COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MEETING OF THE BOARD OF DIRECTORS

September 12, 2006 – 7:30 p.m.

AGENDA

The Coastside County Water District does not discriminate against persons with disabilities. Upon request, the agenda and agenda packet 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 at least five days in advance and we will make every reasonable attempt to provide such an accommodation.

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 agendized item when that item is called. The chair requests that each person addressing the Board limits their presentation to three minutes and complete and submit a Speaker Slip.

4) CONSENT CALENDAR

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

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

- **A.** Requesting the Board to review disbursements for the month ending August 31, 2006 – Claims: $409,701.97 Payroll: $58,164.88 for a total of $467,866.85 (attachment)
- **B.** Acceptance of Financial Reports (attachment)
- **C.** Minutes of the August 8, 2006 Board of Directors Meeting (attachment)
- **D.** Minutes of the August 24, 2006 Special Board Meeting (attachment)
- **E.** Notice of Completion – Acceptance of Denniston Filter Media Replacement Project (attachment)
- **F.** Water Service Connections Installed, Priority and Non-Priority Report (attachment)
- **G.** Total CCWD Production Report (attachment)
- **H.** CCWD Water Use by Category Report (attachment)
- **I.** August 2006 Leak Report (attachment)
- **J.** Rainfall Reports (attachment)
- **K.** San Francisco Public Utilities Commission Hydrological Conditions Report for July 2006 (attachment)
- **L.** Engineering Projects Received for Review during the month of August, 2006 (attachment)
- **M.** General Manager Activity Report (attachment)

5) SUPERINTENDENT OF OPERATION'S REPORT

- **A.** Superintendent of Operations Monthly Report (attachment)
- **B.** Discussion and direction to staff regarding proposal to rehabilitate District water wells (attachment)

6) DISTRICT ENGINEER'S WORK STATUS REPORT (attachment)

7) GENERAL MANAGER'S REPORT

A. Discussion and direction to staff regarding request for relief of water bill for Carolyn Minkin for service located at 461 Cypress, Half Moon Bay, CA (attachment)

B. Discussion and direction to staff (attachment) regarding proposal from TRC Essex for the Denniston Restoration Project and further discussion of a Special Board Meeting/Workshop for this project (attachment)

C. Discussion and direction to staff on the San Mateo County Public Hearing on September 13, 2006 for consideration of a Coastal Development Permit to allow the replacement of an existing 10-inch water transmission pipeline with a new 16-inch transmission pipeline, in the unincorporated Miramar area of San Mateo County (attachment)

D. Discussion and possible direction to staff regarding the Advisory Committees of the District (attachment)

E. Status Report on Capital Improvement Projects (attachment)

F. Correspondence: **(1)** Note received September 6, 2006 from Tammy Hannon; **(2)** SFPUC Water Enterprise Environmental Stewardship Policy – Final Draft – June 27, 2006 **(3)** SFPUC – Hetch Hetchy Water and Power – Global Warming Fact Sheet – September 7, 2006 (attachment)

8) ATTORNEY'S REPORT

A. Discussion and possible direction concerning adjustment of Board Member Compensation for attendance at meetings and for service rendered to the District (attachment)

9) MEETINGS ATTENDED / SCHEDULED – BOARD OF DIRECTORS

10) AGENDA ITEMS AND DIRECTOR COMMENTS

11) CLOSED SESSION

A. Conference with Real Property Negotiators (Cal. Govt. Code §54956.8(b)):
Properties: Carter Hill West Storage Tank Site (APN 056-320-090); 655 Miramar Drive, Half Moon Bay, CA (APN 048-076-070)
Agency Negotiators: General Manager/Legal Counsel
Negotiating Parties: District and Global Signal Acquisitions IV LLC
Subject Matter: Potential sale/lease of portion of District-owned properties for communications tower site

12) RECONVENE OPEN SESSION

13) ADJOURNMENT

Check Number	Vendor No	Vendor Name	Check Date	Check Amount
8628	ALV01	ALVES PETROLEUM, INC.	08/04/2006	2,439.26
8629	BFI01	ALLIED WASTE SERVICES #925	08/04/2006	205.65
8630	BFI02	BFI OF CALIFORNIA, INC.	08/04/2006	83.25
8631	CIN01	CINTAS FIRST AID & SAFETY	08/04/2006	141.36
8632	COA 15	COASTSIDE NET, INC	08/04/2006	79.95
8633	FIR06	FIRST NATIONAL BANK	08/04/2006	1,974.86
8634	KAI01	KAISER FOUNDATION HEALTH	08/04/2006	8,116.00
8635	MON07	MONTERY COUNTY LAB	08/04/2006	1,422.60
8636	UNI13	UNIBIND, INC.	08/04/2006	303.23
8637	UPS01	UPS STORE	08/04/2006	123.08
8638	WES11	WEST COAST AGGREGATES, INC.	08/04/2006	170.01
8639	SCH03	EDWARD SCHMIDT	08/09/2006	2,283.75
8640	ASS01	ACWA SERVICES CORPORATION	08/11/2006	13,985.68
8641	PAC 01	PACIFIC GAS & ELECTRIC CO.	08/11/2006	48,995.85
8642	PAC02	PACIFICA CREDIT UNION	08/11/2006	612.00
8643	PUB01	PUB. EMP. RETIRE SYSTEM	08/11/2006	15,951.68
8644	VAL01	VALIC	08/11/2006	2,792.00
8645	ARR01	ARROWHEAD FRAMING CENTER	08/15/2006	136.80
8646	STA 03	CA DHS DRINKING WATER PROGRAM	08/14/2006	70.00
8647	COA19	COASTSIDE COUNTY WATER DIST.	08/23/2006	463.96
8648	MET06	METLIFE SBC	08/23/2006	1,318.00
8649	PAC02	PACIFICA CREDIT UNION	08/23/2006	612.00
8650	PUB01	PUB. EMP. RETIRE SYSTEM	08/23/2006	15,529.69
8651	VAL01	VALIC	08/23/2006	2,792.00
8652	ADP01	ADP, INC.	08/28/2006	531.35
8653	ALP03	ALPINE CONTROLS	08/28/2006	5,882.06
8654	AME09	AMERICAN WATER WORKS ASSOC.	08/28/2006	195.00
8655	AND01	ANDREINI BROS. INC.	08/28/2006	11,759.52
8656	ANG01	ANGELO'S MUFFLER	08/28/2006	248.75
8657	ASS06	ACWA / JPIA	08/28/2006	43,248.00
8658	ATC01	ATCHISON, BARISONE	08/28/2006	10,860.82
8659	AZT01	AZTEC GARDENS	08/28/2006	190.00
8661	BAY10	BAY ALARM COMPANY	08/28/2006	906.84
8662	BFI02	BFI OF CALIFORNIA, INC.	08/28/2006	27.00
8663	BIG01	BIG CREEK LUMBER	08/28/2006	35.45
8664	BOR01	BORGES & MAHONEY, INC.	08/28/2006	772.29
8665	BOR03	ELIAS BORBA	08/28/2006	140.00
8666	CAL31	CALIFORNIA OVERNIGHT	08/28/2006	324.50
8667	CAL33	CALIFORNIA SPECIAL DISTRICT	08/28/2006	185.00
8668	CHB02	C.H. BULL CO.	08/28/2006	633.83
8669	CIN01	CINTAS FIRST AID & SAFETY	08/28/2006	27.92
8670	COA02	ROGUE WEB WORKS, LLC	08/28/2006	292.50
8671	CUM 01	CUMMINS WEST, INC.	08/28/2006	3,695.76
8672	DAL 01	DAL PORTO ELECTRIC	08/28/2006	1,377.12
8673	DAT01	DATAPROSE	08/28/2006	1,548.27
8674	DON 01	DONALDSON, DOUG	08/28/2006	120.00
8675	DON 02	DONOVAN, SEAN	08/28/2006	82.03
8676	EAT01	EATON ELECTRICAL INC.	08/28/2006	1,832.51
8677	EIP 01	EIP ASSOCIATES, INC.	08/28/2006	1,093.49
8678	ENR01	ENRIQUEZ MD, JOSEFINA	08/28/2006	129.38
8679	FIR06	FIRST NATIONAL BANK	08/28/2006	840.27
8680	FIS01	FISHER SCIENTIFIC	08/28/2006	1,023.41
8681	FRA01	ANDRE FRANCO	08/28/2006	242.50
8682	GOL04	GOLDEN STATE FLOW MEASUREMENT	08/28/2006	3,273.63
8683	GRA 03	GRAINGER, INC.	08/28/2006	184.79
8684	GRA05	GRANITEROCK	08/28/2006	548.95
8685	GRA07	THE GRAPHIC WORKS	08/28/2006	192.69
8686	GUI01	JOE GUISTINO	08/28/2006	92.54
8687	HAC01	HACH CO., INC.	08/28/2006	1,371.26
8688	HAL 01	HMB BLDG. & GARDEN INC.	08/28/2006	262.57
8689	HAL04	HALF MOON BAY REVIEW	08/28/2006	357.50
8690	HAL24	H.M.B.AUTO PARTS	08/28/2006	24.00

Check Number	Vendor No	Vendor Name	Check Date	Check Amount
8691	HAN02	HANFORD ARC	08/28/2006	454.29
8692	IRO01	IRON MOUNTAIN	08/28/2006	190.29
8693	IRV01	IRVINE, DAVID E.	08/28/2006	2,445.00
8694	IRV02	IRVINE, DAVID E.	08/28/2006	1,703.07
8695	KAN02	KANO LABORATORIES, INC.	08/28/2006	104.80
8696	KRY01	KRYSTAL KLEEN	08/28/2006	400.00
8697	LAN04	LANIER WORLDWIDE, INC.	08/28/2006	786.50
8698	LEE01	DAVID LEE	08/28/2006	300.00
8699	MAR01	MARK THOMAS & COMPANY, INC.	08/28/2006	846.00
8700	MAZ01	MAZE & ASSOCIATES, INC.	08/28/2006	874.71
8701	MCT01	MCTV6	08/28/2006	305.00
8702	MIS01	MISSION UNIFORM SERVICES INC.	08/28/2006	803.06
8703	OCE04	OCEAN SHORE CO.	08/28/2006	1,501.46
8704	OFF01	OFFICE DEPOT	08/28/2006	1,408.44
8705	PAU 01	PAULO'S AUTO CARE	08/28/2006	45.42
8706	POW01	POWERPLAN	08/28/2006	612.40
8707	RAD 01	STRAWFLOWER ELECTRONICS	08/28/2006	131.84
8708	RED01	RED WING SHOES	08/28/2006	138.01
8709	ROB 01	ROBERTS & BRUNE CO.	08/28/2006	3,303.44
8710	SAN 03	SAN FRANCISCO WATER DEPT.	08/28/2006	135,448.08
8711	SBC02	AT&T	08/28/2006	1,010.98
8712	SBC03	SBC LONG DISTANCE	08/28/2006	58.17
8713	SEA04	SEARS COMMERCIAL ONE	08/28/2006	1,442.88
8714	SEQ02	SEQUOIA OCCUPATIONAL HEALTH	08/28/2006	195.00
8715	SER03	SERVICE PRESS	08/28/2006	259.73
8716	SEW 01	SEWER AUTH. MID- COASTSIDE	08/28/2006	920.00
8717	SIE 02	SIERRA CHEMICAL CO.	08/28/2006	4,872.55
8718	SOU01	JOAO & IRIA SOUSA	08/28/2006	242.50
8719	SPR03	SPRINT PCS	08/28/2006	579.50
8720	STA02	STATE PLUMBING & HEATING SUPPL	08/28/2006	623.52
8721	STE01	FRANK & SUSAN STEWARD	08/28/2006	190.00
8722	TAI02	TAIT ENVIRONMENTAL SYSTEMS	08/28/2006	200.00
8723	TET 01	JAMES TETER	08/28/2006	19,336.08
8724	TOW01	TOWILL SURVEYING, MAPPING & GI	08/28/2006	11,300.00
8725	TUR 01	TURNER CONSTRUCTION, INC.	08/28/2006	25.50
8727	UB*00217	DOROTHY DILLON	08/28/2006	13.18
8729	UB*00219	RODNEY FRASER	08/28/2006	2.05
8730	UB*00220	H. L. HENNINGTON	08/28/2006	45.03
8732	UB*00222	OLEG POPOVITCH	08/28/2006	23.87
8733	UB*00223	JULIE HARMON	08/28/2006	22.65
8734	UB*00224	ARNON/JUSTYNA MATITYAHU	08/28/2006	187.93
8735	UB*00225	SHYAM KATARUKA	08/28/2006	6.00
8737	UB*00227	PATTY SCHWARTZ	08/28/2006	11.84
8739	UB*00229	WILLIAM ATKINSON	08/28/2006	51.76
8741	UB*00231	ANDREA STARIHA	08/28/2006	40.64
8742	UB*00232	GREGG MOORE	08/28/2006	27.15
8746	UB*00236	STEPHEN PEGG	08/28/2006	46.46
8747	UB*00237	BILLY VELA	08/28/2006	67.90
8748	UB*00238	LISA GUNTER	08/28/2006	10.16
8749	UB*00239	MELINDA MILNER	08/28/2006	37.76
8751	UB*00241	DARIEN HAMILTON	08/28/2006	18.36
8755	UB*00245	KATHY CALOCA	08/28/2006	10.45
8756	UB*00246	KATHLEEN BROWN	08/28/2006	54.40
8757	VIE01	JOSE & NELIA VIEIRA	08/28/2006	215.50
8758	WAT 02	WATER EDUCATION FOUND.	08/28/2006	45.00
8759	WES11	WEST COAST AGGREGATES, INC.	08/28/2006	549.50
			Report Total:	409,701.97

Check #'s
8660,8726,8728,8731,8736,8738,8740,8743,
8744,8745,8750, 8752,8753,8754 are VOID.

Account	Description	Current Actual	Current Budget	Variance	% Var	Year to Date Actual	2/12 YTD Budget	Variance	% Var
Fund Number: 1									
REVENUE									
1-0-4120-00	Water Revenue - All Areas	435,220.74	370,357.00	-64,863.74	-17.51	981,871.53	1,008,144.00	26,272.47	2.61
1-0-4170-00	Water Taken From Hydrants	2,317.68	2,500.00	182.32	7.29	3,835.69	5,000.00	1,164.31	23.29
1-0-4180-00	Late Notice - 10% Penalty	3,806.84	4,166.66	359.82	8.64	8,646.65	8,333.32	-313.33	-3.76
1-0-4230-00	Service Connections	655.28	500.00	-155.28	-31.06	292,585.38	231,000.00	-61,585.38	-26.66
1-0-4920-00	Interest Earned	.00	0.00	0.00	0.00	30,317.36	16,521.50	-13,795.86	-83.50
1-0-4925-00	Interest Revenue T&S Fees	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-0-4930-00	Tax Apportionments/Cnty Checks	1,078.44	0.00	-1,078.44	0.00	13,111.26	0.00	-13,111.26	0.00
1-0-4950-00	Miscellaneous Income	8,872.01	6,000.00	-2,872.01	-47.87	12,647.68	12,000.00	-647.68	-5.40
1-0-4960-00	CSP Assm. Dist. Processing Fee	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-0-4965-00	ERAF REFUND - County Taxes	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-0-4235-00	CSP Connection T & S Fees	13,940.00	0.00	-13,940.00	0.00	73,185.00	0.00	-73,185.00	0.00
1-0-4970-00	Wavecrest Reserve Conn. Fees	3,345.60	0.00	-3,345.60	0.00	6,691.20	0.00	-6,691.20	0.00
	REVENUE Totals:	**469,236.59****	**383,523.66****	**-85,712.93****	**-22.35**	**1,422,891.75****	**1,280,998.82****	**-141,892.93****	**-11.08****
EXPENSES									
1-1-5000-00	Gen. Oper. Fund	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5130-00	Water Purchased	135,448.08	115,206.00	-20,242.08	-17.57	185,635.30	242,004.00	56,368.70	23.29
1-1-5710-00	Deprec, Trucks, Tools, Equipt.	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5230-00	Pump Exp, Nunes T P	1,582.15	1,083.33	-498.82	-46.05	1,582.15	2,166.66	584.51	26.98
1-1-5231-00	Pump Exp, CSP Pump Station	38,922.84	45,363.00	6,440.16	14.20	38,922.84	50,127.00	11,204.16	22.35
1-1-5232-00	Pump Exp, Trans. & Dist.	2,723.73	2,066.66	-657.07	-31.79	2,723.73	4,133.32	1,409.59	34.10
1-1-5233-00	Pump Exp, Pilarcitos Can.	229.81	800.00	570.19	71.27	229.81	1,600.00	1,370.19	85.64
1-1-5234-00	Pump Exp. Denniston Proj.	5,692.25	10,635.00	4,942.75	46.48	5,692.25	21,270.00	15,577.75	73.24
1-1-5242-00	CSP Pump Station Operations	602.63	650.00	47.37	7.29	1,206.53	1,300.00	93.47	7.19
1-1-5235-00	Denniston T.P. Operations	1,589.63	6,121.66	4,532.03	74.03	3,173.53	12,243.32	9,069.79	74.08
1-1-5236-00	Denniston T.P. Maintenance	3,339.73	2,500.00	-839.73	-33.59	4,560.94	5,000.00	439.06	8.78
1-1-5240-00	Nunes T P Operations	6,532.39	8,189.41	1,657.02	20.23	11,396.26	16,378.82	4,982.56	30.42
1-1-5241-00	Nunes T P Maintenance	1,694.80	4,525.00	2,830.20	62.55	2,608.61	9,050.00	6,441.39	71.18
1-1-5243-00	CSP Pump Station Maintenance	4,738.84	4,250.00	-488.84	-11.50	5,960.15	8,500.00	2,539.85	29.88
1-1-5245-00	Alves/Miramontes Maintenance	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5400-00	Trans & Dist. Exp.	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5318-00	Studies/Surveys/Consulting	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5321-00	Water Conservation	923.52	3,875.00	2,951.48	76.17	3,460.96	7,750.00	4,289.04	55.34
1-1-5322-00	Community Outreach	785.58	1,189.16	403.58	33.94	1,704.84	2,378.32	673.48	28.32
1-1-5500-00	General Expense	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5620-00	Office Supplies & Expense	7,705.14	9,010.83	1,305.69	14.49	14,736.78	18,021.66	3,284.88	18.23
1-1-5621-00	Computer Services	3,541.91	2,900.00	-641.91	-22.13	5,384.36	5,800.00	415.64	7.17
1-1-5625-00	Meetings / Training / Seminars	2,728.31	2,333.33	-394.98	-16.93	3,652.05	4,666.66	1,014.61	21.74
1-1-5630-00	Insurance	71,358.62	79,604.16	8,245.54	10.36	100,347.91	126,708.32	26,360.41	20.80
1-1-5681-00	Legal	7,435.79	4,333.33	-3,102.46	-71.60	7,435.79	8,666.66	1,230.87	14.20
1-1-5682-00	Engineering	2,862.00	2,500.00	-362.00	-14.48	5,002.00	5,000.00	-2.00	-0.04
1-1-5683-00	Financial Services	874.71	3,181.82	2,307.11	72.51	1,480.93	8,181.82	6,700.89	81.90
1-1-5685-00	Board Meeting Expense	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5686-00	Miscellaneous Expense	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5687-00	Membership, Dues, Subscript.	245.00	1,747.08	1,502.08	85.98	5,159.00	7,869.16	2,710.16	34.44
1-1-5688-00	Election Expenses	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5690-00	Interest Expense	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Account	Description	Current Actual	Current Budget	Variance	% Var	Year to Date Actual	2/12 YTD Budget	Variance	% Var
1-1-5700-00	San Mateo County Fees	.00	5,000.00	5,000.00	100.00	0.00	5,000.00	5,000.00	100.00
1-1-5701-00	Property Taxes	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5705-00	State Fees	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5711-00	Debt Service - Existing Bonds	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5712-00	Debt Service - Proposed Bonds	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5713-00	Contribution to CIP & Reserves	43,725.00	43,725.00	0.00	0.00	87,450.00	87,450.00	0.00	0.00
1-1-5714-00	Transfer of Conn Fees to CSP	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5725-00	Debt Issuance Amorization Exp.	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5743-00	CSP Assm. Dist. Processing Fee	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5744-00	Capital Replacement Contr.	.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1-1-5411-00	Salaries & Wages - Field	58,899.72	60,953.92	2,054.20	3.37	103,512.35	121,907.84	18,395.49	15.09
1-1-5610-00	Salaries/Wages-Administration	37,064.22	41,537.76	4,473.54	10.77	71,562.62	83,075.52	11,512.90	13.86
1-1-5640-00	Employees Retirement Plan	30,610.99	28,872.30	-1,738.69	-6.02	62,556.52	57,744.60	-4,811.92	-8.33
1-1-5684-00	Payroll Tax Expense	7,181.84	7,582.92	401.08	5.29	13,251.04	15,165.84	1,914.80	12.63
1-1-5412-00	Maintenance - General	23,016.61	9,796.66	-13,219.95	-134.94	26,710.12	19,593.32	-7,116.80	-36.32
1-1-5414-00	Motor Vehicle Expense	4,039.61	3,291.66	-747.95	-22.72	5,480.21	6,583.32	1,103.11	16.76
1-1-5415-00	Maintenance - Well Fields	.00	2,616.66	2,616.66	100.00	0.00	5,233.32	5,233.32	100.00
1-1-5745-00	CSP Connect. Reserve Contribu.	13,940.00	0.00	-13,940.00	0.00	73,185.00	0.00	-73,185.00	0.00
1-1-5746-00	Wavecrest CSP Connt. Reserve	3,345.60	0.00	-3,345.60	0.00	6,691.20	0.00	-6,691.20	0.00
	EXPENSES Totals:	**523,381.05****	**515,441.65****	**-7,939.40****	**-1.54**	**862,455.78****	**970,569.48****	**108,113.70****	**11.14****
Report Totals:									
	REVENUE Total	**469,236.59******	**383,523.66******	**-85,712.93******	**-22.35**	**1,422,891.75******	**1,280,998.82******	**-141,892.93******	**-11.08******
	EXPENSE Total	**523,381.05******	**515,441.65******	**-7,939.40******	**-1.54**	**862,455.78******	**970,569.48******	**108,113.70******	**11.14******
	INCOME Total	**-54,144.46******	**-131,917.99******			**560,435.97******	**310,429.34******		

COASTSIDE COUNTY WATER DISTRICT
INVESTMENT REPORT
August 31, 2006

		Restricted	*Restricted*	*Restricted for CSP CIP Projects*		
	CASH FLOW & OPERATING RESERVE	EMERGENCY RESERVES	CAPITAL EXPENDITURES	DISTRICT CSP CONTRIBUTION	CSP T&S FEES	TOTAL
DISTRICT BALANCES						
CASH IN FNB						
OPERATING ACCOUNT			$1,291,522.18			$1,291,522.18
CSP T&S ACCOUNT					$803,927.57	$803,927.57
TOTAL FIRST NATIONAL BANK	$0.00	$0.00	$1,291,522.18	$0.00	$803,927.57	$2,095,449.75
CASH WITH L.A.I.F	$297,900.00	$700,000.00	$1,197,886.53	$267,655.14	$2,508,716.66	$4,972,158.33
UNION BANK - Project Fund Balanace			$6,420,353.61			$6,420,353.61
						$0.00
CASH ON HAND	$2,100.00					$2,100.00
TOTAL DISTRICT CASH BALANCES	$300,000.00	$700,000.00	$8,909,762.32	$267,655.14	$3,312,644.23	$13,490,061.69
ASSESSMENT DISTRICT BALANCES						
CASH IN FIRST NATIONAL BANK (FNB)						
REDEMPTION ACCOUNT		$ 65,697.16				
RESERVE ACCOUNT (Closed Account 8-4-04)		$ -				
TOTAL ASSESSMENT DISTRICT CASH		$ 65,697.16				

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

COASTSIDE COUNTY WATER DISTRICT
CRYSTAL SPRINGS PROJECT
CAPITAL PROJECTS FY 06/07

MONTH / YEAR: August 2006

PROJECT	Actual to date	FY 06/07 CIP Budget	% Completed
El Granada Pipeline Phase 3A (City) 3B (County) 1128-03/04	$16,429	$1,000,000	1.6%
Main Street/Hwy 92 Pipeline Replacement Project - Phase 2		$718,000	
Contingency		$100,000	
TOTALS	$16,429	$1,718,000	1.0%

Coastside County Water District
Capital Improvement Projects (Non-CSP) - FY 06/07

DATE: August 2006

DESCRIPTION	ACCT NO	CONTRACT AMOUNT	ACTUAL TO DATE	FY 06/07 CIP BUDGET
PIPELINE PROJECTS				
Main Street/Hwy 92 Widening Project (Non-CSP Portion)	1120-93		$1,499	$492,000
WATER TREATMENT PLANT PROJECTS				
Denniston Foot Valve for 60hp Pump	1121-22			$10,000
Denniston Hi Lift Pumps - Refurbish	1121-23			$20,000
Nunes Level Indicators Clearwell/Recovery Tanks	1121-24		$5,882	$10,000
Nunes Filter Media Replacement	1121-25			$5,000
Nunes Filter Backwash Valves	1121-26			$5,000
Nunes - Automatic Sludge Valve	1121-27			$5,000
FACILITIES AND MAINTENANCE PROJECTS				
Denniston Restoration	1120-03		$1,443	$25,000
Meter Change Program	1117-06			$15,000
City & County Projects (resurfacing/raising boxes)	1120-86			$30,000
Pave Nunes WTP Road	1121-28			$30,000
Safety/Security Upgrades	1121-29			$20,000

Coastside County Water District
Capital Improvement Projects (Non-CSP) - FY 06/07

EQUIPMENT PURCHASE & REPLACEMENT

Vehicle Replacement	1118-04			$25,000
Computer System	1118-02		$2,589	$8,000
Office/Shop Equipment	1118-02		$1,443	$1,500
SCADA/Telemetry	1121-82			$125,000

PUMP STATIONS / TANKS / WELLS

Alves Tank - Paint Sand Blast -	1121-08			$125,000
CSP Motor and Pump Rehabilitation	1121-30			$50,000

DEBT RETIREMENT

Nunes WTP & Revenue Bonds				$185,000

DENNISTON - SHORT TERM IMPROVEMENTS

Replace Chlorine Gas with New Sodium Hypochlorite	1121-31			$150,000
Replace Caustic Soda System	1121-32			$150,000
Construct Treated Water Tank Modifications/Flow Through Operations	1121-33			$400,000
Configure Plant for Automated Shutdown	1121-34			$100,000
Install Automated Filter-to-Waste	1121-35			$100,000

Coastside County Water District
Capital Improvement Projects (Non-CSP) - FY 06/07

NUNES - SHORT TERM IMPROVEMENTS

Replace Chlorine Gas with New Sodium Hypochlorite	1121-36			$150,000
Replace Caustic Soda Piping and Add Containment	1121-37			$130,000

TOTAL CAPITAL IMPROVEMENT PROJECT BUDGET **$2,366,500**

Legal Cost Tracking Report
12 Months At-A-Glance

Acct. No.5681
Condotti
Legal

Month	Admin (General Legal Fees)	CSP	Transfer Program	CIP	Personnel	Lawsuits 62% Reimbursable	Infrastructure Project Review (Reimbursable)	TOTAL
Sep-05	3,748		683	315	543		35	5,323
Oct-05	2,123	4,206		309		35	753	7,425
Nov-05	6,655	333	735	735		1,307		9,765
Dec-05	2,596	1,453		1,960	438			6,446
Jan-06	4,371	1,033		543	1,153	457	613	8,167
Feb-06	3,421		78		134	364	78	4,075
Mar-06	9,291	273			20	1,143		10,726
Apr-06	5,749	1,209	59	39		1,011		8,066
May-06	7,448		273	1,427		690		9,838
Jun-06	7,815	156	78	2,705		184		10,938
Jul-06	7,930	1,190		2,081	351		20	11,571
Aug-06	8,040	1,346	254			1,222		10,861
TOTAL	69,188	11,196	2,159	10,113	2,637	6,412	1,498	103,202

Engineer Cost Tracking Report
12 Months At-A-Glance

Acct. No. 5682
Teter
Engineer

Month	Admin & Retainer	CSP Phase II	Phase 3 EG Pipeline	CIP	Short Term WTP Imprv.	Studies & Projects	TOTAL	Reimburseable from Projects
Sep-05	2,426	1,870		1,543			5,840	
Oct-05	4,356	3,455	544	2,838			11,192	
Nov-05	1,490	962	5,269	3,589		1,679	12,989	1,679
Dec-05	1,590	101		1,210			2,900	
Jan-06	6,303	222	1,743	9,311			17,578	
Feb-06	3,056	222		4,736			8,014	
Mar-06	2,621		74	7,395			10,090	
Apr-06	2,996		566	13,263		497	17,321	
May-06	3,858		296	3,490	3,665		11,309	
Jun-06	1,046		444	2,544	10,268		14,302	
Jul-06	2,140		12,685		3,399	304	18,528	304
Aug-06	2,862		11,669	456	4,349		19,336	
TOTAL	34,742	6,833	33,290	50,374	21,682	2,480	149,400	1,983

COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MINUTES OF THE MEETING OF THE BOARD OF DIRECTORS

August 8, 2006

1) ROLL CALL: President Ascher called the meeting to order at 7:01 p.m. Present at roll call were Directors Jim Larimer, Ken Coverdell and Chris Mickelsen.

Also present were Ed Schmidt, General Manager; Anthony Condotti, Legal Counsel; Jim Teter, District Engineer; Joe Guistino, Superintendent of Operations; JoAnne Whelen, Administrative Assistant/Recording Secretary and Gina Brazil, Office Manager.

2) PLEDGE OF ALLEGIANCE

3) PUBLIC ANNOUNCEMENTS:

There were no public announcements.

4) SPECIAL ORDER OF BUSINESS

President Ascher announced that the first item under Special Order of Business would be Item B.

B. Resolution 2006-16 – A Resolution of the Board of Directors of the Coastside County Water District Expressing Gratitude to John Muller for his Leadership and Dedicated Service

ON MOTION by Director Coverdell and seconded by Director Larimer, the Board voted as follows to adopt Resolution 2006-16 – A Resolution of the Board of Directors of the Coastside County Water District Expressing Gratitude to John Muller for his Leadership and Dedicated Service:

Director Coverdell	Aye
Director Larimer	Aye
Director Mickelsen	Aye
President Ascher	Aye

A. Discussion and interview of applicants and possible appointment to fill vacant Board position

Mr. Condotti, District's Legal Counsel provided a brief report on the process and options the Board has available for filling the Board vacancy. Mr. Condotti also reviewed potential points of a conflict of interest associated with one candidate, Mr. Ed Andreini. He reported that he had advised the Board and Mr. Andreini that should Mr. Andreini be appointed to fill the Board Vacancy, that under a provision of the California Government Code (Section 1090), that Mr. Andreini's company would not be able to bid on future Coastside County Water District construction projects.

The Board discussed this issue further, with Mr. Condotti addressing several questions from the Board and explaining the statutes in further detail.

Mr. Andreini asked several questions directed at Mr. Condotti regarding potential conflict of interest issues and discussion ensued among the Board. Mr. Andreini announced that he would very much like to serve on the CCWD Board, but he is not willing to put his company, Andreini Brothers Inc., or the Coastside County Water District at risk over potential conflict of interest issues. Mr. Andreini withdrew his name for consideration to be appointed to serve on the CCWD Board.

George Muteff – 408 Redondo Beach Road, HMB – commended the Board for their accomplishments over the past several years and stated that he felt that this particular Board had transpired the District into the foremost model agency in this town. He expressed his disappointment in losing Mr. Andreini as a Board candidate, but was confident that the Board would make a good appointment. He also stated that he hopes that the Board continues to do the type of work they have been accomplishing, and that hopefully it would rub off on some of the other agencies in town.

Oscar Braun – Higgins Canyon Road, HMB – stated that he was here to give positive praise on two of the candidates, Eddie Andreini and John Plock. He shared a few comments about each of the candidates and also stated that he felt that the CCWD Board was considered to be the best Board on the coastside at this time.

President Ascher then announced that Tim Frahm had withdrawn his request for consideration for the position, stating that he does not have enough time available in his schedule to devote to the duties and commitments of this important position. President Ascher and the Board discussed the process for interviewing the two remaining candidates, Mr. John Plock and Mr. Bob Feldman.

The Board interviewed the following candidates by allowing them to make a brief introduction of their qualifications and experience and then presented questions for their response:

John Plock – P.O. Box 2136, El Granada, CA – stated that he has been a registered voter residing at 923 Francisco Street in El Granada, since 1991 and is a registered civil engineer, semi-retired, and involved in a number of projects, including the San Mateo County Housing and Community Development Committee, the "Save our Foghorn" project and he continues to monitor the local sanitary districts and their plant improvements, regulations, and procedures to reduce the number of sewage spills. Mr. Plock also provided some details of his experience, skills and background.

Mr. Plock then addressed questions from each of the Board members.

Bob Feldman – 390 Burning Tree Court, Half Moon Bay, CA – introduced himself, referenced his submitted letter of interest and highlighted a few details regarding his background, qualifications and experience. Mr. Feldman proceeded to answer questions from each of the Board members.

President Ascher then briefly adjourned the meeting for a break at 8:45 p.m. The meeting was reconvened at 8:52 p.m.

At the Board's request, Mr. Condotti reviewed the District's options regarding filling the Board vacancy and the Board shared their thoughts and comments on the interviews and candidates, and the best way to proceed with filling the vacancy.

ON MOTION by President Ascher and seconded by Director Larimer, the Board voted as follows by roll call vote to appoint one of the candidates at this meeting to fill the Board vacancy:

Director Coverdell	Aye
Director Larimer	Aye
Director Mickelsen	Aye
President Ascher	Aye

ON MOTION by Director Larimer and seconded by Director Coverdell, the Board voted as follows by roll call vote to appoint Mr. Bob Feldman to fill the vacant Board position:

Director Coverdell	Aye
Director Larimer	Aye
Director Mickelsen	Aye
President Ascher	Aye

President Ascher congratulated Mr. Feldman for his appointment to the CCWD Board, advising him that the oath of office would be administered at the next Board meeting. The Board then briefly discussed the possibility of adjourning the meeting to be continued at another date.

ON MOTION by Director Larimer and seconded by Director Coverdell, the Board agreed by consensus to discuss the following items: Item 7A under the General Manager's Report – "Discussion and direction to staff on the proposed mitigation measures from Coast Range Biological (El Granada Pipeline) and subsequent review by CCWD Biologists (EIP Associates)" and Item 5I under the Consent Calendar – "July 2006 Leak Report", then adjourn to discussion of the Closed Session items. It was also agreed that the remainder of this meeting would be scheduled to reconvene on Wednesday, August 16, 2006 at 7:30 p.m.

5) CONSENT CALENDAR

I. <u>July 2006 Leak Report</u>

Mr. Guistino, Superintendent of Operations, addressed the inquiry regarding the July 17, 2006 leak on Magellan and The Crossways, explaining that the leak occurred on a ten-inch portion of a main pipeline serving the Miramar area. He further explained that it was a serious leak, adjacent to a home, involved removal of a large eucalyptus tree, and required a lot of expertise and equipment.

7) GENERAL MANAGER'S REPORT

A. Discussion and direction to staff on the proposed mitigation measure from Coast Range Biological (El Granada Pipeline) and subsequent review by CCWD Biologists (EIP Associates)

Mr. Schmidt provided a brief background of this item and introduced the District's consultant, Mr. George Burwasser with EIP Associates.

Mr. Burwasser reported that he, along with a colleague, Demian Ebert, Senior Scientist II, Fish and Wildlife Biologist, had reviewed the report prepared by Coast Range Biological and found it to be overall deficient in many areas, mostly in documentation. He reported that due to the lack of information contained in the report, it was difficult to assess the conditions, and that the mitigation measures placed on the project were excessive and had no basis in science. Mr. Burwasser pointed out that one part of the report outlined several areas identified as possible habitats for various species, and that these specific areas are actually mowed every six months. He also reported that he had a site visit scheduled later in the week with Jim Teter to walk the alignment to establish the locations of the viable, sensitive habitats, which would be incorporated into drawings that would be presented to the City of Half Moon Bay and San Mateo County.

Mr. Burwasser also referenced the letter from the California Coastal Commission, commenting that the majority of their points were not really applicable to this project. He reported that most of the information provided in their letter pertaining to horizontal boring techniques was helpful, but that CCWD had proposed to perform jack and bore techniques, so their information was irrelevant. He did agree that formal wetland delineations were necessary, and would be started immediately. Mr. Burwasser stated that in regards to the various endangered species that they identified, their habitats were going to be avoided, so mitigation measures were not necessary. In conclusion, Mr. Burwasser advised the Board that he did not think that the California Coastal Commission had a good understanding of the project, based on the information provided in the report prepared by Coast Range Biological, LLC.

The Board discussed some of the details of the Coast Range Biological report further. The Board also directed staff to prepare a letter to the City of Half Moon Bay, following the Public Hearing, stating the deficiencies and substandard work of the Coast Range Biotic Assessment, and request that the City reimburse the District for the cost of this report.

President Ascher then announced that the meeting would be adjourned to closed session and continued to August 16, 2006 at 7:30 p.m.

12) CLOSED SESSION

A. Conference with Real Property Negotiators (Cal. Govt. Code §54956.8(b)): Properties: Carter Hill West Storage Tank Site (APN 056-320-090); 655 Miramar Drive, Half Moon Bay, CA (APN 048-076-070)
Agency Negotiators: General Manager/Legal Counsel
Negotiating Parties: District and Global Signal Acquisitions IV LLC : Subject Matter: Potential sale/lease of portion of District- owned properties for communications tower site

B. Conference with labor negotiators (Cal Govt. Code §54957.6): Agency Designated Representative: Legal Counsel Unrepresented Employee: General Manager

C. Conference with Legal Counsel – Anticipated Litigation Initiation of litigation pursuant to subdivision (b) of Section 54956.9 – One (1) potential case

See attached Report on Closed Session of August 8, 2006 pursuant to Cal. Gov. Code §54957.1 and addendum to meeting Minutes.

13) RECONVENE OPEN SESSION

See attached Report on Closed Session of August 8, 2006 pursuant to Cal. Gov. Code §54957.1 and addendum to meeting Minutes.

14) CONSIDERATION OF GENERAL MANAGER PERFORMANCE BASED COMPENSATION ADJUSTMENT

See attached Report on Closed Session of August 8, 2006 pursuant to Cal. Gov. Code §54957.1 and addendum to meeting Minutes.

15) ADJOURNMENT

The meeting was adjourned at 9:44 p.m.

MINUTES OF THE AUGUST 8, 2006 COASTSIDE COUNTY WATER DISTRICT MEETING OF THE BOARD OF DIRECTORS – ADJOURNED AND RECONVENED TO AUGUST 16, 2006 AT 7:30 P.M.

The Minutes for the business that was transacted at said adjourned meeting follows and are posted herein. Items that were already considered by the Board on August 8, 2006 are shown in ~~strikeout form~~.

All Directors were present and the meeting began at 7:32 p.m.

President Ascher administered the Oath of Office to Mr. Bob Feldman, who was appointed to fill the Board vacancy on August 8, 2006.

Mr. Feldman thanked the Board and stated that he appreciated their vote of confidence in appointing him to the CCWD Board of Directors. He also stated that he felt that he was joining a top-notch Board of Directors and a winning team and that he planned to perform his role as a Board member with integrity and to exercise good judgment in dealing with the needs of the coastside community.

President Ascher acknowledged the article in the August 16, 2006 edition of the Half Moon Bay Review regarding the appointment of Director Feldman. Each of the Board members welcomed Mr. Feldman to the Board of Directors.

5) CONSENT CALENDAR

A. Requesting the Board to review disbursements for the month ending July 31, 2006 – Claims: $416,603.92 Payroll: $64,853.43 for a total of $481,457.35
B. Acceptance of Financial Reports
C. Minutes of the July 11, 2006 Board of Directors Meeting
D. Monthly Water Transfer Report

E. General Manager Activities Report
F. Water Service Connections Installed, Priority and Non-Priority Report
G. Total CCWD Production Report
H. CCWD Water Use by Category Report
I. ~~July 2006 Leak Report~~
J. Rainfall Reports

ON MOTION by Director Coverdell and seconded by Director Mickelsen, the Board voted as follows to accept the items within the Consent Calendar, with the exception of Item 5I, which was accepted at the August 8, 2006 Board meeting:

Director Coverdell	Aye
Director Larimer	Aye
Director Mickelsen	Aye
Director Feldman	Aye
President Ascher	Aye

6) SUPERINTENDENT OF OPERATIONS MONTHLY REPORT

Mr. Guistino referenced his written staff report and proceeded to report on a few highlights over the past month, including, the near completion of the Denniston Filter Media Replacement Project, the plans for the rehabilitation of the Denniston and Pilarcitos wells, and the refurbishing of the Denniston High Lift Pump. Mr. Guistino also reported that the Emergency Generator Project had gone out to bid and that staff was on track with the Department of Health Services Annual Inspection tasks. He also provided updates on the Preventative Maintenance and Inventory Programs.

Mr. Guistino addressed several questions from Board members regarding operations issues, including the rehabilitation of the wells, the monthly large meter reading program and the Highway 92 Automatic Meter Reading Pilot Program.

President Ascher requested that Mr. Guistino provide a monthly update on the progress of the Preventive Maintenance Program, including an evaluation of the cost savings and the life span of the hardware. Director Coverdell complimented Mr. Guistino on the monthly directives tracking report.

7) GENERAL MANAGER'S REPORT

~~A. Discussion and direction to staff on the proposed mitigation measures from Coast Range Biological (El Granada Pipeline) and subsequent review by CCWD Biologists (EIP Associates)~~

B. Discussion and possible approval of a resolution to authorize the Bay Area Water Supply & Conservation Agency (BAWSCA) to represent Coastside County Water District in negotiations on a new Master Water Sales Contract

Mr. Schmidt introduced this item and referenced his written staff report, advising the Board that his recommendation, along with BAWSCA Board Representative Chris Mickelsen, and Anthony Condotti, District Legal Counsel, is to adopt the proposed Resolution, appointing the Bay Area Water Supply & Conservation Agency as CCWD's authorized representative in negotiations for a new Master Water Sales Contract.

Director Mickelsen reported on his meeting earlier in the day with BAWSCA General Manager, Art Jensen, stressing the importance that the twenty-eight agencies remain united in their negotiations with the San Francisco Public Utilities Commission on the new Master Water Sales Contract.

ON MOTION by President Ascher and seconded by Director Larimer, the Board voted as follows to adopt Resolution 2006-17 Appointing the Bay Area Water Supply & Conservation Agency as Authorized Representative of District in Discussions/Negotiations with San Francisco for an Agreement to Provide a Reliable Supply of High Quality Water at a Fair Price:

Director Coverdell	Aye
Director Larimer	Aye
Director Mickelsen	Aye
Director Feldman	Aye
President Ascher	Aye

Staff was directed to agendize and include updates on the progress of all future BAWSCA contract negotiation meetings.

C. Discussion and direction to staff on the Grand Jury Report "Disaster Preparedness of Special Districts"

Mr. Schmidt referenced his staff report, directing the Board's attention to the Grand Jury report on Disaster Preparedness of Special Districts. He reported on CCWD's progress in this area, including the recent Emergency Communications & Contingency Operation Plan, updated in April 2006. Mr. Schmidt also stated that the Superintendent and Water Treatment Plant Supervisor had recently attended routine emergency planning exercises sponsored by the San Francisco Public Utilities Commission.

Mr. Schmidt also reported on the other recent safety measures, including the security fencing around the water treatment plants, the installation of intrusion alarms and cameras, and the supply and equipment shed located at the District office, containing an extensive supply of emergency provisions.

Mr. Schmidt also advised the Board of his reasons for not agreeing with the recommendation of the Grand Jury, which included joining a membership in the Water/Wastewater Agency Response Network (WARN). He further reported that CCWD is currently a member of the California Utilities Emergency Association, and his preference for this agency due to the fact that the membership includes many police and fire, as well as water and sewer agencies.

The Board accepted Mr. Schmidt's recommendation and directed Staff to prepare the response to the San Mateo County Grand Jury, agreeing with the Findings and Recommendations of the report, with the exception of the recommendation that CCWD become members of WARN.

The Board also directed staff to assemble emergency provisions to be supplied at each of the water treatment plant locations.

D. Status Report on Capital Improvement Projects

Mr. Schmidt advised the Board that the bid for the Highway 92/Main Street project had been awarded at the Half Moon Bay City Council meeting on August 15, 2006. He informed the Board that a series of pre-construction meetings will be scheduled, which would be attended

by the District's Staff and Engineer, prior to construction, which is expected to begin in September 2006.

Mr. Schmidt also reported that the San Mateo County Public Hearing for the El Granada Pipeline Replacement Project Phase 3 had been postponed until September 13, 2006.

Mr. Schmidt informed the Board of the outcome of this recent meeting with the City of Half Moon Bay staff regarding the El Granada Pipeline Project, Phase 3 and the Board discussed the District's strategy for the upcoming August 24, 2006 City of Half Moon Bay Planning Commission's Public Hearing for the project's coastal development permit. The Board also agreed with Mr. Schmidt about the apparent substandard biotic assessment report prepared by the consultant, Coast Range Biological, selected by the City of Half Moon Bay.

The Board agreed to write a letter to the City of Half Moon Bay, after the August 24, 2006 Public Hearing, stating the District's dissatisfaction with the biotic assessment report, to request that the City reimburse the District for all associated costs, and to request that the City consider readdressing their system for choosing consultants.

E. **Discussion and direction to staff regarding a Special Board Meeting/Workshop for the Denniston Restoration Project**

Mr. Schmidt reminded the Board that there have been several discussions recently regarding the scheduling of a Special Board Meeting / Workshop for the purpose of obtaining community and regulatory agency support for a Denniston Reservoir Restoration Project. He reported that he envisioned that the event would take place on one morning at the mid to end part of October, with the initial meeting taking place at the Train Station on Higgins Canyon Road, followed by possibly a brown-bag lunch, served at or in route to the actual project site at Denniston Reservoir.

Directors Mickelsen, Coverdell, and Larimer expressed their support for such a workshop, noting that they envision several meetings/workshops, devoted to this subject, and did not feel that a visit to the site was necessary. Staff was directed to prepare for the first of a series of Special Meetings / Workshops involving the community and associated regulatory agencies during the middle to late part of October.

8) ATTORNEY'S REPORT

A. Update on sale of twenty partial non-priority water service connections

Mr. Condotti provided an update, referencing his staff report. Staff was directed to assign the surplus funds from the sale of these connections (after proper allocation to the Crystal Springs Project accounts) to be placed in the Capital Improvement Project Budget.

B. Biennial review of conflict of interest code

Mr. Condotti provided the background of this agenda item, explaining that the conflict of interest code was required to be amended, due to a notice from the San Mateo County Assessor-Clerk-Recorder, stating that their office is required to be the filing officer. Mr. Condotti reported that this is the only substantive change made by the amended code.

ON MOTION by Director Coverdell and seconded by Director Mickelsen, the Board voted as follows to adopt Resolution 2006-18 Adopting an Amended Conflict of Interest Code:

Director Coverdell	Aye
Director Larimer	Aye
Director Mickelsen	Aye
Director Feldman	Aye
President Ascher	Aye

9) ENGINEER'S REPORT

A. District Engineer Work Status Report

Mr. Teter reported to the Board that the District is currently on schedule for the El Granada Transmission Pipeline Replacement Project, referencing the table in his staff report. He informed the Board that one of the next steps in the process is to seek an encroachment permit from the California Department of Transportation. He also informed the Board that he had recently submitted an application for such a permit for the Carter Hill East Pipeline Replacement Project.

Director Coverdell requested that copies be distributed of two recent reports, the draft of the Long Term Plan and Cost/Benefit Analysis Evaluating Repairing the Existing Tank vs. Constructing a New Tank, and the Cost of Water per Supply Source (FY 2004-2005).

10) MEETINGS ATTENDED / SCHEDULED - BOARD OF DIRECTORS

Director Mickelsen reported that he will be attending a BAWSCA meeting on the third Thursday of September and would provide a report to the Board.

President Ascher reported that he would be attending an Association of California Water Agencies Local Legislative Committee in Sacramento on October 13, 2006 and would also provide a report to the Board.

11) AGENDA ITEMS AND DIRECTOR COMMENTS

12) CLOSED SESSION

~~A. Conference with Real Property Negotiators (Cal. Govt. Code §54956.8(b)):~~
~~Properties: Carter Hill West Storage Tank Site (APN 056-320-090); 655 Miramar Drive, Half Moon Bay, CA (APN 048-076-070)~~
~~Agency Negotiators: General Manager/Legal Counsel~~
~~Negotiating Parties: District and Global Signal Acquisitions IV LLC~~
~~Subject Matter: Potential sale/lease of portion of District-owned properties for communications tower site~~
~~B. Conference with labor negotiators (Cal Govt. Code §54957.6):~~
~~Agency Designated Representative: Legal Counsel~~
~~Unrepresented Employee: General Manager~~

C. Conference with Legal Counsel - Anticipated Litigation
Initiation of litigation pursuant to subdivision (b) of Section 54956.9 - One (1) potential case

The Closed Session convened at approximately 9:06 p.m. See attached Closed Session Report pursuant to Cal. Gov. Code §54957.1 and addendum to meeting Minutes.

~~13) RECONVENE OPEN SESSION~~

~~14) CONSIDERATION OF GENERAL MANAGER PERFORMANCE-BASED COMPENSATION ADJUSTMENT~~

15) ADJOURNMENT

The meeting was adjourned at 9:30 p.m. The next meeting of the Coastside County Water District Board of Directors is scheduled for Tuesday, September 12, 2006 at 7:30 p.m.

Respectfully submitted

Ed Schmidt

Ed Schmidt, General Manager

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Everett Ascher, President

Coastside County Water District
Closed Session Report and Addendum To Meeting Minutes

By: **Anthony P. Condotti, District Legal Counsel**
Agenda: **August 8, 2006**

Report Date: August 9, 2006
Subject: Report on Closed Session of August 8, 2006 pursuant to Cal. Govt. Code §54957.1 and addendum to meeting minutes

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Closed Session Report:

12) CLOSED SESSION

A. Conference with Real Property Negotiators (Cal. Govt. Code §54956.8(b)):
Properties: Carter Hill West Storage Tank Site (APN 056-320-090); 655 Miramar Drive, Half Moon Bay, CA (APN 048-076-070)
Agency Negotiators: General Manager/Legal Counsel
Negotiating Parties: District and Global Signal Acquisitions IV LLC
Subject Matter: Potential sale/lease of portion of District-owned properties for communications tower site

B. Conference with labor negotiators (Cal Govt. Code §54957.6):
Agency Designated Representative: Legal Counsel
Unrepresented Employee: General Manager

C. Conference with Legal Counsel – Anticipated Litigation
Initiation of litigation pursuant to subdivision (b) of Section 54956.9 – One (1) potential case

The closed session convened at approximately 9:45 p.m. with Directors Ascher, Mickelsen, Coverdell and Larimer, General Manager Schimidt and Legal Counsel Condotti.

13) RECONVENE OPEN SESSION

The closed session concluded at approximately 10:25 p.m. with no members of the public present. No action was reported.

14) CONSIDERATION OF GENERAL MANAGER PERFORMANCE-BASED COMPENSATION ADJUSTMENT

After discussion, on motion by Director Coverdell, and a second by Director Mickelsen, the Board unanimously (4-0) approved a one-time performance based compensation adjustment in the amount of $2,500.00. The meeting concluded at approximately 10:30 p.m.

Coastside County Water District
Closed Session Report and Addendum To Meeting Minutes

By: **Anthony P. Condotti, District Legal Counsel**
Agenda: **August 8, 2006 (adjourned to August 16, 2006)**

Report Date: August 17, 2006
Subject: Report on Closed Session of August 16th (adjourned regular meeting of August 8, 2006) pursuant to Cal. Govt. Code §54957.1 and addendum to meeting minutes

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Closed Session Report:

12) CLOSED SESSION

C. Conference with Legal Counsel – Anticipated Litigation
Initiation of litigation pursuant to subdivision (b) of Section 54956.9 – One (1) potential case

The closed session convened at approximately 9:10 p.m. with Directors Ascher, Mickelsen, Coverdell, Larimer, and Feldman, General Manager Schimidt and Legal Counsel Condotti. The closed session concluded at approximately 9:30 p.m., with no members of the public present. No reportable action was taken.

COASTSIDE COUNTY WATER DISTRICT

766 MAIN STREET

HALF MOON BAY, CA 94019

MINUTES OF THE SPECIAL MEETING OF THE BOARD OF DIRECTORS

August 24, 2006

1) ROLL CALL: President Ascher called the meeting to order at 6:30 p.m. This portion of the special meeting was conducted at the Board Chambers of the Coastside County Water District, located at 766 Main Street, Half Moon Bay, CA. Present at roll call were Directors Jim Larimer, Ken Coverdell, Chris Mickelsen, and Bob Feldman.

Also present were Ed Schmidt, General Manager, Anthony Condotti, Legal Counsel, Jim Teter, District Engineer, George Burwasser, Biological Consultant, and JoAnne Whelen, Administrative Assistant/Recording Secretary.

2) SPECIAL ORDER OF BUSINESS

A. Consideration of City of Half Moon Bay Planning Commission's Recommended "Conditions for Approval" of Coastside County Water District's Coastal Development Permit to Allow the Replacement of Old Water Pipelines with New Larger Pipelines Located Within the Public Rights-of-Way of North Main Street and the west side of Highway 1 to Mirada Road in the City of Half Moon Bay. These "Conditions of Approval" are set forth in Exhibit "B" to the Staff Report prepared for Item VI.2 of the City of Half Moon Bay Planning Commission's August 24, 2006 meeting – PDP-072-05

President Ascher announced that the focus of the meeting would be on the matter before the Half Moon Bay Planning Commission regarding a Coastal Development Permit for the El Granada Pipeline Replacement Project. President Ascher invited former Coastside County Water District Director, and current Half Moon Bay City Councilman, John Muller, to address the Board.

John Muller – Half Moon Bay, CA – Informed the Board that he had consulted with the City's legal counsel earlier in the day, who opined that Planning Commission Chairman's previous correspondence related to the project would not disqualify him from participating in the hearing. Mr. Muller also urged Directors to avoid addressing the Commissioners on a personal level, and to confine comments and questions to the merits of the project. He wished the Board and staff success with this difficult process.

President Ascher thanked Mr. Muller for his insight and words of wisdom. He then requested that the General Manager review the action from the last Board meeting on this issue. Mr. Schmidt read from the draft Minutes, which stated that the Board directed staff to prepare a letter to the City of Half Moon Bay, following the Public Hearing, stating the deficiencies and substandard work of the Coast Range Biotic Assessment and to request that the City reimburse the District for the cost of the report.

President Ascher recommended that the Board focus on the positive nature of this project, and in obtaining the permit approvals, with the emphasis on safety and health issues. He also stressed the importance of conveying that the pipeline has been sized to accommodate current existing growth, in order to provide adequate service to our ratepayers.

President Ascher opened the discussion by reminding the Board that the ultimate goal is to have the Coastal Development Permit (CDP) approved and that the Board needed to decide if all of the conditions were acceptable, and if not, how best to proceed.

Director Coverdell stated that he felt that time is of the essence and that it was important that the CDP be approved at the City's meeting this evening and that CCWD should accept the conditions as stated, in order to avoid any further potential delays with the project.

Director Mickelsen agreed with Director Coverdell, that CCWD could live with the conditions, that it would be the most cost effective approach than to battle with the City over the conditions. He referenced the schedule that the District Engineer has provided and felt that it was important to try to stay on that schedule for the project's construction to take place on a timely basis for the District's benefit and to the benefit of all the ratepayers.

Director Larimer stated that if the City Planning Commission made any reference to the project being growth-inducing that it may be effective to use the December 10, 2003 quote from Chairman Mike Reilly from the California Coastal Commission regarding infrastructure. He also shared his concern that the District, along with accepting all of the previous conditions of the permit, will have to accept the new conditions, which he felt were specific and unreasonable. He further stated, in addition to the ill definition of the project itself, that there is a huge difference in the description contained in the City's staff report and in the conditions specified in Exhibit B. Director Larimer reported that he felt that the Board should report to the City Planning Commission that they agree with the philosophy of the staff report but that the Board disagrees with some of the specifics, which contain some errors in facts. He also reported that he felt the Board should refuse to accept the condition that CCWD must report the financial status of the project to the City as a condition to this permit.

Director Feldman inquired about the conditions associated with the previous permit, which Mr. Schmidt addressed in detail. Director Feldman stated that he felt it was important to accentuate the positive, and agreed that the conditions should be accepted to avoid any further delays with the project.

President Ascher then opened the discussion up for public comment.

George Muteff – 408 Redondo Beach Road, Half Moon Bay – Reported that he had visited City Hall earlier in the day and submitted some public record requests for any correspondence between the Planning Commission Chairman and the City of Half Moon Bay staff. He informed the Board that he would like to address the Planning Commission and speak to the public safety versus growth issues and the overall cost of the project to the ratepayers in the end.

The District's biological consultant, George Burwasser, informed the Board that he was prepared with materials, including photographs that address many issues, the various waterways, including set-backs, the plan line showing the regulated habitats and also had packets of materials that speak to the noise issue. Mr. Burwasser also stated that in his opinion, that although some of the conditions were "over-kill", there were no conditions that the District could not live with, and he did not feel that it was appropriate to dispute the conditions.

Mr. Teter, District Engineer reported that the project drawings are currently being revised to indicate the proper jack-and-bore lengths at each of the creek crossings and that markers have now been placed in the filed showing these locations. He further reported that he will have conditions associated with an encroachment permit from CalTrans as well.

The Board continued to discuss the various project related issues. Mr. Condotti addressed the requirement regarding the financial analysis, pointing out that although it is a somewhat inappropriate condition, the Board had accepted this same condition in connection with a previous project. He also stated that he felt that this condition is close enough to the language of the policy, so that it would be difficult to challenge the validity of this condition, which merely requires that the District provide information to the City, without granting them any authority in the decision- making.

President Ascher summarized the issues and suggested that the Board members consider proposing a motion.

ON MOTION by Director Coverdell and seconded by Director Feldman, the motion was presented to accept the conditions as contained within the coastal development permit.

Director Larimer proposed an amendment to the motion to request a conference with City of Half Moon Bay staff, upon the general agreement that the permit would be issued, and that the issues of a variance in terms of the interpretation of the biological mitigation and the need for it, be reviewed with staff, engineer, consultants, and legal counsel representing the District and that they arrive at a modification of Exhibit B that is mutually satisfactory.

Director Coverdell did not accept the amendment to his motion. President Ascher called for a roll call vote on the original motion:

ON MOTION by Director Coverdell and seconded by Director Feldman, the Board voted as follows to accept the conditions as contained within the coastal development permit:

Director Coverdell	Aye
Director Larimer	No
Director Mickelsen	Aye
Director Feldman	Aye
President Ascher	Aye

The Board and staff then discussed the script and process for addressing the Planning Commission at the Public Hearing. The General Manager reviewed his proposed script for addressing the Planning Commission. The Board accepted the General Manager's recommendation that he be the principal spokesman.

Director Larimer then made the following motion: The Coastside County Water District Board of Directors, through their legal counsel, make a formal request of all associated government agencies, including the City of Half Moon Bay, the Federal Fish and Wildlife Agency, the California Department of Fish and Game and the California Coastal Commission, to produce copies of all of their correspondence related to this project, under the Freedom of Information Act. There was no second to the motion.

3) ADJOURNMENT

This portion of the special meeting that was conducted at the Coastside County Water District Board Chambers was adjourned at 7:34 p.m.

4) **ROLL CALL: All Directors were present at this portion of the special meeting, which convened at approximately 7:45 p.m. at a Public Hearing of the City of Half Moon Bay Planning Commission located at the Ted Adcock Senior/Community Center, 535 Kelly Avenue, Half Moon Bay, CA**

5) SPECIAL ORDER OF BUSINESS

A. **Item VI.2 of the City of Half Moon Bay Planning Commission Agenda – PDP-072-05 – entitled a "Coastal Development Permit to Allow the Replacement of Old Water Pipelines with New Larger Pipelines Located Within the Public Rights-of-Way of North Main Street and the west side of Highway 1 to Mirada Road in the City of Half Moon Bay". Applicant: Coastside County Water District.**

The Board and staff discussed the subject Coastal Development Permit and associated conditions in the course of the public hearing.

6) ADJOURNMENT

The meeting was adjourned at approximately 1:35 a.m. on Friday, August 25, 2006, and no action was taken.

Respectfully submitted:

Ed Schmidt

Ed Schmidt, General Manager

Everett Ascher, President

STAFF REPORT

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

From: **Ed Schmidt, General Manager**

Agenda: **September 12, 2006**

Report Date: **September 6, 2006**

Subject: **Notice of Completion – Denniston Water Treatment Plant Filter Rehabilitation Project**

Recommendation: The Board of Directors take the following Actions.

(1) Accept the Denniston Water Treatment Plant Filter Rehabilitation Project as complete.

(2) Authorize the Notice of Completion to be filed with the County of San Mateo.

(3) Authorize the release of the retention funds when the Notice of Completion has been recorded and returned to the District.

Background:

The District entered into a contract with ERS Industrial Service, Inc., on February 8, 2005. The project consisted of (1) removing the existing filter media and pipe laterals from three 8 foot diameter by 20 foot long pressure filters and replacing those materials with new materials, (2) removing the 8 inch diameter backwash flow control valve and the 4 inch diameter surface wash flow control valves and replacing them with new valves, and (3) replacing or repairing the interior coating system of each filter as directed by the Engineer

following a field inspection after the filter media has been removed from the filters The project was completed on August 24, 2006.

Fiscal Impact: None.

Recorded at Request of
and Return To:

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

NOTICE OF COMPLETION

NOTICE IS HEREBY GIVEN:

1. The undersigned is the owner of all right, title and interest or estate in the hereafter described real property.

2. The full name and address of the undersigned is:

COASTSIDE COUNTY WATER DISTRICT
766 MAIN STREET
HALF MOON BAY, CALIFORNIA 94019

3. On the 24th day of August, 2006 there was completed upon the hereinafter described real property a work of improvement as a whole named Denniston Water Treatment Plant Filter Rehabilitation Project, consisting of (1) removing the existing filter media and pipe laterals from three 8 foot diameter by 20 foot long pressure filters and replacing those materials with new materials, (2) removing the 8 inch diameter backwash flow control valve and the 4 inch diameter surface wash flow control valves and replacing them with new valves, and (3) replacing or repairing the interior coating system of each filter as directed by the Engineer following a field inspection after the filter media has been removed from the filters.

4. The name of the original contractor for the work of improvement as a whole was: ERS Industrial Service, 2120 Warm Springs Court, Fremont, CA 94539-6774.

5. The real property herein referred to is situated in the County of San Mateo, State of California, and described as follows:

The Denniston Water Treatment Plant is located on a parcel of land which is located within the unincorporated portion of San Mateo County (APN 037-320-140/150). Vehicle access to the treatment plant is by means of an unpaved road which begins on the east side of Highway 1 directly across the highway from the driveway to the Half Moon Bay Airport parking lot. The treatment plant is located approximately 1-1/4 miles east of State Highway No. 1.

COASTSIDE COUNTY WATER DISTRICT

By: _____
Ed Schmidt, General Manager

COASTSIDE COUNTY WATER DISTRICT

Installed Water Connection Capacity & Water Meters

2006

Installed Water Connection Capacity	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Total
HMB Non-Priority													
5/8" meter					1		1	3					5
3/4" meter					1.5			1.5					3
HMB Priority													
5/8" meter													0
3/4" meter													0
1" meter													0
County Non-Priority													
5/8" meter			2	2									4
3/4" meter	1.5												1.5
1" meter						2.5							2.5
County Priority													
5/8" meter													0
3/4" meter	1.5	1.5											3
1" meter													0
Monthly Total	**3**	**1.5**	**2**	**2**	**2.5**	**2.5**	**1**	**4.5**	**0**	**0**	**0**	**0**	**19**

Installed Water Meters	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec	Totals
HMB Non-Priority					2		1	4					7
HMB Priority													0
County Non-Priority	1		2	2		1							6
County Priority	1	1											2
Monthly Total	**2**	**1**	**2**	**2**	**2**	**1**	**1**	**4**	**0**	**0**	**0**	**0**	**15**

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

TOTAL CCWD PRODUCTION (HCF) ALL SOURCES-2006

	PILARCITOS		DENNISTON		CRYSTAL SPRINGS	SAN VIN.	RAW WATER	PLANT	TOTAL	
	WELLS	LAKE	WELLS	RESERVOIR	RESERVOIR	RESERVOIR	TOTAL	USAGE	HCF	MG
JAN	12,326	18,971	0	0	32,353	0	63,650	2,914	60,735	45.43
FEB	15,294	40,989	2,139	4,893	615	0	63,930	2,406	61,524	46.02
MAR	17,727	50,013	0	0	321	0	68,061	1,885	66,176	49.50
APR	0	103,422	0	0	267	0	103,690	2,406	101,283	75.76
MAY	0	83,543	3,235	15,053	0	0	101,832	4,545	97,286	72.77
JUN	0	60,882	2,005	18,730	27,139	0	108,757	5,080	103,676	77.55
JUL	0	0	2,259	21,858	122,701	0	146,818	4,385	142,433	106.54
AUG	0	0	1,390	19,799	102,340	0	123,529	5,281	118,249	88.45
SEPT	0	0	0	0	0	0	0	0	0	0.00
OCT	0	0	0	0	0	0	0	0	0	0.00
NOV	0	0	0	0	0	0	0	0	0	0.00
DEC	0	0	0	0	0	0	0	0	0	0.00
TOTAL HCF	45,348	357,821	11,029	80,334	285,735	0	**780,267**	28,904	**751,364**	
TOTAL MG	33.92	267.65	8.25	60.09	213.73	0.00	**583.64**	21.62		**562.02**
% TOTAL	5.8%	45.9%	1.4%	10.3%	36.6%	0.0%	**100.0%**	3.7%	96.3%	

CCWD WATER USE BY CATEGORY (HCF)

Through December 2006

	JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEPT-OCT	NOV-DEC	HCF to Date	MG to Date
RESIDENTIAL	64,497	60,712	95,392	120,177	0	0	340,778	254.90
COMMERCIAL	10,533	8,920	10,840	12,248	0	0	42,541	31.82
RESTAURANT	3,092	2,806	3,222	3,882	0	0	13,002	9.73
HOTELS/MOTELS	6,276	5,738	6,744	7,375	0	0	26,133	19.55
SCHOOLS	1,223	911	1,634	4,695	0	0	8,463	6.33
MULTI DWELL	14,656	13,276	15,779	17,353	0	0	61,064	45.68
BEACHES/PARKS	367	314	655	1,599	0	0	2,935	2.20
FLORAL	20,097	18,339	32,936	26,106	0	0	97,478	72.91
RECREATIONAL	335	350	344	427	0	0	1,456	1.09
MARINE	1,844	1,450	767	2,595	0	0	6,656	4.98
IRRIGATION	3,224	786	3,285	29,343	0	0	36,638	27.41

HCF	126,144	113,602	171,598	225,800	0	0	637,144	
MG	94.36	84.97	128.36	168.90	0.00	0.00		476.58

Coastside County Water District
August 2006 Leak Report

Date	Location	City	Pipe Type / Size	Repair Material	Estimated Water Loss	Estimated Cost of Repair
1 Aug	347 Poplar	HMB	1" plastic service	3' copper 1 -1" comp fitting	4,000	$875
1 Aug	Myrtle St	HMB	¾" plastic service	5' copper 1 – ¾" comp fitting	4,320	$525
25 Aug	306 Sevilla St	EG	1" plastic service	8' copper 1 – 1" comp fitting	3,600	$925

Estimated Water Loss – 11,920 gallons
Estimated Cost for Repairs - $2325

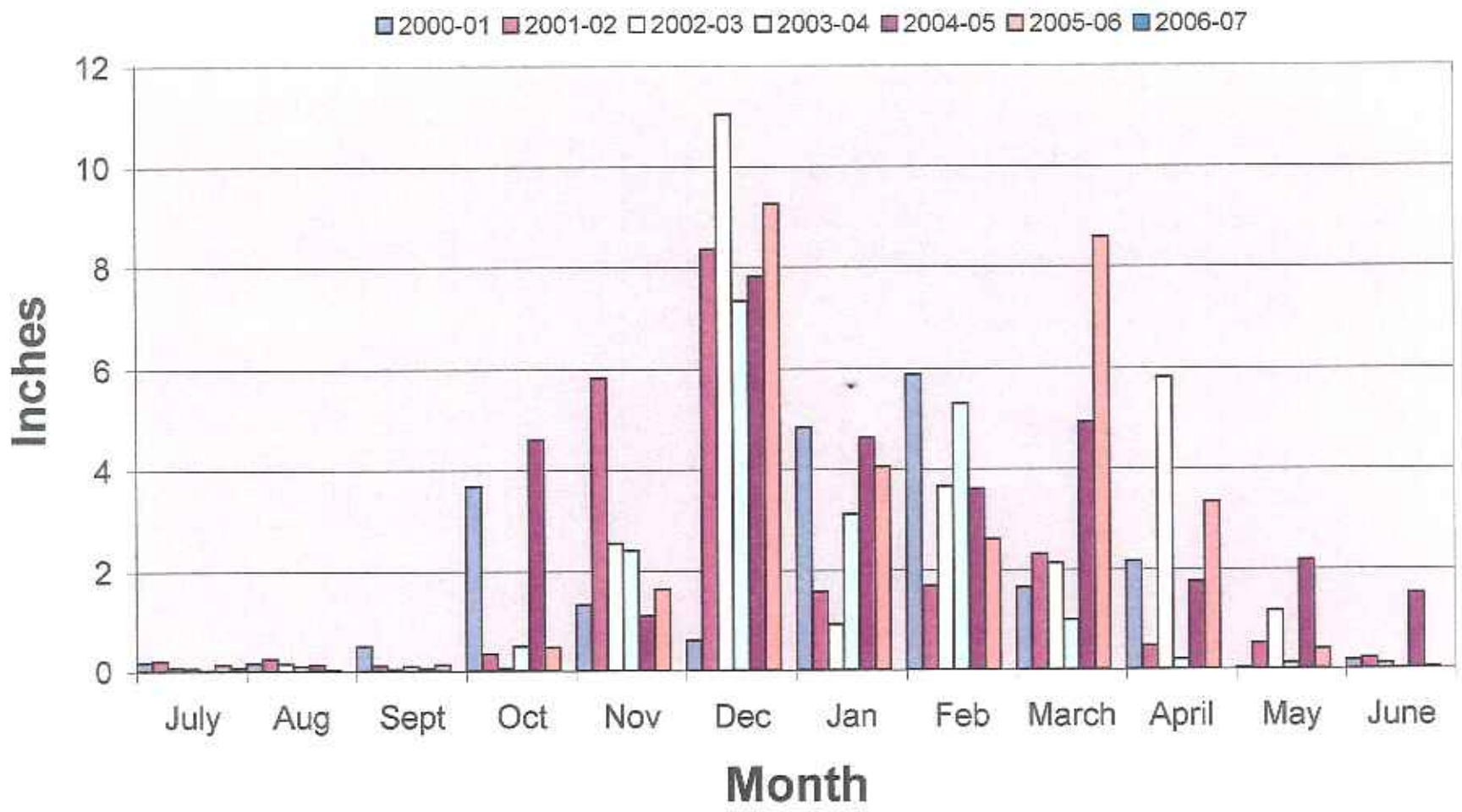
Coastside County Water District
766 Main Street
July 2006 - June 2007

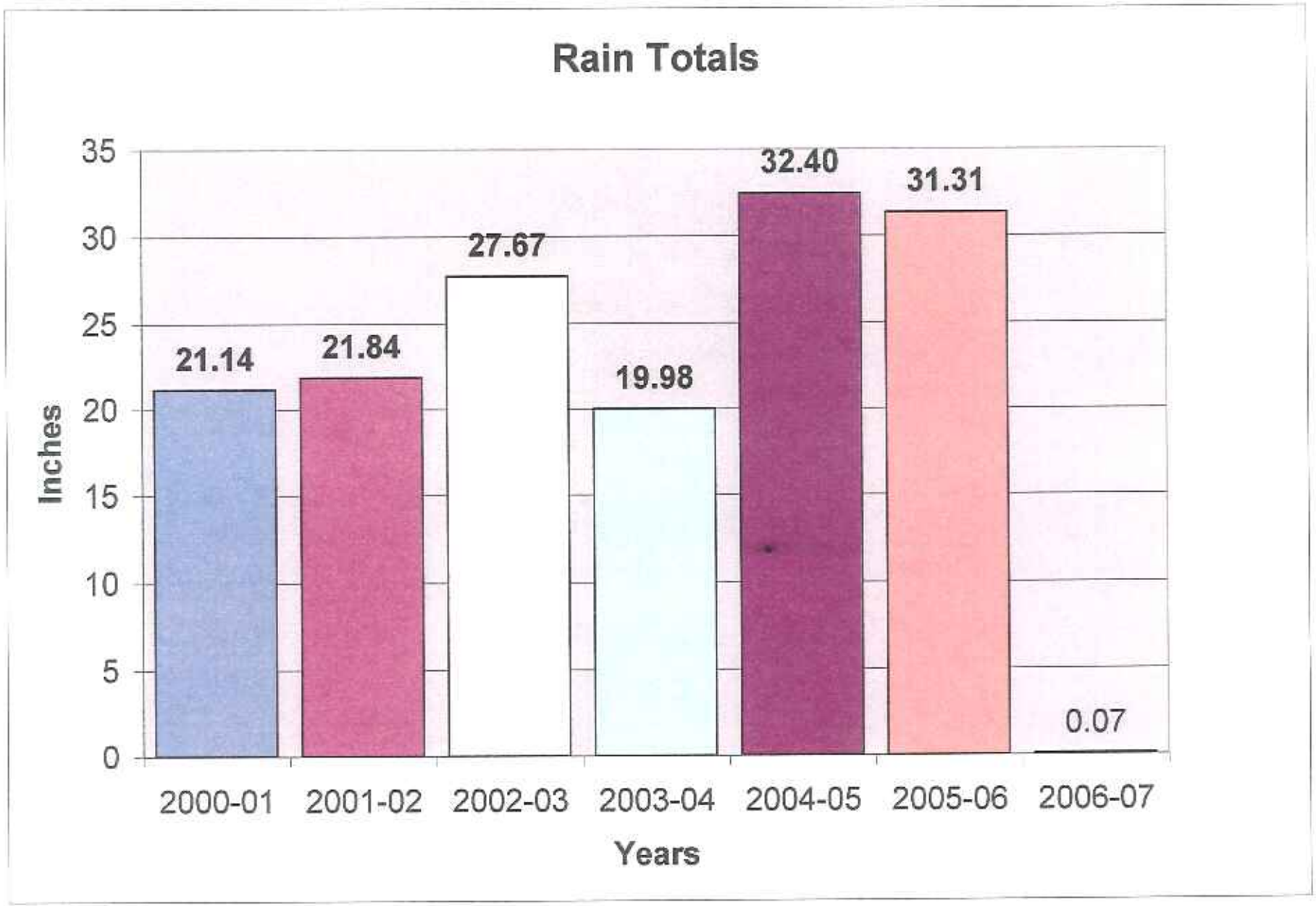
District Office
Rainfall in Inches

	2006						2007					
	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June
1	0	0										
2	0	0										
3	0	0										
4	0	0										
5	0	0										
6	0	0										
7	0	0										
8	0	0										
9	0.02	0										
10	0	0										
11	0	0										
12	0.02	0										
13	0	0										
14	0.01	0										
15	0	0										
16	0	0										
17	0	0										
18	0	0										
19	0	0										
20	0	0										
21	0	0										
22	0	0										
23	0	0										
24	0	0										
25	0	0										
26	0	0										
27	0.01	0										
28	0.01	0										
29	0	0										
30	0	0										
31	0	0										
Mon.Total	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07

Rainfall by Month

July 2006 - June 2007




Rain Totals
35
30
25
20
15
10
5
0
Inches
21.14
21.84
27.67
19.98
32.40
31.31
0.07
2000-01
2001-02
2002-03
2003-04
2004-05
2005-06
2006-07
Years

MONTHLY CLIMATOLOGICAL SUMMARY for AUG. 2006

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	63.9	74.2	12:30p	58.2	5:00a	2.8	1.7	0.00	1.7	10.0	3:00p	SSW
2	59.4	67.7	10:00a	56.6	3:00a	2.4	0.0	0.00	0.6	7.0	9:00a	ESE
3												
4												
5	66.4	75.6	12:30p	54.5	5:00a	2.4	3.6	0.00	1.7	10.0	11:30a	SSW
6	62.2	69.8	12:30p	52.7	5:00a	3.8	1.0	0.00	1.8	12.0	2:00p	SSW
7	66.9	76.9	1:00p	60.6	12:30a	1.1	3.0	0.00	1.8	12.0	3:30p	SSW
8	63.6	69.8	3:00p	57.5	11:30p	2.3	0.9	0.00	1.9	14.0	1:30p	SW
9	64.5	74.2	2:30p	54.3	5:30a	3.2	2.7	0.00	1.1	8.0	12:30p	SSW
10	62.8	71.3	10:00a	55.8	2:30a	2.9	0.7	0.00	1.3	10.0	12:00p	SW
11	64.6	74.6	1:30p	58.5	4:30a	2.2	1.9	0.00	1.4	9.0	1:30p	SSW
12	65.5	76.9	2:00p	58.7	6:30a	2.2	2.7	0.00	2.6	14.0	1:00p	S
13	64.5	73.3	1:30p	59.3	7:00a	2.2	1.7	0.00	2.0	13.0	2:30p	S
14	66.8	77.2	3:00p	59.4	5:30a	1.5	3.3	0.00	2.0	13.0	10:00a	SSW
15	64.3	73.7	12:00p	59.2	4:00a	2.2	1.5	0.00	1.9	10.0	12:30p	SSW
16	64.3	73.2	12:00p	58.5	11:30p	2.2	1.5	0.00	1.8	10.0	11:00a	SSW
17	62.0	72.4	4:00p	54.9	4:00a	4.2	1.2	0.00	1.8	11.0	10:30a	SSW
18	62.1	72.0	11:30a	55.6	5:00a	3.8	1.0	0.00	1.2	9.0	1:00p	SSW
19	61.2	71.7	1:30p	54.5	6:00a	4.5	0.7	0.00	0.9	9.0	2:00p	SSW
20	62.2	72.2	1:00p	56.5	1:30a	3.8	0.9	0.00	0.9	10.0	1:00p	SSW
21	60.9	70.1	12:00p	56.8	11:30p	4.2	0.2	0.00	1.5	12.0	3:00p	SW
22	60.8	68.4	4:30p	55.0	3:30a	4.4	0.2	0.00	1.4	12.0	3:30p	SW
23	61.3	70.2	2:00p	55.6	12:00m	4.2	0.5	0.00	1.3	11.0	3:00p	SW
24	61.3	72.3	1:30p	54.7	1:30a	4.5	0.8	0.00	1.0	9.0	12:30p	SSW
25	63.6	75.2	2:00p	57.7	1:00a	3.0	1.5	0.00	1.7	12.0	2:30p	S
26	64.1	73.7	2:00p	58.1	6:00a	2.6	1.6	0.00	1.5	10.0	1:00p	SSW
27	62.0	70.1	11:30a	56.5	11:30p	3.6	0.6	0.00	1.0	10.0	2:30p	SSW
28	59.9	68.0	11:00a	55.0	5:00a	5.1	0.1	0.00	1.4	12.0	4:00p	SW
29	60.7	69.6	1:00p	56.1	12:30a	4.6	0.3	0.00	0.7	9.0	4:00p	SW
30	60.9	69.5	1:30p	52.1	12:00m	4.8	0.7	0.00	1.3	9.0	12:00p	SSW
31	60.0	69.7	2:30p	49.1	5:30a	5.8	0.8	0.00	1.5	10.0	11:30a	S
	62.9	77.2	14	49.1	31	96.4	37.4	0.00	1.4	14.0	8	SSW

Max >= 90.0: 0
Max <= 32.0: 0
Min <= 32.0: 0
Min <= 0.0: 0
Max Rain: 0.00 ON 8/01/06
Days of Rain: 0 (>.01 in) 0 (>.1 in) 0 (>1 in)
Heat Base: 65.0 Cool Base: 65.0 Method: Integration

STATION (City) Half Moon Bay (River Station, if different) | MONTH AUG | 20 06

STATE CA | COUNTY SAN MATEO | RIVER

TIME (LST) OF OBSERVATION 0730 | TEMP. | PRECIPITATION | STANDARD TIME IN USE PST

TYPE OF RIVER GAGE | ELEVATION OF RIVER GAGE ZERO Ft. | FLOOD STAGE Ft. | NORMAL POOL STAGE Ft.

ORM B-91 (Rev.)

U.S. DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL WEATHER SERVICE

RECORD OF RIVER AND CLIMATOLOGICAL OBSERVATIONS

DATE	TEMPERATURE F. 24 HRS. ENDING AT OBSERVATION MAX.	MIN.	AT OBSN.	PRECIPITATION 24-HR AMOUNTS Rain, melted snow, etc. (Mo. and Hundredths)	Snow, ice pellets, hail, (mo. and tenths)	At Ob. Snow, ice pellets, hail, ice on ground (Mo.)	Draw a straight line (——) through hours precipitation was observed, and a waved line (~~~) through hours precipitation probably occurred unobserved. A.M. NOON P.M.	WEATHER (Calendar Day) Mark "X" for all types occurring each day. Fog	Ice Pellets	Glaze	Thunder	Hail	Damaging Winds	Time of observation if different from above	RIVER STAGE CONDITION	GAGE READING AT ___ A.M.	TENDENCY	REMARKS (Special observers, etc.)
1	67	55	68	0.00				X								0845		GA
2	65	54	56	0.00				X								0810		GA
3	64	55	57	0.00				X								0805		GA
4	65	54	57	0.00				X								0800		GA
5	72	51	60	0.00												0730		GA
6	71	46	54	0.00												0815		JW
7	68	56	62	0.00												0930		GA
8	74	52	60	0.00												0917		T
9	69	49	53	0.00												0771		JW
10	70	49	58	0.00												0800		GA
11	63	55	54	0.00				X								0730		GA
12	64	55	56	0.00												0800		JW
13	69	55	57	0.00				X								0817		JW
14	66	56	60	0.00												0830		GA
15	70	56	57	0.00												0805		GA
16	69	52	62	0.00				X								0750		GA
17	65	53	56	0.00				X								0755		JW
18	66	51	56	0.00				X								0810		GA
19	66	52	55	0.00				X								0800		GA
20	69	53	55	0.00				X								0820		JW
21	67	53	57	0.00												0845		T
22		NO		PAT	T													
23	65	53	54	0.00												0651		JW
24	63	53	56	0.00				X								0800		GA
25	62	54	57	0.00				X								0800		GA
26	61	55	55	0.00				X								0815		GA
27	67	54	55	0.00												0830		T
28	69	53	55	0.00												0800		GA
29	63	53	55	0.00												0755		T
30	62	54	55	0.00												0730		GA
31	67	43	52	0.00												0745		GA
			SUM			X	CHECK BAR (For wire-weight) NORMAL CK. BAR	Fog	Ice Pel.	Glaze	Thund.	Hail	Dam. Winds					
							READING / DATE											

CONDITION OF RIVER AT GAGE

A. Obstructed by rough ice.
B. Frozen, but open at gage.
C. Upper surface of smooth ice.
D. Ice gorge above gage.
E. Ice gorge below gage.
F. Shore ice.
G. Floating ice.
H. Pool stage.

OBSERVER SAM DPS

SUPERVISING OFFICE MTR

STATION INDEX NO. 04-3714

San Francisco Public Utilities Commission
Hydrological Conditions Report
For July 2006

M. Tsang, J. Chester, B. McGurk, 4 August 2006

Current System Storage

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

Table 1
Current Storage
As of August 1, 2006

Reservoir	Current Storage		Maximum Storage		Available Capacity		Percent of Maximum Storage
	Acre-Feet	Millions of Gallons	Acre-Feet	Millions of Gallons	Acre-Feet	Millions of Gallons	
Tuolumne System							
Hetch Hetchy [1/]	357,996		360,360		2,364		99.3%
Cherry [2/]	270,080		273,340		3,260		98.8%
Lake Eleanor [3/]	25,867		27,100		1,233		95.4%
Water Bank	570,000		570,000		0		Full
Tuolumne Storage	1,223,943		1,230,800		6,857		99.4%
Local Bay Area Storage							
Calaveras [4/]	38,199	12,447	96,824	31,550	58,625	19,103	39.4 %
San Antonio	42,804	13,948	50,496	16,454	7,692	2,507	84.8 %
Crystal Springs	49,223	16,039	58,377	19,022	9,154	2,983	84.3 %
San Andreas	17,478	5,695	18,996	6,190	1,518	495	92.0 %
Pilarcitos	2,292	747	3,099	1,010	807	263	73.9 %
Total Local Storage	149,996	48,876	227,792	74,226	77,796	25,350	65.8%
Total System	1,373,939		1,458,592		84,653		94.2%

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

Hetch Hetchy System Precipitation Index [5/]

Current Month: The July precipitation index is 0.19 inch, 124.7% of the average index for the month.

Cumulative Precipitation to Date: Water year-2006 to date precipitation index is 50.9 inches, or 143.1% of the average annual water year, or 147.2% of the average season-to-date precipitation index.

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

Tuolumne Basin Unimpaired Inflow

Unimpaired inflow to SFPUC reservoirs and Tuolumne River at La Grange as of July 1 is summarized below in Table 2. Water available to the City is also shown in Table 2.

Table 2
Unimpaired Inflow
Acre-Feet

	July 2006				October 1, 2005 through July 31, 2006			
	Observed Flow	Median[5]	Average[5]	Percent of Average	Observed Flow	Median[5]	Average[5]	Percent of Average
Inflow to Hetch Hetchy Reservoir	135,253	48,741	78,405	172.5%	1,039,707	664,220	653,412	159.1%
Inflow to Cherry Reservoir and Lake Eleanor	44,555	12,912	25,955	171.7%	732,648	426,035	417,228	175.6%
Tuolumne River at La Grange	207,554	81,362	124,521	166.7%	3,262,732	1,807,450	1,817,210	179.5%
Water Available to the City	77,335	3,816	48,972	157.9%	1,974,764	741,091	791,596	249.5%

[5] Hydrologic Record: 1919 – 2000

Hetch Hetchy System Operations

The well above normal temperature in July did finish the snowmelt for WY2006. The April through July inflow into Hetch Hetchy Reservoir was 165.2% of long-term average. All upcountry reservoirs filled and spilled in July. As the reservoir water levels dropped below the spillway level during the month, powerdraft from Hetch Hetchy and Cherry reservoirs were returned to water conservation mode of operation. Kirkwood Powerhouse Unit #2 was shut down since late June for the scheduled rewinding that will last through this fall.

Water transfer from Lake Eleanor to Cherry Lake was resumed in early July as the snowmelt inflow into Lake Cherry was over. In July, 7,900 acre-feet of water were pumped from Lake Eleanor to Lake Cherry.

SJPL Diversion

The average rate of San Joaquin Pipeline delivery during July was 288 mgd.

Local System

The average rate at the Sunol Valley Water Treatment Plant (SVWTP) for the month of July was approximately 10 mgd. The average rate at Harry Tracy Water Treatment Plant during July was approximately 41 mgd. July water demands averaged approximately 290 mgd. Water demand on August 1, 2006 was approximately 288 mgd.

Table 3 - Precipitation totals for July at three local reservoirs

Reservoir	Month Total (inches)	Percentage of Normal for the Month	Year To Date [7] (inches)	Percentage of Normal for the Year to Date [7]
Pilarcitos	0.00	0 %	0.00	0 %
Crystal Springs	0.00	0 %	0.00	0 %
Calaveras	0.00	0 %	0.00	0 %

[7] Since 7-1-2006

Figure 1: Water Year 2006 cumulative precipitation received at Hetch Hetchy Reservoir through the end-of-month July. Wet, dry, median and WY 2005 precipitation for the station at Hetch Hetchy are included for comparison purposes.

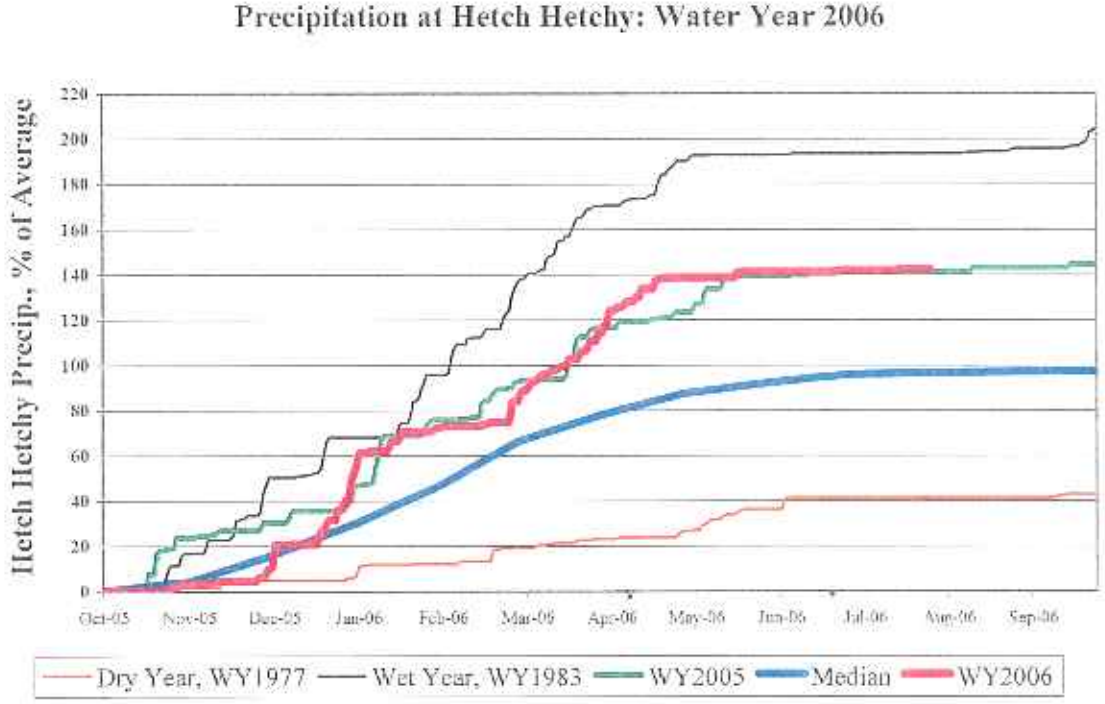
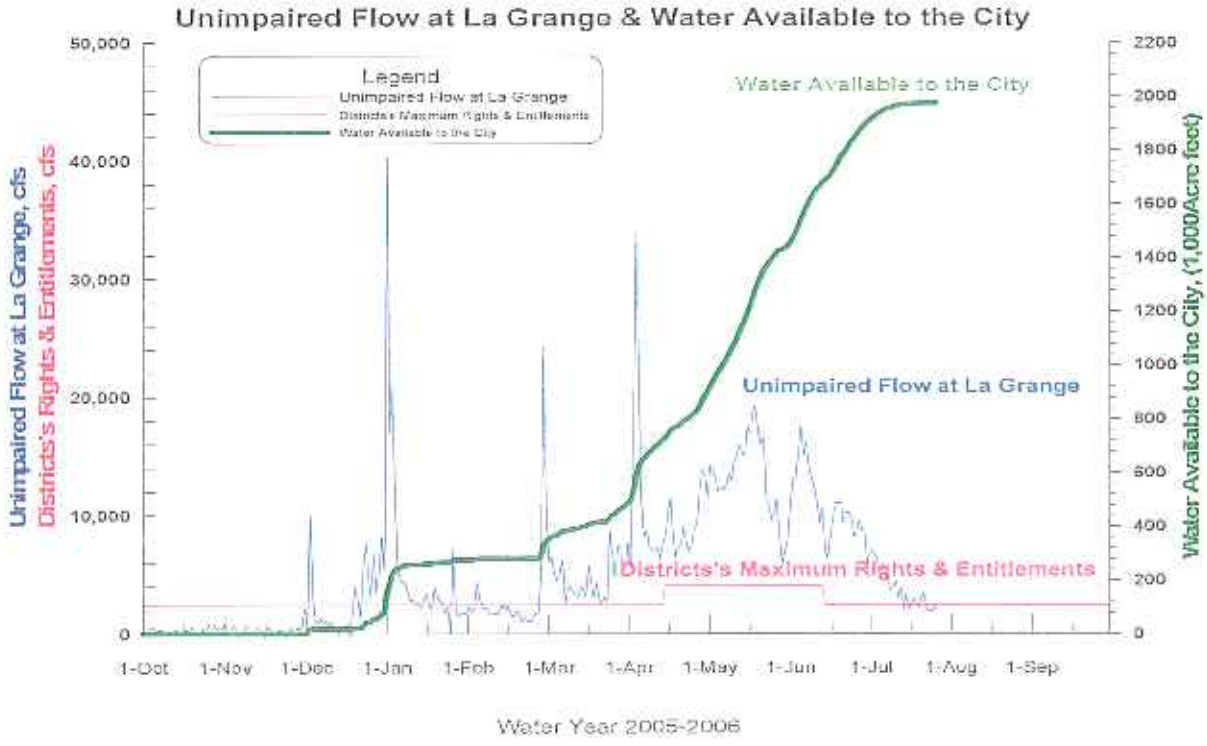


Figure 2: This graph shows the calculated unimpaired flow at La Grange and the allocation of flow between the Districts and the City. Water available to the City for the period from October 1, 2005 through July 31, 2006 is 1,974,764 acre-feet.



cc	HHWP Records	Fong, Mike	Larramendy, Don	Sanguinetti, Dave
	Bauer, Leo	Gass, Matt	Levin, Ellen	Tsang, Michael
	Carlin, Michael	Hale, Barbara	McGurk, Bruce	
	Chester, John	Hannaford, Margaret	Rickson, Norman	
	Davis, Cheryl	Jensen, Art	Samii, Camron	
	DeGraca, Andrew	Kehoe, Paula	Sandkulla, Nicole	

STAFF REPORT

To: **Ed Schmidt, General Manager**

From: **Jim Teter, District Engineer**

Agenda: **September 12, 2006**

Report Date: **September 6, 2006**

Subject: **Engineering Projects Received for Review During August, 2006**

Recommendation:

None. The agenda item is informational.

Background:

The Board of Directors has requested a monthly report from the District Engineer on proposed new developments which have been forwarded to him for engineering review.

Projects Received:

There were no projects received for review.

Fiscal Impact:

None. All costs of engineering review are paid by the project applicant.

STAFF REPORT

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

From: **Ed Schmidt, General Manager**

Agenda: **September 12, 2006**

Date: September 7, 2006

Subject: **General Manager Activities**

The following is an accounting of some of the activities I have been involved with for the period of Friday, August 4, 2006 through Thursday, September 7, 2006:

- **Held "all employee" meeting on Tuesday, August 15, 2006**
- **Met and/or had discussions with the following individuals:**
  - Debra Aucher – City of Half Moon Bay
  - Tim Frahm – Farm Bureau
  - George Burwasser – EIP Associates
  - Steve Stielstra – Essex Environmental
  - Sage Schaan – City of Half Moon Bay
  - Steve Flint – Interim City of Half Moon Bay Planning Director
  - Lucy Triffleman – U.S. Fish & Wildlife
  - Dave Johnston – California Department of Fish & Game
  - Paul Nagengast – City of Half Moon Bay
  - Barbara Mauz
  - Jim Marsh
  - Jeff Barnes
  - Susan Danielson
  - Eddie Andreini
  - Robert Moules
  - Jane Hillhouse
  - David Neal – P.G.& E.
  - Stan Pastorino
  - Mike Schaller – San Mateo County Planning Department
  - Lisa Grote – San Mateo County Planning Department
  - Kevin Janneck – Essex Environmental
  - Galen Gurrero – Essex Environmental

- Chris Coles – City of San Bruno
- Tim Ramirez – San Francisco Public Utilities Commission
- John Ummel – Bay Area Water Supply and Conservation Agency
- Nicole Sandkula – Bay Area Water Supply & Conservation Agency

➢ Meetings Attended

- City of Half Moon Bay Median Irrigation Project meeting with Charise McHugh of the Chamber of Commerce and Debra Aucher of the City of Half Moon Bay – August 3, 2006
- El Granada Pipeline Replacement Project Phase 3 – Debra Aucher and Steve Flint with the City of Half Moon Bay – Monday, August 7, 2006
- City of Half Moon Bay Planning Commission Meeting – August 24, 2006
- Facilities Tour with Director Feldman – August 29, 2006

➢ Upcoming Meetings

- BAWSCA – TAC Meeting – Thursday, September 7, 2006
- Lucy Triffleman, George Burwasser and Jim Teter – Walk through of El Granada Pipeline Route – Tuesday September 12, 2006
- San Mateo County Public Hearing – Wednesday, September 13, 2006
- SFPUC Water Supply Improvement Project Update – Belmont, CA – Thursday, September 14, 2006
- California Special Districts Association (CSDA) Manager's Conference - Squaw Valley, CA – Monday, September 25, 2006
- SFPUC – Bay Area Water Stewards (BAWS) Water Demand Projections – Thursday or Friday – September 28th or 29th, 2006

Coastside County Water District

Employee Meeting – Tuesday, August 15, 2006 – 8:00 a.m.

1. Appointment of Bob Feldman to fill Board vacancy
2. Resolution of the CCWD Board of Directors expressing gratitude to John Muller for his leadership and dedicated service
3. Discussion and direction to staff on the proposed mitigation measures from Coast Range Biological (El Granada Pipeline) and subsequent review by CCWD Biologists (EIP Associates)
4. Discussion and approval of a resolution to authorize the Bay Area Water Supply & Conservation Agency (BAWSCA) to represent CCWD in negotiations on a new Master Water Sales Contract with SFPUC
5. Discussion and direction to staff on the Grand Jury Report "Disaster Preparedness of Special Districts"
6. Status Report on the Capital Improvement Projects – *(attachment)*
7. Discussion and direction to staff regarding a Special Board Meeting / Workshop for the Denniston Restoration Project
8. Update on the twenty partial non-priority water service connections
9. Biennial review of the conflict of interest code
10. Superintendent of Operations Report – *(attachment)*
11. Safety
12. Office Manager's Report
13. CalPERS Retirement Planning Workshops *(attachment)*
14. Questions, Comments, Concerns
15. Adjournment

STAFF REPORT

To: **Ed Schmidt, General Manager**

From: **Joe Guistino, Superintendent of Operations**

Agenda Date: **September 12, 2006**

Date: September 6, 2006

Subject: **Operational Report – August 2006**

Source of Supply- Crystal Springs and Denniston Reservoirs and Denniston Well #9 were the main source of supply for July.

Systems Improvement:

Denniston Filter Media Replacement
This project is now complete.

Nunes Influent Valve
A specification for installation of the new magnetic flow meter was submitted to Anderson Pacific as part of a change order for this project. Installation of the magnetic flow meter and closure of this project is expected by the end of September.

Intrusion Alarms and Security
Bay Alarm has some punch list items to complete. Training and start-up of the system will be complete by the end of September.

Denniston Wells
The RFP for the refurbishing of Denniston Wells 1 & 2 will be sent to local newspapers and qualified contractors on upon Board approval at the 12 September Board Meeting. Estimates for this work will be about $25,000 each.

Short Term Plant Improvements

- Final design is underway for the chemical feed systems at Nunes and Denniston WTP. These systems were designed for efficient and accurate use, safety and reliability.
- Concept design for the Denniston Tank modifications is complete and the engineer is ready to start the final design.

Emergency Repair of Denniston 60 HP High Lift Pump Intake
The District Construction Crew, under John Davis, undertook the emergency replacement of the foot valve for the Denniston 60 HP high lift pump. The original valve had collapsed onto itself and resulted in a blockage to the pump intake. The crews installed the spare foot valve slated for the 100 HP pump. The entire intake

pipe for the 60 HP was found to be severely corroded and will be replaced when the permanent foot valve is installed on this unit this winter. (see attachments)

CCWD Facilities Enhancements
This month's activities:
Denniston WTP - Lab countertop installed, cabinet doors refinished, painted raw and coagulated water pipes, installed signage and stencils on pipelines.
Nunes WTP – painted bollards, vents, and hatches, removed scrap, cleaned Wash Water Recovery room, installed signage (confined space, pipe labels and stencils), weeded and cleaned plant grounds and Half Moon Bay Tank sites,
Other Sites – Cleaning, weed and tree removal at Frenchman's Creek PS, Cahill Tank and Pilarcitos Canyon Road, finished painting portable pump on Cabrillo Highway and Frenchman's Creek PS, washed upper windows and repaired skylights at District Center, cut weeds along Mirmontes Tank road, and painted fire hydrants.

Safety/Training/Inspections:
Safety Committee Meeting:
The Safety Committee met on 15 August. The primary focus of the meeting was on emergency supplies as related to emergency preparedness. Cintas supplied some catalogues as to emergency supply kits available and kits were purchased for Denniston, Nunes and Crystal Springs facilities.

Emergency Planning – Tabletop Exercise Design Course
On 9 and 10 August, Joe Guistino and Steve Twitchell attended a 2-day workshop on how to prepare a tabletop exercise for emergency planning purposes. The workshop was hosted by SFPUC and was conducted by California Specialized Training Institute. The training culminated in a group effort that provided a tabletop exercise titled "Horseplay at the Fluoride Station" that was enacted by SFPUC Staff. (attachment)

Filter Optimization Webcast
Steve Twitchell and Joe Guistino viewed a very informative webcast on filter optimization on 16 August. The webcast materials will be useful as a guideline to monitor filter performance at our two treatment facilities. The webcast is available for viewing by staff for free until 14 November.

Update on Other Activities:

PM Program
We ordered the required upgrades and reinstatement fees for the Hansen V7 PM program and expect to be on-line by 1 October.

Inventory Program
Springbrook representative trained staff members Craig Lunow, John Davis and Jon Bruce on 2 August as to initiating the Inventory Control Program. The program is up and running as planned.

Employee Transitions

Long-term employee Elias Borba tendered his retirement on 28 August, effective as of 1 January 2007. His retirement may free up a promotional opportunity for an existing employee as well as opens a permanent position in our dynamic field crew.

Logan Duffy, our 6 month temp employee, quit for a higher paying job at BCS Chemical in Redwood City. Mr. Duffy was a highly valued worker and may be interested in returning once the new position becomes available.

Department of Health Services

Correspondence

We are on schedule for all deliverables committed to DHS as requested in this year's annual inspection. As of 1 September, we have sent them a package that included:

- SOP to convert from Conventional to Direct Filtration at Nunes WTP
- SOP on Jar Testing
- A critical alarm testing program
- Linked the Denniston chlorine analyzer to the SCADA system.

Items Requiring Attention

Meter Reading (July 06)

Monthly large meter reading – Staff has incorporated an additional 120 meters (approximate) into the monthly meter reading in order to provide monthly readings for all meters 1" and greater.

Crystal Springs Pump #2

In April, an unusual thumping noise occasionally heard in unit #2 at Crystal Springs Pump Station initiated a critical evaluation of the motor and electrical panels. Testing and analysis of the problem unearthed a serious problem with the cold start system in this unit. The cold start equipment was purchased and installation will be complete by mid September.

Temporary foot valve for 60 hp high lift pump at Denniston.

Removing original failed
foot valve at
Denniston.

Directional labels and identifying stencils at Denniston.

Directional labels and identifying stencils at Denniston.

Directional labels and identifying stencils at Denniston.

Directional labels and identifying stencils at Denniston.

Governors Office of Emergency Services
Henry Renteria, Director

California Department of Health Services

OPERATION

" Horseplay at the Fluoride Station "

EXPLAN
(Exercise Plan)

August 10, 2006

Department of Health Services

Operation "Horseplay at the Fluoride Station"

August 10, 2006

EXERCISE PLAN

(EXPLAN)

Table of Contents

I. BACKGROUND / GOAL

Background

The **San Francisco Public Utilities Commission** views Emergency Management as a priority to protect lives and property. The District recently embarked on a series of exercises evaluating their Emergency Operations Plan, and Water Plan. This Table Top exercise is the first exercise in that series. Further exercising will be done by the District at a time conducive to their needs.

Goal

To improve the operational readiness of the **San Francisco Public Utilities Commission Emergency/Department Operations Staff** using a Table Top exercise.

II. CONCEPT / PURPOSE / OBJECTIVES

Concept

This will be a single-phase, Table Top Exercise, involving the **San Francisco Public Utilities Commission Emergency/Department Operations Center** Staff. The Exercise will be controlled through the use of scripted messages and evaluated based upon the Exercise Objectives below:

Purpose

To conduct an emergency management exercise to evaluate the activities of the **Emergency/Department Operations Center** Staff using a Table Top Exercise focusing o water related issues.

Objectives

1. The ability of the staff to operate under SEMS and appropriate Emergency Operatios Plans and Water Plan

2. The ability of staff to coordinate and communicate during the exercise and the abilit of incident management to communicate needed public information.

3. The ability to provide potable water to affected communities.

III. ARTIFICIALITIES AND ASSUMPTIONS

Artificialities

1. All communications will be oral and between the **THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION DOC** staff members and Facilitator.
2. The Communications Directory (**Annex D**) is the only permissible phone directory for the exercise.
3. A Facilitator will control the exercise.
4. Any evacuations will be discussed between **THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION DOC** staff members and will be simulated.
5. Evaluators will be present in the Department Operations Center. Their **only** function is to evaluate the attainment of objectives. They will not assist in operations.
6. The weather and other situational matters are as stated in the narrative.
7. The date as related in the narrative is **August 10, 2006.**
8. Decontamination area if needed will be discussed between staff members.

Assumptions

1. Communications are functioning normally.
2. All information provided by the facilitator is to be considered valid, but not verified. It my be misdirected.
3. All information in the narrative is to be considered valid.
4. Exercise time will be regulated by messages given to the players.
5. Staffing will be at normal levels for this time of day for the event.

IV. TASKS / ASSIGNMENTS

The San Francisco Public Utilities Commission maintains a constant state of readiness to respnd to man-made and natural disasters. Tasks and assignments have been put into place to addres this exercise.

Preparation

- Identify participants for this exercise as personnel from the San Francisco Public Utilities Commission
- Participate in reviewing the SEMS Emergency Plan, and Water Plan.
- Review response techniques to be used by the San Francisco Public Utilities Commission Staff.

During the Exercise

- Staff a designated Emergency/Department Operations Center.

- All staff shall act in accordance with the SEMS Emergency Plan, and Water Plan.
- Participants should be prepared to participate in the exercise in accordance with the SEMS Emergency Plan, and Water Plan.

V. REFERENCES

- **The San Francisco Public Utilities Commission** Emergency Operations Plan
- **The San Francisco Public Utilities Commission** Water Plan

VI. EXERCISE CONTROL

Scripted messages will be used to begin Operation **Horseplay at the Fluoride Station .** The Exercise Facilitator has developed control measures to ensure that the exercise objectives can be met. The term "**Secure Operation Horseplay at the Fluoride Station** will be used to end the exercise.

VII. EVALUATION

An Evaluation Plan has been developed to evaluate the attainment of exercise objectives (see **Annex J**). EOC participants will have an opportunity to critique this exercise during a post-exercise "hot-wash".

VIII. COMMUNICATIONS

All communications will take place only between **THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION DOC** staff members participating in the exercise, and the Facilitator.

IX. SAFETY AND SECURITY

Safety and security issues will be handles by the **San Francisco Public Utilities Commission**.

X. REPORTS

An After-Action Report will be completed following the critique and evaluation of the exercise. The California Specialized Training Institute will compile this report.

XI. PUBLIC INFORMATION

A Public Information Officer (PIO) should be a member of the DOC staff

XII. INSTRUCTIONS TO PARTICIPANTS

1. **THIS EXERCISE IS NOT A TEST OF PERSONNEL!** This is a training exercise designed to evaluate the SEMS Emergency Plan and the Water Plan.
2. During the exercise all questions should be directed to the Facilitator.
3. Actions and decisions should be consistent with the SEMS Emergency Plan and the Water Plan.
4. Save and leave ALL documentation in the EOC.
5. Use only exercise communications as listed in (**Annex D**). This directory is valid **ONLY** for this exercise.
6. **REMEMBER**, this is an exercise and **NOT** a test!

XIII. AGENDA

August 10, 2006

0900 hrs	Introduction to SEMS/ICS/NIMS
1030 hrs	EOC Training.
1300 hrs	Operation **Horseplay at the Fluoride Station** will terminate after exercise objectives are met.

END+30 min A "Hot Wash" critique will be held immediately following the exercise.

END+/- 30 min "Hot Wash" completed.

ANNEXES

Annex A: Planning Milestones

January 2006:	The State Department of Health Services Division of Drinking Water Environmental Management requests that CSTI prepare a Table Top exercise for the Department
January 2006:	CSTI enters into contract with State Department of Health Services Division of Drinking Water Environmental Management for the exercise.
January 2006:	The **San Francisco Public Utilities Commission** agrees to host the exercise.
February, 2006:	Table Top exercise delivered to **The San Francisco Public Utilities Commission** Department Operations Center Staff.

Annex B: Narrative

"Operation Horseplay at the Fluoride Station"

At 2000 hours on August 10, 2006, an anonymous caller to the sheriff's department states that they saw a horse trailer parked illegally inside the Polhemus Fluoride Station. The sheriff's department responds and finds six unlabeled 55-gallon drums, drum pumps, and the gate to the facility has been rammed open. The door to the facility has been left open, the lights are on and a volatile odor is emanating from the drums. Later, another caller notifies the SFPUC at 2230 hours of seeing 4 men at the plant around 1800 hours.

Annex C: Participants

The San Francisco Public Utilities Commission Department Operations Center Staff

Annex D: Communications Directory

All communications will be oral and between members of the **SAN FRANCISCO PUBLIC UTILITIES COMMISSION DOC** Staff and the Facilitator.

Annex E: Media Plan (not applicable for this exercise)

Annex F: Distribution Annex

Distribution of the Exercise Plan (EXPLAN) and COSIN will be as follows:

EXPLAN	1 to each exercise participant and Exercise Design Team Member
COSIN	1 to each member of the Exercise Design Team

Annex G: Control Staff Instructions (COSIN)

The COSIN (Annex G) is published separately

Annex H: Maps

Any maps needed for the exercise will be furnished by the **Emergency/Department Operations Center** Staff

Annex I: Glossary

COSIN – Control Staff Instructions. A document prepared by the Exercise Design Team for use by the Control Staff (exercise director, exercise section chiefs, simulators, evaluators).

EOC – Emergency Operations Center. Command Center that provides centralized information gathering and dissemination, emergency management mitigating efforts and centralized deployment of resources.

EOP – SEMS Emergency Plan. This document provides emergency managers with predetermined guidelines for mitigation of emergency events.

ERP – Emergency Response Plan. This document provides emergency managers with predetermined guidelines for mitigation of emergency events.

EXPLAN – Exercise Plan. Provides the instructions, guidelines and organizational information to all participants for the conduct of a specific exercise.

PIO – Public Information Officer. Serves as the coordinator/clearinghouse of information to the public and the media.

Governors Office of Emergency Services
Henry Renteria, Director

California Department of Health Services

OPERATION

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(EXPLAN)

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To conduct an emergency management exercise to evaluate the activities of the **Emergency/Department Operations Center** Staff using a Table Top Exercise focusing on water related issues.

Objectives

1. The ability of the staff to operate under SEMS and appropriate Emergency Operations Plans and Water Plan

2. The ability of staff to coordinate and communicate during the exercise and the ability of incident management to communicate needed public information.

3. The ability to provide potable water to affected communities.

III. ARTIFICIALITIES AND ASSUMPTIONS

Artificialities

1. All communications will be oral and between the **THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION DOC** staff members and Facilitator.
2. The Communications Directory (**Annex D**) is the only permissible phone directory for the exercise.
3. A Facilitator will control the exercise.
4. Any evacuations will be discussed between **THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION DOC** staff members and will be simulated.
5. Evaluators will be present in the Department Operations Center. Their only function is to evaluate the attainment of objectives. They will not assist in operations.
6. The weather and other situational matters are as stated in the narrative.
7. The date as related in the narrative is **August 10, 2006.**
8. Decontamination area if needed will be discussed between staff members.

Assumptions

1. Communications are functioning normally.
2. All information provided by the facilitator is to be considered valid, but not verified. It may be misdirected.
3. All information in the narrative is to be considered valid.
4. Exercise time will be regulated by messages given to the players.
5. Staffing will be at normal levels for this time of day for the event.

IV. TASKS / ASSIGNMENTS

The San Francisco Public Utilities Commission maintains a constant state of readiness to respond to man-made and natural disasters. Tasks and assignments have been put into place to address this exercise.

Preparation

- Identify participants for this exercise as personnel from the San Francisco Public Utilities Commission
- Participate in reviewing the SEMS Emergency Plan, and Water Plan.
- Review response techniques to be used by the San Francisco Public Utilities Commission Staff.

During the Exercise

- Staff a designated Emergency/Department Operations Center.

- All staff shall act in accordance with the SEMS Emergency Plan, and Water Plan.
- Participants should be prepared to participate in the exercise in accordance with the SEMS Emergency Plan, and Water Plan.

V. REFERENCES

- **The San Francisco Public Utilities Commission** Emergency Operations Plan
- **The San Francisco Public Utilities Commission** Water Plan

VI. EXERCISE CONTROL

Scripted messages will be used to begin Operation **Horseplay at the Fluoride Station .** The Exercise Facilitator has developed control measures to ensure that the exercise objectives can be met. The term "**Secure Operation Horseplay at the Fluoride Station** will be used to end the exercise.

VII. EVALUATION

An Evaluation Plan has been developed to evaluate the attainment of exercise objectives (see **Annex J**). EOC participants will have an opportunity to critique this exercise during a post-exercise "hot-wash".

VIII. COMMUNICATIONS

All communications will take place only between **THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION DOC** staff members participating in the exercise, and the Facilitator.

IX. SAFETY AND SECURITY

Safety and security issues will be handles by the **San Francisco Public Utilities Commission.**

X. REPORTS

An After-Action Report will be completed following the critique and evaluation of the exercise. The California Specialized Training Institute will compile this report.

XI. PUBLIC INFORMATION

A Public Information Officer (PIO) should be a member of the DOC staff

XII. INSTRUCTIONS TO PARTICIPANTS

1. **THIS EXERCISE IS NOT A TEST OF PERSONNEL!** This is a training exercise designed to evaluate the SEMS Emergency Plan and the Water Plan.
2. During the exercise all questions should be directed to the Facilitator.
3. Actions and decisions should be consistent with the SEMS Emergency Plan and the Water Plan.
4. Save and leave ALL documentation in the EOC.
5. Use only exercise communications as listed in **(Annex D)**. This directory is valid **ONLY** for this exercise.
6. **REMEMBER**, this is an exercise and **NOT** a test!

XIII. AGENDA

August 10, 2006

0900 hrs	Introduction to SEMS/ICS/NIMS
1030 hrs	EOC Training.
1300 hrs	Operation **Horseplay at the Fluoride Station** will terminate after exercise objectives are met.

END+30 min A "Hot Wash" critique will be held immediately following the exercise.

END+/- 30 min "Hot Wash" completed.

ANNEXES

Annex A: Planning Milestones

January 2006:	The State Department of Health Services Division of Drinking Water Environmental Management requests that CSTI prepare a Table Top exercise for the Department
January 2006:	CSTI enters into contract with State Department of Health Services Division of Drinking Water Environmental Management for the exercise.
January 2006:	The **San Francisco Public Utilities Commission** agrees to host the exercise.
February, 2006:	Table Top exercise delivered to **The San Francisco Public Utilities Commission** Department Operations Center Staff.

Annex B: Narrative

"Operation Horseplay at the Fluoride Station"

At 2000 hours on August 10, 2006, an anonymous caller to the sheriff's department states that they saw a horse trailer parked illegally inside the Polhemus Fluoride Station. The sheriff's department responds and finds six unlabeled 55-gallon drums, drum pumps, and the gate to the facility has been rammed open. The door to the facility has been left open, the lights are on and a volatile odor is emanating from the drums. Later, another caller notifies the SFPUC at 2230 hours of seeing 4 men at the plant around 1800 hours.

Annex C: Participants

The San Francisco Public Utilities Commission Department Operations Center Staff

Annex D: Communications Directory

All communications will be oral and between members of the **SAN FRANCISCO PUBLIC UTILITIES COMMISSION DOC** Staff and the Facilitator.

Annex E: Media Plan (not applicable for this exercise)

Annex F: Distribution Annex

Distribution of the Exercise Plan (EXPLAN) and COSIN will be as follows:

EXPLAN	1 to each exercise participant and Exercise Design Team Member
COSIN	1 to each member of the Exercise Design Team

Annex G: Control Staff Instructions (COSIN)

The COSIN (Annex G) is published separately

Annex H: Maps

Any maps needed for the exercise will be furnished by the **Emergency/Department Operations Center** Staff

Annex I: Glossary

COSIN – Control Staff Instructions. A document prepared by the Exercise Design Team for use by the Control Staff (exercise director, exercise section chiefs, simulators, evaluators).

EOC – Emergency Operations Center. Command Center that provides centralized information gathering and dissemination, emergency management mitigating efforts and centralized deployment of resources.

EOP – SEMS Emergency Plan. This document provides emergency managers with predetermined guidelines for mitigation of emergency events.

ERP – Emergency Response Plan. This document provides emergency managers with predetermined guidelines for mitigation of emergency events.

EXPLAN – Exercise Plan. Provides the instructions, guidelines and organizational information to all participants for the conduct of a specific exercise.

PIO – Public Information Officer. Serves as the coordinator/clearinghouse of information to the public and the media.

SEMS – Standardized Emergency Management System – California's mandated system for managing responses to multi-agency and multi-jurisdictional emergencies.

ANNEX J: PARTICIPANT CRITIQUE

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

Horseplay at the Fluoride Station

August 10, 2006

PARTICIPANT CRITIQUE

1. Do you feel that this exercise was valuable in increasing your ability to effectively respond to an emergency?

Comments:

2. What benefit did you derive from this exercise?

Comments:

3. How often should exercises be conducted?

3 months 6 months 1 year 2 years

Comments:

4. Was the Departmental Operations Center adequately staffed for the exercise?

Comments:

5 Was the information in the SEMS Emergency Plan current?

Comments:

5(a). Was the information in subordinate / associate plans if any used current?

Comments:

6. Was the information in the SEMS Emergency Plan and Water Plan useful? If not, what would you suggest?

Comments:

7. Do you feel there was effective communication among the exercise participants? How would you improve communications?

Comments:

8. Was the pace and complexities of exercise challenging to you?

Comments:

9. Was this exercise a realistic test of the staff?

Comments:

10. What type of additional training would you recommend?

Comments:

Additional Comments:

Name _____
(optional)

1 September, 2006

Ms. Thuy Van Nguyen, S.E.
State of California Department of Health Services
Santa Clara District
Drinking Water Field Operations Branch
850 Marina Bay Parkway, Building P, 2nd Floor
Richmond, CA 94804-6403

Reference: Annual Inspection 2006 Completed Action Items
Coastside County Water District, System No. 4110011

Dear Ms. Nguyen:

Enclosed are completed action items addressed in the 2006 Annual Inspection.

Conversion from Conventional to Direct Filtration- A Standard Operation Procedure (SOP) has been developed to convert the Nunes Water Treatment Plant from Conventional Treatment to Direct Filtration. This SOP will be implemented into the Nunes O&M Manual.

Jar Testing - A Standard Operation Procedure (SOP) has been developed for the Nunes WTP and the Denniston WTP. These SOP's will be implemented into the Nunes, and Denniston O&M Manuals. Additionally, data recorded on the Jar Test Worksheet will provide a more detailed explanation on how staff determines proper chemical dosing and identifying floc characteristics.

Alarm Exercising Program – An Alarm Exercising Program had been implemented and alarm will be exercised annually at the Nunes WTP and the Denniston WTP as recommended by DHS. Additionally, alarms generated by day-to-day operations will be logged on the Monthly Alarm Sheet (enclosed).

Linking Chlorine Analyzer to SCADA System – The chlorine analyzer located at the Denniston Low/High lift station has been linked to the Rugid computer located at the Denniston WTP. The system has been tested and will alert operations if an anomaly occurs. Set points have been established as low set point 0.75 ppm, high set point 1.80 ppm.

Sincerely,

Steve Twitchell
Water Treatment Plant Supervisor
Coastside County Water District

Enclosures

cc: Eric Lacy

Coastside County Water District
Nunes Monthly Alarm Sheet

onth

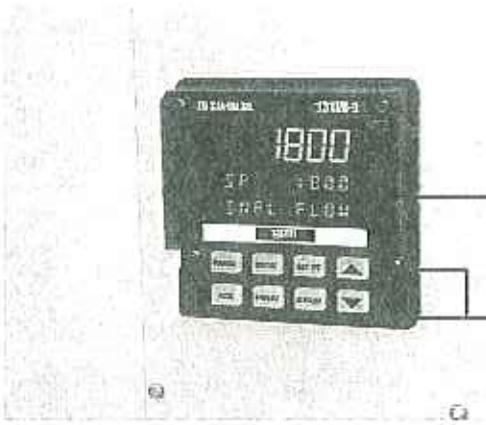
Alarms	Date of Alarm
High Chlorine	
Low Chlorine	
Treated Water Ph High/Low	
Low Alum Tank	
High Treated Water Turbidity	
Filter # 1 Turbidity High	
Filter # 2 Turbidity High	
Filter # 3 Turbidity High	
Filter # 4 Turbidity High	
Stream and Current High/Low	
High Recovery Tank Level	
High Wash water Tank Level	
'occulation Fail	
Scraper Fail	
Alum System Fail	
Low Wash water Tank Level	
Low Pump Suction Pressure	
Low Utility Water Pressure	
Flocculation Tank Overflow	
Sedimentation Tank Overflow	
Engine Generator Fail	
Low Fuel Tank Level	
Fuel Tank Low	
High WTP Pressure Shutdown	
Emergency Shutdown	

Comments

Nunes Water Treatment Plant
Standard Operational Procedures
Conversion from Conventional To Direct Filtration

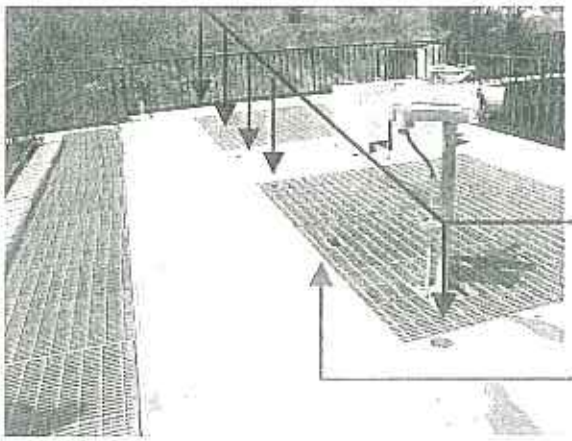
Definition: This Standard Operational Procedure will provide step-by-step procedures to convert the Nunes Water Treatment Plant from Conventional to Direct Filtration.

Purpose: The conversion of the Nunes Water Treatment Plant from conventional water treatment to direct filtration allows for isolation of the sedimentation basin for cleaning, repair, or in case the sedimentation basin is damaged due to a natural disaster and the treatment plant must stay in service to meet District water demands.



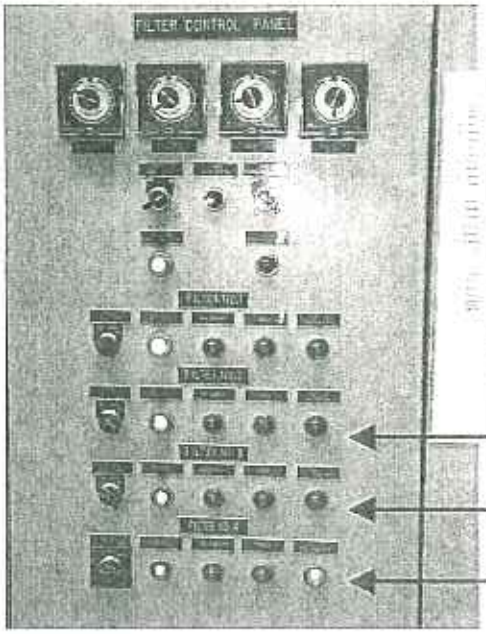
Adjust the set point (SP) not to exceed 900 gpm or 3gpm/sq ft on the Influent Control Valve Controller located on the Process Control Panel.
Note: If the water demand is lower then no adjustment will be needed

Adjust flow by depressing the up or down arrows on the controller.

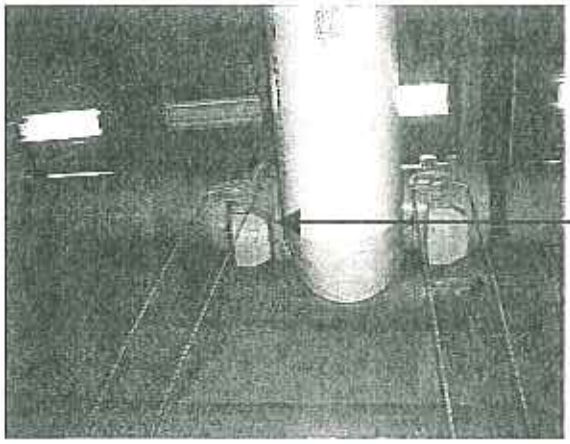


Close 5 of the 6 valves that feed the Sedimentation Basin from the Flocculation Basin

Leave this valve open

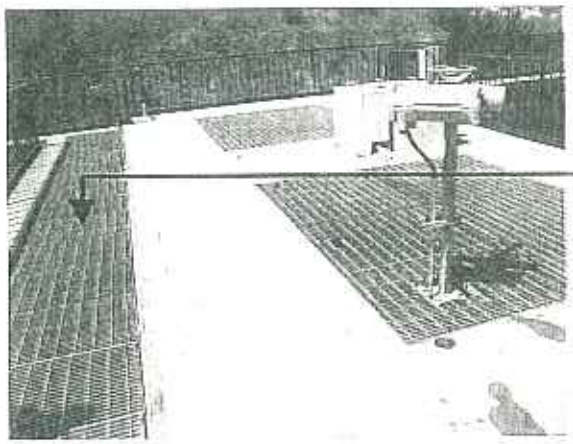


Shut down all filters except the next to back wash. This will allow any built up sediments to flow into that filter

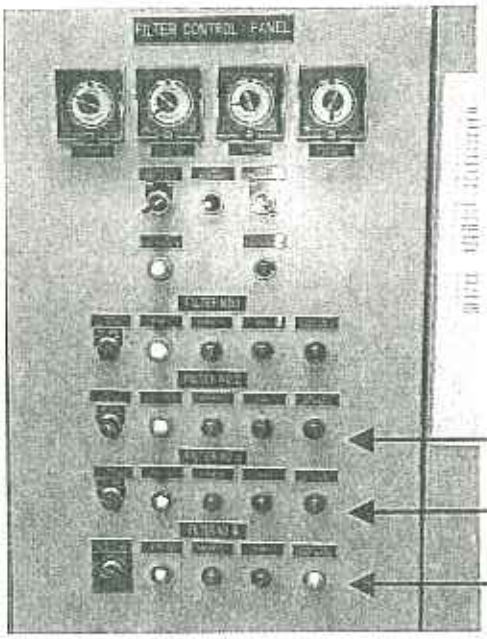


Open valve from the Flocculation Basin located on the East side of the filter pipe gallery.

Close valve from the Sedimentation Basin located on the East side the filter pipe gallery



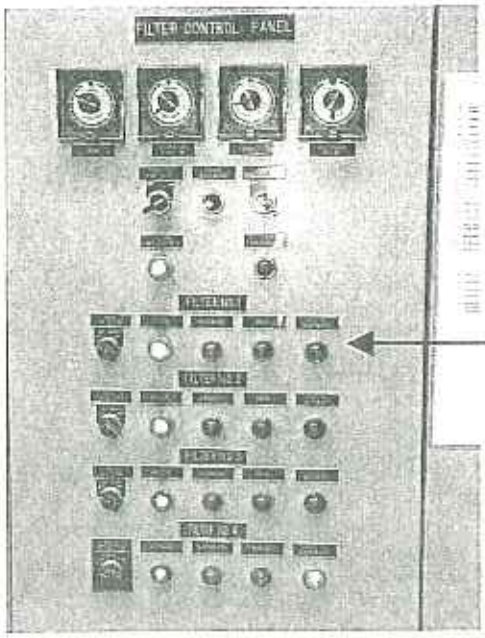
Check to see if the Flocculation Basin Trough is free of debris. Wash down residual debris if needed



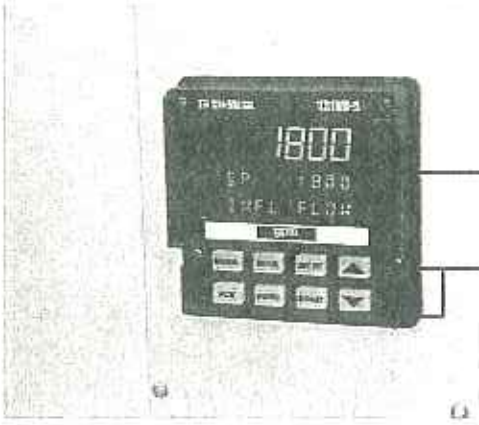
Bring the three offline filter back online. Monitor the filters for any upset. If filter upset occurs, backwash filter.

Note: Criteria for this are found in Title 22 Section 64660-7-A,B,C.

- 2.0 NTU at any time during the first four (4) hours of operation
- 1.0 NTU at any time during the first four (4) hour of operation following 90 % of the interruption events during any consecutive 12 month period
- 0.5 NTU at the time that the filter has been in operation for four (4) hours



After the three filters are back online, put the dirty filter into backwash by pressing the start backwash button on the Filter Control Panel



After all four filters are back online adjust the influent flow to the desired GPM

Adjust flow by depressing the up or down arrows on the controller.

ARTICLE 5. OPERATION

Section 64660. Operating Criteria.

(a) All treatment plants utilizing an approved surface water shall be operated by operators certified by the Department in accordance with Health and Safety Code section 106885.

(b) Filtration facilities shall be operated in accordance with the following requirements:

(1) Conventional and direct filtration plants shall be operated at flow rates not to exceed 3.0 gallons per minute per square foot (gpm/sq. ft.) for ~~simple~~ single media filters and 6.0 gpm/sq. ft. for deep bed, dual or mixed media filters under gravity flow conditions. For pressure filters, filtration rates shall not exceed 2.0 gpm/sq. ft. for ~~simple~~ single media filters and 3.0 gpm/sq. ft. for dual, mixed media, or deep bed filters.

(2) Slow sand filters shall be operated at filtration rates not to exceed 0.10 gallon per minute per square foot. The filter bed shall not be dewatered except for cleaning and maintenance purposes.

(3) Diatomaceous earth filters shall be operated at filtration rates not to exceed 1.0 gallon per minute per square foot.

(4) In order to obtain approval for filtration rates higher than, but not more than twice, those specified in paragraphs (b)(1), (b)(2), and (b)(3), a water supplier shall demonstrate to the Department that the filters can comply with the performance requirements of section 64653.

(5) In order to obtain approval for filtration rates greater than twice those specified in paragraphs (b)(1), (b)(2), and (b)(3), a water supplier shall demonstrate to the Department that the filters do the following:

(A) Provide a minimum of 99 percent *Giardia lamblia* cyst removal and 90 percent virus removal; ~~and~~

(B) Meet the turbidity performance standards established in section 64653(c); and.

(C) Systems serving at least 10,000 people shall provide a minimum 99 percent *Cryptosporidium* oocyst removal and meet the turbidity performance standards established in section 64657.30.

(6) Filtration rates shall be increased gradually when placing filters back into service following backwashing or any other interruption in the operation of the filter.

(7) When any individual filter in a conventional or direct filtration plant is placed back into service following backwashing or other interruption event, the filtered water turbidity of the effluent from that filter shall not exceed any of the following:

(A) 2.0 NTU at any time during the first four hours of filter operation following all interruption events.

(B) 1.0 NTU at any time during the first four hours of filter operation following at least 90 percent of the interruption events during any consecutive 12 month period.

(C) 0.5 NTU at the time that the filter has been in operation for 4 hours.

(8) Pressure filters shall be physically inspected and evaluated annually for such factors as media condition, mudball formation, and short circuiting. A written record of the inspection shall be maintained at the treatment plant.

(9) Coagulation and flocculation unit processes shall be in use at all times during which conventional and direct filtration treatment plants are in operation. The effectiveness of these processes shall be demonstrated by either at least an 80 percent reduction through the filters of the monthly average raw water turbidity or jar testing, pilot testing or other means to demonstrate that optimum coagulation is being achieved.

(10) The filtered water turbidity level from each filter unit shall be monitored with a continuous turbidity meter and recorder, or with a grab sampling program designed to identify compliance with the requirements of paragraph (b)(7) and approved by the Department. If this monitoring indicates that any filter unit in a conventional or direct filtration plant is not performing as required in paragraph (b)(7), the filter shall be taken out of service and inspected to determine the cause of its inadequate performance. The filter unit shall not be returned to service until any deficiencies have been corrected and operations tests demonstrate that the filter unit is meeting the requirements of paragraph (b)(7).

(c) Disinfection facilities shall be operated in accordance with the following requirements:

(1) A supply of chemicals necessary to provide continuous operation of disinfection facilities shall be maintained as a reserve or demonstrated to be available.

(2) An emergency plan shall be developed prior to initiating operation of the disinfection facilities. The plan shall be implemented in the event of disinfection failure to prevent delivery to the distribution system of any undisinfected or inadequately disinfected water. The plan shall be posted in the treatment plant or other place readily accessible to the plant operator.

Coastside County Water District

Nunes WTP

Standard Operational Procedures

Jar Testing

Introduction:

This Standard Operational Procedure will provide step-by-step procedures for preparing stock solutions and performing a Jar Test for the Nunes Water Treatment Plant.

Definition:

The jar test is a common laboratory procedure used to determine the optimum operating conditions for water treatment plants. This method allows adjustments in pH, variations in coagulant or polymer dose, alternating mixing speeds, or testing of different coagulant or polymer types, on a small scale in order to predict the functioning of a large scale treatment operation. A jar test simulates the coagulation and flocculation processes that encourage the removal of suspended colloids and organic matter which can lead to turbidity, odor, and taste problems.

Stock Solution Preparation:

Alum

Alum stock solutions are prepared by dissolving 1.6 mL of liquid Aluminum Sulfate in 500 mL distilled water. Each 1.0 mL of this stock solution will equal 1 mg\L (ppm) when added to 2,000 mL of raw water to be tested.

Polymer

Polymer stock solutions are prepared by dissolving 0.8 mL of liquid polymer to 500 mL distilled water. Each 1.0 mL of this stock solution will equal 1 mg\L (ppm) when added to 2,000 mL of raw water to be tested.

Note: Make new stock solution before each test.

Jar Test Procedures:

Fill five (5) testing jar containers with 2000 mL sample water (Raw water) from raw water sample point in the lab. One of the containers filled will represent the coagulant dosage presently being used in the plant.

Fill one (1) container with 2000mL sample water from the rapid mix sample point in the lab. This will be used as a control and will represent the dosage being applied to the plant while the other four (4) containers can be adjusted depending on what conditions are being tested. For example, the pH of the jars can be adjusted or variations of coagulant dosages can be added to determine optimum operating conditions.

Add the coagulant to each of the five (5) containers.

One of the containers filled will represent the coagulant dosage presently being used in the plant. This container should be placed in the center of the jar testing apparatus with two (2) containers to the left and two (2) containers to the right. The container to the left will represent an incremental and lateral decease of chemical and the containers to the right will represent an incremental and lateral increase in chemical. The control jar should be placed to the far left on the jar testing apparatus. (See jar test apparatus layout for container sequence)

Stir at approximately one hundred (100) rpm for one (1) minute. The rapid mix stage helps to disperse the coagulant throughout each container. Coagulants are chemical additions, such as metallic salts, which help cause smaller aggregates to form larger particles.

Reduce the stirring speed to thirty five (35) rpm and continue mixing for fifteen (15) minutes. This slower mixing speed helps promote floc formation by enhancing particle collisions which lead to larger flocs. These speeds must be slow enough to prevent sheering of the floc due to turbulence caused by stirring to fast.

Turn off the mixers and allow the containers to settle for forty (40) minutes. Look at the containers and determine which one has the best results. Underfeeding chemical will cause the sample to look cloudy with little or no floc and almost no settling, while overfeed will cause a dense fluffy floc to occur and will not settle well. The container with an appropriate dosage of coagulant will have floc that has settled to the bottom and the water above it will be clear.

Then measure the final turbidity in each container. The final turbidity can be evaluated roughly by sight or more accurately using a nephelometer.

Place all data and results on the Jar Testing Worksheet.

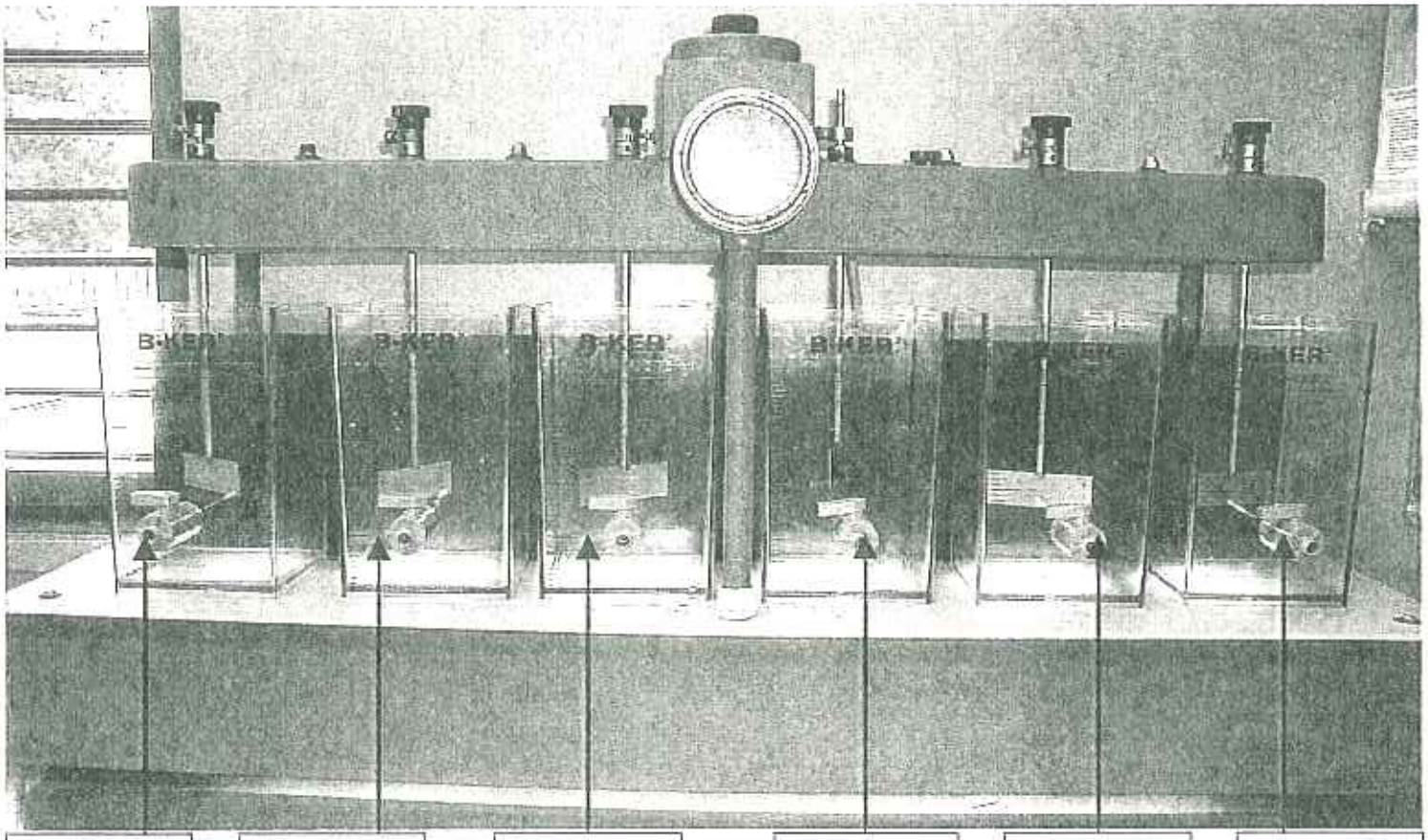
Note: Keep the under light of the jar testing apparatus off during the stirring sequence. The raw water temperature entering the Nunes WTP is seasonally cool year round, it is very important to try to maintain a representative temperature for the jar test.

Summary:

Jar testing is an experimental method where optimal conditions are determined empirically rather than theoretically. Jar test are meant to mimic the conditions and processes that take place in the clarification portion of water treatment plants. The values that are obtained through the experiment are correlated and adjusted in order to account for the actual treatment system.

As every water treatment plants are different Jar testing results can be used as a baseline to determine a proper dosage within the treatment stream. Other parameters may aid in the decision process such as raw water characteristics, historical data, and plant reaction.

Jar Test Apparatus Layout



Control Jar. Sample from rapid mix.	Raw Water Plant Dosage. (--)	Raw Water Plant Dosage. (-)	Raw Water Plant Dosage.	Raw Water Plant Dosage. (+)	Raw Water Plant Dosage. (++)

Coastside County Water District

Denniston WTP

Standard Operational Procedures

Jar Testing

Introduction:

This Standard Operational Procedure will provide step-by-step procedures for preparing stock solutions and performing a Jar Test for the Denniston Water Treatment Plant.

Definition:

The jar test is a common laboratory procedure used to determine the optimum operating conditions for water treatment plants. This method allows adjustments in pH, variations in coagulant or polymer dose, alternating mixing speeds, or testing of different coagulant or polymer types, on a small scale in order to predict the functioning of a large scale treatment operation. A jar test simulates the coagulation and flocculation processes that encourage the removal of suspended colloids and organic matter which can lead to turbidity, odor, and taste problems.

Stock Solution Preparation:

Alum

Alum stock solutions are prepared by dissolving 0.2 mL of liquid Aluminum Sulfide in 100 mL distilled water. Each 1.0 mL of this stock solution will equal 1 mg\L (ppm) when added to 1,000 mL of raw water to be tested.

Polymer

Polymer stock solutions are prepared by dissolving 0.1 mL of liquid polymer in 100 mL distilled water. Each 1.0 mL of this stock solution will equal 1 mg\L (ppm) when added to 1,000 mL of raw water to be tested.

Note: Make new stock solution before each test

Jar Test Procedures:

Fill five (5) 1000 mL beakers with sample water (Raw water) from raw water sample point in the lab. One of the beakers filled will represent the coagulant dosage presently being used in the plant.

Fill one (1) 1000mL beaker with sample water from the rapid mix sample point. This will be used as a control and will represent the dosage being applied to the plant while the other four (4) beakers can be adjusted depending on what conditions are being tested. For example, the pH of the jars can be adjusted or variations of coagulant dosages can be added to determine optimum operating conditions.

Add the coagulant to each of the five (5) beakers.

One of the beakers filled will represent the coagulant dosage presently being used in the plant. This beaker should be placed in the center of the jar testing apparatus with two (2) beakers to the left and two (2) beakers to the right. The beakers to the left will represent an incremental and lateral decease of chemical and the beakers to the right will represent an incremental and lateral increase in chemical. The control jar should be placed to the far left on the jar testing apparatus. (See jar test apparatus layout for the beaker sequence)

Stir at approximately one hundred (100) rpm for one (1) minute. The rapid mix stage helps to disperse the coagulant throughout each beaker. Coagulants are chemical additions, such as metallic salts, which help cause smaller aggregates to form larger particles.

Reduce the stirring speed to thirty five (35) rpm and continue mixing for fifteen (15) minutes. This slower mixing speed helps promote floc formation by enhancing particle collisions which lead to larger flocs. These speeds must be slow enough to prevent sheering of the floc due to turbulence caused by stirring to fast.

Turn off the mixers and allow the beakers to settle for forty (40) minutes. Look at the beakers and determine which one has the best results. Underfeeding chemical will cause the sample to look cloudy with little or no floc and almost no settling, while overfeed will cause a dense fluffy floc to occur and will not settle well. The beakers with an appropriate dosage of coagulant will have floc that has settled to the bottom and the water above it will be clear. Then measure the final turbidity in each beaker. The final turbidity can be

evaluated roughly by sight or more accurately using a nephelometer.

Place all data and results on the Jar Testing Worksheet.

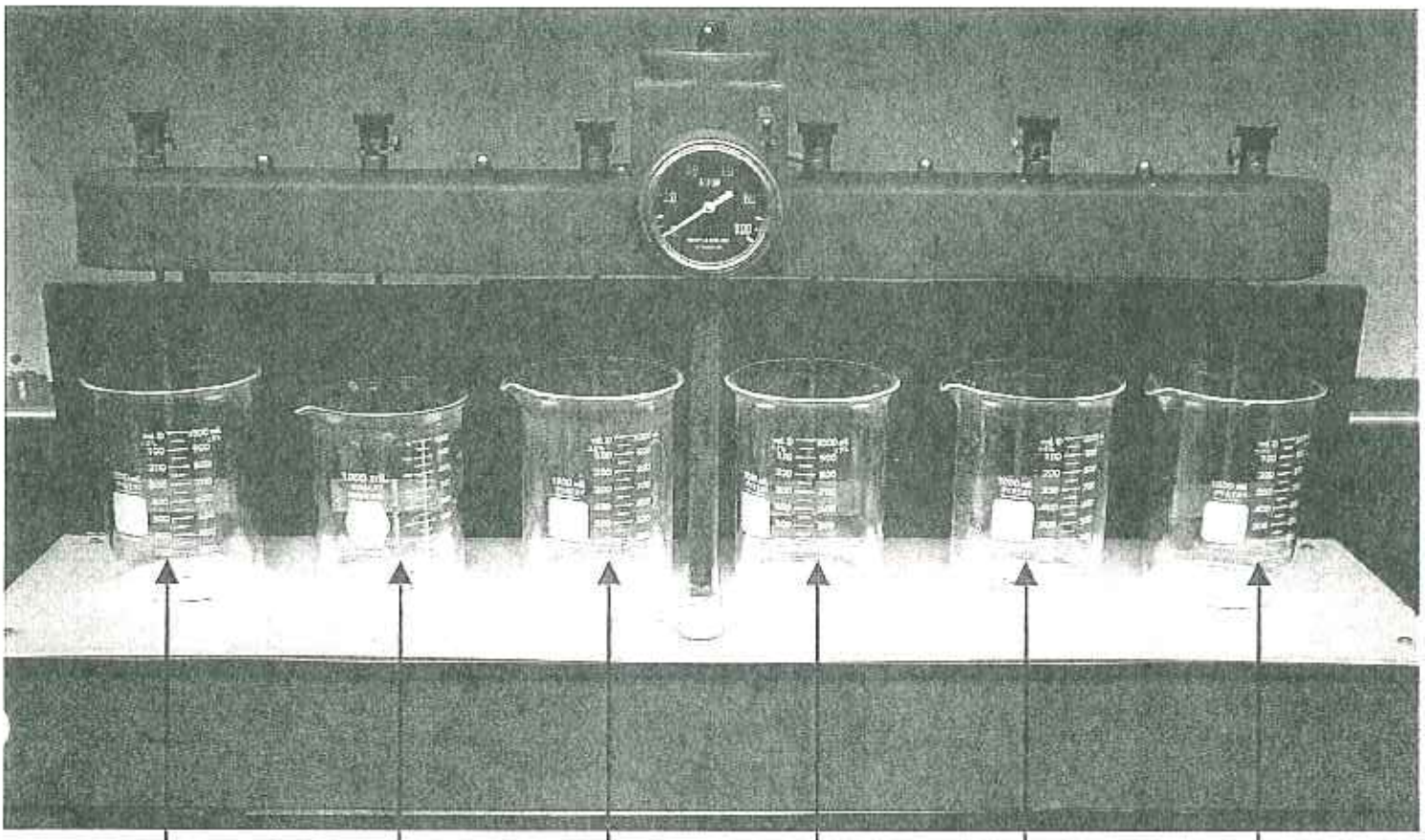
Note: Keep the under light of the jar testing apparatus off during the stirring sequence. The raw water temperature entering the Denniston WTP is seasonally cool year round, it is very important to try to maintain a representative temperature for the jar test.

Summary:

Jar testing is an experimental method where optimal conditions are determined empirically rather than theoretically. Jar test are meant to mimic the conditions and processes that take place in the clarification portion of water treatment plants. The values that are obtained through the experiment are correlated and adjusted in order to account for the actual treatment system.

As every water treatment plants are different Jar testing results can be used as a baseline to determine a proper dosage within the treatment stream. Other parameters may aid in the decision process such as raw water characteristics, historical data, and plant reaction.

Jar Test Apparatus Layout



Control Jar. Sample from rapid mix.	Raw Water Plant Dosage. (--)	Raw Water Plant Dosage. (-)	Raw Water Plant Dosage.	Raw Water Plant Dosage. (+)	Raw Water Plant Dosage. (++)

COPY

7 September 2006

Ms. Thuy Van Nguyen
State of California
Department of Health Services
Drinking Water Field Operations Branch
850 Marina Bay Parkway, Building P, 2nd Floor
Richmond, CA 94804-6403

Reference: August 2006 Monthly Report

Dear Ms. Nguyen:
Enclosed are the following reports for **August.**

Distribution System:

- 20 Total Coliform samples completed and all ABSENT

Nunes Water Treatment Plant:

- Nunes Monthly Summary of Monitoring for SWTR (page 1, 2 and 3)
- Monthly Iron for **July**
- Monthly Iron for **August**
- CT Compliance spreadsheet for **August**
- Individual Filter Monitoring Report (1 page)

Denniston Water Treatment Plant:

- Denniston Monthly Summary of Monitoring for SWTR (page 1, 2 and 3)
- Monthly Iron, Manganese and Aluminum Report for **August**
- CT Compliance spreadsheet for **August**
- Individual Filter Monitoring Report (4 pages)
- Service report from Roberts Filter on filter performance and plant operation

If you have any questions with the reports submitted or would like additional information regarding this matter, please do not hesitate to contact me.

Sincerely,

Joe Guistino
Superintendent of Operations
Coastside County Water District
650 726 4405
jguistino@coastsidewater.org

MONTHLY SUMMARY OF DISTRIBUTION SYSTEM COLIFORM MONITORING

System Name	System Number
Coastside County Water District	4110011
Sampling Period	
Month: August	Year: 2006

	Number Required	Number Collected	Number Total Coliform Positives	Number Fecal/ E.coli Positives
1. Routine Samples (see note 1)	20	20	0	0
2. Repeat Samples Following Samples Which are Total Coliform Positive and Fecal/E.coli *Negative* (see notes 5 and 6)		na	na	0
3. Repeat Samples Following Routine Samples Which are Total Coliform *Positive* and Fecal/E.coli Positive (see notes 5 and 6)		na	0	0
4. MCL Computation For Total Coliform Positive Samples				
a. Totals (sum of columns)	20	20	0	
b. If 40 or more samples collected in month, determine percent of samples that are total coliform positive [(total number positive/total number collected) x 100]	na			

c. Is system in compliance …with fecal/E. coli MCL? (see notes 2 and 3) ☑ Yes ☐ No

…with monthly MCL? (see note 4) ☑ Yes ☐ No

5. Invalidated Samples

(Note what samples, if any, were invalidated; who authorized the invalidation; and when replacement samples were collected. Attach additional sheets, if necessary.)

6. Summary Completed By:

Signature	Title	Date
	SUPT of OPERATIONS	7SEPT6

NOTES AND INSTRUCTIONS

1. Routine samples include:
   a. Samples required pursuant to 22 CCR Section 64423, and any additional samples required by an approved routine sample siting plan established pursuant to 22 CCR Section 64423.
   b. Extra samples required for systems collecting less than five routine samples per month that had one or more total coliform positives in previous month;
   c. Extra samples for systems with high source water turbidities that are using surface water or groundwater under direct influence of surface water and do not practice filtration in compliance with regulations;
2. Note: **For a repeat sample following a total coliform positive sample, any fecal/E.coli positive repeat (boxed entry) constitutes an MCL violation and requires immediate notification to the department** (22, CCR, Section 64426.1).
3. Note: **For repeat sample following a fecal/E.coli positive sample, any total coliform positive repeat (boxed entry) constitutes an MCL violation and requires immediate notification to the department** (22, CCR, Section 64426.1).
4. **Total coliform MCL (Notify Department within 24 hours of MCL violation):**
   a. For systems collecting less than 40 samples, if two or more samples are total coliform positive, then the MCL is violated.
   b. For systems collecting 40 or more samples, if more than 5.0 percent of samples collected are total coliform positive, then the MCL is violated.
   Positive results and their associated repeat samples must be tracked on the worksheet on the other side.
5. For systems collecting more than one routine sample per month, three repeat samples must be collected for each total coliform positive sample. Repeat samples must be collected within 24 hours of being notified of the positive results.
7. For systems collecting one or less routine samples per month, four repeat samples must be collected for each total coliform positive sample.

MONTHLY SUMMARY OF MONITORING FOR SURFACE WATER TREATMENT REGULATIONS

System Name: Coastside Water District System Number: 411-0011

Plant Name: Nunes Water Treatment Plant Month/Year: August-06

	Date	Recycled Water Turbidity	Raw Water Turbidity[2]	Settled Water Turbidity	Treated water turbidities every four hours (NTU)[1] Midnight to 4:00 am	4:00 am to 8:00 am	8:00 am to noon	Noon to 4:00 pm	4:00 pm to 8:00 pm	8:00 pm to Midnight	Average
Tue	1	1.630	1.850	0.760	0.026	0.033	0.029	0.027	0.026	0.025	0.026
Wed	2	1.260	1.850	0.910	0.025	0.025	0.025	0.027	0.025	0.025	0.026
Thu	3	1.670	2.270	0.751	0.027	0.026	0.026	0.051	0.028	0.025	0.025
Fri	4	1.910	2.170	0.721	0.026	0.027	0.029	0.025	0.026	0.026	0.027
Sat	5	2.400	2.220	0.670	0.027	0.027	0.026	0.027	0.025	0.026	0.026
Sun	6	2.830	2.420	0.864	0.025	0.025	0.025	0.026	0.027	0.026	0.026
Mon	7	2.010	3.710	0.951	0.027	0.029	0.031	0.032	0.025	0.027	0.029
Tue	8	2.220	2.780	0.525	0.027	0.026	0.026	0.025	0.025	0.026	0.025
Wed	9	2.450	2.690	0.331	0.026	0.026	0.025	0.024	0.025	0.025	0.025
Thu	10	2.630	2.430	0.417	0.025	0.025	0.023	0.025	0.025	0.025	0.025
Fri	11	2.160	2.140	0.398	0.025	0.025	0.024	0.024	0.029	0.029	0.026
Sat	12	1.003	2.510	0.433	0.025	0.024	0.025	0.025	0.024	0.024	0.025
Sun	13	2.273	2.010	0.951	0.024	0.024	0.024	0.026	0.030	0.026	0.026
Mon	14	2.500	2.140	1.050	0.032	0.057	0.035	0.030	0.033	0.031	0.034
Tue	15	2.340	2.040	0.450	0.032	0.031	0.030	0.027	0.025	0.025	0.028
Wed	16	2.170	2.190	0.630	0.025	0.025	0.025	0.025	0.025	0.025	0.025
Thu	17	2.000	2.250	0.579	0.025	0.025	0.024	0.025	0.024	0.025	0.025
Fri	18	3.080	2.740	0.641	0.025	0.024	0.024	0.023	0.023	0.024	0.024
Sat	19	2.420	2.250	0.491	0.024	0.023	0.025	0.026	0.024	0.024	0.024
Sun	20	2.030	2.070	0.505	0.025	0.024	0.025	0.025	0.024	0.025	0.024
Mon	21	1.940	1.950	0.444	0.025	0.024	0.025	0.025	0.025	0.030	0.026
Tue	22	1.980	1.900	0.394	0.030	0.030	0.029	0.029	0.029	0.031	0.030
Wed	23	1.980	1.890	0.354	0.030	0.030	0.030	0.029	0.043	0.034	0.033
Thu	24	0.660	2.210	0.407	0.025	0.053	0.031	0.041	0.032	0.031	0.034
Fri	25	1.670	2.190	0.435	0.030	0.030	0.029	0.024	0.023	0.023	0.026
Sat	26	2.032	1.890	0.335	0.024	0.023	0.025	0.024	0.023	0.024	0.024
Sun	27	2.240	1.850	0.333	0.025	0.024	0.024	0.025	0.023	0.023	0.024
Mon	28	1.640	1.450	0.310	0.023	0.024	0.024	0.025	0.023	0.023	0.024
Tue	29	0.604	1.430	0.320	0.024	0.024	0.024	0.025	0.024	0.024	0.024
Wed	30	0.690	1.560	0.335	0.024	0.023	0.041	0.025	0.024	0.024	0.027
Thu	31	2.580	1.870	0.448	0.025	0.025	0.029	0.024	0.024	0.024	0.025
	Avg.	1.976	2.160	0.561	0.026	0.026	0.027	0.027	0.027	0.028	

[1] *For continuous turbidity monitoring, a discrete turbidity value must be taken off the record chart at four hour intervals.*

[2] *Raw water turbidity must be monitored after returned flow.*

Note: *See Directions on reporting peak recycle, raw, and settled water turbidities.*

Total Number of Samples:	186	Number of readings <= 0.3 NTU:	186
% Readings <= 0.3 NTU:	100.0%	Average Effluent NTU	0.026
		Meets Standard (i.e. at least 95% of readings are <= 0.3 NTU) (Y/N)?	Yes
		Maximum discrete turbidity value:	0.043
Average percent reduction during the month = [(Average Raw NTU - Average Effluent NTU)/(Average Raw NTU)] x 100% =			98.8%
		Meets Standard (i.e. Reduction is greater than 80%) (Y/N)?	Yes

Percentile Results:		
xth Percentile NTU Value of all turbidity readings: (x% of all turbidity readings are less than these values)	50 th =	0.025
	90 th =	0.031
	95 th =	0.032
	99 th =	0.038
	99 th =	0.041

Nunes Water Treatment Plant Combined Filter Effluent Reporting

Incidents of turbidity greater than 1 NTU for more than 1 hour.

Date of Incident	N/A									
Value										

Incidents of turbidity greater than 1.0 NTU for more than 8 consecutive hours while the plant is operating.

Date of Incident	N/A									
Value										

Individual Filter Effluent Reporting

Were individual filters monitored and recorded at least once every 15 minutes? ☑ Yes ☐ No

Were there any trigger violations? ☐ Yes ☑ No

Incidents of turbidity greater than 1.0 NTU in two consecutive measurements taken no more than 15 minutes apart.

Date of Incident	N/A									
Value										
Filter Number										

Incidents of turbidity greater than 0.3 NTU in two consecutive measurements taken 15 minutes apart at the end of the first 60 minutes of continuous filter operation after the filter has been backwashed or otherwise taken offline.

Date of Incident	N/A									
Value										
Filter Number										

Incidents of turbidity greater than 1.0 NTU in two consecutive measurements taken no more than 15 minutes apart at any time in each of three consecutive months.

Date of Incident	N/A									
Value										
Filter Number										

Incidents of turbidity greater than 2.0 NTU in two consecutive measurements taken no more than 15 minutes apart at any time in each of two consecutive months.

Date of Incident	N/A									
Value										
Filter Number										

Turbidity Instrument Calibration

Indicate the date that the turbidimeters that are used for regulatory monitoring purposes were calibrated:

Date	Which Turbidimeter	Which standards used, primary or secondary	Date	Which Turbidimeter	Which standards used, primary or secondary
8/30/2006	Raw	Primary			
8/30/2006	Filter #1	Primary			
8/30/2006	Filter #2	Primary			
8/30/2006	Filter #3	Primary			
8/30/2006	Filter #4	Primary			
8/30/2006	Treated Water	Primary			

Disinfection Process Data

Disinfectant residual type (check one): ● Free Chlorine ○ Combined Chlorine ○ Other

Incidents of chlorine residuals less than 0.2 ppm at the plant effluent:

Date of Incident					
Duration					
Date Dept. Notified					

Total number of incidents where residual is < 0.2 ppm: 0

Meet Standard (i.e. is not less than 0.2 ppm for more than four hours (Y/N)? Yes

Number of distribution system residual samples collected:	41
Number of distribution system samples for HPC only:	0
Total number of residual and/or HPC samples collected:	41
Number of samples with no detectable residual and HPC is not measured:	0
Number of samples with no residual and HPC > 500 CFU/mL:	na
Number of samples for HPC only and HPC > 500 CFU/mL:	na
Total number of samples with no residual and/or HPC > 500 CFU/mL:	0

Compute V:

Where V = [1 - (Total No. of samples with no residual and/or HPC > 500)/(Total No. of residual and/or HPC samples collected)] x 100

V = 100.0%

Meets Standard (i.e. V >= 95%) (Y/N) ? Yes

SUMMARY OF WATER QUALITY COMPLAINTS

General Complaints:

Type of Complaint	Number	Corrective Actions Taken
Taste/Odor	0	
Color	0	
Turbidity	0	
Suspended Solids	0	
Other (Describe)	0	

Reports of Gastrointestinal Illness (attach additional sheets if necessary):

Person Reporting	Date	Corrective Actions Taken
	0-Jan-00	

Attach an explanation of any failure of the performance standards or operating criteria and corrective action taken or planned.

Signature:

Date: 7SEPT 6

Coastside County Water District

Nunes Water Treatment Plant

Monthly Iron Sheet

	In House Lab Results		Outside Lab Results	
Date	Raw	Treated	Raw	Treated
July 1, 2006				
July 2, 2006				
July 3, 2006	0.110	0.000		
July 4, 2006				
July 5, 2006				
July 6, 2006				
July 7, 2006				
July 8, 2006				
July 9, 2006				
July 10, 2006	0.070	0.000		
July 11, 2006				
July 12, 2006				
July 13, 2006				
July 14, 2006				
July 15, 2006				
July 16, 2006				
July 17, 2006	0.120	0.030	0.265	0
July 18, 2006				
July 19, 2006				
July 20, 2006				
July 21, 2006				
July 22, 2006				
July 23, 2006				
July 24, 2006	0.090	0.000		
July 25, 2006				
July 26, 2006				
July 27, 2006				
July 28, 2006				
July 29, 2006				
July 30, 2006				
July 31, 2006	0.080	0.000		

Minimum	0.070	0.000	0.265	0.000
Maximum	0.120	0.030	0.265	0.000
Average	0.094	0.006	0.265	0.000

Coastside County Water District

Nunes Water Treatment Plant

Monthly Iron Sheet - August 2006

	In House Lab Results		Outside Lab Results	
Date	Raw	Treated	Raw	Treated
August 1, 2006				
August 2, 2006				
August 3, 2006				
August 4, 2006				
August 5, 2006				
August 6, 2006				
August 7, 2006	0.090	0.000	0.258	ND
August 8, 2006				
August 9, 2006				
August 10, 2006				
August 11, 2006				
August 12, 2006				
August 13, 2006				
August 14, 2006	0.150	0.030		
August 15, 2006				
August 16, 2006				
August 17, 2006				
August 18, 2006				
August 19, 2006				
August 20, 2006				
August 21, 2006	0.060	0.000		
August 22, 2006				
August 23, 2006				
August 24, 2006				
August 25, 2006				
August 26, 2006				
August 27, 2006				
August 28, 2006	0.090	0.050		
August 29, 2006				
August 30, 2006				
August 31, 2006				

Minimum	0.060	0.000	0.258	0.000
Maximum	0.150	0.050	0.258	0.000
Average	0.098	0.020	0.258	#DIV/0!

CT Compliance for Giardia Lamblia Cysts by Free Chlorine
Nunes Water Treatment Plant

Input Fields
Calculated Fields
Totals

Month and Year: Aug '06

Required Giardia Log Inactivation: 0.5

Required CT Calculated Using Equation 15 from the USEPA SWTR Guidance Manual (Appendix F, Page 360):
$Ct = 0.36 \times pH^{2.69} \times temp^{-0.15} \times C^{0.15} \times (1 - \log I)$ for Temperatures 0.5 to 5.0°C
$Ct = 0.35 \times pH^{2.69} \times 5^{-0.15} \times C^{0.15} \times 0.5^{\wedge}[(T-5)/10] \times (1 - \log I)$ for Temperatures > 5.0°C

Segment 1
Flocculation and Sedimentation

Total Volume in Gallons:	513,400
Combined Floc/Sed Basin Short Circuiting Factor (t_{10}/T):	0.20
Number of Basins in Service:	1
Flocculation	
Length (ft):	30.00
Width (ft):	36.00
Water Depth (ft):	13.00
Volume in Gallons:	105,000
Sedimentation Basin	
Length (ft):	140.00
Width (ft):	30.00
Average Water Depth (ft):	13.00
Volume in Gallons:	408,400

Segment 2
Filtration

Net Volume Per Filter in Gallons:	14,500
Filter Short Circuiting Factor (t_{10}/T):	0.45
Total Filters Online (0 to 4):	N
Number of Filters For CT Calculations (0 to 3):	N-1
Number of Bays per Filter:	2
Filter Bay Length (ft):	18.00
Filter Bay Width (ft):	9.00
Minimum Water Depth- Elevation 372.5 (ft):	8.00
Total Volume per Filter (gallons):	20,800
Lost Volume for Filter Underdrains per Filter (gallons):	-1,212
Media Volume= 12" Gravel, 12" Sand, 20" Anthracite (gallons):	8,886
Media Percent Solids (percent):	55%
Lost Volume for Filter Media per Filter (gallons):	-4,887
Net Volume Per Filter (gallons):	14,500

Segment 3
Clearwell

Net Clearwell Volume in Gallons:	172,830
Clearwell Short Circuiting Factor (t_{10}/T):	0.30
Number of Clearwells For CT Calculations:	1
Clearwell Length (ft):	34.00
Clearwell Width (ft):	34.00
Clearwell Depth (ft):	20.50
Total Clearwell Volume (gallons):	177,300
Lost Volume from Columns (gallons):	-600

Cells	Flow Rate (gpm)	Effective Contact Time t_{10} (minutes)	Temp (°C)	pH (units)	Chlorine Residual "C" (mg/L)	$C_{Clearwell}$ (mg-min/L)	Calculated Cl_{10} (mg-min/L)	Inactivation Ratio $Cl_{10}/C_{Clearwell}$
1	1,819	84.7	19.4	7.3	0.19	10	16.36	1.64
2	1,388	111.1	19.5	7.3	0.22	9	24.45	2.58
3	1,716	86.6	19.5	7.6	0.44	11	38.44	3.68
4	1,786	86.1	19.5	7.4	0.18	10	16.50	1.58
5	1,662	95.6	19.9	7.4	0.17	10	16.79	1.75
6	1,911	95.0	20.0	7.3	0.21	9	20.09	2.12
7	2,089	74.8	20.2	7.4	0.30	9	22.36	2.43
8	1,753	87.8	20.2	7.4	0.24	9	20.86	3.19
9	1,625	84.6	20.3	7.4	0.20	8	16.86	2.04
10	1,720	89.5	20.1	7.4	0.18	9	16.12	1.71
11	1,738	55.0	20.3	7.2	0.12	9	10.83	1.23
12	1,903	65.8	20.0	7.2	0.58	9	49.83	5.32
13	1,873	87.2	20.2	7.2	0.20	9	18.44	1.99
14	1,647	66.0	20.4	7.6	0.30	10	26.87	3.12
15	1,636	84.1	20.6	7.3	0.30	8	26.24	3.22
16	1,535	83.9	20.6	8.0	0.32	11	28.54	2.39
17	1,484	105.2	20.7	8.0	0.18	11	18.94	1.70
18	1,953	79.9	20.4	7.9	0.14	11	11.04	1.32
19	1,744	89.3	20.2	7.9	0.14	11	12.38	1.11
20	1,750	88.0	20.2	7.8	0.20	11	17.60	1.63
21	1,649	89.4	20.0	7.9	0.14	11	13.02	1.23
22	1,525	100.8	20.1	7.8	0.12	11	12.10	1.11
23	1,455	105.5	20.1	7.9	0.10	11	10.55	0.94
24	1,931	79.7	20.0	7.4	0.23	9	15.85	1.98
25	1,660	92.8	19.8	7.5	0.24	9	22.27	2.40
26	1,778	86.6	20.1	7.4	0.20	9	17.32	1.84
27	1,510	102.0	20.1	7.6	0.20	10	20.40	2.01
28	1,350	114.1	19.9	7.3	0.20	8	22.82	2.45
29	1,256	122.7	20.0	7.3	0.10	9	12.27	1.54
30	1,383	111.4	19.8	7.3	0.22	9	24.53	2.84
31	1,638	84.1	19.8	7.4	0.14	10	13.19	1.37

Segment 1 Average: 2.08

No. Filters Online (N)	No. Filters for Cl	Effective Contact Time t_{10} (minutes)	Temp (°C)	pH (units)	Chlorine Residual "C" (mg/L)	$C_{Clearwell}$ (mg-min/L)	Calculated Cl_{10} (mg-min/L)	Inactivation Ratio $Cl_{10}/C_{Clearwell}$
4	3	10.8	19.4	7.3	0.00	10	-	-
4	3	14.1	19.5	7.3	0.00	9	-	-
4	3	11.4	19.5	7.6	0.00	11	-	-
4	3	10.9	19.5	7.4	0.00	10	-	-
4	3	12.6	19.9	7.4	0.00	10	-	-
4	3	12.2	20.0	7.3	0.00	9	-	-
4	3	9.5	20.2	7.4	0.00	9	-	-
4	3	11.2	20.2	7.4	0.00	9	-	-
4	3	12.0	20.3	7.4	0.00	8	-	-
4	3	11.4	20.1	7.4	0.00	8	-	-
4	3	11.3	20.3	7.2	0.00	8	-	-
4	3	10.9	20.0	7.2	0.00	8	-	-
4	3	10.5	20.2	7.2	0.00	9	-	-
4	3	12.7	20.4	7.6	0.00	10	-	-
4	3	12.0	20.6	7.3	0.00	8	-	-
4	3	10.7	20.6	8.0	0.00	11	-	-
4	3	13.4	20.7	8.0	0.00	11	-	-
4	3	10.0	20.4	7.9	0.00	11	-	-
4	3	11.2	20.2	7.9	0.00	11	-	-
4	3	11.2	20.2	7.8	0.00	11	-	-
4	3	12.6	20.0	7.9	0.00	11	-	-
4	3	12.8	20.1	7.8	0.00	11	-	-
4	3	13.4	20.1	7.9	0.00	11	-	-
4	3	10.1	20.0	7.4	0.00	9	-	-
4	3	11.9	19.8	7.3	0.00	9	-	-
4	3	11.0	20.1	7.4	0.00	9	-	-
4	3	13.0	20.1	7.6	0.00	10	-	-
4	3	14.5	19.9	7.3	0.00	8	-	-
4	3	15.0	20.0	7.3	0.00	9	-	-
4	3	14.2	19.8	7.3	0.00	9	-	-
4	3	12.0	19.8	7.4	0.00	10	-	-

Segment 2 Average: -

Effective Contact Time t_{10} (minutes)	Temp (°C)	pH (units)	Chlorine Residual "C" (mg/L)	$C_{Clearwell}$ (mg-min/L)	Calculated Cl_{10} (mg-min/L)	Inactivation Ratio $Cl_{10}/C_{Clearwell}$	Cumulative Giardia Inactivation Ratio $Cl_{10}/C_{Clearwell}$	Cumulative Giardia Inactivation (log)
28.5	20.4	7.7	1.08	12	30.80	2.56	4.27	2.13
37.4	19.5	8.0	1.07	14	39.15	2.74	5.32	2.65
30.2	19.5	7.6	1.05	12	32.81	2.66	8.34	3.17
26.0	19.5	8.0	1.00	14	26.01	2.06	3.88	1.83
33.2	19.7	8.5	1.04	16	34.63	2.13	3.80	1.84
32.2	20.1	7.9	1.08	13	34.79	2.67	4.86	2.43
25.1	19.6	7.8	1.28	13	32.19	2.53	4.93	2.46
28.0	20.1	8.4	1.30	16	36.46	2.43	5.62	2.61
31.8	21.1	8.1	1.40	14	44.68	3.20	5.34	2.67
30.2	19.9	7.6	1.20	12	36.16	2.97	4.66	2.34
29.5	19.8	8.4	1.12	19	33.43	2.12	3.35	1.67
26.8	20.8	7.8	1.20	12	34.50	2.76	8.10	4.05
27.7	18.5	7.1	1.11	11	30.74	2.82	4.71	2.36
33.6	21.4	8.5	1.30	16	43.59	2.62	6.04	3.02
31.7	20.5	8.3	1.09	14	33.62	2.33	5.54	2.77
25.3	20.8	8.5	1.12	15	31.66	2.05	4.44	2.22
35.4	21.1	8.0	1.16	13	41.11	3.23	4.93	2.46
28.8	20.2	8.0	1.10	13	29.23	2.17	3.20	1.60
29.7	19.9	8.1	1.10	14	32.72	2.31	3.41	1.71
26.6	19.9	8.1	1.20	14	35.50	2.47	4.11	2.05
33.6	19.8	8.4	1.10	16	36.85	2.34	3.57	1.78
34.0	19.9	7.9	1.10	13	37.36	2.82	3.93	1.97
35.6	19.8	8.2	1.24	15	44.20	2.94	3.88	1.94
29.8	19.7	8.0	1.19	14	31.90	2.27	3.95	1.98
31.3	19.9	8.0	1.04	14	32.51	2.39	4.70	2.36
26.2	21.1	8.1	1.40	14	40.84	2.92	4.86	2.43
34.4	22.2	8.6	1.22	14	41.81	2.99	4.92	2.46
38.4	19.5	8.1	1.20	15	46.12	3.12	5.60	2.80
41.3	19.5	8.4	1.28	19	52.89	3.21	4.55	2.28
37.5	19.4	7.8	1.24	14	46.52	3.44	6.08	3.04
31.7	19.8	7.4	1.35	11	43.75	3.83	5.20	2.60

Segment 3 Average: 3.60 | 4.70 | 2.30

Individual Filter Monitoring Report

System Name: Coastside County Water District **Date** August-06

System Number: 4110011

Water Treatment Plant Name: Nunes Water Treatment Plant

		Start Backwashing Filter				Stop Backwashing Filter / Filter Online					
Date	Filter #	Time	Flow Rate (MGD)	Final Turbidity (NTU)	Filter Run (HOURS)	Time	Flow Rate (MGD)	Peak Turbidity (NTU)	Turbidity After 30 min	Time to <0.1 NTU (MIN)	Operator
8/1/06	3	1000	2.3	0.028	96	1120	2.3	0.100	0.025	0	ST
8/2/06	4	1000	2.4	0.018	96	1120	2.4	0.070	0.021	0	ST
8/3/06	1	1000	2.4	0.045	96	1115	2.4	0.082	0.031	0	ST
8/4/06	2	1000	2.5	0.048	96	1110	2.5	0.083	0.030	0	ST
8/5/06	3	830	2.3	0.042	94.5	940	2.3	0.122	0.040	5	JD
8/6/06	4	930	2.5	0.024	95.5	1040	2.5	0.090	0.030	0	JD
8/7/06	1	1300	3.0	0.052	96	1350	3.0	0.075	0.038	0	ST
8/8/06	2	1130	2.6	0.039	97.5	1224	2.6	0.080	0.035	0	SD
8/9/06	3	1130	2.5	0.035	99	1224	2.6	0.099	0.037	0	SD
8/10/06	4	1100	2.6	0.017	97.5	1154	2.6	0.072	0.031	0	SD
8/11/06	1	1440	2.6	0.022	97.5	1534	2.6	0.088	0.035	0	EB
12/06	2	830	2.6	0.021	94.5	1000	2.6	0.082	0.032	0	EB
8/13/06	3	830	2.5	0.021	93	1000	2.5	0.089	0.036	0	EB
8/14/06	4	1215	2.5	0.020	96	1308	2.5	0.113	0.032	8	ST
8/15/06	1	930	2.4	0.041	92	1015	2.4	0.099	0.036	0	ST
8/16/06	2	900	2.6	0.040	96	945	2.6	0.095	0.021	0	ST
8/17/06	3	900	2.6	0.037	96	930	2.6	0.121	0.026	8	ST
8/18/06	4	800	2.6	0.017	96	829	2.6	0.080	0.027	0	MD
8/19/06	1	800	2.6	0.028	96	829	2.6	0.070	0.040	0	MD
8/20/06	2	800	2.6	0.026	96	829	2.6	0.075	0.040	0	MD
8/21/06	3	1200	2.2	0.023	96	1239	2.2	0.100	0.055	2	SD
8/22/06	4	1200	2.2	0.017	96	1239	2.2	0.085	0.042	0	SD
8/23/06	1	1500	2.8	0.057	103	1539	2.8	0.110	0.060	5	SD
8/24/06	2	1045	2.7	0.027	99	1124	2.7	0.160	0.080	10	DP
8/25/06	3	830	2.0	0.020	92	909	2.0	0.200	0.115	40	SD
8/26/06	4	745	2.1	0.200	92	824	2.1	0.130	0.020	8	DP
8/27/06	1	845	2.7	0.029	90	924	2.7	0.080	0.040	0	DP
8/28/06	2	1400	1.9	0.020	99	1439	1.9	0.098	0.044	0	SD
8/29/06	3	1215	1.9	0.021	94	1255	1.9	0.095	0.041	0	ST
8/30/06	4	1130	2.4	0.016	96	1209	2.4	0.075	0.032	0	SD
8/31/06	1	800	2.4	0.022	93	840	2.4	0.080	0.030	0	EB

MONTHLY SUMMARY OF MONITORING FOR SURFACE WATER TREATMENT REGULATIONS

System Name: Coastside County Water District

System Number: 411-0011

Plant Name: Denniston Water Treatment Plant

Month/Year: August-08

	Date	Recycled Water Turbidity Grab	Raw Water Turbidity Grab		Treated water turbidities every four hours (NTU)[1]						Average
					Midnight to 4:00 am	4:00 am to 8:00 am	8:00 am to noon	Noon to 4:00 pm	4:00 pm to 8:00 pm	8:00 pm to Midnight	
Tue	1	1.650	3.690		0.024	0.022	0.022	0.027	0.025	0.024	0.024
Wed	2	1.800	4.200		0.023	0.022	0.023	0.029	0.025	0.024	0.024
Thu	3	2.270	4.040		0.026	0.024	0.025	0.024	0.024	0.022	0.024
Fri	4	1.590	4.880		0.022	0.024	0.025	0.024	0.024	0.024	0.024
Sat	5	1.780	5.480		0.032	0.040	0.027	0.025	0.025	0.028	0.033
Sun	6	2.390	5.210		0.054	0.027	0.027	0.025	0.026	0.040	0.036
Mon	7		5.650		0.031	0.022	0.029	0.025	0.031	0.026	0.034
Tue	8	2.900	4.730		0.024	0.022	shut/dwn	0.026	0.031	0.029	0.027
Wed	9	1.570	4.340		0.026	0.023	0.029	0.032	0.029	0.027	0.029
Thu	10	1.770	4.370		0.025	0.023	0.023	0.032	0.027	0.026	0.026
Fri	11	1.850	4.240		0.025	0.024	0.024	0.031	0.026	0.025	0.026
Sat	12		4.250		0.020	0.020	0.022	0.030	0.020	0.020	0.022
Sun	13		4.650		0.020	0.022	0.022	0.033	0.025	0.023	0.024
Mon	14		4.400		0.022	0.021	0.021	0.025	0.023	0.023	0.023
Tue	15	1.690	4.690		0.028	0.029	0.028	0.027	0.026	0.024	0.026
Wed	16		4.210		0.022	0.022	shut/dwn	shut/down	shut/down	shut/down	0.022
Thu	17		0.000		shut/down	shut/down	shut/dwn	start/up	0.051	0.029	0.040
Fri	18		4.620		0.025	0.023	0.027	0.023	0.025	0.024	0.024
Sat	19		4.650		0.022	0.021	0.021	0.032	0.024	0.022	0.024
Sun	20		4.650		0.022	0.021	0.022	0.034	0.024	0.022	0.024
Mon	21		4.430		0.021	0.021	0.026	0.039	0.027	0.026	0.026
Tue	22	1.750	4.670		0.025	0.022	0.021	0.034	0.024	0.024	0.025
Wed	23		4.650		0.021	0.021	0.021	0.033	0.023	0.022	0.024
Thu	24		4.750		0.022	0.021	0.021	0.031	0.023	0.022	0.023
Fri	25		4.640		0.021	0.021	0.021	0.029	0.025	0.022	0.023
Sat	26		4.800		0.022	0.021	0.021	0.028	0.025	0.023	0.023
Sun	27		4.690		0.022	0.021	0.021	0.051	0.024	0.023	0.027
Mon	28		4.630		0.023	0.022	0.021	0.028	0.024	0.023	0.024
Tue	29		4.610		0.021	0.021	0.021	0.026	0.023	0.021	0.022
Wed	30		4.400		0.021	0.021	0.021	0.029	0.025	0.023	0.023
Thu	31		5.220		0.022	0.022	0.021	0.024	0.026	0.026	0.024
	Avg.	1.919	4.730	-	0.025	0.023	0.023	0.031	0.026	0.025	0.026

[1] *For continuous turbidity monitoring, a discrete turbidity value must be taken off the record chart at four hour intervals.*

[2] *Raw water turbidity must be monitored after returned flow.*

Note: *See Directions on reporting peak recycle, raw, and settled water turbidities*

Total Number of Samples:	177	Number of readings <= 0.3 NTU:	177
% Readings <= 0.3 NTU:	100.0%	Average Effluent NTU:	0.023
		Meets Standard (i.e. at least 95% of readings are <= 0.3 NTU) (Y/N)?	Yes
		Maximum discrete turbidity value:	0.035
Average percent reduction during the month = [(Average Raw NTU - Average Effluent NTU)/(Average Raw NTU)] x 100% =			99.5%
		Meets Standard (i.e. Reduction is greater than 80%) (Y/N)?	Yes

Percentile Results:		
xth Percentile NTU Value of all turbidity readings. (x% of all turbidity readings are less than these values)	50 th =	0.024
	90 th =	0.031
	95 th =	0.034
	98 th =	0.055
	99 th =	0.064

Denniston Water Treatment Plant Combined Filter Effluent Reporting

Incidents of turbidity greater than 1 NTU for more than 1 hour

Date of Incident	N/A									
Value										

Incidents of turbidity greater than 1.0 NTU for more than 8 consecutive hours while the plant is operating

Date of Incident	N/A									
Value										

Individual Filter Effluent Reporting

Were individual filters monitored and recorded at least once every 15 minutes? ☑ Yes ☐ No

Were there any trigger violations? ☐ Yes ☑ No

Incidents of turbidity greater than 1.0 NTU in two consecutive measurements taken no more than 15 minutes apart.

Date of Incident	N/A									
Value										
Filter Number										

Incidents of turbidity greater than 0.3 NTU in two consecutive measurements taken 15 minutes apart at the end of the first 4 hours of continuous filter operation after the filter has been backwashed or otherwise taken offline.

Date of Incident	N/A									
Value										
Filter Number										

Incidents of turbidity greater than 1.0 NTU in two consecutive measurements taken no more than 15 minutes apart at any time in each of three consecutive months.

Date of Incident	N/A									
Value										
Filter Number										

Incidents of turbidity greater than 2.0 NTU in two consecutive measurements taken no more than 15 minutes apart at any time in each of two consecutive months.

Date of Incident	N/A									
Value										
Filter Number										

Turbidity Instrument Calibration

Indicate the date that the turbidimeters that are used for regulatory monitoring purposes were calibrated:

Date	Which Turbidimeter	Which standards used, primary or secondary	Date	Which Turbidimeter	Which standards used, primary or secondary
8/31/2006	Raw	Primary			
8/31/2006	Filter #1	Primary			
8/31/2006	Filter #2	Primary			
8/31/2006	Filter #3	Primary			
8/31/2006	Treated	Primary			

Disinfection Process Data

Disinfectant residual type (check one): ● Free Chlorine ○ Combined Chlorine ○ Other

Incidents of chlorine residuals less than 0.2 ppm at the plant effluent:

Date of Incident					
Duration					
Date Dept. Notified					

Total number of incidents where residual is < 0.2 ppm: 0

Meet Standard (i.e. is not less than 0.2 ppm for more than four hours (Y/N)? Yes

Number of distribution system residual samples collected:	
Number of distribution system samples for HPC only:	
Total number of residual and/or HPC samples collected:	0
Number of samples with no detectable residual and HPC is not measured:	
Number of samples with no residual and HPC > 500 CFU/mL:	
Number of samples for HPC only and HPC > 500 CFU/mL:	
Total number of samples with no residual and/or HPC > 500 CFU/mL:	0

Compute V:

Where V = [1 - (Total No. of samples with no residual and/or HPC > 500)/(Total No. of residual and/or HPC samples collected)] x 100

V = _____

Meets Standard (i.e. V >= 95%) (Y/N) ? _____

SUMMARY OF WATER QUALITY COMPLAINTS

General Complaints:

Type of Complaint	Number	Corrective Actions Taken
Taste/Odor		
Color		
Turbidity		
Suspended Solids		
Other (Describe)		

Reports of Gastrointestinal Illness (attach additional sheets if necessary):

Person Reporting	Date	Corrective Actions Taken

Attach an explanation of any failure of the performance standards or operating criteria and corrective action taken or planned.

Signature: _____

Date: _____

Coastside County Water District

Denniston Water Treatment Plant

Monthly Iron, Manganese, and Aluminum Sheet - August 2006

	In House Lab Results						Outside Lab Results					
	Iron		Manganese		Aluminum		Iron		Manganese		Aluminum	
Date	Raw	Treated	Raw	Treated	Raw	Treated	Raw	Treated	Raw	Treated	Raw	Treated
August 1, 2006	0.560	0.030	0.109	0.000	0.000	0.000						
August 2, 2006	0.660	0.000	0.094	0.001	0.010	0.000						
August 3, 2006	0.620	0.020	0.090	0.000	0.000	0.000						
August 4, 2006	0.800	0.000	0.102	0.000	0.000	0.000						
August 5, 2006	0.740	0.010	0.099	0.000	0.010	0.030						
August 6, 2006	0.470	0.010	0.086	0.003	0.010	0.000						
August 7, 2006	0.720	0.020	0.091	0.001	0.000	0.000	0.910	0	0.089	0		
August 8, 2006	0.700	0.000	0.086	0.001	0.000	0.000						
August 9, 2006	0.680	0.010	0.094	0.000	0.000	0.000						
August 10, 2006	0.650	0.010	0.106	0.000	0.000	0.000						
August 11, 2006	0.570	0.030	0.098	0.000	0.000	0.000						
August 12, 2006	0.690	0.020	0.960	0.000	0.000	0.000						
August 13, 2006	0.620	0.001	0.094	0.000	0.000	0.000						
August 14, 2006	0.650	0.050	0.099	0.000	0.000	0.000	0.721	0	0.072	0		
gust 15, 2006	0.570	0.040	0.097	0.008	0.000	0.000						
August 16, 2006	0.520	0.000	0.030	0.003	0.000	0.010						
August 17, 2006												
August 18, 2006	0.670	0.020	0.099	0.007	0.000	0.000						
August 19, 2006	0.620	0.010	0.136	0.000	0.000	0.000						
August 20, 2006	0.580	0.010	0.095	0.000	0.000	0.000						
August 21, 2006	0.600	0.000	0.080	0.000	0.000	0.000	0.638	0	0.058	0		
August 22, 2006	0.580	0.030	0.100	0.000	0.000	0.000						
August 23, 2006	0.460	0.000	0.075	0.000	0.000	0.000						
August 24, 2006	0.600	0.010	0.110	0.004	0.000	0.000						
August 25, 2006	0.610	0.010	0.096	0.000	0.000	0.000						
August 26, 2006	0.590	0.010	0.088	0.001								
August 27, 2006	0.540	0.020	0.088	0.010								
August 28, 2006	0.580	0.000	0.071	0.000	0.000	0.000	*	*	*	*	*	*
August 29, 2006	0.580	0.030	0.063	0.000	0.000	0.000						
August 30, 2006	0.500	0.000	0.081	0.000	0.000	0.000						
August 31, 2006	0.600	0.050	0.103	0.000	0.000	0.000						
Minimum	0.460	0.000	0.030	0.000	0.000	0.000	0.638	0	0.058	0	0.000	0.000
Maximum	0.800	0.050	0.960	0.010	0.010	0.030	0.910	0	0.089	0	0.000	0.000
Average	0.611	0.015	0.121	0.001	0.001	0.001	0.756	0	0.073	0	#DIV/0!	#DIV/0!

* Results Pending

CT Compliance for Giardia L ...lia Cysts by Free Chlorine
Denniston Water Treatment Plant

Input Fields
Calculated Fields
Totals

Month and Year: Aug '00

Required Giardia Log Inactivation: 1.0

Required CT Calculated Using Equation 15 from the USEPA SWTR Guidance Manual (Appendix F, Page 360):
$Ct = 0.36 \times pH^{2.89} \times temp^{-0.11} \times C^{0.15} \times (-\log I)$ for Temperatures 0.5 to 5.0°C
$Ct = 0.36 \times pH^{2.89} \times 5^{-0.11} \times C^{0.15} \times 0.5^{\wedge}[(T-5)/10] \times (-\log I)$ for Temperatures > 5.0°C

Segment 1
Prechlorination Pipeline and Coagulation Tank

Pipeline Diameter (ft):	1.00
Pipeline Length (ft):	123.00
Pipeline Volume (gallons):	723
Pipeline Short Circuiting Factor (t_{10}/T):	1.00
Coagulation Tank Diameter (ft):	9.00
Coagulation Tank Length (ft):	30.00
Coagulation Tank Volume (gallons):	11,200
Coagulation Tank Short Circuiting Factor (t_{10}/T):	0.40

Date	Flow Rate (gpm)	Effective Contact Time "t_{10}" (minutes)	Temp (°C)	pH (units)	Chlorine Residual "C" (mg/L)	CTcalc (mg-min/L)	Calculated Cl_{10} (mg-min/L)	Inactivation Ratio Cl_{10}/CTcalc
1	398	13.2	16.1	7.5	0.80	29	11.71	0.403
2	395	13.2	16.2	7.6	0.95	32	12.63	0.396
2	394	13.3	15.8	7.6	0.90	31	11.97	0.386
4	395	13.2	15.5	7.7	0.85	32	11.38	0.352
5	396	13.5	15.8	7.7	0.78	31	10.59	0.329
6	393	13.2	15.7	8.0	0.82	35	10.92	0.311
7	391	13.4	16.0	7.5	0.80	29	10.71	0.372
8	358	14.6	16.4	7.7	1.00	31	14.61	0.470
9	349	15.0	16.6	8.3	0.90	37	13.49	0.365
10	403	13.0	16.9	8.0	0.80	32	10.36	0.322
11	399	13.1	16.6	7.9	0.76	31	9.93	0.321
12	395	13.2	16.2	7.5	0.72	28	9.62	0.345
13	394	13.3	15.6	7.5	0.84	30	11.16	0.371
14	400	13.1	15.6	8.3	0.95	40	12.56	0.317
15	401	13.0	16.0	7.6	0.85	30	11.09	0.366
16	402	13.0	15.6	7.8	1.00	34	13.04	0.383
17		-	0.0	0.0	0.00	0	-	-
18	303	17.3	16.5	8.8	1.02	23	17.60	0.765
19	400	13.1	16.4	8.2	0.80	36	10.47	0.274
20	395	13.2	15.3	7.6	0.92	31	10.79	0.343
21	403	13.0	14.8	8.1	0.86	29	11.17	0.287
22	409	12.8	15.1	8.0	0.80	37	11.56	0.315
23	399	13.1	15.3	7.8	0.76	33	9.96	0.299
24	396	13.2	15.2	8.0	1.00	37	13.22	0.353
25	418	12.5	14.9	8.6	0.62	48	7.76	0.159
26	409	12.8	15.3	7.7	1.00	34	12.80	0.381
27	385	13.6	15.0	7.8	1.20	36	16.30	0.447
28	416	12.5	15.6	8.4	0.98	41	12.23	0.296
29	408	12.8	15.7	8.0	0.96	35	12.30	0.348
30	399	13.2	14.8	8.0	0.82	27	10.79	0.268
31	404	12.9	15.2	8.2	0.94	39	12.17	0.312
							Segment 1 Average:	0.356

Segment 2
Filters and Filter Effluent Piping

Total Filters Online (0 to 3):	N
Number of Filters For CT Calculations (0 to 3):	N
Filter Diameter (ft):	8.00
Filter Length (ft):	20.00
Total Volume per Filter (gallons):	7,520
2% Lost Volume for Filter Bottoms (gallons):	-150
Lost Volume for Media- 42" depth, 55% solids (gallons):	-2,370
Net Volume Per Filter (gallons):	5,000
8-inch Pipeline Diameter (ft):	0.67
8-inch Pipeline Length fore Each Filter (ft):	9.00
8-inch Pipeline Volume for Each Filter (gallons):	35
12-inch Pipeline Diameter (ft):	1.00
Pipeline Length (ft):	6.00
12- inch Pipeline Volume (gallons):	70
Filter Short Circuiting Factor (t_{10}/T):	0.75
Pipeline Short Circuiting Factor (t_{10}/T):	1.00

No. Filters Online (N)	No. Filters for Ct	Effective Contact Time "t_{10}" (minutes)	Temp (°C)	pH (units)	Chlorine Residual "C" (mg/L)	CTcalc (mg-min/L)	Calculated Cl_{10} (mg-min/L)	Inactivation Ratio Cl_{10}/CTcalc
3	3	28.7	16.1	7.5	0.88	29	25.65	0.879
3	3	28.7	16.2	7.6	0.96	32	27.55	0.864
3	3	29.0	15.7	7.6	0.90	31	26.12	0.842
3	3	28.9	15.4	7.7	0.86	33	24.87	0.753
3	3	29.6	16.1	7.7	0.78	31	23.13	0.750
3	3	29.1	16.0	8.0	0.82	34	23.92	0.692
3	3	29.2	15.9	7.5	0.80	29	23.38	0.809
3	3	31.9	16.5	7.7	1.00	31	31.86	1.032
3	3	22.7	16.5	8.3	0.90	37	20.44	0.791
3	3	28.3	16.8	8.0	0.80	32	22.66	0.698
3	3	28.6	16.8	7.9	0.76	31	21.76	0.711
3	3	28.8	16.8	7.5	0.72	28	20.77	0.785
3	3	23.0	15.6	7.8	0.84	30	24.58	0.815
3	3	28.6	15.4	8.3	0.96	40	27.42	0.697
3	3	28.5	15.2	7.6	0.85	30	24.20	0.814
3	3	28.5	16.0	7.8	1.00	33	28.45	0.859
3	3	-	0.0	0.0	0.00	0	-	-
3	3	37.7	16.2	8.6	1.02	22	38.41	1.730
3	3	28.6	15.5	8.2	0.80	36	22.85	0.602
3	3	28.7	15.3	7.6	0.92	31	23.54	0.748
3	3	28.3	15.1	8.1	0.86	36	24.36	0.639
3	3	28.0	15.3	8.0	0.90	36	25.22	0.700
3	3	29.5	15.5	7.8	0.76	33	21.76	0.661
3	3	28.9	15.7	8.0	1.00	36	28.65	0.797
3	3	27.3	15.3	8.8	0.62	45	16.94	0.378
3	3	27.9	15.4	7.7	1.00	33	27.93	0.838
3	3	29.6	15.6	7.6	1.20	35	35.57	1.017
3	3	27.3	15.7	8.4	0.98	38	26.25	0.687
3	3	28.0	15.4	8.0	0.96	36	26.95	0.744
3	3	28.7	14.8	8.0	0.82	37	23.54	0.629
3	3	28.7	15.0	8.2	0.94	40	28.66	0.671
							Segment 2 Average:	0.768

Segment 3
Treated Water Pipeline

Volume in Gallons:	12,102
Pipeline Short Circuiting Factor (t_{10}/T):	1.00
Pipeline Diameter (ft):	1.00
Pipeline Length (ft):	2,000

Effective Contact Time "t_{10}" (minutes)	Temp (°C)	pH (units)	Chlorine Residual "C" (mg/L)	CTcalc (mg-min/L)	Calculated Cl_{10} (mg-min/L)	Inactivation Ratio Cl_{10}/CTcalc	Cumulative Giardia Inactivation Ratio Cl_{10}/CTcalc	Cumulative Giardia Inactivation (log)
32	16.1	7.6	1.04	31	31.20	1.011	2.393	2.393
30	16.2	7.6	1.00	30	30.00	0.955	2.245	2.245
31	15.7	7.6	0.95	31	29.76	0.959	2.180	2.180
31	15.4	7.5	1.00	31	31.02	0.998	2.113	2.113
31	16.1	7.5	0.96	28	29.76	1.012	2.168	2.168
31	16.0	7.6	0.90	32	27.90	0.871	1.874	1.874
31	15.9	7.7	0.60	29	18.60	0.634	1.812	1.812
34	16.5	7.6	0.68	28	23.12	0.821	2.323	2.323
30	16.5	7.7	0.76	30	26.60	0.897	2.053	2.053
30	16.8	7.6	1.00	29	30.00	1.027	2.048	2.048
30	16.8	7.7	0.90	30	27.00	0.908	1.839	1.839
31	15.8	7.6	0.96	29	28.76	1.040	2.170	2.170
31	15.6	7.7	0.82	32	25.42	0.791	1.972	1.972
30	15.4	7.6	0.90	32	27.00	0.852	1.836	1.836
30	15.2	7.7	0.98	31	29.40	0.951	2.133	2.133
30	16.0	7.6	0.95	31	28.80	0.936	2.103	2.103
-	0.0	0.0	0.00	0	-	-	-	-
40	16.2	7.5	0.74	29	29.60	1.017	3.002	3.002
30	16.5	7.5	0.98	31	29.40	0.956	1.832	1.832
30	16.3	7.5	0.90	31	27.00	0.877	1.608	1.608
30	16.1	7.6	0.86	32	25.40	0.819	1.745	1.745
30	15.3	7.7	0.92	33	27.60	0.847	1.804	1.804
30	15.5	7.6	0.84	31	25.20	0.803	1.789	1.789
31	15.7	7.7	0.92	32	28.52	0.894	2.034	2.034
29	15.3	7.7	1.10	34	31.03	0.950	1.687	1.687
30	15.4	7.6	1.03	32	30.90	0.966	2.174	2.174
31	15.6	7.6	0.80	31	24.80	0.806	2.271	2.271
29	16.7	7.7	1.00	30	29.00	0.968	1.901	1.901
30	15.4	7.6	0.96	32	28.80	0.900	1.901	1.901
30	14.8	7.6	1.00	34	30.00	0.894	1.812	1.812
30	15.0	7.5	0.90	31	27.00	0.869	1.841	1.841
						Segment 3 Average:	0.909	2.052	2.052

Individual Filter Monitoring Report

System Name: Coastside County Water District **Date** August-06

System Number: 4110011

Water Treatment Plant Name: Dennistin Water Treatment Plant

		Start Backwashing Filter					Stop Backwashing Filter / Filter Online							
Date	Filter #	Time	Flow Rate (GPD)	Head Loss (FT)	Final Turbidity (NTU)	Filter Run (HOURS)	Time	Flow Rate (MGD)	Head Loss (FT)	Peak Turbidity (NTU)	Turbidity After 30 min	Time to <0.1 NTU (MIN)	Filter to Waste Yes/No	Operator
8/1/06	1	1000	0.55	1.2	0.002	24	1012	0.56	0.2	0.130	0.040	5	no	MD
8/1/06	2	1012	0.55	1.2	0.002	24	1024	0.56	0.2	0.200	0.040	5	no	MD
8/1/06	3	1024	0.55	1.2	0.002	24	1036	0.56	0.2	0.080	0.040	0	no	MD
8/2/06	1	1000	0.56	1.4	0.020	24	1012	0.57	0.2	0.140	0.040	5	no	MD
8/2/06	2	1012	0.56	1.4	0.020	24	1024	0.57	0.2	0.220	0.040	5	no	MD
8/2/06	3	1024	0.56	1.4	0.020	24	1036	0.57	0.2	0.070	0.040	0	no	MD
8/3/06	1	1000	0.56	1.6	0.040	24	1012	0.57	0.2	0.130	0.040	0	no	MD
8/3/06	2	1012	0.56	1.6	0.020	24	1024	0.57	0.2	0.200	0.040	5	no	MD
8/3/06	3	1024	0.56	1.6	0.020	24	1036	0.57	0.2	0.070	0.040	0	no	MD
8/4/06	1	1000	0.55	2.0	0.070	24	1012	0.56	0.2	0.160	0.050	15	no	MD
[illegible]/4/06	2	1012	0.55	2.0	0.040	24	1024	0.56	0.2	0.180	0.040	5	no	MD
[illegible]4/06	3	1024	0.55	2.0	0.020	24	1036	0.56	0.2	0.080	0.040	0	no	MD
8/5/06	1	945	0.55	2.0	0.140	23.5	957	0.56	0.2	0.230	0.060	15	no	JD
8/5/06	2	957	0.55	2.0	0.110	23.5	1009	0.56	0.2	0.230	0.040	10	no	JD
8/5/06	3	1009	0.55	2.0	0.040	23.5	1021	0.56	0.2	0.090	0.050	0	no	JD
8/6/06	1	700	0.55	2.5	0.158	21	712	0.56	0.2	0.106	0.034	0	no	ST
8/6/06	2	712	0.55	2.5	0.110	21	724	0.56	0.2	0.146	0.039	0	no	ST
8/6/06	3	724	0.55	2.5	0.040	21	736	0.56	0.2	0.100	0.046	0	no	ST
8/5/06	1	2330	0.55	2.7	0.140	16.5	2342	0.56	0.2	0.210	0.050	15	no	JD
8/6/06	2	2342	0.55	2.7	0.100	16.5	2354	0.56	0.2	0.200	0.040	10	no	JD
8/6/06	3	2354	0.55	2.7	0.040	16.5	2406	0.56	0.2	0.100	0.050	0	no	JD
8/7/06	1	1300	0.56	2.7	0.100	25.5	1312	0.57	0.2	0.200	0.140	50	no	MD
8/7/06	2	1312	0.56	2.7	0.020	25.5	1324	0.57	0.2	0.290	0.140	45	no	MD
8/7/06	3	1324	0.56	2.7	0.030	25.5	1336	0.57	0.2	0.080	0.120	40	no	MD
8/8/06	1	1330	0.56	1.6	0.030	24.5	1342	0.57	0.2	0.190	0.060	10	no	MD
8/8/06	2	1342	0.56	1.6	0.020	24.5	1356	0.57	0.2	0.270	0.060	15	no	MD
8/8/06	3	1356	0.56	1.6	0.020	24.5	1406	0.57	0.2	0.090	0.060	0	no	MD
8/9/06	1	1000	0.56	0.9	0.020	20.5	1012	0.57	0.4	0.150	0.060	15	no	MD
8/9/06	2	1012	0.56	0.9	0.020	20.5	1024	0.57	0.4	0.250	0.050	10	no	MD
8/9/06	3	1024	0.56	0.9	0.020	20.5	1036	0.57	0.4	0.080	0.050	0	no	MD

Individual Filter Monitoring Report

System Name: Coastside County Water District **Date** August-06

System Number: 4110011

Water Treatment Plant Name: Dennistin Water Treatment Plant

		Start Backwashing Filter					Stop Backwashing Filter / Filter Online							
Date	Filter #	Time	Flow Rate (GPD)	Head Loss (FT)	Final Turbidity (NTU)	Filter Run (HOURS)	Time	Flow Rate (MGD)	Head Loss (FT)	Peak Turbidity (NTU)	Turbidity After 30 min	Time to <0.1 NTU (MIN)	Filter to Waste Yes/No	Operator
8/10/06	1	1100	0.56	1.0	0.020	25	1112	0.57	0.3	0.130	0.040	5	no	MD
8/10/06	2	1110	0.56	1.0	0.020	25	1124	0.57	0.3	0.230	0.040	15	no	MD
8/10/06	3	1112	0.56	1.0	0.020	25	1136	0.57	0.3	0.080	0.040	0	no	MD
8/11/06	1	1100	0.57	1.0	0.020	24	1112	0.58	0.3	0.120	0.050	5	no	MD
8/11/06	2	1112	0.57	1.0	0.020	24	1124	0.58	0.3	0.240	0.040	10	no	MD
8/11/06	3	1124	0.57	1.0	0.020	24	1136	0.58	0.3	0.080	0.040	0	no	MD
8/12/06	1	1100	0.57	1.0	0.020	24	1112	0.58	0.03	0.090	0.040	10	no	EB
8/12/06	2	1112	0.57	1.0	0.020	24	1124	0.58	0.03	0.110	0.030	30	no	EB
8/12/06	3	1124	0.57	1.0	0.020	24	1136	0.58	0.03	0.090	0.030	5	no	EB
8/13/06	1	1130	0.58	1.0	0.020	25	1142	0.59	0.03	0.080	0.060	10	no	EB
8/13/06	2	1142	0.58	1.0	0.020	25	1154	0.59	0.03	0.170	0.050	5	no	EB
8/13/06	3	1154	0.58	1.0	0.020	25	1206	0.59	0.03	0.080	0.030	0	no	EB
8/14/06	1	1200	0.55	1.0	0.020	25.5	1212	0.56	0.3	0.130	0.040	5	no	MD
8/14/06	2	1212	0.55	1.0	0.020	25.5	1224	0.56	0.3	0.250	0.040	15	no	MD
8/14/06	3	1224	0.55	1.0	0.020	25.5	1236	0.56	0.3	0.090	0.040	0	no	MD
8/15/06	1	1000	0.57	1.1	0.020	21.5	1012	0.58	0.3	0.120	0.040	0	no	MD
8/15/06	2	1012	0.57	1.1	0.020	21.5	1024	0.58	0.3	0.220	0.040	5	no	MD
8/15/06	3	1012	0.57	1.1	0.020	21.5	1036	0.58	0.3	0.080	0.040	0	no	MD
8/15/06	1	1630	0.57	0.5	0.020	6.5	1642	0.58	0.3	0.140	0.040	5	no	MD
8/15/06	2	1642	0.57	0.5	0.020	6.5	1654	0.58	0.3	0.170	0.050	10	no	MD
8/15/06	3	1654	0.57	0.5	0.020	6.5	1706	0.58	0.3	0.070	0.040	0	no	MD
8/17/06	1	1600	0.57	1.5	0.020	17	1612	0.58	0.6	0.130	0.050	5	no	MD
8/17/06	2	1612	0.57	1.5	0.020	17	1624	0.58	0.6	0.280	0.040	10	no	MD
8/17/06	3	1624	0.57	1.5	0.020	17	1636	0.58	0.6	0.080	0.040	0	no	MD
8/18/06	1	1300	0.57	1.6	0.020	21	1312	0.58	0.6	0.140	0.060	5	no	MD
8/18/06	2	1312	0.57	1.6	0.020	21	1324	0.58	0.6	0.230	0.040	10	no	MD
8/18/06	3	1324	0.57	1.6	0.020	21	1336	0.58	0.6	0.080	0.040	0	no	MD
8/19/06	1	1130	0.55	1.3	0.020	22.5	1142	0.56	0.5	0.120	0.050	5	no	MD
8/19/06	2	1142	0.55	1.3	0.020	22.5	1154	0.56	0.5	0.220	0.050	10	no	MD
8/19/06	3	1154	0.55	1.3	0.020	22.5	1206	0.56	0.5	0.080	0.040	0	no	MD

Individual Filter Monitoring Report

System Name: Coastside County Water District **Date** August-06

System Number: 4110011

Water Treatment Plant Name: Dennistin Water Treatment Plant

		Start Backwashing Filter					Stop Backwashing Filter / Filter Online							
Date	Filter #	Time	Flow Rate (GPD)	Head Loss (FT)	Final Turbidity (NTU)	Filter Run (HOURS)	Time	Flow Rate (MGD)	Head Loss (FT)	Peak Turbidity (NTU)	Turbidity After 30 min	Time to <0.1 NTU (MIN)	Filter to Waste Yes/No	Operator
8/20/06	1	1130	0.55	1.6	0.020	24	1142	0.56	0.5	0.140	0.040	5	no	MD
8/20/06	2	1142	0.55	1.6	0.020	24	1156	0.56	0.5	0.190	0.040	10	no	MD
8/20/06	3	1154	0.55	1.6	0.020	24	1206	0.56	0.5	0.080	0.050	0	no	MD
8/21/06	1	1030	0.55	1.5	0.020	23	1042	0.56	0.6	0.150	0.050	5	no	MD
8/21/06	2	1042	0.55	1.5	0.020	23	1054	0.56	0.6	0.210	0.050	10	no	MD
8/21/06	3	1054	0.55	1.5	0.020	23	1106	0.56	0.6	0.800	0.040	0	no	MD
8/21/06	1	1130	0.58	0.6	0.040	0.3	1142	0.59	0.6	0.120	0.040	0	no	MD
8/21/06	2	1142	0.58	0.6	0.040	0.3	1154	0.59	0.6	0.200	0.050	10	no	MD
8/21/06	3	1154	0.58	0.6	0.040	0.3	1206	0.59	0.6	0.080	0.040	0	no	MD
8/22/06	1	1130	0.58	1.2	0.020	24	1142	0.59	0.6	0.140	0.040	10	no	MD
8/22/06	2	1142	0.58	1.2	0.020	24	1154	0.59	0.6	0.220	0.050	10	no	MD
8/22/06	3	1154	0.58	1.2	0.020	24	1206	0.59	0.6	0.080	0.040	0	no	MD
8/23/06	1	1130	0.56	1.3	0.020	24	1142	0.57	0.6	0.160	0.050	5	no	MD
8/23/06	2	1142	0.56	1.3	0.020	24	1154	0.57	0.6	0.210	0.040	10	no	MD
8/23/06	3	1154	0.56	1.3	0.020	24	1206	0.57	0.6	0.080	0.040	0	no	MD
8/24/06	1	1100	0.56	1.2	0.020	23.5	1112	0.57	0.3	0.140	0.040	5	no	SD
8/24/06	2	1112	0.56	1.2	0.020	23.5	1124	0.57	0.3	0.210	0.050	10	no	SD
8/24/06	3	1124	0.56	1.2	0.020	23.5	1136	0.57	0.3	0.080	0.050	0	no	SD
8/25/06	1	1100	0.56	1.1	0.020	24	1112	0.57	0.4	0.160	0.040	10	no	DP
8/25/06	2	1112	0.56	1.1	0.020	24	1124	0.57	0.4	0.260	0.040	10	no	DP
8/25/06	3	1124	0.56	1.1	0.020	24	1136	0.57	0.4	0.090	0.060	0	no	DP
8/26/06	1	1000	0.56	1.0	0.020	23.5	1012	0.57	0.4	0.060	0.060	4	no	DP
8/26/06	2	1012	0.56	1.0	0.020	23.5	1024	0.57	0.4	0.280	0.060	10	no	DP
8/26/06	3	1024	0.56	1.0	0.020	23.5	1036	0.57	0.4	0.090	0.060	0	no	DP
8/27/06	1	1200	0.56	1.2	0.020	26	1212	0.57	0.4	0.150	0.050	5	no	DP
8/27/06	2	1212	0.56	1.2	0.020	26	1224	0.57	0.4	0.260	0.050	10	no	DP
8/27/06	3	1224	0.56	1.2	0.020	26	1236	0.57	0.4	0.100	0.050	0	no	DP
8/28/06	1	1230	0.57	1.0	0.020	25.5	1242	0.58	0.4	0.240	0.050	5	no	MD
8/28/06	2	1242	0.57	1.0	0.020	25.5	1254	0.58	0.4	0.140	0.060	5	no	MD
8/28/06	3	1254	0.57	1.0	0.020	25.5	1306	0.58	0.4	0.090	0.060	0	no	MD

Individual Filter Monitoring Report

System Name: Coastside County Water District **Date** August-06

System Number: 4110011

Water Treatment Plant Name: Dennistin Water Treatment Plant

		Start Backwashing Filter					Stop Backwashing Filter / Filter Online							
Date	Filter #	Time	Flow Rate (GPD)	Head Loss (FT)	Final Turbidity (NTU)	Filter Run (HOURS)	Time	Flow Rate (MGD)	Head Loss (FT)	Peak Turbidity (NTU)	Turbidity After 30 min	Time to <0.1 NTU (MIN)	Filter to Waste Yes/No	Operator
8/29/06	1	1230	0.57	1.1	0.020	24	1242	0.58	0.3	0.160	0.040	5	no	MD
8/29/06	2	1242	0.57	1.1	0.020	24	1254	0.58	0.3	0.210	0.050	10	no	MD
8/29/06	3	1256	0.57	1.1	0.020	24	1306	0.58	0.3	0.080	0.050	0	no	MD
8/30/06	1	1300	0.57	1.1	0.020	24.5	1312	0.58	0.4	0.160	0.050	5	no	MD
8/30/06	2	1312	0.57	1.1	0.020	24.5	1324	0.58	0.4	0.230	0.050	10	no	MD
8/30/06	3	1324	0.57	1.1	0.020	24.5	1336	0.58	0.4	0.080	0.050	0	no	MD
8/31/06	1	1100	0.57	1.1	0.020	22	1112	0.58	0.4	0.160	0.050	5	no	MD
8/31/06	2	1112	0.57	1.1	0.020	22	1124	0.58	0.5	0.240	0.070	15	no	MD
8/31/06	3	1124	0.57	1.1	0.020	22	1136	0.58	0.6	0.090	0.060	0	no	MD
	1													
	2													
	3													
	1													
	2													
	3													
	1													
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8/24/2006

Service Report
Coast Side Water district
Denniston Plant

The writer visited the above treatment on July 10-12, 2006. The purpose of the trip was to review the condition of the plant and make recommendations for improvement.

Background

The writer was last at the Denniston Water Plant in early November of last year. The purpose of the trip was training and startup as required by contract. All obligations were met to the satisfaction of the Water District personnel and the plant performance was correct. All three filters were finished and on line along with all other aspects of the plant; the last filter was put on line at that time while the other filters had been in operation meeting demand. The plant was shut down again in mid-December and only operated for brief periods up to mid-May of this year.

Work Accomplished

Two system backwashes were observed. The first backwash was accomplished at the flow rates and times previously used, the second with the same rates and shortened times. Each backwash was complete and resulted in the normal clean bed headloss.

Several jar tests were observed using the normal methods used by plant personnel. One jar test series was conducted with acid adjustment to determine the advisability of operation at lower pH values. Muriatic acid was used for pH adjustment. Values from ambient to below 6.5 were tested.

Observations

First with regard to the backwash, the backwashes were within the normal methods used by Roberts Filter. The backwash flow rate was lower than typical, however the clean bed headloss indicates that the backwash is effective. Clean bed headloss should return to the value noted when the media was first installed, as it appears to do here. Backwash effectiveness was verified by the previous recent inspection of the bed by the contractor. The media at that time were described as clean and loose with no mudballs evident.

There was indication in the filter inspection of higher media loss than normally is anticipated. Such loss is usually the result of excessive bed expansion. The best backwash rate is the highest that can be achieved without losing media, which appears to be the rate of 1600 to 1700 gpm presently used. That rate would therefore be acceptable to Roberts. It is possible that the overall design of the unit allows expansion of the bed to the area of the surface wash. The addition of the surface wash flow raises the total flow to about 2000 gpm. That additional flow is probably sufficient to remove the accumulated solids while not causing media loss. The filters should routinely be opened and the media bed inspected at a frequency of every 6 – 12 months of operation by plant personnel. In this case another inspection after three months would be recommended to confirm the effectiveness of the backwash.

The performance of the surface wash was in question. The recommended rate for a fixed surface wash system is 1 – 2 gpm/sf, and the rates noted for each unit were in that range. The absence of mudballs is an indication of effectiveness.

No operational problems were found during the inspection. The earlier problems with short filter runs were not in evidence at the visit. We have not been able to find any generally accepted marker of performance for a direct filtration plant, as would be typical for a conventional plant. Run lengths are directly the result of the treatment chemistry and the nature of the raw water,

and the backwash system can only remove the accumulated solids, thereby achieving the clean bed headloss. What literature information that is available indicates that this source is at or near the upper limits for application of direct filtration given the high iron and manganese combined with the turbidity, but performance is the final marker. The consistently high filtered water quality indicates that the plant operation is good and the operators should be commended. A review of the performance since that visit indicates the operation is stable and remains efficient. The iron and manganese removals, manganese in particular, are at the limit of the systems capability.

In general, plant efficiencies are measured by productivity as defined by the percentage of raw water available for sale to the users, and not by the filter run lengths. A conventional plant is considered efficient when the productivity is above 95%, but the applied turbidities to achieve this productivity are typical less than 5.0 NTU and preferably less than 1.0 NTU. The applied turbidity at this plant as measured after chemical addition was well above those values. Inorganic coagulants create chemical solids as part of the process, and those solids contribute to the loading to the filter. In this case productivity above 90%, as was measured at the plant, should be considered good operation.

The filters can operate to higher headloss, but the chemistry required for clarification produces a chemical floc which has low shear strength; shear forces increase as the headloss increases, resulting in turbidity breakthrough and service run termination. I saw nothing in the chemistry or operation that could be altered to improve retention. It appeared from the jar tests that the alum is being used to its best effectiveness. Improvement would most likely involve alternate treatment chemistry, specifically the use of Ferric coagulants or a polyaluminum product. Either coagulant is compatible with the equipment but the materials and methods of chemical feed should be reviewed with the manufacturer. These or other coagulants may allow more efficient operation, but that judgment can only be made through plant scale trials. Chemical vendors will usually provide assistance is such trials. Anything that can reduce the solids load or improve the shear strength of the solids through the run will increase the run length.

The jar testing methods used were correct and practical in application; the results can reasonably be applied to the operation. Filterability testing can be used with the jar testing to provide an objective means to determine the best chemistry rather than relying on visual judgment. The series where pH adjustment was used provided interesting results. Typically a low pH in the range of 6.0 – 6.5 is best for alum for coagulation, however for this source the performance deteriorated as the pH was lowered. The best pH for coagulation, by observation, was the ambient mixed water pH of the plant operation on that date. It would be useful to include pH adjustment in the jar test routine if the raw pH tends to vary or the alum dosage is increased. Alum lowers the pH and some adjustment upward, in those cases, may be necessary for optimum operation, or some reduction may be necessary during periods of high raw water pH due to algae blooms.

Recommendations

1. Consider alternate treatment chemistries
2. Inspect the filters in three months and every 6 – 12 months thereafter
3. Increase backwash rates and times only if the clean bed headloss indicates that the filters are not coming clean

This trip was undertaken as a result of time still available on the contract and not as a result of any belief in error on the part of Roberts or ERS. It seems clear that the work called for by specification has been completed and is correct.

Donald J. Mackay
Service Manager

STAFF REPORT

To: **Ed Schmidt, General Manager**

From: **Joe Guistino, Superintendent of Operations**

Agenda Date: **September 12, 2006**

Date: September 8, 2006

Subject: **CCWD Well Rehabilitation Program**

Recommendation

Direct Staff to publish and send to qualified companies the Request For Proposal to rehabilitate Denniston Wells 1 & 2.

Background

The production from the 13 Coastside County Water District wells has declined by 30% in the last three years, going from an average of 88 MG/year to about 64 MG/year. The Denniston Well field production has dropped to about 50%. District Staff is presently making plans to pursue the rehabilitation of select wells in accordance with Board recommendation to make the maximum use of local water sources. Well rehabilitation of Pilarcitos Well 4A has proven to increase its capacity by 45% at a cost of $8,000. The Denniston Well System was selected as our starting point since these wells can be run year-round and they would lessen the impact on our already stressed Denniston Reservoir.

Recent inspection of Denniston Wells 1 & 2 by Layne Christensen Company showed that these wells were severely plugged. The plugging was most likely due to the biological activity of iron bacteria and encrustation by mineral formations but could become productive again with proper rehabilitation.

Fiscal Impacts

Approximately $16,000 if these 2 wells are found to be in fair condition (similar to Pilarcitos Well 4A) or up to $50,000 if they are found to be significantly deteriorated.

SCHEDULE OF WORK
SECTION 1

SUMMARY OF WORK

PART 1 – GENERAL

GENERAL

The work to be performed under this contract shall consist of furnishing all tools, equipment, materials, supplies, and manufactured articles, and for furnishing all transportation and services, including fuel, power, water, and essential communications, and for the performance of all labor, work, or other operations required for the fulfillment of the contract in strict accordance with the contract documents. The work shall be complete, and all work, materials, and services not expressly shown or called for in the contract documents which may be necessary for the complete development and installation of pump and appurtenances shall in good faith be performed, furnished, and installed by the Contractor as though originally so specified, or shown at no increase in cost to the Owner.

WORK COVERED BY CONTRACT DOCUMENTS

The work required for the rehabilitation of Denniston Wells one (1) and two (2) will be completed within ten (10) consecutive days and shall include the following items:

Pressure wash the equipment before leaving the shop.

Mobilize to site.

Videotape the condition of the well using a downward/side scanning color camera.

Brushing the well and bail out sediment and particles.

Introduce chemicals to the well for treatment and swab. Let well set overnight. Swab the next day.

Remove twenty (20) well casing volumes of water and sediment/air-lift develop the well (end of second day).

Re-video tape the well.

Disinfect the well.

Reinstall pump, column pipe, power cable, sounding tube, safety cable, transducer access pipe, reinstall the transducer, and connect the pump to the motor control panel.

Test well/pump performance.

Dispose of any wastes.

Demobilize.

ACTIVITIES BY OTHERS

The Contractor shall cooperate fully with all regulating agencies, personnel of the Owner, and the Owner's representative.

EXISTING WELL CONSTRUCTION DETAILS AND CONDITIONS

Coastside County Water District Denniston Wells 1 and 2 require rehabilitation due to heavy plugging of the perforated sections of the wells. The plugging is estimated to be 90-95% of the total screened area of the well.

Neither well is producing water to its greatest efficiency, most likely due to the biological activity and mineral precipitation present blocking the well perforations. The possibility of a mechanical blockage in the formation from mineral and related bacteria is a further concern.

The wells are to be rehabilitated with formulated chemistries, brushing, bailing and swabbing. In addition, airlifting double disc swabbing in 20-foot zone isolated sections shall be used to remove the materials that have been dislodged from the formation and casing walls. Further, the well is to be treated with a Sodium Hypochlorite and Oximate at 300ppm to disinfect and slow down the natural occurring biofouling microorganisms that will re-grow and produce mechanical blockage within the formation.

There is no location for the discharge water to be drained via a sanitary sewer drain or permitted discharge location. The discharge fluids are to be contained in Baker tanks and trucked away with the use of vacuum trucks.

Well #1 is 8" inch steel construction with wire wrap screen perforation at 24-39 feet and 51-71 feet respectively. It was drilled to 104 feet in 1977.

Well #2 is 10" inch steel construction with slot perforation from 20 – 80 feet. It is not possible to see where the slot stops due to the extreme plugging. The well was drilled to 112' in the late 70's.

CONTRACTOR USE OF THE PROJECT SITE

The Contractor's use of the project site shall be limited to the construction operations, including on-site storage of materials and field equipment.

The work shall be completed between the hours of 7:00 AM and 5:00 PM, during a five (5) day work period unless otherwise directed. All work must be completed with ten (10) consecutive days.

The Contractor shall remove any oils or water contaminated with oil or fuel from their equipment at no cost to the Owner. The Contractor is encouraged to use plastic sheeting under their equipment.

PART 2 – MATERIALS

Not used.

PART 3 – EXECUTION

END OF SECTION

SECTION 01005

MEASUREMENT AND PAYMENT

PART 1 – GENERAL

SCOPE

Payment for the various items of the Schedule of Work Items, as further specified herein, shall include all compensation to be received by the Contractor for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items of work being described, as necessary to complete the various items of the work in accordance with the requirements of the contract documents, including all appurtenances thereto, and including all costs of compliance with the regulation of public agencies having jurisdiction, including Safety and Health Requirements of the California Division of Industrial Safety and the Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA). No separate payment will be made for any item that is not specifically set forth in the Schedule of Work Items, and all costs therefore shall be included in the prices named in the Schedule of Work Items for the various appurtenant items of work.

UNIT PRICE ITEMS LABELED "LUMP SUM"

Measurement of payment of "lump sum" items will be based upon the completion of the work as a unit, complete, as specified. Payment of completion of the "lump sum" items will be made at the price shown in the Bid Schedules and shall constitute full compensation for completing said work.

UNIT PRICE ITEMS BASED UPON TIME AND MATERIALS

Measurement of the time required for swabbing air-lifting the well will be recorded by the hour with fifteen (15) minute intervals as the smallest unit of time credited to the Contractor. Fractions of an hour less that one-half hour, but exceed one-quarter hour, will be considered to be one-half hour.

No time will be recorded for delays resulting from:
1) equipment stuck in the hole
2) equipment breakdown
3) arranging major drilling, pumping or testing apparatus, or
4) failure to conduct the operations in a diligent and responsible manner by which the desired result could ordinarily be expected.

Costs for replacement parts, etc. for maintenance and repair of pumps and equipment will be reimbursed on a time and materials basis.

END OF SECTION

SECTION 01040

TEMPORARY FACILITIES

PART 1 – GENERAL

CONTRACTOR'S EQUIPMENT

General

The well will be rehabilitated by brushing, videotaping, chemically treating, swabbing and air-lifting/bailing the water from the well. Swabbing of the well during chemical treatment will be with a double flange swab suspended by a cable. Final development shall consist of an air-lift using a PVC pipe where the water and solids removed from the well shall pass between the pipe and the well casing. The Contractor will provide all tools, accessories, power, other equipment, and experienced personnel necessary to conduct efficient operations at the site. The Contractor shall have a calibrated sounder capable of measuring the total depth of the well.

Air-lift Equipment

The air-lift pipe will be in good condition. A minimum of a 375 cfm compressor shall be provided and used. The compressor must be equipped with dual air filters to eliminate the presence of compression oil in the air stream. No oil is permitted to enter the well via the air stream.

Temporary Discharge Pipe

Temporary discharge pipe shall be provided by the Contractor. The pipe shall occasionally be moved to distribute the flow and prevent runoff.

Water Storage Tanks

Tanks as necessary. (Contractor shall containerize and neutralize any acidic water pumped out after treatment prior to discharge).

ELECTRICITY

The Contractor shall provide at his own cost all electric power required for construction, testing, general and security lighting, and all other purposes whether supplied through temporary or permanent facilities. The Contractor shall provide adequate job site distribution facilities conforming to applicable codes and safety regulations.

NUISANCE WATER

It is anticipated that nuisance water, such as drill water, rainfall, groundwater, or surface runoff may be encountered within the construction site during the period of construction under this contract. The Contractor shall at all times protect the work from damage by such waters and shall take all due measures to prevent delays in progress of work caused by such waters. The Contractor shall dispose of nuisance water at his own expense and without adverse effects upon the Owner's property or any other property.

WATER DISPOSAL

Contractor shall containerize and neutralize any acidic water pumped out after treatment prior to discharge.

PART 2 – MATERIALS

Not used.

PART 3 – EXECUTION

Not Used.

END OF SECTION

MOBILIZATION/DEMOBILIZATION

PART 1 – GENERAL

GENERAL

Mobilization/Demobilization shall include moving onto the site of all plans and equipment and other construction facilities as required for the proper performance and completion of the work. Mobilization/Demobilization shall include but not be limited to the following principle items:

Moving onto the site of all Contractors' plant and equipment required for work to commence.

Installing temporary construction power, wiring, and discharge piping.

Posting all OSHA required notices and establishment of safety programs.

RELATED WORK SPECIFIED ELSEWHERE

Schedule of Work Items

PAYMENT FOR MOBILIZATION

The Contractor's attention is directed to the condition that no payment for mobilization or any part thereof will be approved for payment under the contract until all mobilization/demobilization items listed above have been completed as specified.

END OF SECTION

SECTION 02543-340

REHABILITATION/DEVELOPMENT

PART 1 – GENERAL

Description

This section covers rehabilitation and development of the well.

RELATED WORK SPECIFIED ELSEWHERE

Schedule of Work Items

MEASUREMENT AND PAYMENT

Payment shall be made as indicated in the Schedule of Work Items.

The time required for well development activities will be recorded by the hour with fifteen (15) minute intervals as the smallest unit of recorded time. The time recorded for payment shall commence when the equipment is starting to be installed in the well and shall end when the equipment reaches ground surface.

No additional payment shall be made for equipment malfunction or delays running equipment into or out of the well.

PART 2 – MATERIALS

SWABBING EQUIPMENT

The well shall be preliminarily developed by using a close fitting double flanged swab with a diameter no less than ½ inch of the well casing diameter. The swab shall be attached to a cable.

AIR-LIFT EQUIMENT

Final development of the well shall be completed by the air-lift method using small diameter PCV pipe no greater that four (4) inches in diameter. All water and sediments removed from the well shall pass between the pipe and the well casing.

At a minimum, a compressor rated at a minimum of 250 cfm shall be used. The compressor needs to be equipped with a dual filter to prevent any compressor oil from entering the air stream.

PART 3 – EXECUTION

REHABILITATION/DEVELOPMENT

Before field work, a kick-off meeting will be held to discuss field procedures, requirements, and health and safety issues and requirements.

All equipment placed into the well shall be disinfected using a twenty-five (25) part per million (ppm) chlorine solution.

The static depth to water shall be measured.

The existing pump, column pipe, air sounding tube and pressure transducer are presently removed.

The removed pump and appurtenances shall be inspected, cleaned, repaired or replaced (as necessary).

The total depth of the well shall be measured prior to beginning work.

The well shall be videotaped with a downward and side scanning color video camera.

The well shall be brushed to remove loose scaling or material from the screen followed by either pumping or bailing of the waste.

Introduce a volume of uninhibited hydrochloric acid (of strength no greater than thirty-five percent 35%) with hydroxyacetic acid. The hydroxyacetic acid will be mixed at a ratio of about one gallon to seventy percent (70%) acid for every ten (10) to fifteen (15) gallons of water in the well.

Swab each twenty (20) foot section of screen for one (1) hour starting at the deepest section.

Let well set over night with no pumping.

Return the next day and surge each twenty (20) foot section for one (1) hour starting at the deepest section.

Air-lift or bail well during the afternoon of the day following the introduction of chemicals to remove a minimum of twenty (20) well volumes and to remove particles and bring in fresh water from the formation to the well The twenty (20) well volumes of water should be contained and neutralized as necessary to provide for proper disposal of the water containing formaldehyde chemistry by the Contractor.

The air-lift pipe shall be initially installed to about sixty (60) feet below ground surface before commencing air-lift operations. Periodically the air-lift shall be stopped and additional pipe added until the bottom of the pipe is within a minimum of five (5) feet of the bottom of the well.

The Contractor shall remove any sediment from the bottom of the well by using a bottom bailer or air-lift.

After completion of rehabilitation pumping, the Contractor shall measure the depth of the well to determine the amount of sediment remaining in the bottom of the well. If the sediments exceed one (1) foot in thickness, the Contractor shall remove the sediments.

The Contractor shall attach a well header assembly to direct the air-lifted water away from the well into the surface containment tanks.

The Contractor shall repair the well head as necessary and provide an attachment point for the safety cable.

The Contractor shall videotape the well with a side scanning color video camera to assess the effectiveness of treatment.

The Contractor shall disinfect the well (see Well Disinfection Section).

END OF SECTION

SECTION 02523-390

WELL DISINFECTION

PART 1 – GENERAL

DESCRIPTION

This section covers the disinfecting of the well.

RELATED WORK SPECIFIED ELSEWHERE

Schedule of Work Items

MEASUREMENT AND PAYMENT

The time required for disinfection of the well shall be made on a lump sum basis as shown in the Schedule of Work Items.

No additional payment shall be made for equipment malfunction or delays running equipment into or out of the well.

PART 2 – MATERIALS

DISINFECTANT

The disinfectant shall be HTH Perchloron or equal dry powder, seventy (70) percent free chlorine, added to the well.

PART 3 – EXECUTION

GENERAL

Chlorination of the well shall be performed after completion of the development process.

A doubly capped, perforated pipe container filled with the granular chlorine compound shall be moved up and down the entire water filled casing and screen section until all the chlorine has dissolved.

The chlorine content in the well shall be a minimum of one-hundred (100) mg/l of dissolved chlorine after completion of disinfection work.

The chlorinated water shall remain in the well until after the pump is installed.

END OF SECTION

SECTION 02523-500

PUMP AND APPURTANCES

PART 1 – GENERAL

DESCRIPTION

This section describes the re-installation of the pump, column pipe, power cable, safety cable, ¾-inch transducer pipe, and a ½ inch diameter sounding tube, the transducer, reconnecting the pump power cable to the motor control panel and testing the pump. The Contractor shall use the existing well header and pressure transducer.

RELATED WORK SPECIFIED ELSEWHERE

Schedule of Work Items.

Rehabilitation/Development Section.

Well Disinfection: Section 02523-390

SUBMITTALS

The Contractor shall provide to Owner's representative results of well/pump testing and any and all manufacturer's literature on the pump equipment.

MEASUREMENT AND PAYMENT

Payment for re-installing and installing the specified pumping equipment will be based on a lump sum basis. Payment shall include re-installing and testing all specified equipment and all small parts not fully described in this section as required for a complete and functioning pumping system.

PART 2 – MATERIALS

MATERIALS

Not used.

PART 3 - EXECUTION

INSTALLATION AND TESTING

After disinfecting the well the Contractor shall install the pump and appurtenances.

The Contractor shall install the transducer through the ¾ inch access pipe.

The Contractor shall reinstall all specified equipment and re-install the transducer in a complete, functioning and workmanlike manner. After installation, the pump will be tested against its shutoff head and in a free flow configuration and pumped to waste until pumped water runs clear. When the water runs clear the Contractor shall seek permission of the Owner before turning water to the distribution system.

Following installation the pump shall be pumped with open discharge for a period of two (2) hours to test the performance of the well and pump. Well shall be pumped at maximum rate and drawdown in the well shall be monitored periodically for the purpose of plotting a drawdown curve. Prior to initiation of the test an initial water level measurement shall be made in the well. The pumping rate will be measured during the pumping test.

END OF SECTION

STAFF REPORT

To: **Ed Schmidt, General Manager**

From: **Jim Teter, District Engineer**

Agenda: **September 12, 2006**

Report Date: **September 6, 2006**

Subject: **District Engineer Work Status Report**

Recommendation:

None. The agenda item is informational.

Background:

The Board of Directors has requested a monthly status report from the District Engineer on his activities.

Work Performed Since Last Board Meeting

Work performed since the last Board of Directors meeting includes:

- Water Treatment Plant Short-Term Improvements. Preliminary engineering work is continuing.
  A. Nunes WTP. At a meeting held at the WTP on August 25, 2006, Teter met with the WTP operating staff (Twitchell and Donovan) to present another series of concept design drawings for the layout of the chemical feed systems pumps, storage tanks and containment walls. Following discussion, the operating staff selected what they considered the best alternative which still needed to be reviewed and approved by Joe Guistino following his return from vacation. On September 5, Guistino contacted Teter to inform him that he was in agreement with the same alternative concept design as the WTP operators. Teter will now proceed with the final design work.
  B. Denniston WTP. Similar to the Nunes WTP improvements, the WTP operating staff is currently finalizing the locations for the chemical feed system pumps,

tanks and containment walls. Once those decisions are finalized, the District Engineer will proceed with preparation of plans and specifications for the chemical feed facilities and piping modifications. Meanwhile, the District Engineer has been working on the plans for the piping revisions to the Denniston storage tank and the new pipeline from the treatment plant to the tank.

- Phase 3 El Granada Pipeline Replacement Project:
  The engineering design work on the revisions to the pipeline plan sheets for the revisions required by the biological reports has been completed as have the piping typical detail sheets. The Autocad draftsman is currently completing the revisions to the drawing sheets.
- Water Distribution System Map Revisions. Revised the map originals for four years of changes to the water distribution system, and provided the number of copy sets requested.
- Engineering Advice. Provided the District staff with advice on an as-requested basis on a number of engineering-related topics.

Current Work Assignments:

A description and status report on the District Engineer's current work assignments follows:

1. Preparation of Design Contract Documents for Phases IIIA and IIIB of the El Granada Transmission Pipeline Replacement Project. Current status of the project is as follows:
   Engineering design work has been completed on the project drawings, and the Autocad draftsman is currently completing the final drawings. Following completion, the application for the Caltrans encroachment permit will be submitted.

2. Preparation of Design Contract Documents for the Carter Hill East Pipeline Replacement Project. The plans and specifications for the uncompleted portion of the project have been completed. The Caltrans encroachment permit has been obtained. The project is ready for the bidding whenever funding is available in the Capital Improvement Budget.

3. Long-Term Plan/Cost Benefit Analysis for Alves Storage Tank. A draft report has been completed and forwarded to the General Manager and Facilities Committee for review.

4. SCADA System Replacement. The District Engineer has begun work on the study for replacement of the existing SCADA (Supervisory Control and Data Acquisition) system. The study will provide recommendations for the new system including cost. This work will be performed in conjunction with the

work for the WTP Short-Term Improvements since it requires extensive coordination with the WTP operating staff and the final decisions regarding the short-term improvements.

5. Short-Term Improvements at Nunes & Denniston WTPs. The District Engineer has begun preparation of the plans and specifications for these projects.

Fiscal Impact:

1. El Granada Transmission Pipeline Replacement Project Phases IIIA & IIIB. The current fiscal year Capital Improvement Program contains funding for engineering design work for this project (See the C.I.P. report included elsewhere in the Board meeting packet).

2. Carter Hill East Pipeline Replacement Project. The current fiscal year Capital Improvement Program contains $10,000 funding for engineering design work for this project (See the C.I.P. report included elsewhere in the Board meeting packet).

3. Alves Tank Study. The FY 05/06 Capital Improvement Budget contains $125,000 the project work.

4. SCADA System Replacement. The FY 05/06 Capital Improvement Budget contains $20,000 for the SCADA system replacement study.

5. Short-Term Water Treatment Plant Improvements. The FY 05/06 Capital Improvement Budget contains funding for this project.

Schedule for El Granada Transmission Pipeline Replacement Project

A. El Granada Pipeline Phases 3A & 3B:

Complete predesign services (surveying & photogrammetry)	February, 2005
Complete preliminary engineering design	March 3A, June 3B, 2005
File CDP application for Phase 3A	October, 2005
File CDP application for Phase 3B	December, 2005
Obtain CDP's	Sept., 2006
Obtain encroachment permits from the City of Half Moon Bay, Caltrans and San Mateo County	Nov., 2006

Advertise for Bids	Jan., 2007
Award Construction Contract	Feb., 2007
Complete Construction	Nov., 2007

COST OF WATER PER SUPPLY SOURCE (FY 04-05)

					SFPUC		
Expense Account	Description	Water Sources Actual Total Expense	Denniston Project	Pilarcitos Well Field	Pilarcitos Lake	Crystal Springs Reservoir	*Reference Line For Notes*
5130	Water Purchased	998,553			467,423	531,130	*1*
5230	Pump Exp., Nunes WTP	11,100		482	4,971	5,647	*2*
5231	Pump Exp., CSP Pump Station	199,888				199,888	*3*
5233	Pump Exp., Pilarcitos Canyon	15,044		15,044			*4*
5234	Pump Exp., Denniston Project	59,315	59,315				*5*
5242	CSP Pump Station Operations	10,082				10,082	*6*
5235	Denniston WTP Operations	80,968	80,968				*7*
5236	Denniston WTP Maintenance	22,455	22,455				*8*
5240	Nunes WTP Operations	91,794		3,984	41,105	46,705	*9*
5241	Nunes WTP Maintenance	26,234		1,139	11,747	13,348	*10*
5243	CSP Pump Station Maintenance	28,111				28,111	*11*
5411	Salaries and Wages-Field	194,652	84,731	3,677	37,943	68,301	*12*
5414	Motor Vehicle Expenses	10,813	5,407	177	1,211	4,078	*13*
Total Direct Expense (without depreciation)		1,749,009	252,876	24,443	564,400	907,290	*14*
Total Direct Expense per Million Gallons of Production (without depreciation)			1,504	835	1,869	2,645	*15*
Annual Depreciation Expense			188,000	38,000	196,000	536,000	*16*
Total Expense (with depreciation)			440,876	62,443	760,400	1,443,290	*17*
Total Expense per Million Gallons of Production (with depreciation)			2,623	2,133	2,518	4,207	*18*
Total Expense per Acre Foot of Production (with depreciation)			711	695	820	1,053	*19*

Coastside County Water District

NOTES FOR THE DOCUMENT ENTITLED COST OF WATER PER SUPPLY SOURCE FOR FY 04/05

April 28, 2006

Line 1 (Account 5130)
The total expense of water purchased from the SFPUC ($998,553) was proportioned to each SFWD supply source based on the amount of water purchased during the fiscal year as shown in the District's Water Supply Evaluation report:

Pilarcitos Lake	= 301.94 mg	= 46.81 %
Crystal Springs Reservoir	= 343.05	= 53.19
Total	= 343.05	= 100.00 %

Pilarcitos Lake: 46.81% of $998,553	= $467,423
Crystal Springs Reservoir: 53.19% of $998,553	= 531,130
Total	= $998,553

Line 2 (Account 5230)
The total pump expense at Nunes WTP ($11,100) was proportioned to each supply source for which water was treated at the Nunes WTP based on the production from that supply source during the fiscal year as shown in the District's Water Supply Evaluation report:

Pilarcitos Lake	= 301.94 mg	= 44.78 %
Crystal Springs Reservoir	= 343.05	= 50.88
Pilarcitos Well Field	= 29.27	= 4.34
Total	= 674.26 mg	= 100.00

Pilarcitos Lake: 44.78% of $11,100	= $ 4,971
Crystal Springs Reservoir: 50.88% of $11,100	= 5,647
Pilarcitos Well Field: 4.34% of $11,100	= 482
Total	= $11,100

Line 3 (Account 5231)
The total pump expense at the Crystal Springs Pump Station ($199,888) was assigned to the Crystal Springs Reservoir supply source.

Line 4 (Account 5233)
The total pump expense for Pilarcitos Canyon ($15,044) was assigned to the Pilarcitos Well Field supply source.

Line 5 (Account 5234)
The total pump expense for the Denniston project ($59,315) was assigned to the Denniston Project supply source.

Line 6 (Account 5242)
The total expense for the CSP Pump Station Operations ($10,082) was assigned to the Crystal Springs Reservoir water supply source.

Line 7 (Account 5235)
The total expense for Denniston Treatment Plant Operations ($80,968) was assigned to the Denniston Project water supply source.

Line 8 (Account 5236)
The total expense for Denniston Treatment Plant Maintenance ($22,455) was assigned to the Denniston Project water supply source.

Line 9 (Account 5240)
The total expense for Nunes Treatment Plant Operations ($91,794) was proportioned to each supply source for which water was treated at the Nunes WTP based on the production from that supply source during the fiscal year as shown in the District's Water Supply Evaluation report. See Line 2 above for the production percentage calculations:

Pilarcitos Lake: 44.78% of $91,794	= $ 41,105
Crystal Springs Reservoir: 50.88% of $91,794	= 46,705
Pilarcitos Well Field: 4.34% of $91,794	= 3,984
Total	= $ 91,794

Line 10 (Account 5241)
The total expense for Nunes Treatment Plant Maintenance (($26,234) was proportioned to each supply source for which water was treated at the Nunes WTP based on the production from that supply source during the fiscal year as shown in the District's Water Supply Evaluation report. See Line 2 above for the production percentage calculations:

Pilarcitos Lake: 44.78% of $26,234	= $ 11,747
Crystal Springs Reservoir: 50.88% of $26,234	= 13,348
Pilarcitos Well Field: 4.34% of $26,234	= 1,139
Total	= $ 26,234

Line 11 (Account 5243)
The total expense for CSP Pump Station Maintenance was assigned to the Crystal Springs Reservoir supply source.

Line 12 (Account 5411)
The total expense for all District field employees wages and benefits was $601,050, but that total included work not directly related to water supply source expenses such as meter reading and leak repair. The majority of the work at the Crystal Springs Pump Station was performed by one employee, John Davis, and 25% of his total salary and benefits (at 30% of salary) in the amount of $25,189 was assigned to the Crystal Springs water supply source. The majority of the work at the Denniston and Nunes WTP's was performed by two employees, Sean Donovan and Matt Damrosch, and 100% of their total salary and benefits (at 30% of salary) in the amount of $169,463 was assigned to

the treatment plants. This total expense was proportioned at 50% for each treatment plant: Nunes WTP at $84,732 and Denniston WT at $84,731. The Nunes WTP expense was proportioned to each supply source for which water was treated based on the production from that supply surce during the fiscal year as shown in the District" Water Supply Evaluation report. See Line 2 above for the production percentage calculations:

Pilarcitos Lake: 44.78% of $84,732	= $ 37,943
Crystal Springs Reservoir: 50.88% of $84,732	= 43,112
Pilarcitos Well Field: 4.34% of $84,732	= 3,677
Total	= $ 84,732

The total expense for the Crystal Springs Reservoir Source was calculating the sum of the pump station salary expense of $25,189 with the treatment plant salary expense of $43,113 for a total of $68,301.

Line 13 (Account 5414)

The total motor vehicle expense for the District's 10 vehicles was $36,044, but only 3 of those vehicles were used by employees performing work at water source of supply facilities (Crystal Springs Pump Station and the water treatment plants). The motor vehicle expense related to source of supply facilities was calculated as 30% of the total expense: 30% of $36,044 = $10,813. That amount was apportioned to the source facilities as follows:

Denniston WTP: 50% of $10,813	= $ 5,407
Nunes WTP: 25% of $10,813	= 2,703
Crystal Springs Pump Station: 25% of $10,813	= 2,703
Total	= $10,813

The above amounts were then apportioned to the water supply sources as follows:

A. Assign the $5,407 shown above to the Denniston Project.

B. Assign the $2,703 shown above for the Nunes WTP proportional to the production from those sources (see Line 2 above for the production percentage calculations):

Pilarcitos Lake @ 44.78% of $2,703	= $ 1,211
Crystal Springs Reservoir: 50.88% of $2,703	= 1,375
Pilarcitos Well Field: 4.34% of $2,703	= 117
Total	= $ 2,703

C. The amount to be assigned to Crystal Springs was calculated as the sum of the pump station amount and the Nunes WTP amount from above:

Pump Station	= $ 2,703
Nunes WTP	= 1,375
Total	= $ 4,078

Line 14 (Total Direct Expense w/o Depreciation)

The Total Direct Expense without depreciation is the sum of all the expenses for the various expense accounts directly related to the water supply sources. As described above, all of the field workers salaries are not included nor are numerous other expense accounts that are not directly related to water supply source expenses.

Line 15 (Total Direct Expense per Million Gallons of Production w/o Depreciation)
The Total Direct Expense per Million Gallons of Production without Depreciation was calculated by dividing the total direct expense as shown in Line 14 for that source by the total production from that source during the fiscal year as shown in the Water Supply Evaluation report:

Denniston Project: $252,876 divided by 168.10 mg	= $ 1,504 per mg
Pilarcitos Well Field: $24,443 divided by 29.27 mg	= 835
Pilarcitos Lake: $564,400 divided by 301.94 mg	= 1,869
Crystal Springs Res.: $907,290 divided by 343.05 mg	= 2,645

Line 16 (Annual Depreciation Expense)

A. Method for Calculating Annual Depreciation. The District accountant, John Parsons, recommended that for the purpose of calculating the cost of water per supply source, annual depreciation should be calculated based on the current estimated replacement cost for each water source facility and a useful life of 50 years.

B. Estimated Current Replacement Cost of Water Supply Facilities. The District Engineer, Jim Teter, calculated the estimated current replacement cost of water supply facilities using information available to him as shown below:

1. Denniston Project Facilities:

Pump Station & pipeline to WTP	= $ 1.2 million
Water Treatment Plant	= 3.5
Storage tank (1.5 mg)	= 1.5
Treated water pipeline to Clipper Ridge	= 0.3
Well field and conveyance pipeline to pump station	= 1.0
Total current construction cost	= $ 7.5 million
Engr., permits and misc. @ 25%	= 1.9
Total current estimated replacement cost	= $ 9.4 million

2. Crystal Springs Pump Station:

Original pump station cost	= $ 6.0 million
Inflation at 4% per year for 12 years = 47%	= 2.8
Total current construction cost	= $ 8.8 million
Engr., permits and misc. @ 25%	= 2.2
Total current estimated replacement cost	= $11.0 million

3. Pilarcitos East Pipeline:

17,400 LF 18" pipeline @ $250 per LF	= $ 4.4 million
Cahill Ridge storage tank	= 0.3
Total current construction cost	= $ 4.7 million
Engr., permits and misc. @ 20%	= 1.0
Total current estimated replacement cost	= $ 5.7 million

4. Pilarcitos West Pipeline:

24,400 LF 18" pipeline @ $250 per LF	= $ 6.1 million
Total current construction cost	= $ 6.1 million
Engr., permits and misc. @ 20%	= 1.2
Total current estimated replacement cost	= $ 7.3 million

5. Nunes Water Treatment Plant:

Initial treatment plant construction	= $ 2.5 million
Inflation for 26 years @ 4% = 100%	= 2.5
Treatment plant expansion construction	= 3.5
Inflation for 12 years @ 4% = 47%	= 1.6
Total current construction cost	= $ 10.1 million
Engr., permits & misc. @ 25%	= 2.5
Total current estimated replacement cost	= $ 12.6 million

6. Pilarcitos Well Field:

Test holes: 10 @ $30,000	= $ 0.30 million
Well construction: 7 @ $50,000	= 0.35
Pumps & piping: 7 @ $20,000	= 0.14
Total current construction cost	= $ 0.79 million
Engr., permits & misc. @ 25%	= 0.20
Total current estimated replacement cost	= $ 0.99 million
	= $ 1.0 million

7. Upper Pilarcitos Canyon Pipeline (SFWD Service connection at Stone Dam To Pilarcitos West pipeline)

2,300 LF 12" pipeline @ $250 per LF	= $ 0.58 million
Appurtenant work	= 0.12
Total current construction cost	= $ 0.70
Engr., permits & misc. @ 25%	= 0.20
Total current estimated replacement cost	= $ 0.90

C. Calculate total annual depreciation expense for each water source. For the sources which utilize more than one water supply facility, the Pilarcitos West Pipeline and the Nunes WTP, the total annual depreciation expense was proportioned between the water sources based on the production from that source during the fiscal year as shown in the Water Supply Evaluation report (See Line 2 above for the production percentage calculations):

1. Denniston Project = $ 9.4 million

   Annual depreciation: $9.4 million divided by 50 yrs. = $ 188,000 per yr.

2. Pilarcitos Well Field:

Well Field: 100% of $1.0 million	= $ 1.0 million
Pilarcitos West Pipeline: 4.34% of $7.3 million	= 0.3
Nunes WTP: 4.34% of $12.6 million	= 0.6
Total	= $ 1.9 million

   Annual depreciation: $1.9 million divided by 50 years = $38,000 per yr.

3. Pilarcitos Lake:

Upper Pilarcitos Canyon Pipeline: 100% of $0.9 million	= $ 0.9 million
Pilarcitos West Pipeline: 44.78% of $7.3 million	= 3.3
Nunes WTP: 44.78% of 12.6 million	= 5.6
Total	= $ 9.8 million

Annual depreciation: $9.8 million divided by 50 years = $196,000 per yr.

4. Crystal Springs Reservoir:

Crystal Springs Pump Station: 100% of $11.0 million	=	$ 11.0 million
Pilarcitos East Pipeline: 100% of $5.7 million	=	5.7
Pilarcitos West Pipeline: 50.88% of $7.3 million	=	3.7
Nunes WTP: 50.88% of $12.6 million	=	6.4
Total	=	$ 26.8 million

Annual depreciation: $26.8 million divided by 50 years = $536,000 per yr.

Line 17 (Total Expense w/ Depreciation)
The total expense with depreciation was calculated by adding the amounts shown on Line 14 to the amounts shown on Line 16.

Line 18 (Total Expense per Million Gallons of Production w/ Depreciation)
The total expense per million gallons of production w/ depreciation was calculated by dividing the total expenses as shown on Line 16 for that source by the total production from that source during the fiscal year as shown in the Water Supply Evaluation report:

Denniston Project: $440,876 divided by 168.10 mg	=	$ 2,623 per mg
Pilarcitos Well Field: $62,443 divided by 29.27 mg	=	2,133
Pilarcitos Lake: $760,400 divided by 301.94 mg	=	2,518
Crystal Springs Reservoir: $1,443,290 divided by 343.05 mg	=	4,207

Line 19 (Total Expense per Acre Foot of Production w/ Depreciation)
The total expense per acre-foot of production w/ depreciation was calculated by dividing the total expenses as shown on Line 16 for that source by the total production from that source during the fiscal year as shown in the Water Supply Evaluation report:

Denniston Project: $440,876 divided by 620.26 AF	=	$ 711 per AF
Pilarcitos Well Field: $62,443 divided by 89.86 AF	=	695
Pilarcitos Lake: $760,400 divided by 926.96 AF	=	820
Crystal Springs Reservoir: $1,443,290 divided by 1,053.2 AF	=	1,370

STAFF REPORT

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

From: **Ed Schmidt, General Manager**

Agenda: **September 12, 2006**

Report Date: September 7, 2006

Subject: **Discussion and direction to staff regarding request for relief of water bill from Carolyn Minkin for service located at 461 Cypress, Half Moon Bay, CA Account # 3567**

Recommendation

Deny request for relief of water bill and encourage property owner to take advantage of a payment amortization plan for the high bill of $1,347.39 plus a 10% penalty, for a balance of $1,482.13.

Background

The District practice is to charge water customers for **ALL** water that is supplied to that customer. Typically the CCWD Board has adhered to that practice in an effort to ensure that other customers do not have to pick up the cost of that water.

On June 22, 2006, during routine meter reading, field staff member Jon Bruce noticed an unusually high meter reading. Mr. Bruce noted that the meter served a triplex, which was listed for sale. He contacted the listing real estate agent in order to obtain contact information for the property owner, to alert the owner of a possible leak(s).

Jon Bruce followed up with a meeting with the Owner, advising the customer how to check the plumbing fixtures for leaks. Upon investigation, two significant leaks were discovered, one in a toilet and another leak located in a sink.

The owner, Carolyn Minkin, contacted the District office staff at that time and reported that her tenants had not advised her of the leaks, that one of the tenants was five to six months behind in rental payments, and that the triplex was on the market for sale. She requested an adjustment on this high bill. Office staff explained the District's no-adjustment practice and offered the customer an amortization plan for payment of the bill.

On July 28, 2006, the District received a letter from the customer (copy attached), explaining the situation and requesting assistance with the bill.

On August 16, 2006 field staff sent the water meter out to a lab for accuracy testing. The test results, received August 21, 2006 (copy attached), indicate an average accuracy rate of 99.47%.

Additionally attached is a copy of the customer's account history and a copy of the customer account comments.

Ms. Minkin has since sold the triplex, terminating service in her name effective August 22, 2006. A new owner is now in possession of the property. The new owner has contacted the District to report that the current plumbing situation located in this building is a "nightmare".

In adhering to the District's no-adjustment practice, staff is recommending that any relief of this high bill be denied.

Ps — file

RECEIVED
JUL 2 8 2006
COASTSIDE COUNTY
WATER DISTRICT

July 28, 2006

Attn: Mr. Ed Schmidt,
General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, Ca. 94019

I am in receipt of a bill for 461 Cypress Ave. in the amount of $1,347.39 for the period of 4/27/06 to 06/29/06. I am/was the owner of the triplex at the above address.

I received a call from the gentleman doing the meter reading at my work one day recently, reporting that the meter was moving erratically and that something was wrong. I immediately left work and came to meet him at my residence. I had to go in each unit and we discovered Unit B's toilet was leaking. After I successfully turned the toilet off, the meter stopped. I called the Water Department immediately to tell them the situation and that I had no knowledge of this previously. The tenant in Unit B was moving out and never had mentioned the problem.

They told me the procedure was to write to you explaining the situation and try to come to some reasonable payment. I pay on two water bills every other month and it has always varied between $90 - $150 for both meters.

Please contact me and I hope you can help. My address is 315 Washington Blvd., HMB, CA. 94019. I can be reached during the week at Longs at 726-3345 or on my cell phone at 544-4648.

Very sincerely,
Carolyn Minkin

Carolyn Minkin

AMP, DDP

P:\Mike\MeterTestForm03

M & M BACKFLOW AND METER MAINTENANCE
METER PERFORMANCE REPORT

Customer Name: COASTSIDE COUNTY WATER DISTRICT

Location:

Serial #: 50920330 Size 5/8" Type SRII

Reading (Before): 175019.83 Reading (After) 175031.85

Tested Rate (GPM)	Meter Volume Stop	Meter Volume Start	cf	Tester Volume	Tester % Accuracy	Meter Accuracy
0.25	175020.80	175019.83	0.97	1.000	100.00%	97.00%
2	175021.81	175020.800	1.01	1.000	100.00%	101.00%
15	175031.85	175021.81	10.04	10.000	100.00%	100.40%
			0.00			#DIV/0!
			0.00			#DIV/0!
					Avg. Test Accuracy:	99.47%

Notes:

	Water	Wastewater
Avg. Monthly Bill:		

Estimated Revenue Loss

	Per Month:	Per Year:
Water:	0	$ -
Wastewater:	$ -	$ -

Tested By: MICHAEL WOLF Date: 8/17/2006

Utility Billing
Account History Report

User Name: gina
City Name: Coastside Water
Printed: 09/07/2006 - 8:41:AM

Customer Name: MINKIN,CAROLYN
Customer Address: 461-A CYPRESS AVE
HALF MOON BAY, CA 94019
Home Phone: (650) 726-3159 Ext.
Business Phone: ( ) - Ext.
Customer Number: 003567 000

Owner name:
Service Address: 461 CYPRESS AVE
Reference Number: MIN0035

Account Status: Delete
Connect Date: 08/08/1997 Final Date: 08/22/2006
Total Acct Balance: 1,662.41
Deposits: 0.00 Refunds: 0.00

Tran Date	Tran Type	Amount	Description	Water	Misc	Pen					
			Current Balance By Service	**1,527.67**	**0.00**	**134.74**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
08/22/2006	Balance	1,662.41		1,527.67		134.74					
08/22/2006	Billing	180.28		180.28							
08/02/2006	Adjustment	134.74	Reminder Notice			134.74					
08/02/2006	Letter	0.00	Reminder Notice								
06/29/2006	Balance	1,347.39		1,347.39							
06/29/2006	Billing	1,347.39		1,347.39							
06/09/2006	Payment	-108.52		-98.65		-9.87					
05/25/2006	Letter	0.00	Reminder Notice								
05/25/2006	Adjustment	9.87	Reminder Notice			9.87					
04/28/2006	Balance	98.65		98.65							
04/28/2006	Billing	98.65		98.65							
03/21/2006	Payment	-106.89		-106.89							
02/27/2006	Balance	106.89		106.89							
02/27/2006	Billing	106.89		106.89							
01/25/2006	Payment	-59.68		-59.68							
12/30/2005	Balance	59.68		59.68							
12/30/2005	Billing	59.66		59.66							
11/22/2005	Payment	-54.20		-54.20							
11/01/2005	Balance	54.22		54.22							
11/01/2005	Billing	54.22		54.22							
09/21/2005	Payment	-35.30		-35.30							
08/31/2005	Balance	35.30		35.30							
08/31/2005	Billing	35.30		35.30							
07/15/2005	Payment	-30.30		-30.30							
07/06/2005	Balance	30.30		30.30							
07/06/2005	Billing	30.30		30.30							

Customer Number: 003567 000 Reference Number:MIN0035

Tran Date	Tran Type	Amount	Description	Water	Misc	Pen
05/12/2005	Payment	-43.58		-43.58		
05/02/2005	Balance	43.58		43.58		
05/02/2005	Billing	43.58		43.58		
03/10/2005	Payment	-73.94		-73.94		
03/02/2005	Balance	73.94		73.94		
03/02/2005	Billing	73.94		73.94		
01/12/2005	Payment	-57.38		-57.38		
12/30/2004	Balance	57.38		57.38		
12/30/2004	Billing	57.38		57.38		
11/17/2004	Payment	-73.94		-73.94		
10/29/2004	Balance	73.94		73.94		
10/29/2004	Billing	73.94		73.94		
09/17/2004	Payment	-85.44		-85.44		
08/31/2004	Balance	85.44		85.44		
08/31/2004	Billing	85.44		85.44		
07/13/2004	Payment	-63.27		-63.27		
06/30/2004	Balance	63.27		63.27		
06/30/2004	Billing	63.27		63.27		
05/12/2004	Payment	-65.93		-65.93		
04/29/2004	Balance	65.93		65.93		
04/29/2004	Billing	65.93		65.93		
03/10/2004	Payment	-124.08		-124.08		
02/27/2004	Balance	124.08		124.08		
02/27/2004	Billing	124.08		124.08		
01/09/2004	Payment	-63.27		-63.27		
12/26/2003	Balance	63.27		63.27		
12/26/2003	Billing	63.27		63.27		
11/13/2003	Payment	-82.68		-82.68		
10/31/2003	Balance	82.68		82.68		
10/31/2003	Billing	82.68		82.68		
09/18/2003	Payment	-76.57		-76.57		
08/29/2003	Balance	76.57		76.57		
08/29/2003	Billing	76.57		76.57		
07/14/2003	Payment	-94.41		-94.41		
06/30/2003	Balance	94.41		94.41		
06/30/2003	Billing	94.41		94.41		
05/08/2003	Payment	-97.56		-97.56		
04/29/2003	Balance	97.56		97.56		
04/29/2003	Billing	97.56		97.56		
04/07/2003	Payment	-100.71		-100.71		
03/26/2003	Letter	0.00	Reminder Notice			
02/28/2003	Balance	100.71		100.71		
02/28/2003	Billing	100.71		100.71		
01/06/2003	Payment	-88.11		-88.11		
12/27/2002	Balance	88.11		88.11		

Customer Number: 003567 000 Reference Number:MIN0035

Tran Date	Tran Type	Amount	Description	Water	Misc	Pen
12/27/2002	Billing	88.11		88.11		
11/07/2002	Payment	-78.66		-78.66		
10/30/2002	Balance	78.66		78.66		
10/30/2002	Billing	78.66		78.66		
09/10/2002	Payment	-62.64		-62.64		
08/28/2002	Balance	62.64		62.64		
08/28/2002	Billing	62.64		62.64		
07/10/2002	Payment	-72.41		-72.41		
06/28/2002	Balance	72.41		72.41		
06/28/2002	Billing	72.41		72.41		
05/08/2002	Payment	-67.06		-67.06		
04/26/2002	Balance	67.06		67.06		
04/26/2002	Billing	67.06		67.06		
03/15/2002	Payment	-69.39		-69.39		
02/28/2002	Balance	69.39		69.39		
02/28/2002	Billing	69.39		69.39		
01/09/2002	Payment	-72.41		-72.41		
12/27/2001	Balance	72.41		72.41		
12/27/2001	Billing	72.41		72.41		
11/14/2001	Payment	-90.53		-90.53		
10/31/2001	Balance	90.53		90.53		
10/31/2001	Billing	90.53		90.53		
09/12/2001	Payment	-78.45		-78.45		
08/30/2001	Balance	78.45		78.45		
08/30/2001	Billing	78.45		78.45		
07/20/2001	Payment	-82.97		-82.97		
06/29/2001	Balance	82.97		82.97		
06/29/2001	Billing	82.97		82.97		
05/15/2001	Payment	-88.26		-88.26		
05/08/2001	Adjustment	-55.76	OVERREAD	-55.76		
04/30/2001	Balance	144.02		144.02		
04/30/2001	Billing	144.03		144.03		
03/09/2001	Payment	-55.66		-55.66		
02/28/2001	Balance	55.65		55.65		
02/28/2001	Billing	55.65		55.65		
01/10/2001	Payment	-51.57		-51.57		
12/27/2000	Balance	51.57		51.57		
12/27/2000	Billing	51.57		51.57		
11/16/2000	Payment	-75.02		-75.02		
11/01/2000	Balance	75.02		75.02		
11/01/2000	Billing	75.02		75.02		
09/29/2000	Payment	-88.44		-88.44		
09/20/2000	Adjustment	-35.97	leak/june	-35.97		
09/20/2000	Adjustment	-39.24	leak/Aug	-39.24		
08/30/2000	Balance	163.65		163.65		

Customer Number: 003567 000 **Reference Number:** MIN0035

Tran Date	Tran Type	Amount	Description	Water	Misc	Pen
08/30/2000	Billing	163.65		163.65		
07/12/2000	Payment	-144.03		-144.03		
06/29/2000	Balance	144.03		144.03		
06/29/2000	Billing	144.03		144.03		
05/26/2000	Payment	-130.25		-130.25		
04/26/2000	Balance	130.25		130.25		
04/26/2000	Billing	130.95		130.95		
03/15/2000	Payment	-88.97		-88.97		
02/28/2000	Balance	88.27		88.27		
02/28/2000	Billing	88.27		88.27		
01/08/1999	Payment	-77.67		-77.67		
12/28/1999	Balance	77.67		77.67		
12/28/1999	Billing	77.67		77.67		
11/15/1999	Payment	-61.77		-61.77		
10/29/1999	Balance	61.77		61.77		
10/29/1999	Billing	61.77		61.77		
09/16/1999	Payment	-54.88		-54.88		
08/31/1999	Balance	54.88		54.88		
08/31/1999	Billing	54.88		54.88		
07/10/1999	Payment	-51.00		-51.00		
06/28/1999	Balance	51.00		51.00		
06/28/1999	Billing	51.00		51.00		
04/29/1999	Billing	0.00				

Route Sequence Serial	101 - 4200 - 61819062	Read Date	Reading	Consumption
		08/23/2006	1	1
	Final Bill	08/22/2006	0	0
		08/16/2006	0	0

Route Sequence Serial	101 - 4200 - 50920330	Read Date	Reading	Consumption
		08/16/2006	1,750	43
		06/22/2006	1,707	274
		04/19/2006	1,433	26
		02/21/2006	1,407	28
		12/22/2005	1,379	14
		10/24/2005	1,365	13
		08/22/2005	1,352	8
		06/28/2005	1,344	6
	000,000,000,	04/26/2005	1,338	11
	000,000,000,	02/28/2005	1,327	22
	000,000,000,	12/21/2004	1,305	16
	000,000,000,	10/26/2004	1,289	22

Route Sequence Serial	101 - 4200 - 50920330	Read Date	Reading	Consumption
	000,000,000,	08/23/2004	1,267	26
	000,000,000,	06/23/2004	1,241	19
	000,000,000,	04/23/2004	1,222	20
	000,000,000,	02/19/2004	1,202	38
	000,000,000,	12/19/2003	1,164	19
	000,000,000,	10/27/2003	1,145	26
	000,000,000,	08/20/2003	1,119	24
	000,000,000,	06/24/2003	1,095	32
	000,000,000,	04/22/2003	1,063	33
	000,000,000,	02/20/2003	1,030	34
	000,000,000,	12/17/2002	996	30
	000,000,000,	10/25/2002	966	27
	000,000,000,	08/21/2002	939	21
	000,000,000,	06/25/2002	918	26
	000,000,000,	04/23/2002	892	24
	000,000,000,	02/20/2002	868	25
	000,000,000,	12/19/2001	843	26
	003,000,000,	10/25/2001	817	32
	000,000,000,	08/23/2001	785	28
	000,000,000,	06/25/2001	757	33
	000,000,000,	04/24/2001	724	35
	000,000,000,	02/21/2001	689	22
	000,000,000,	12/20/2000	667	20
	007,000,000,	10/24/2000	647	30
	002,000,000,	08/23/2000	617	59
	000,000,000,	06/22/2000	558	53
	000,000,000,	04/20/2000	505	49
	000,000,000,	02/23/2000	456	35
	000,000,000,	12/20/1999	421	31
		10/27/1999	390	25
		08/23/1999	365	23
		06/18/1999	342	21
		04/23/1999	321	18
		02/28/1999	0	11
		12/31/1998	0	8
		10/31/1998	0	10
		08/31/1998	0	10
		06/30/1998	0	16
		04/30/1998	0	20
		02/28/1998	0	20
		12/31/1997	0	18
		10/31/1997	0	20
		08/31/1997	0	9

Utility Billing
Account Comments

User: gina
Printed: 09/07/2006 - 8:37 AM

Customer No: 003567 - 000
Customer Name: CAROLYN MINKIN
Service Address: 461 CYPRESS AVE
Phone: (650) 726-3159

Date	Status	Comment
07/28/2006	COMMENT	7/28/06 DROPPED OFF LETTER TO ED SCHMIDT REQUESTING RELIEF ON WATER BILL.
06/22/2006	COMMENT	06.22.06...HIGH WATER USAGE NOTED DURING METER READ PER JON B...FOR MORE INFO--JB HAS PAPER WORK...csl
06/22/2006	COMMENT	6/22/06: CUSTOMER WILL WRITE LETTER TO ED SCHMIDT TO BE ON AUG. '06 AGENDA FOR BOD MTG. TENANT NEVER TOLD HER OF LEAK & IS BEHIND 5-6 MONTHS IN RENT. HOUSE IS 4 SALE. WANTS TO REQUEST ADJUSTMENT. OFFERED AMORTIZATION.

STAFF REPORT

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

From: **Ed Schmidt, General Manager**

Agenda: **September 12, 2006**

Report Date: September 8, 2006

Subject: **Discussion and direction to staff regarding proposal from TRC Essex for the Denniston Restoration Project and further discussion of a Special Board Meeting/Workshop for this project**

Recommendation

1. Approve the attached proposal from TRC Essex for professional environmental consulting services.
2. Decide on either November or December 2006 for our Denniston Restoration Project "kick-off meeting".

Background

In previous years the District periodically dredged the Denniston Reservoir as part of its regular maintenance program. In 1982 the District removed about 20,000 cubic yards of decomposed granite silt. In 1986 about 8,000 cubic yards of similar material was removed. On each of those occasions, the District analyzed the project's potential environmental impacts in accordance with the California Environmental Quality Act (CEQA), and obtained a Coastal Development Permit (CDP) from the County of San Mateo and a Streambed Alteration Agreement from the California Department of Fish and Game.

Since the early 1990's the level of silt in the Denniston Reservoir have slowly but steadily risen to the point that, the siltation level impacts its productivity. During this time period, the District's routine maintenance operations to remove the accumulated sediment have also faced increasing levels of opposition and regulatory control. The District previously attempted to address this problem by proposing smaller and less obtrusive dredging operations. In doing so, the viability of the reservoir as the District's only raw water storage facility has been compromised. The Denniston project provides about 25% of the District's water supply.

The District purchases most of its water from the San Francisco Public Utility Commission (SFPUC). The SFPUC increased its rates 20% this year and similar rate increases are in store for the next few years. Those increases have to be passed along to our customers. It is imperative that this local water supply source be preserved. Since we do not have to purchase the Denniston water, we can save our customers hundreds of thousands of dollars per year by keeping the Denniston Reservoir clean.

A more comprehensive project to restore the reservoir can be coupled with measures to protect and enhance the value of the reservoir as a natural habitat for fish and wildlife.

TRC Essex Proposal

Numerous meetings and telephone calls between TRC Essex staff and me, Tony Condotti, and President Ascher have taken place over the last six weeks, in an effort to involve TRC Essex in this restoration project. As you probably know, TRC Essex has a practice of NOT getting involved in local environmental projects. Attached is their proposal for helping the District form a foundation for the ultimate goal of the

District obtaining a CDP from the California Coastal Commission (CCC) for the restoration of this reservoir. Steve Stielstra, Vice President of TRC Essex will be at the Board meeting on Tuesday evening.

Denniston Reservoir Restoration "Kick-off Meeting"

Based on a recent meeting I had with President Ascher and Director Feldman, we feel it would be appropriate to hold the initial "kick-off meeting" until November of December of 2006, due to the extreme planning necessary for this important event, especially if TRC Essex is going to be involved in this project.

Fiscal Impact:

$38,930.00 for TRC Essex proposal.

TRC Essex

September 7, 2006

Mr. Ed Schmidt
General Manager
Coastside County Water District
766 Main Street
Half Moon Bay, CA 94019

Subject: Denniston Reservoir Project

Dear Ed:

TRC Essex is pleased to present this proposal to the Coastside County Water District (District) to provide professional environmental consulting services for the proposed Denniston Reservoir Restoration Project. We are confident that the depth and breadth of experience our team brings, along with our expertise in local environmental issues and permitting, will provide the District with an extremely high-quality product that will be the foundation for planning and permitting this project. Our collaborative approach to projects will complement how we understand the District wants to approach this project.

We are prepared to begin work as soon as a contract is executed. Given the onset of the rainy season, we would like to begin the initial field reconnaissance and data collection right away so that we can use the information to the best extent during agency conversations, project meetings, and preparation of the project report and maps.

Thank you for you inviting us to work with the District on this project.

Sincerely,

Steve Stielstra
Vice President

537 Main Street
Half Moon Bay, California 94019
Phone: 650-726-9020
Fax: 650-712-1190
www.essexenv.com

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ATTACHMENTS

BACKGROUND

The Coastside County Water District (District) receives approximately 25 percent of its water supply from a single local source, the Denniston Reservoir, in San Mateo County. Siltation has marginalized the reservoir's ability to store and export quality water, and has reduced the efficiency of the water treatment and conveyance infrastructure. A direct result has been that the District has had to import to the coast substantially more expensive water from the San Francisco Public Utility Commission's Hetch Hetchy water system, at considerably high prices. Other direct results include inefficiencies in local water transport and expensive infrastructure upgrades and maintenance.

To reverse the effects of the siltation and provide a reliable and quality local water supply, the District proposes to secure the permits that will allow it to restore the Denniston Reservoir as a sustainable local supply. The restoration permitting and construction process will ensure that fish and wildlife habitat is preserved, special-status species populations are protected, and the upstream watershed is enhanced.

The District has requested that TRC Essex provide this proposal to begin the permitting process. This first phase of the permitting process will include developing baseline information by reviewing existing data, collecting general information at the reservoir and surrounding watershed, and initial geographic information system (GIS) research. This phase will also include initial discussions with the District, appropriate regulatory agencies, and other parties likely to be affiliated with the project.

FIRM PROFILE AND QUALIFICATIONS

TRC Essex, based in Half Moon Bay, is a wholly owned subsidiary of TRC, a national firm specializing energy, engineering, and environmental solutions. TRC Essex specializes in providing environmental permitting and compliance services for infrastructure and energy projects nationwide. With specialists in planning, siting, permitting, biology, GIS, cultural and archeological resources, and restoration, the firm is ideally qualified to develop and implement a solid, strategic approach to this project.

TRC Essex specializes in maintaining a solid understanding of project design and construction. We often participate in constructability reviews, as they relate to environmental resources and mitigations, as well as plan and specification reviews. A core strength of ours is how we bring our construction competency forward during the planning process, and develop integrated permits that incorporate mitigations that are effective, and make sense to everyone, including the agencies and the contractors.

Our staff offers extensive experience in the planning, scheduling, and preparation of applications for federal, state, and local permits, licenses, and certificates. Our strong background in the water industry, gained from

working both with applicants and federal and state agencies, enables us to identify environmental concerns and develop practical, cost-effective mitigation.

As a matter of course we develop permit tracking systems, Internet-based portals, and databases to manage and track projects. TRC Essex uses the latest in communication and data-gathering tools to ensure that our clients have the most accurate, real time data available.

SCOPE OF WORK

As part of this first phase of permitting the Denniston Reservoir Restoration Project, TRC Essex will develop the following.

Task 1: Data Collection and Baseline Mapping

To adequately assess the existing conditions in the Denniston watershed, TRC Essex staff will gather and incorporate data from a variety of sources, including existing data from the District. TRC Essex will conduct general database searches, literature reviews, and field studies to provide and initial inventory of any sensitive resources that could be affected by the project. TRC Essex will conduct a site visit to gain a basic understanding of the site and surrounding area and gather general watershed data. This baseline data will be used for various aspects of the project, but most importantly, it will allow the GIS department to begin to produce the necessary maps that will be required to communicate and develop the reservoir restoration permits and associated programs.

All of the data that is gathered will be used to create GIS shape files that will be used in conjunction with aerial photos, USGS quad maps and California Natural Diversity Database layers. General data collection and mapping is a critical first step to any successful project. This data will be used to create state-of-the-art GIS maps that will assist us with many of the steps that are involved with this project.

Task 2: Regulatory Analysis and Agency Meetings

As the baseline data is developed, TRC Essex will begin communications with appropriate resource agencies and begin developing the framework for the permits and the restoration project. Wherever possible we will add agency information to the GIS so that the maps become the basis for project development.

Although this phase will not involve preparing the agency permits, it will identify what they will require, what the formats should be, how the information should be presented, and who the key agency contacts are. This phase will require meeting with agencies, preferably on-site or in Half Moon Bay, to discuss concerns and project options. We assume much of the focus

will be on habitat enhancement, watershed protection, and resource documentation, e.g., the contents and focus of a biological assessment.

These meetings and conversations will be captured in notes and minutes and kept in the project files and summarized in weekly project status reports. TRC Essex will provide the District with a weekly summary report that captures the past week's accomplishments and outlines work for the upcoming week.

Task 3: Report and Permitting Schedule Development

TRC Essex will develop a summary report outlining our review of existing data and our field review. This report will also include results of agency meetings and the resulting permitting approach and schedule. The report will include recommendations for further studies, agency collaboration, and public involvement. It will be approximately 20 to 30 pages, including appropriate graphics, tables, and schedules.

As a supplement to this report, TRC Essex will provide the GIS maps that display the resource layers, geographic features, and field data collected during project preparation. We anticipate one meeting to present these findings to the District.

Deliverables

As part of this scope of work TRC Essex will provide the District with the following products:

- A 20- to 30-page summary initial findings report based upon our initial site and area reconnaissance, and review of recent resource reports (The report will include a permit analysis summary and associated schedule.)
- GIS maps and shape files
- Attend meetings with the District
- Contact resource agencies (e.g., the U.S. Fish and Wildlife Service, California Department of Fish and Game, National Marine Fisheries Service, California Coastal Commission, San Mateo County, U.S. Army Corps of Engineers) to establish general permits requirements, timelines, priorities
- A draft project communication plan, including key contacts, document management protocols, and information tracking and storage recommendations
- List of initial restoration design goals and parameters

STAFFING

The project will be staffed from our Half Moon Bay office. Resumes included with this proposal represent, but are not limited to, the staff who will likely work on this project, including biologists, planners, and GIS specialists. TRC Essex may occasionally subcontract with resource specialists, and we will not

hesitate to recommend this to the District whenever appropriate. Subcontractors are not part of this contact.

Key staff that will likely work on the project is listed below, and their resumes are provided in Attachment A.

- Steve Stielstra, Principal
- Kevin Janik, Associate Biologist
- Lin Bowie, Senior Associate
- Mark Cassady, Senior Associate
- Kerry O'Neill, Senior Associate
- Madeleine van der Heyden, Associate Biologist
- Galen Guerrero-Murphy, Associate Biologist
- Benjamin Hart, Associate Biologist
- Molly Sandomire, GIS Specialist II
- Carley Sweet, Environmental Planner

Kevin Janik will be the project manger for this contract. Kevin is an experienced biologist, who has a primary professional focus on watershed management and restoration. This experience, combined with working with many of the local resource agencies, gives him the ideal background for this effort.

As illustrated by the resumes, this team includes expertise in:

- Project management
- Sensitive species, notably California red-legged frog, San Francisco garter snake, and anadromous fish
- Permitting, policy, and environmental regulations
- Construction planning and constructability analysis
- Restoration
- Landscape design and architecture
- GIS

The many years of experience shown by these resumes demonstrate a highly successful track record on major projects throughout the country—projects that were usually complex, and often controversial.

SCHEDULE

TRC Essex will begin work immediately upon contract execution, and the work associated with this contract is projected over a three-month period.

ASSUMPTIONS

- The District will provide all necessary and available technical drawings, plot plans, alignment drawings, graphics, and maps to support the project.

- Permit applications and delineation of wetlands or other waters of the United States are not included in this scope of work.
- The District will provide TRC Essex with all information necessary to adequately define the project within two weeks of the contract execution date.
- Field surveys will be at the general reconnaissance level, and will not at this stage be at the protocol level or at the level of detail needed for biological assessments.
- Any necessary rights-of-entry will be provided to TRC Essex prior to fieldwork, and adequate project maps/drawings will be provided prior to fieldwork.

COSTS

TRC Essex will provide these services under a professional services contract on a time and materials basis, not to exceed $38,000, and as detailed by the spreadsheet in Attachment B.

Attachment A: Key Staff Resumes

STEVEN S. STIELSTRA
Vice President

SUMMARY

Steve Stielstra is a proven leader in environmental planning, permitting, and compliance management of large-scale utility projects. His 24 years of experience in the environmental field includes projects in diverse settings with complex, often controversial, resource issues. Steve has managed diverse environmental permitting and construction compliance work for hundreds of miles of onshore and offshore natural gas pipeline projects in Oregon, Washington, California, Alaska, New York, and Massachusetts. Steve offers technical expertise in environmental analysis, compliance, and mitigation as well as in project siting, routing, and property acquisition. His far-reaching capabilities also include policy development, personnel training, team building, and conflict resolution and negotiation.

RELEVANT EXPERIENCE AT TRC ESSEX

2006–present **Liberty Gas Storage, LLC, Liberty Gas Storage Project**
Project Director
Overseeing the initial environmental training and environmental inspection services during construction of storage facilities, compressor stations, and two natural gas pipelines in southwest Louisiana.

2005–present **Florida Power and Light, and enXco Corporation, Delta Transmission Line Reconductoring Project**
Project Director
Overseeing biological and cultural resource studies and permitting strategy to reconductor an 11-mile, 230 kilovolt (kV) transmission line project in Solano, Sacramento, and Contra Costa counties. Resource issues include California clapper rail, giant garter snake, rare plant species, and wetlands. Key aspects include work on offshore islands in the Delta and the Antioch Dunes National Wildlife Refuge.

2005–present **Southern California Edison, San Joaquin Cross Valley Loop, Proponent's Environmental Assessment (PEA)**
Project Director
Providing strategic direction for the preparation of a PEA for submittal to the California Public Utilities Commission (CPUC) for approval of a new 220 kV transmission line in Tulare County. Assisting the client in developing alternative routes and participating in route evaluation.

2005–present **Entrega Gas Pipeline, Inc., Entrega Pipeline Project**
Project Director
Overseeing the third-party environmental compliance monitoring program during construction of 328 miles of 36- and 42-inch-diameter natural gas pipeline from Colorado to Wyoming. Working under the direction of the Federal Energy Regulatory Commission (FERC) and the Bureau of Land Management (BLM).

2005–present **El Paso, Wyoming Interstate Company, Ltd, Piceance Basin Expansion Project**
Project Director
Providing oversight of the implementation of the third-party environmental compliance monitoring program during construction of 141.7 miles of 24-inch-diameter natural gas pipeline in Colorado and Wyoming. Working under the direction of the FERC and the BLM.

2005–present **San Diego Gas & Electric, Otay Mesa Power Purchase Agreement Transmission Project**
Project Director
Overseeing environmental compliance monitoring of a project consisting of 38 miles of overhead and 10 miles of underground 230 kV transmission line in San Diego County. The project includes a horizontal directional drill beneath the Sweetwater Marsh National Wildlife Refuge.

2005–present **Pacific Gas and Electric Company (PG&E), Potrero to Hunter's Point Cable Project**
Project Director
Supervising the environmental compliance management program during construction of a 2.5-mile, 115 kV underground transmission line project in San Francisco, California. Providing quality control, and overseeing the budget, public outreach subcontract, and up to three environmental inspectors.

2005 **TransCanada Gas Transmission Northwest, Jordan Cove Energy Project**
Project Director
Provided oversight during the development of a routing feasibility study for a proposed large-scale natural gas pipeline between Coos Bay and Eugene, Oregon. Work included preparation of the route comparison summary and water resources analysis of proposed route alternatives.

2005 **Calpine Corporation, Liquefied Natural Gas (LNG) Export Pipeline Route Alternatives**
Project Director
Oversaw a preliminary environmental and regulatory assessment of two proposed 80- to 155-mile, 30-inch-diameter export pipelines. Provided Calpine with an overview of environmental issues in the region, as well as early potential options for route alternatives.

2004–present **Pacific Gas and Electric Company, Holdover Permits Project**
Project Director and Strategy Support
Overseeing a team effort to review the data gathered during recent permit analysis projects that categorized all of PG&E's energy transmission and distribution permits for federal lands. Directing the necessary research, data analysis, and agency negotiations to company-wide strategy for programmatic permitting of hundreds of utility facilities on federal lands.

2004–present **Pajaro Valley Water Management Agency, Revised Basin Management Plan**
Project Director
Overseeing all activities related to preconstruction support for 45 miles of pipelines that will connect water facilities in Santa Clara and San Benito counties and a coastal irrigation distribution system in the Pajaro Valley. Coordinating with the engineering and design team to incorporate environmental mitigation and restoration specifications for contractor bids.

2004–present **Pacific Gas and Electric Company, Delta Distribution Planning Area Capacity Increase Substation Project, PEA**
Project Director
Overseeing all activities related to the preparation of a PEA for submittal to the CPUC for approval of a new substation in Contra Costa County, California.

2004–2005 **Sempra Energy, Port Arthur LNG Terminal Project**
Project Director
Oversaw the preparation of Resource Report 5—Socioeconomics and Resource Report 8—Land Use, Recreation, and Aesthetics for an LNG terminal and 70 miles of natural gas send-out pipelines in Louisiana and Texas. The report will be used to support an application for a Certificate of Public Convenience and Necessity from the FERC filed under Sections 3 and 7(c) of the Natural Gas Act.

2004–2005 **Federal Energy Regulatory Commission, Environmental Training Seminars**
Instructor
Served as a key instructor for a three-day seminar for FERC environmental staff and three-day training seminars for natural gas industry professionals at locations throughout the United States. The *Environmental Report Preparation Seminar* and the *Post-Certificate Environmental Compliance Seminar* discuss the environmental documentation required for FERC Certificate of Public Convenience and Necessity applications and compliance management techniques reflecting recent regulatory changes and industry advances.

2003–2004 **Calpine, Samoa Point LNG Export Pipeline Project**
Project Director
Oversaw a team of pipeline routing specialists to evaluate pipeline construction feasibility and locate a preliminary pipeline route for a proposed 155-mile, 36-inch-diameter natural gas pipeline from Eureka to Red Bluff, California. Routing considered pipeline constructability and environmental considerations in the context of diverse topography and ecological settings from the coast, across the Trinity Mountains, and into the interior valley of northern California. Summarized key environmental and regulatory issues and provided recommendations on permitting strategy, environmental mitigation, community involvement, and stakeholder outreach.

2003–2004 **Sierra Pacific Power Company, Falcon Project**
Project Director
Managed environmental compliance during construction of approximately 180 miles of 345 kV transmission line from the Falcon Substation west of Elko to the Gonder Substation in Ely, Nevada. Responsible for budgeting and scheduling. Key resource protection issues included cultural and biological resources.

2003–2004 **Pacific Gas and Electric Company, Potrero to Hunter's Point Cable Project, PEA**
Project Director
Overseeing all activities related to the preparation of a PEA for submittal to the CPUC for approval of PG&E's 2.5-mile transmission line reinforcement project to upgrade the electrical transmission system serving the City of San Francisco by improving reliability and increasing capacity.

2002–2004 **Iroquois Gas Transmission, Eastchester Extension**
Project Director
Provided oversight and supervision of nine-member environmental inspection field staff for construction of 37-mile natural gas pipeline through Long Island Sound from Long Island to the Bronx, as well as construction of two compressor stations, and major upgrades at three others. Managed overall budget, regulatory compliance, field staff allocation, and key client communications.

2003 **Pacific Gas and Electric Company, Jefferson–Martin 230 kV Transmission Project Environmental Impact Report (EIR)**
Peer Reviewer
On behalf of PG&E, reviewed the Land Use, Recreation, and Agricultural Resources and Population and Housing, Public Services, and Utilities and Service Systems, and Transportation and Traffic chapters of the EIR for approximately 27 miles of new power line in northern California.

2002–2003 **Pacific Gas and Electric Company, Plan of Reorganization Permit Transfer**
Project Director
Provided strategy and oversight of a team of permitting specialists responsible for reviewing and evaluating documents for transfer under a proposed corporate re-organization. Key responsibilities included evaluation and transfer of documents relating to the California Resources Agency and working with team strategists and agency leads.

2002–2003 **Pacific Gas and Electric Company, San Mateo–Martin Number 4 60 kV Conversion, PEA**
Project Director
Oversaw activities related to the preparation of a PEA for submittal to the CPUC for approval of PG&E's 11.5-mile electric transmission line reconductoring and substation conversion project in the San Francisco Bay Area. Assisted with project strategy. During construction, supervised project management activities related to the biological monitoring and compliance inspection programs, which consisted of up to six field monitors, to ensure compliance with state and federal requirements during construction.

2002–2003 **Maritimes & Northeast Pipeline, LLC, Phase III and HubLine Pipeline Projects**
Project Director
Supervised planning and quality assurance for 24.8 miles of 30-inch-diameter pipeline onshore, and 34.5 miles of 24-inch-diameter offshore pipeline installation in Massachusetts. The project crossed numerous sensitive wetlands and waterbodies, including the waters outside of Boston Harbor.

OTHER RELEVANT EXPERIENCE

1997–2001 **Pacific Gas and Electric Company, Building and Lands Services**
Senior Consultant
Managed land acquisition, engineering and environmental components, including a PEA, for a 6.1-mile, 115 kV power line in Butte County, California and for a highly controversial 8-mile, 115 kV power line in Santa Clara County, California. Responsibilities on other substation and natural gas transmission projects included siting studies, route analysis and selection, interagency coordination, regulatory compliance, negotiation, and permitting. Selected and managed consultants. Oversaw contracts, environmental assessments, and related studies.

1993–1997 **Stielstra and Associates**
Principal
Managed the preparation of environmental assessments, planning and compliance documents, and real estate siting studies. Facilitated, negotiated, and resolved complex issues involving environmental and public policy, land acquisition, and facility management. Prepared National Environmental Policy Act documents and coordinated intergovernmental contacts and reviews.

EDUCATION

1979 **University of California, Riverside, California**
Master's of Environmental Administration

1977 **University of Redlands, Redlands, California**
Bachelor of Science, Biology

KEVIN P. JANIK
Associate

SUMMARY

Kevin Janik has a strong environmental background built through his studies as an undergraduate and masters student and through his internships working on restoration projects in Montana. He has a broad knowledge of wetland ecology, biological services, and natural resource management, as well as experience writing environmental impact reports. Kevin's diverse skills also include multimedia marketing and sales.

RELEVANT EXPERIENCE AT TRC ESSEX

2006–present **Pacific Gas and Electric Company (PG&E), Pilarcitos Creek Bank Stabilization Project**
Project Manager
Conducting watershed management, stream channel restoration planning and design, bank stabilization design and planning, and permitting for a creek bank stabilization project in unincorporated San Mateo County, California.

2006–present **Kinder Morgan, Rush Ranch Mitigation Project**
Associate
Performing natural resource mapping to restore impacted tidal salt marsh habitat in Solano County, California. Assisting with the project design. Conducting agency consultations and noxious weed management.

2006 **Arcadis, Sunrise Power Link Project**
Associate
Conducted a habitat assessment (botanical, wildlife and water resources) and biological monitoring for a 500 kilovolt electric transmission line project in San Diego County. Used geographic information system (GIS) to map biological data.

2006 **Centerpoint, MCX Project**
Associate
Researched environmental impacts and existing land uses for several alternative routes for construction of an approximately 800-mile natural gas pipeline from northern Texas to Alabama. Determined the necessary permits for the project. Conducted agency consultations.

2006 **PG&E Holdover Permits Review**
Associate
Conducted research, technical writing, and GIS map quality assurance during the implementation of a process to resolve 450 permits as part of PG&E's commitment to resolve all permits in holdover status during the bankruptcy process.

OTHER RELEVANT EXPERIENCE

2005 **Montana Water Trust, Missoula, Montana**
Intern
Conducted stream monitoring for restoration projects pertaining to ecology, biology, and hydrology of various lotic systems. Measured stream flow using Marsh-McBirney flow meter. Performed streambed and corridor mapping using R2 cross methodology. Developed land use strategies to improve natural resource allocation. Collected data in the field and managed corresponding databases.

2005 **Geum Environmental Consulting, Hamilton, Montana**
Volunteer
Worked on various riparian corridor and wetland restoration projects. Assisted with construction of stream banks to restore channel sinuosity, increase bank stabilization, and control erosion. Installed bioengineering structures such as coir logs and pre-vegetated mats. Developed and implemented plans to increase fish habitat. Conducted native plant revegetation and seeding. Performed stream flow monitoring and water quality testing.

2005 **Dudek & Associates, Palm Desert, California**
Intern
Gained an understanding of California Environmental Quality Act and National Environmental Policy Act procedures and documentation. Worked on an Environmental Impact Report for a wind energy development project. Reviewed technical documents pertaining to geology, hydrology, biology, noise, and air quality to ensure consistency with environmental impact reports. Assisted with the creation of due diligence reports by communicating with various local and state agencies to obtain data. Became familiar with site plans and utility maps.

2002–2004 **Eco Design Resources, San Carlos, California**
Environmental Consultant/Marketing Manager
Helped start business that serves both as a showroom for environmentally friendly building products and as an environmental education center. Acquired guest speakers and organized lectures on current environmental issues. Created relationships with vendors. Answered questions and provided information for people visiting the showroom. Wrote and organized web content and promotional material.

1998–1999 **Green Genes, San Francisco, California**
Plant Technician
Maintained a greenhouse containing hundreds of tropical plants. Cultivated new plants. Provided maintenance and care for customer's plants at various locations. Created designs for new accounts and supervised installations.

EDUCATION

2005 **University of Montana, Missoula, Montana**
Master of Science, Environmental Studies

1996 **University of Colorado, Boulder, Colorado**
Bachelor of Arts, Environmental Studies

TRAINING

2006 Biology and Management of the California Red-legged Frog, by Norman Scott and Galen Rathbun
2006 Wetlands Regulation and Mitigation, UC Davis Extension

LIN Y. BOWIE
Senior Associate

SUMMARY

With more than 27 years of experience in environmental management and research, Lin Bowie has successfully guided several large-scale construction projects from preconstruction planning and permitting through final restoration and postconstruction monitoring. She also has conducted research projects in integrated vegetation management, hazard tree recognition, streambank restoration, and watershed management and modeling. Lin's far-reaching technical background includes natural resources management, environmental permitting, erosion control, stream restoration, weed control, restoration, and stormwater pollution prevention.

RELEVANT EXPERIENCE AT TRC ESSEX

2006–present **Pacific Gas and Electric Company, Atlantic to Lincoln 115 kV Transmission Project**
Project Director
Overseeing the development of a U.S. Army Corps of Engineers Nationwide Permit 12 application, California Department of Fish and Game 1602 application, and a 401 Certification from the Regional Water Quality Control Board for the reconductoring of a 12.4-mile, 60 kilovolt (kV) powerline into 115 kV.

2004–present **PG&E Holdover Permits Review**
Project Manager
As a follow-up to the previous Distribution Systems Review and Plan of Re-organization Review Projects, served as the Project Manager to develop a process to resolve all permits in arrears. Supervised a project data team to update databases, a document team to prepare permit applications and agency correspondence and documentation and a strategy team to develop a process of working with major permitting agencies. Implemented a process to resolve 450 permits as part of PG&E's commitment to resolve all permits in holdover status during the bankruptcy process.

2004 **San Francisco Public Utilities Commission, Capital Improvement Program, Hetch Hetchy**
Project Manager
Managed all activities related to developing an integrated permit management database system and permit acquisition support program for the San Francisco Public Utilities Commission's $3.6 billion Capital Improvement Program to upgrade the Hetch Hetchy water system. Responsible for the system design, integration with Primavera P3e and Expedition project schedule, and cost control systems. Developed permit assessment and acquisition processes and tools. Provided permit acquisition support, training, and research. Developed permitting and compliance guidelines. Coordinated a comprehensive workshop on agency jurisdictions and permitting for the project managers and environmental manager teams.

2001–2002 **PGT-PG&E Pipeline Expansion Project, Line 401 Capacity Loops**
Project Manager
Managed and coordinated the permitting and planning effort on an expedited schedule for an 18-mile, 42-inch-diameter natural gas pipeline looping project in northern California. Oversaw preconstruction surveys and reporting for a broad range of resources, including biological, cultural, visual, and water. Prepared permits and plans for state and federal agencies, including California Department of Fish and Game, California Public Utilities Commission, Bureau of Land Management, and U.S. Army Corps of Engineers. Prepared stream crossing plans and Storm Water Pollution Prevention Plan for the Regional Water Quality Control Board. Assisted in preparing alternative timber harvest practices for the Timber Harvest Plan for the California Department of Forestry and Fire Protection. Supervised environmental inspection in preparation for timber clearing. Ensured compliance with state and federal requirements. Coordinated with agencies' staffs to facilitate approvals. Construction completed and the line put in service in August of 2002. Coordinated start of postconstruction and long-term monitoring activities.

1997–1998 **Questar Corporation, TransColorado Phase II**
Senior Associate
Developed a reclamation program and planning for postconstruction restoration of 270 miles of 24- and 22-inch-diameter mainline pipeline in Colorado. Oversaw the creation of the schedule, hiring of seed subcontractor, and development of the reclamation specifications. Assisted in mapping comprehensive environmental mitigation measures on alignment sheets. Completed first drafts and assisted in preparation of several mitigation plans, including notification and public relations, hazardous materials and waste management, and transportation and access.

1994–1996 **Central Coast Water Authority, Mission Hills and Santa Ynez Extensions and Coastal Branch, Phase II**
Environmental Program Manager
Developed and implemented the project environmental compliance program for all phases of construction. Created a Program Implementation Plan to respond to project mitigation requirements during all phases of construction and restoration. Supervised monitoring activities for wildlife mitigation. Established specific protection measures for the California red-legged frog, southwestern willow flycatcher, California tiger salamander, silvery legless lizard, California horned toad, and the American badger. Managed the restoration program, including seeding, mulching, and plant propagation in chaparral, native grassland, riparian, oak woodland, and coastal scrub communities.

1993–1994 **Pacific Gas Transmission Company, PGT-PG&E Pipeline Expansion Project C-Spreads**
Environmental Program Manager
Managed implementation of the environmental compliance program for a 25-mile natural gas pipeline construction project. Wrote the Authorization to Construct Application to the Federal Energy Regulatory Commission. Prepared the environmental and restoration contract specifications. Coordinated preconstruction survey activities and revision and acquisition of permits and plans. Managed final restoration of the pipeline corridor in lodgepole and mixed conifer forests, wetlands, and high-desert sagebrush and grasslands.

OTHER RELEVANT EXPERIENCE

1985–1991 **Pacific Gas and Electric Company**
Senior Research Scientist
Led an interdisciplinary team of hydrologists, foresters, programmers and modelers to study vegetation management and harvest practices on the behavior of streamflow in a major watershed: the Upper Fork of the Feather River. Produce a dynamic simulation model of streamflow, sedimentation and forest harvest patterns to show how alternative timber management practices affected water yield and streamflow dynamics.

1977–1979 **University of California Cooperative Agreement with the U.S. Forest Service**
Project Biologist
Served on an interdisciplinary team assisting development of regulations stemming from passage of the National Forest Management Act. Conducted a review of ecological and forest simulation models as potential tools for preparing forest management plans. Contributed to the Resource Program Assessment under the Federal Land Policy And Management Act of 1976. Prepared research proposals, reports, and bibliographies.

EDUCATION

1981 **University of California, Berkeley, California**
Master of Science, Range Management

1974 **Knox College, Galesburg, Illinois**
Bachelor of Arts, Biology

MARK C. CASSADY
Senior Associate

SUMMARY

Mark Cassady combines extensive experience in environmental planning, compliance management, and biological resources. He has been instrumental in planning and permitting infrastructure projects throughout California. Mark has managed and conducted multiple biological resource surveys and implemented protection plans for a variety of sensitive plant and animal species. Mark also has significant expertise in stream and wetland crossings, erosion control, and restoration. He has written numerous mitigation plans, construction specifications, and biological reports.

RELEVANT EXPERIENCE AT TRC ESSEX

2006–present **City of Santa Clarita, Santa Clara River Bank Stabilization**
Project Manager
Providing oversight of the permitting efforts for the stabilization of an eroded section of the north bank of the Santa Clara River, which will include removal of existing trash and the installation of approximately 910 feet of riprap. Securing permits with the California Department of Fish and Game, Los Angeles Regional Water Quality Control Board, and the U.S. Army Corps of Engineers.

2005–present **Castaic Lake Water Agency, Honby Pipeline Project**
Project Manager
Managing all aspects of the permitting, including developing the permit applications, for the replacement of an existing 33-inch-diameter water pipeline with a 60-inch-diameter steel underground pipeline in Santa Clarita, California. Coordinating with agencies and stakeholders. Conducted field review, collected riparian tree information, and conducted spadefoot toad surveys. Developed the Project Description and oversaw the preparation of a Habitat Revegetation, Restoration, and Monitoring Plan.

2005–present **Florida Power and Light, and enXco Corporation, Delta Transmission Line Reconductor**
Project Manager
Managing biological and cultural resource studies and regulatory permitting for an 11-mile reconductoring project in Solano, Sacramento, and Contra Costa counties. Important resource issues include California clapper rail, giant garter snake, various rare plant species, salmonids, and wetlands. Key aspects of this project include work on offshore islands in the Delta, and coordination with the U.S. Fish and Wildlife Service for work within the Antioch Dunes National Wildlife Refuge.

2004–2005 **Sierra Pacific Power Company, Tracy to Silver Lake 120 kV Transmission Line Project**
Biological Lead
Managed the completion of biological resource surveys and associated habitat mapping. Prepared Biological Field Survey Workplan and coordinated the activities of a team of botanists and wildlife biologists to conduct surveys for rare plants, noxious weeds, wetlands, pygmy rabbit, sage grouse, raptors, and other species along approximately 17 miles of right-of-way in western Nevada.

2004–2005 **Verizon of California, Sea Ranch Fiber-optic Project**
Project Manager
Responsible for planning biological resource surveys and wetland delineations for a 17-mile fiber-optic project along the coast in Sonoma County, California. Coordinated with resource agencies and acquired permits from local, state, and federal resource agencies.

1996–present **San Luis Obispo County, On-call Environmental Services**
Project Manager
Managing a variety of on-call environmental services for county road and bridge repair projects. Working closely with county engineering staff, field crews, and agency representatives to implement

regulatory requirements defined in the U.S. Army Corps of Engineers, National Marine Fisheries Service, U.S. Fish and Wildlife Service, and California Department of Fish and Game permits and authorizations. Developing documents to obtain permits for road, bridge, and flood control channel repairs. Providing habitat assessments, sensitive species surveys (California red-legged frog, steelhead), erosion control and restoration consultation, environmental training and monitoring, and regulatory reporting. Approved by the U.S. Fish and Wildlife Service to conduct activities pertaining to protection of the California red-legged frog.

1999–2004 **Encana, Wild Goose Gas Storage Project**
Project Manager
Coordinated postconstruction restoration and monitoring for wetlands and aboveground screening of facilities built during initial stage of gas storage development. Managed Essex's role during the planning of an expansion of the gas storage facilities and connecting pipelines in Butte and Colusa counties, California. Coordinated biological and wetland resource work for feasibility study, alternative routing analysis, Proponent's Environmental Assessment, and permit applications. Managed development of mitigation plans and other documents. Coordinated with resource agencies. Developed mitigation strategies for giant garter snake and valley elderberry longhorn beetle. Managed environmental compliance field staff during construction of 25-mile pipeline and related facilities.

2001–2004 **Santa Barbara County, Master Services Agreement**
Project Manager
Managed various environmental services for the Santa Barbara County Public Works Department. Conducted protocol surveys for California red-legged frog. Worked closely with County planners and construction contractors during flood control projects to ensure compliance with permit requirements. Provided worker environmental training, preconstruction surveys, construction inspection, and regulatory reporting. Approved by the U.S. Fish and Wildlife Service to conduct activities pertaining to protection of the California red-legged frog and tidewater goby. Prepared California red-legged frog survey reports and biological assessments.

2002–2004 **San Luis Obispo County, Lopez Dam Seismic Remediation Project**
Project Manager
Oversaw environmental compliance management during a seismic retrofit of an existing earthen dam in San Luis Obispo County. Key resources issues included California red-legged frog, steelhead, southwestern pond turtle, and protection of water quality. Supervised the environmental monitoring program during construction activities. Coordinated with County, consultants, and contractors regarding schedules, compliance, and conflict resolution. Approved by the U.S. Fish and Wildlife Service to survey for and handle California red-legged frogs.

2003–2004 **Calpine, Samoa Point LNG Export Pipeline Project**
Senior Biologist/Project Manager
Assessed biological resources in area for a preliminary environmental and regulatory assessment of the proposed pipeline route for a 155-mile, 30-inch-diameter export pipeline in northern California. Summarized key biological issues and provided recommendations on permitting strategy and environmental mitigation. Planned and oversaw pipeline routing study through sensitive coastal, mountain, and foothill resource areas.

2000–2003 **John L. Wallace and Associates, Olde Towne Nipomo Enhancement Project**
Project Manager
Managed environmental planning for a road widening and streetscape enhancement project through downtown Nipomo in San Luis Obispo County, California. Coordinated with the California Department of Transportation, county personnel, and regulatory agency representatives. Developed Biological Assessment, Mitigated Negative Declaration, off-site wetland mitigation plan, and permit applications. Managed subcontract for cultural resources surveys.

2000–2002 **Equilon Pipeline Company, LLC, Pipeline Replacement Project**
Project Manager
Managed Essex's role in planning, permitting, and assessing the habitat along replacement sections of an oil pipeline from Fresno County to Contra Costa County in California. Coordinated with regulatory and permitting agencies for the replacement strategies. Conducted constructability review with engineers and construction management to determine appropriate routing and workspace. Developed mitigation measures for sensitive species and their habitats, including San Joaquin kit fox, burrowing owl, California tiger salamander, and California red-legged frog.

1999–2001 **City of San Luis Obispo**
Project Manager
Managed biological surveys, wetland delineation, and cultural resource surveys for the proposed replacement of a section of water pipeline serving San Luis Obispo, California. Coordinated preconstruction surveys, construction monitoring, environmental training, and post-construction monitoring for road and flood control maintenance projects.

1994–1998 **Central Coast Water Authority, Mission Hills and Santa Ynez Extensions and Coastal Branch, Phase II**
Provided a variety of environmental management services during the construction and operation of a 145-mile water pipeline, water treatment plant, and tank storage facilities in central California.

Project Environmental Program Manager
Oversaw restoration management. Coordinated agency reports and on-site inspections. Prepared reports for schedule and budget tracking and implemented appropriate decisions based on project status. Supervised contract management for multiple erosion control and restoration tasks. Designed erosion controls and supervised implementation.

On-site Environmental Coordinator
Oversaw environmental monitoring during construction of a 28-mile segment. Addressed key resource issues, such as special-status reptiles and amphibians, streams and wetlands, erosion control, cultural resources, and oak woodland, riparian, and chaparral preservation. Coordinated environmental, archaeological, and Native American monitoring. Oversaw daily compliance reporting system.

Environmental Monitor
Inspected for environmental compliance during construction of 42-mile segment. Conducted preconstruction surveys for sensitive plant and wildlife species. Captured and relocated wildlife from construction areas. Inspected for topsoil handling, erosion control, stream and wetland crossing procedures, and biological and cultural resource protection. Provided on-site environmental training for construction crews.

EDUCATION

1991 **California Polytechnic State University, San Luis Obispo, California**
Bachelor of Science, Biology

MEMBERSHIPS AND CERTIFICATIONS

2003–present Society for Conservation Biology
1996–present The Wildlife Society
1997–present California Department of Fish and Game Scientific Collector's Permit #SC-000400

KERRY O'NEILL
Senior Associate

SUMMARY

Kerry O'Neill has worked successfully in virtually every aspect of environmental management—from preconstruction planning to compliance management. In the past decade, Kerry has overseen construction of nearly 3,000 miles of utility construction in the western United States. Her experience centers on program development, implementation, and management for large-scale projects in the natural gas industry. Kerry has provided environmental compliance management for long-distance linear projects across a diverse range of habitats, and she has specific expertise in visual resource analysis. She has also worked as an environmental compliance program expert witness during arbitration proceedings and a visual resource witness for hearings before the California Public Utilities Commission (CPUC).

EXPERIENCE AT TRC ESSEX

2005–present **Entrega Gas Pipeline, Inc., Entrega Pipeline Project**
Compliance Manager
Managing the implementation of the third-party environmental compliance monitoring program during construction of 328 miles of 36- and 42-inch-diameter natural gas pipeline from Colorado to Wyoming. Responsible for overseeing the management of the compliance program, including providing the compliance monitors with guidance on and review of compliance issues; reviewing, compiling, and distributing daily and weekly reports; and reviewing and processing variance requests. Working under the direction of the Federal Energy Regulatory Commission (FERC) and the Bureau of Land Management (BLM). Overseeing three compliance monitors.

2005–present **El Paso, Wyoming Interstate Company, Ltd, Piceance Basin Expansion Project**
Compliance Manager
Managing implementation of the third-party environmental compliance monitoring program during construction of 141.7 miles of 24-inch-diameter natural gas pipeline in Colorado and Wyoming. Responsible for overseeing the management of the compliance program, including providing the compliance monitors with guidance on and review of compliance issues; reviewing, compiling, and distributing daily and weekly reports; and reviewing and processing variance requests. Working under the direction of the FERC and the BLM. Overseeing three compliance monitors.

2006 **Jordan Cove Energy, Jordan Cove LNG Project**
Project Manager
Researched and prepared Aesthetic Viewshed Study and Resource Report 8—Land Use, Recreation, and Aesthetics for a liquefied natural gas (LNG) terminal in Coos Bay, Oregon. The reports will be used to support an application for a Certificate of Public Convenience and Necessity from the FERC filed under Sections 3 and 7(c) of the Natural Gas Act.

2005–present **TransCanada Gas Transmission Northwest, Jordan Cove Energy Project**
Project Manager
Managed the development of a routing feasibility study for a proposed large-scale natural gas pipeline between Coos Bay and Eugene, Oregon. Participating in federal and state agency meeting. Preparing the land use and visual route comparison summary analysis of the proposed route alternatives. Managing the Geographic Information System data compilation and mapping effort. Ensuring quality control for all deliverables. Routing considered pipeline constructability and environmental considerations in the context of diverse topography and ecological settings from the coast across the Coast Range Mountains, and into the Willamette Valley of Oregon.

2004–2005 **Sempra Energy, Port Arthur LNG Terminal Project**
Senior Associate
Researched and prepared Resource Report 5—Socioeconomics and Resource Report 8—Land Use, Recreation, and Aesthetics for a liquefied natural gas (LNG) terminal and 70 miles of natural gas

send-out pipelines in Louisiana and Texas. The report will be used to support an application for a Certificate of Public Convenience and Necessity from the FERC filed under Sections 3 and 7(c) of the Natural Gas Act.

OTHER RELEVANT EXPERIENCE

2000–2004 **Kerry O'Neill Landscape Designs**
Owner
Performed landscape designs for residential properties, including planting, irrigation, and lighting design. Prepared construction details and specifications for related work and inspected work performed by Landscape Contractor(s) during construction. Working as an environmental compliance program expert witness during arbitration proceedings, responsible for writing arguments relating to the implementation of a pipeline project's environmental compliance program during construction.

1992–1994 **Bechtel Corporation / Pacific Gas Transmission Company**
Environmental Compliance Supervisor
Responsible for environmental compliance in California during construction of the 800-mile PGT-PG&E Pipeline Expansion Project. Oversaw compliance with federal and state mitigation measures developed to minimize disturbance and provide restoration to approximately 90 rare plant sites, 335 vernal pools, 50 wetlands, and 50 riparian crossings. Supervised eight environmental field inspectors and an office staff of five. Coordinated with construction representatives, the CPUC, and California Department of Fish and Game to develop a river crossing plan for an open cut crossing of the upper Sacramento River and several perennial creek crossings.

1990–1992 **Pacific Gas and Electric Company / Pacific Gas Transmission Company**
Senior Land Planning Analyst
Responsible for various planning activities for the PGT-PG&E Pipeline Expansion Project, which involved construction of 800 miles of 42-inch gas pipeline across four states. Prepared and presented testimony before the CPUC on visual impacts. Assisted in developing the environmental report and various mitigation plans. Performed permit scheduling activities and assisted in obtaining permits for Idaho, Washington, Oregon, and California. Assisted in preparing the environmental compliance procedures, budget, and staffing requirements. Prepared environmental contract specifications.

1978–1990 **Pacific Gas and Electric Company**
Landscape Architect
Performed landscape and irrigation design activities for company facilities, including substations, service centers, and power plants. Developed planting and irrigation plans, wrote specifications, prepared budgets, and inspected projects during construction. Performed visual analysis for various utility projects, including electric transmission lines, hydroelectric facilities, and geothermal facilities. Directed revegetation of company sites. Developed planting plans, coordinated with nurseries for materials, and inspected projects during revegetation activities.

EDUCATION

1977 **Colorado State University, Fort Collins, Colorado**
Bachelor of Science, Landscape Architecture

PROFESSIONAL LICENSE

1985–present State of California, Board of Landscape Architects No. 2506

MADELEINE VAN DER HEYDEN
Associate/Biologist

SUMMARY
A biologist, Madeleine van der Heyden possesses distinctive experience in the surveying and handling of endangered plants and wildlife. Madeleine has particular expertise in handling San Francisco garter snake and California red-legged frog. Computer graphic and support abilities, such as environmental applications of geographic information systems, Adobe Photoshop, Premiere, Illustrator 10, ArcGIS 9, and Garmin global positioning system (GPS), also round out Madeleine's consulting skills.

RELEVANT EXPERIENCE AT TRC ESSEX

2006–present **Duke Energy, Southeast Supply Header**
Associate
Conducting initial GPS reconnaissance in Mississippi and Louisiana for a proposed 270-mile, 36-inch-diameter natural gas transmission line.

2006 **San Diego Gas & Electric, Sunrise Powerlink Project**
Associate
Conducted habitat assessment for proposed transmission lines in the Sonoran Desert and central San Diego County and entered data into ArcMap 9 directly in the field.

2006–present **Pacific Gas and Electric Company (PG&E), Atlantic to Lincoln 115 kV Transmission Project**
Associate
Assisting with the development of a U.S. Army Corps of Engineers Nationwide Permit 12 application, California Department of Fish and Game 1602 application, and a 401 Certification from the Regional Water Quality Control Board for the reconductoring of a 12.4-mile, 60 kilovolt (kV) powerline into 115 kV.

2006 **Pajaro Valley Water Management Agency, Revised Basin Management Plan**
Biological Monitor
Conducted biological surveys in potential Santa Cruz long-toed salamander habitat on project site to collect data of this amphibian species. Produced monitoring report.

2005 **California Department of Transportation, Devil's Slide South Portal Project**
Biological Monitor
Monitored vegetation clearing to ensure the protection of the California red-legged frog, San Francisco dusky-footed woodrat, nesting birds, and general wildlife. Ensured proper installation of fencing around endangered species areas and buffers around bird nests. Provided environmental training for construction crew. Performed breeding bird surveys, monitored active nests, and insured the integrity of buffers protecting nests.

2005 **PG&E, Jefferson-Martin 230 kV Transmission Project**
Biological Monitor
Monitored construction site and areas around it to ensure the protection of the California red-legged frog and San Francisco garter snake. Conducted biological surveys in wetland areas near the construction site.

2005 **PG&E, Gas Line 132 Inspection and North Coast County Water District Water Line Projects**
Biological Monitor
Provided environmental training to construction crew. Conducted surveys before vegetation clearing for the protection of the San Francisco garter snake and California red-legged frog at the San Francisco Peninsula Watershed and State Fish and Game Refuge. Monitored excavation of pipelines.

Relocated wildlife to appropriate safe sites. Produced monitoring reports.

2005 **PG&E, San Bruno Mountain Tower Anti-climbing Guard Installation Project**
Biological Monitor
Assisted with environmental training for PG&E crew. Flagged host plants and identified appropriate access routes to designated work areas for the protection of the federally endangered callippe silverspot, mission blue, and San Bruno elfin butterflies. Monitored installation of anti-climbing guards.

2004 **City of Half Moon Bay, Pilarcitos Creek Trail Project**
Environmental Inspector
Conducted biological surveys and monitoring during construction of a pedestrian and bicyclist trail along Pilarcitos Creek in the City of Half Moon Bay. Required approval of U.S. Fish and Wildlife for monitoring of sensitive species, including San Francisco garter snake and California red-legged frog. Produced daily monitoring reports.

OTHER RELEVANT EXPERIENCE

2003–2005 **McGinnis Biological Consulting, Manteca, California**
Biologist's Assistant
Conducted California red-legged frog egg mass and adult surveys in three ponds at the north portal for the California Department of Transportation's Devil's Slide Project. Ensured that the protective fences around the ponds were in good condition. Set fish traps and checked them periodically for surveys. Created maps and tables for final survey reports. Surveyed small marsh at the south portal for California red-legged frogs. Monitored vegetation and sediment removal operation to ensure protection of the San Francisco garter snake, California red-legged frog, and western pond turtle on the Cupid Row Canal Vegetation/Sediment Removal Flood Control Maintenance Project for the County of San Mateo. Collected and assembled data and created maps and graphs for San Francisco garter snake and California red-legged frog surveys on behalf of PG&E at the San Francisco Peninsula Watershed and State Fish and Game Refuge.

2001 **Student Conservation Association, Rio Grande National Forest, Del Norte, Colorado**
Intern/Research Assistant
Conducted Boreal toad and Boreal owl surveys, established willow transects to keep track of moose impact, assisted in soil erosion countermeasures, controlled noxious weeds, built wheelchair-accessible trails and bridge, assessed watershed conditions, repaired water troughs for Pronghorn antelope.

1997–present **Mojave Desert Field Trip at Zzyxx Desert Study Center with Dr. S.M. McGinnis and Other Southern California Desert Trips**
Student
Conducted day and night surveys using different techniques for capturing reptiles and amphibians. Within two days, captured and released all 14 lizard species and over 6 snake species that occur in the Mojave National Preserve. Conducted mammal trapping with pit traps and Sherman #2 traps. Observed bat capture technique with sonar and net. Went on countless spring desert field trips to the Anza-Borrego State Park, Joshua Tree National Park, Death Valley National Park, and Mojave National Preserve. Identified plants and wildlife during visits. Very familiar with the flora and fauna of the Mojave and Sonoran deserts.

EDUCATION

2004 **California State University, Hayward, California**
Bachelor of Science, Biology and Environmental Sciences

GALEN GUERRERO-MURPHY
Associate

SUMMARY

Galen Guerrero-Murphy, a recent graduate of Stanford University, has a diverse range of skills, including biological studies, field sampling, species identification, research, and report writing. Galen has experience with habitat surveys, monitoring, and restoration; endangered and threatened species surveys; report preparation; and document design and production. Focusing his academic studies in biology, earth systems, conservation and the history of science, he has gained an interdisciplinary perspective on conservation and ecology.

RELEVANT EXPERIENCE AT TRC ESSEX

2006 **Southern California Gas Company, Goleta and Playa Del Rey Gas Storage Facility Vegetation Management Report**
Research Assistant
Conducting research and preparing a letter report outlining resource issues, permitting strategies, and regulatory requirements for vegetation management activities at two gas storage facilities located within the coastal zone of southern California.

2006 **Southern California Gas Company, Line 85 Permanent Repairs**
Research Assistant
Conducting research on habitat requirements and associations, distribution and range, and potential of species to occur for a Biological Assessment in preparation for the permanent relocation of approximately 6,371 feet of 26-inch-diameter pipeline within the Angeles National Forest.

2006 **South Carolina Pipeline Corporation, FERC Training**
Research Assistant
Developed Federal Energy Regulatory Commission (FERC) notification and reporting checklists and annual report templates for Subpart F Section 157 Blanket Certificate Projects and Section 2.55 projects (Auxiliary Installations and Replacement of Facilities). Created Subpart F and Section 2.55 Decision-Making Flow Charts addressing notification requirements.

OTHER RELEVANT EXPERIENCE

2005 **Stanford University Architect/Planning Office, Stanford, California**
Intern
Identified fish and amphibian species, riparian characteristics, and water flow of San Francisquito, Matadero, Los Trancos, and Deer Creeks. Performed California red-legged frog and San Francisco garter snake surveys. Monitored and maintained artificial vernal pools constructed for California tiger salamander breeding. Conducted field sampling of native fish and amphibian species at Jasper Ridge Biological Preserve. Managed California native tree and grass nursery.

EDUCATION

2001–2005 **Stanford University, Stanford, California**
Bachelor of Science, Science and Technology in Society

TRAINING

2006 Biology and Management of the California Red-legged Frog, by Norman Scott, Ph.D. and Galen Rathbun, Ph.D

2006 Special-Status Reptiles and Amphibians of Northern California, by Sean Barry

BENJAMIN J. HART
Associate

SUMMARY

A biologist, Benjamin Hart has a diverse range of skills, including biological research, field sampling, project and team management, public education, and writing, and communications. Benjamin has extensive salmonid research experience, as well as experience with habitat surveys, monitoring, and restoration; endangered species surveys; and report writing. He also has proven Geographic Information Systems (GIS) capabilities, with a strong knowledge of ArcView and other GIS mapping programs. Benjamin is SCUBA certified and has conducted surveys of corals and other marine species.

RELEVANT EXPERIENCE AT TRC ESSEX

2006–present **Confidential Client, Pipeline Permitting Project**
Deputy Project Manager
Conducting habitat mapping, fisheries surveys, project coordination, and management tasks, including writing subcontracts and contract change orders, budget tracking, and weekly reporting, for a proposed pipeline construction project in California.

2006–present **City of Santa Clarita, Santa Clara River Bank Stabilization**
Associate
Completing permit applications, creating maps, and maintaining project files for the stabilization of an eroded section of the north bank of the Santa Clara River, which will include removal of existing trash and the installation of approximately 910 feet of riprap. Securing permits with the California Department of Fish and Game, Los Angeles Regional Water Quality Control Board, and the U.S. Army Corps of Engineers.

2005–present **Castaic Lake Water Agency, Honby Pipeline Project**
Associate
Prepared the Habitat Revegetation, Restoration, and Monitoring Plan for the replacement of an existing 33-inch-diameter water pipeline with a 60-inch-diameter steel underground pipeline in Santa Clarita, California. Creating a Spadefoot Toad Mitigation Plan consistent with California Department of Fish and Game requirements.

2006 **Pacific Gas and Electric Company, Jefferson to Martin 230 kV Transmission Line**
Associate
Conducted biological monitoring during construction of an underground and overhead transmission line installed in San Mateo County. Primary species of concern on the project were San Francisco garter snake and California red-legged frog.

OTHER RELEVANT EXPERIENCE

2004 **Oregon Department of Fish and Wildlife, Newport, Oregon**
Environmental Biological Aide
Maintained and monitored three adult salmonid traps. Constructed, installed, and maintained two types of juvenile salmonid traps. Identified, marked, measured, and took genetic samples from juvenile and adult fish. Conducted spawning surveys. Mounted and read scale samples to identify age, rearing habitat, and time spent in fresh and saline environments. Conducted data entry.

2003–2004 **Oregon Department of Fish and Wildlife, Roseburg, Oregon**
Environmental Biological Aide
Maintained and ran adult Coho salmon and steelhead trout trap at Smith River Falls. Handled and measured some 2,000 adult fish. Floy-tagged fish for mark-recapture study. Conducted spawning surveys to measure population and mark-recapture rates. Conducted surveys to estimate smelt populations. Handled small boats in white-water conditions. Conducted creel surveys and angler pressure counts. Monitored dissolved oxygen levels, turbidity, pH, temperature at various depths and locations, and conductivity of the water in Diamond Lake. Interacted with public regarding water quality issues at the lake. Performed out-migration study of stocked juvenile Chinook salmon. Assisted in annual high-lakes stocking project. Used radio telemetry to monitor migration and spawning habits of Winter Steelhead on the Umpqua River and its tributaries. Assisted with presence/absence surveys.

EDUCATION

1999 **University of California, Santa Cruz**
Bachelor of Arts, Biology

TRAINING

2006 Biology and Management of the California Red-legged Frog, by Norman Scott and Galen Rathbun
2006 Fish Passage Design Workshop, 5 Counties Salmonid Conservation Program
2005 CFQA: A Step by Step Approach, University of California, Davis Extension

MOLLY SANDOMIRE
Biologist/GIS Specialist

SUMMARY
Molly Sandomire possesses a unique combination of biological experience and geographic information system (GIS) and systems analysis. Her expertise lies in extracting and analyzing data from various geographic and tabular databases using ArcMap, ArcEditor, ArcINFO, Spatial Analyst, Linear Referencing, MS Excel, and MS Access. Molly has collected data using global positioning system equipment, and has mapped a variety of resources, including urban parks, in-stream debris, timber, and fungi. In addition, she has performed surveys for marbled murrelets.

RELEVANT EXPERIENCE AT TRC ESSEX

2006–present **Duke-Centerpoint, Southeast Supply Header Project**
GIS Specialist II
Researched and gathered GIS data for a 267-mile liquefied natural gas pipeline. Assimilated datasets from multiple private, state, local, and federal sources into a single format and then created base maps used by planning and field staff during the preliminary planning and analysis phases of the project. Providing ongoing cartographic and analytic support.

2006 **Pacific Gas and Electric Company (PG&E), Holdover Permits Project**
GIS Specialist II
Created an automated mapbook creation program in VB for ARCGIS for the Forest Service Holdover Permit Review Process. The mapbook has multiple map views and a table incorporating data and analysis from various federal and state data sets, including soil, hydrology, transportation, and sensitive species information relevant to the specific permit. The automation program allows the maps to be updated quickly and easily as the project undergoes continual refinement to meet the needs of multiple national forest administrators.

2006 **Confidential Client, 500 kV Routing Study**
Environmental Planner
Researched and collected GIS data for a proposed 500 kV transmission line routing study. Data was gathered from federal and state sources and combined into a single, well-documented project. The final product included multiple small-scale maps and two large-scale, resource-focused mapbooks that will be used intensively by the client as they move forward with the study.

2006 **Duke-Centerpoint, Cottonwood Energy Project**
GIS Specialist II
Researched and collected GIS data for a proposed 500 kV transmission line routing study. Gathered data from federal and state sources and combined into a single, well-documented project. Preliminary routing maps were prepared for client meetings. Ongoing aspects of the project include future map preparation and spatial analysis to support route proposals.

2006 **PG&E, Jefferson-Martin 230 kV Transmission Line Project**
Environmental Monitor
Conducted biological monitoring to ensure the protection of the California red-legged frog and San Francisco garter snake during construction of approximately 27 miles of underground and overhead transmission line in San Mateo County. Conducted biological surveys in wetland areas near the construction site.

OTHER RELEVANT EXPERIENCE

2004 **University of Washington, College of Fishery Sciences**
Research Analyst II
Ran models and generated analyses for an in-stream debris flow evaluation study. Constructed shapefiles using ArcView 3.2 and ArcGIS, wrote Avenue scripts to automate repetitive tasks, taught the use of ArcGIS Geospatial databases, generated maps and map templates.

2002 **City of Bellevue Parks and Community Services**
Mapping Specialist Intern
Designed and collected high quality geographic data on park features for the 2002 Park Plan Update and Sportsfield Analysis, gathered field data using a Trimble Pathfinder 3000 GPS, edited data in ArcView, converted to ArcINFO coverages, wrote metadata, and produced presentation quality maps.

2001 **University of Washington, School of Forest Resources**
GIS Intern
Worked independently to establish and maintain contacts with a variety of establishments to gather, evaluate, and tabulate data on *Boletus* distribution in Washington. Analyzed data and generated maps, metadata, and reports of *Boletus* spatial distribution.

1999–2000 **City of Redmond Parks and Recreation**
Park Ranger, Urban Forestry
Worked to maintain trails throughout the Redmond trail system, assisting in trail construction and major trail rehabilitation projects within the Redmond Watershed Preserve.

2000 **Biota Pacific, Bothell, Washington**
Wildlife Technician II
Performed surveys for marbled murrelets on privately owned timber land in southwestern Washington. Placed new survey stations using aerial maps and compass to locate position, corrected erroneously recorded stations to reflect actual placement, and performed habitat assessments.

EDUCATION

2005 Johns Hopkins University, Baltimore, Maryland
Master of Science, Geography and Environmental Engineering

1998 University of Washington, Seattle, Washington
Bachelor of Science, Zoology

TRAINING

2006 Biology and Management of the California Red-legged Frog, by Norman Scott and Galen Rathbun
2006 Linear Referencing with ArcGIS Desktop

CARLEY SWEET
Intern/Research Assistant

SUMMARY
Carley Sweet has experience in natural resource management involving environmental laws and regulations. She has developed mitigation plans fostering support for endangered and threatened species, and she has been involved in biological surveys and studies. She is familiar with regulatory compliance, and has participated in the permitting process for large-scale construction projects.

RELEVANT EXPERIENCE AT TRC ESSEX

2006–present **Centerpoint Energy Gas Transmission, Bk2B Project**
Research Assistant
Conducting research and providing assistance on permit assessments. Entering permit contacts into permit management database.

2006–present **TRC Essex, Various Projects**
Research Assistant
Updating species accounts and references to create templates to use in future biological assessments. Creating flowcharts to show organization of resources. Researched permitting agencies and compiled/updated relevant information into agency profiles to place on TRC Essex portal. Updating permit checklist as it pertains to TRC Essex.

OTHER RELEVANT EXPERIENCE

2005–2006 **U.S. Fish and Wildlife Service (USFWS), Biological Opinions and Studies**
Student Trainee/Fish and Wildlife Biologist
Reviewed reports and developed recommendations concerning proposed projects. Authored numerous Section 7 Endangered Species biological opinions and developed outreach materials for endangered species recovery plans. Investigated federal management/resource development proposals to determine their effect on federally listed species. Participated in study of mercury levels in Forster's terns and Caspian terns at the Don Edwards National Wildlife Refuge, while banding terns and collecting data. Participated in egg mass, larvae, and adult surveys of federally listed California red-legged frog and California tiger salamander.

2005 **California State Parks, Heron and Egret Monitoring**
Volunteer
Assisted the Folsom State Recreation Area of California State Parks in making future management decisions regarding great blue herons. Observed behavior of the great blue heron nesting colonies during critical nesting periods. Collected data pertaining to number of active nests, breeding stage of nests, adults incubating eggs, and number of hatched young.

2003–2005 **U.S. Fish and Wildlife Service, Public Outreach/Environmental Education**
Information and Education Assistant
Participated in activities to promote public awareness and education of fish and wildlife resources for the Sacramento Fish and Wildlife Office's (SFWO) programs for endangered species, contaminants, habitat restoration, and other issues. Assisted in monitoring elevated selenium levels through sampling, sorting, and identifying fish samples, as well as the collected shorebird and waterfowl eggs. Participated in the tagging, data accumulation, and release of the endangered riparian brush rabbit. Helped with the design, development, and maintenance of the SFWO website.

EDUCATION

2003–2006	**Sierra Community College, Rocklin, California** **American River College, Sacramento, California** Completed numerous biology-related courses
2003	**California State University, Chico, California** Bachelor of Science, Parks and Natural Resource Management

TRAINING

2006	Section 7 Endangered Species Consultation training, USFWS
2006	California red-legged frog workshop, City of Livermore
2004	San Francisco garter snake workshop, USFWS
2004	Western snowy plover workshop, USFWS
2003	Environmental planning course, California State University, Chico

Attachment B: Cost Estimate

Coas[illegible] County
Water District

TRC Essex
September 8, 2006

Denniston Reservoir
Initial Baseline Data Collection, Permit Scheduling, and Summary Report

	Sep	Oct	Nov	Dec	Hours	Rate	$
TRC ESSEX PROFESSIONAL HOURS/FEES							
Task 1: Data Collection and Baseline Mapping							
Managing Director	1	1			2	170.00	340.00
Project Director	-	-	-	-	-	155.00	-
Senior Associate	4	4	4		12	125.00	1,500.00
Lead Planner	-	-	-	-	-	105.00	-
Associate	4	70	60	20	154	90.00	13,860.00
Research Assistant	4	8	16	10	38	75.00	2,850.00
Administrative	-	-	-	-	-	55.00	-
GIS Specialist II	6	20	20	16	62	90.00	5,580.00
GIS Specialist I	-	-	-	-	-	75.00	-
Environmental Compliance Supervisor	-	-	-	-	-	100.00	-
Lead Environmental Inspector	-	-	-	-	-	90.00	-
Environmental Inspector II	-	-	-	-	-	85.00	-
Environmental Inspector I	-	-	-	-	-	70.00	-
Subtotal Fees:	1,870.00	9,370.00	8,900.00	3,990.00	268		24,130.00
Task 2: Regulatory Analysis, Agency Meetings							
Managing Director	-	2	-	2	4	170.00	680.00
Project Director	-	-	-	-	-	155.00	-
Senior Associate	-	3	-	3	6	125.00	750.00
Lead Planner	-	-	-	-	-	105.00	-
Associate	2	16	16	4	38	90.00	3,420.00
Research Assistant	-	-	-	-	-	75.00	-
Administrative	-	-	-	-	-	55.00	-
GIS Specialist II	-	-	-	-	-	90.00	-
GIS Specialist I	-	-	-	-	-	75.00	-
Environmental Compliance Supervisor	-	-	-	-	-	100.00	-
Lead Environmental Inspector	-	-	-	-	-	90.00	-
Environmental Inspector II	-	-	-	-	-	85.00	-
Environmental Inspector I	-	-	-	-	-	70.00	-
Subtotal Fees:	180.00	2,155.00	1,440.00	1,075.00	48		4,850.00
Task 3: Report and Permitting Schedule Development							
Managing Director	-	1	-	-	1	170.00	170.00
Project Director	-	-	-	-	-	155.00	-
Senior Associate	2	4	-	2	8	125.00	1,000.00
Lead Planner	-	-	-	-	-	105.00	-
Associate	-	8	30	20	58	90.00	5,220.00
Research Assistant	-	-	-	-	-	75.00	-
Administrative	-	-	-	-	-	55.00	-
GIS Specialist II	-	-	8	8	16	90.00	1,440.00
GIS Specialist I	-	-	-	-	-	75.00	-
Environmental Compliance Supervisor	-	-	-	-	-	100.00	-
Lead Environmental Inspector	-	-	-	-	-	90.00	-
Environmental Inspector II	-	-	-	-	-	85.00	-
Environmental Inspector I	-	-	-	-	-	70.00	-
Subtotal Fees:	250.00	1,390.00	3,420.00	2,770.00	83		7,830.00
TOTAL TRC ESSEX HOURS							
Managing Director	1	4	-	2	7		1,190.00
Project Director	-	-	-	-	-		-
Senior Associate	6	11	4	5	26		3,250.00
Lead Planner	-	-	-	-	-		-
Associate	6	94	106	44	250		22,500.00
Research Assistant	4	8	16	10	38		2,850.00
Administrative	-	-	-	-	-		-
GIS Specialist II	6	20	28	24	78		7,020.00
GIS Specialist I	-	-	-	-	-		-
Environmental Compliance Supervisor	-	-	-	-	-		-
Lead Environmental Inspector	-	-	-	-	-		-
Environmental Inspector II	-	-	-	-	-		-
Environmental Inspector I	-	-	-	-	-		-
Subtotal:	23	137	154	85	399		36,810.00
TRC ESSEX FEES	2,300.00	12,915.00	13,760.00	7,835.00			36,810.00
TRC ESSEX OTHER DIRECT COSTS							
TRAVEL	-	200.00	200.00	-			400.00
FIELD PER DIEM	-	-	-	-			-
FIELD EQUIPMENT/SUPPLIES	160.00	160.00	-	-			320.00
SUPPLIES	-	-	-	-			-
COPY/PRINTING	200.00	400.00	400.00	400.00			1,400.00
UPS/FEDERAL EXPRESS	-	-	-	-			-
TOTAL ODCs	360.00	760.00	600.00	400.00			2,120.00
GRAND TOTAL	2,660.00	13,675.00	14,360.00	8,235.00			38,930.00

STAFF REPORT

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

From: **Ed Schmidt, General Manager**

Agenda: **September 12, 2006**

Report Date: September 8, 2006

Subject: **Discussion and direction to staff on the San Mateo County Public Hearing on September 13, 2006 for Consideration of a Coastal Development Permit to allow the replacement of an existing 10-inch water transmission pipeline with a new 16-inch transmission pipeline, in the unincorporated Miramar area of San Mateo County**

Recommendation

Accept San Mateo County Planning staff conditions of approval and direct staff and consultants, Jim Teter, Tony Condotti, and George Burwasser to attend the Public Hearing on Wednesday, September 13, 2006.

Background

In August 1985, the San Mateo County Board of Supervisors granted CCWD's application for a CDP to construct the Crystal Springs Water Supply Project (CSP). The CSP consisted of a pump station adjacent to Crystal Springs Reservoir, approximately seven miles of pipeline to convey the water to Half Moon Bay, and substantial expansion in capacity of the Nunes Water Treatment Plant located just east of the Half Moon Bay city limit. Two appeals were filed with the Coastal Commission challenging the Coastal Development Permit.

The Commission found that neither appeal raised a substantial issue and dismissed the appeals without a hearing in September 1985.

The original design concept for the Crystal Springs Project included enlargement of certain distribution pipelines beyond the Nunes Treatment Plant including the Carter Hill West pipeline, the El Granada pipeline running north-south generally along or parallel to Highway One and the Main Street pipeline. Both the City Council and the County Board of Supervisors approved these pipeline replacements in concept in 1987 as part of the formation of an assessment district pursuant to which purchasers of the connections made available by the Crystal Springs Project were able to finance their purchases. The distribution infrastructure was not made part of the CDP application because the need for their replacement was not imminent.

The District's plan was for the enlarged pipeline to be constructed in segments, over time, financed with revenues from the continuing sale of water connections, and designed to meet current and near term demands for transmission capacity in accordance with the adopted and proposed land use plans for the City of Half Moon Bay and County of San Mateo.

In June, 1997, the District engineer reported that existing system is "at or near its maximum transmission capacity ... and a new, larger transmission pipeline is required to accommodate the increased use which is occurring within the pipeline service area." And during the summer and fall of 2001, and again for several months in the summer of 2003, even with the Frenchmans Creek Pumping Station operating at full capacity the District was required to install a portable pump to maintain adequate pressure in the El Granada pipeline to serve customers in the northern segment of the District.

On March 15, 1999, the City of Half Moon Bay conditionally approved a CDP for the aforementioned "Casa Del Mar Segment" of the El Granada Transmission Pipeline, consisting of approximately 2,200 lineal feet. On October 19, 1999, the County of San Mateo approved a CDP for the replacement of approximately 3,200 lineal feet of the El Granada pipeline located in the unincorporated area of El Granada, from San Clemente Road south along Columbus Street, Moro Avenue, and Ventura Avenue, and terminating at Santiago Avenue.

The approvals were appealed to the California Coastal Commission. The focus of both appeals (and substantial public comment from vocal opponents of the project) was whether the proposed 16" pipeline diameter of the El Granada pipeline would provide excess transmission capacity beyond levels contemplated in the County and Half Moon Bay LCPs and, thereby, have "growth-inducing" impacts.

Actually, because of smaller transmission pipelines on the north and south ends of both segments of the Phase I El Granada pipeline project, their overall effect on the transmission capacity of CCWD's system was insignificant. However, the Coastal Commission staff's analysis was based upon examination and analysis of the theoretical transmission capacity of the completed CSP Transmission Infrastructure, including the full reach of the El Granada Pipeline from the intersection of Main Street and Highway 92 to the terminus of the pipeline near the Denniston treatment facility in El Granada.

On December 10, 2003, based upon the District's and Coastal Commission Staff's analysis of the theoretical capacity of the completed CSP Infrastructure Improvements, the Coastal Commission conditionally approved both segments of the El Granada pipeline project. Thus, because the detailed analysis undertaken by the Coastal Commission included an in-depth examination of the completed CSP Infrastructure

Improvements, including the completed El Granada Pipeline, the Coastal Commission's approval of Phases 1 and 2 cleared the way for the remaining segments of the Crystal Springs Infrastructure Improvements to move forward.

The remaining County segment proposal is to replace 3,600 feet of existing undersized, thin wall, leaking 10-inch pipeline with a 16-inch diameter ductile iron pipeline. We will have one creek crossing and one highway crossing. As with the City section, we will jack and bore both crossings. At the request of the County, we will abandon our existing pipeline easement across the parcel called Mirada Surf. By re-routing the pipeline around the Mirada Surf property, we eliminate the need to cut down many Eucalyptus trees. This new route will use the path of an existing dirt road around the Mirada Surf property.

Attached to this staff report is the San Mateo County Staff Report, which is recommending approval, subject to certain conditions, which are identified as Attachment A.

Tony Condotti and I have reviewed all of the conditions and we both recommend that the CCWD Board accept them. Also attached to this staff report is a letter from Tony Condotti to the County Real Properties Division, in which he requests a discussion of the process for obtaining the new pipeline easement suggested by the County Parks Department and conditioned within the County's staff report.

Also attached to this staff report is the "Notice of Public Hearing" for our permit, which will be on Wednesday, September 13, 2006 at 9:30 a.m. suggested start time for our project. This public hearing is being noticed as a CCWD Board meeting.

LAW OFFICES

ATCHISON, BARISONE, CONDOTTI & KOVACEVICH

A PROFESSIONAL CORPORATION

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JOHN G. BARISONE

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BARBARA H. CHOI

SUSAN E. BARISONE

WENDY B. MORGAN

JEFFREY E. BARNES

HEATHER J. LENHARDT

September 7, 2006

Via Facsimile (650)363-4832
And United States Mail
Steve Alms, Real Property Manager
San Mateo County Manager's Office
455 County Center, 5th Floor
Redwood City, CA 94063

Re: Phase 3B – El Granada Transmission Pipeline Replacement Project

Dear Mr. Alms:

This office represents the Coastside County Water District, the applicant for a coastal development permit that is currently pending in the Planning and Building Division of the San Mateo County Environmental Services Agency. A hearing on the District's CDP application has been scheduled before the Planning Commission for next Wednesday, September 16th, at 9:00 a.m.

As you may recall, representatives of the District met with officials from the Real Property and Parks & Recreation Departments on March 21, 2006 and again on June 21, 2006 to discuss the realignment of the proposed pipeline from an existing District-owned recorded easement across property owned by the County in El Granada that is bordered by Magellan Avenue and Santiago Avenue (APN 047-330-010). The realignment would result in the rerouting of the District's water transmission pipeline from its current location, which roughly bisects the County parcel, to a new location along the eastern boundary of the parcel. Although the reroute will add significantly to the length (and resulting expense) of the pipeline project, the District agreed to prepare a redesign to accommodate the County's concerns with the manner in which the current pipeline alignment constrains the utility of the parcel for future park development. Of course, the District will have to quitclaim its existing easement once the replacement project has been completed.

Although the proposed realignment is an accommodation to the County, it is nevertheless the District's understanding that the CDP for the project will include a condition requiring the District to obtain formal approval by the County of an easement encompassing the new alignment. Accordingly, I am enclosing for your consideration a draft easement deed for the

County's consideration. Also enclosed are 8 ½" x 11" size copies of the proposed realignment. I expect to receive the legal description shortly and will also forward that as soon as I have received it.

I would appreciate your contacting me at your earliest convenience to discuss the process for obtaining formal approval of the easement. Representatives of the District would be happy to meet with you to facilitate further discussion.

Sincerely,

ANTHONY P. CONDOTTI

cc: Marcia Raines, Director, County Environmental Services Agency
Fax #: (650) 599-1721
Mike Schaller, Senior Planner, County Environmental Services Agency
Fax #: (650)363-4849
Sam Herzberg, Park Planner, County Environmental Services Agency
Fax #: (650)599-1721
Ed Schmidt, CCWD General Manager
Jim Teter, CCWD District Engineer

COUNTY OF SAN MATEO
ENVIRONMENTAL SERVICES AGENCY
PLANNING AND BUILDING DIVISION

DATE: September 13, 2006

TO: Planning Commission

FROM: Planning Staff

SUBJECT: Consideration of a Coastal Development Permit, pursuant to Section 6328.4 of the County Zoning Regulations, to allow the replacement of an existing 10-inch water transmission pipeline with a new 16-inch transmission pipeline, in the unincorporated Miramar area of San Mateo County. This project is appealable to the California Coastal Commission.

County File Number: PLN 2006-00020 (Coastside County Water District)

PROPOSAL

The applicant, Coastside County Water District, proposes to replace 3,660 linear feet of an existing 10-inch welded steel water transmission pipeline with a new 16-inch ductile iron transmission pipeline. This project is the second phase of a pipeline replacement project. Phase 1 was approved by the County in 1999. The contractor will dig a trench approximately 3 feet deep, install the pipe and backfill the trench and repave. The new pipeline must pass under Cabrillo Highway and Arroyo de en Medio Creek. At both crossings, the applicant is proposing to use jack and bore method to go under each obstacle. This method will not require excavation of the road or creek bed. Once construction of the pipeline is completed, it will then be pressure tested and sanitized. The contractor will connect the new pipeline to the ends of the existing pipeline and connect the distribution lines and individual water connections to the new pipeline. When all the connections have been transferred, the old pipeline will be disconnected, sealed and abandoned in place. The applicant has an existing 10-foot wide easement across the parcel commonly referred to as Mirada Surf. This route travels straight through the eucalyptus grove, which dominates this parcel. Construction of the new pipeline along this alignment would require substantial tree removal. At the request of the County Parks and Recreation Division, the applicant is proposing to use a different route, around the perimeter of the Mirada Surf property. This route will utilize an existing dirt road along the south side of the parcel, thus minimizing the amount of tree removal necessary to construct the pipeline.

RECOMMENDATION

Approve the Coastal Development Permit, County File Number PLN 2006-00020, by adopting the required findings and conditions of approval identified in Attachment A.

BACKGROUND

Report Prepared By: Michael Schaller, Project Planner, Telephone 650/363-1849

Applicant: Coastside County Water District

Owner: State of California and San Mateo County

Location: Public right-of-way within the Miramar area, and the Mirada Surf east property, between Miramar and El Granada

Zoning: R-1/S-94/DR (Single-family residential/10,000 sq. ft. minimum parcel size/Design Review) and RM-CZ/DR (Resource Management-Coastal Zone/Design Review)

General Plan Designation: Medium-Low Density Residential (2.4 – 6.0 dwelling units/acre) and Public Recreation

Flood Zone: Zone C (Areas of Minimal Flooding), FEMA Panel 060311-0225C, dated August 5, 1986

Existing Land Use: Residential and Open Space

Project History: In 1998, the Coastside County Water District (CCWD) adopted a plan to replace the existing 10-inch water transmission line which delivers water to the El Granada area. This plan envisioned replacement in three phases. In 1999, the District submitted an application for a Coastal Development Permit to replace the northern segment within the community of El Granada. This permit was approved by the Board of Supervisors on October 19, 1999. An appeal was subsequently filed with the California Coastal Commission (CCC). In 2003, after conducting their own analysis of the proposed new pipeline, the CCC approved the project as proposed. The CCC's staff report is included as Attachment D.

Environmental Evaluation: The Water District, as lead agency, certified an Initial Study and Negative Declaration for the entire pipeline replacement project on July 14, 1998. In 1999, the Planning Commission certified that it had reviewed and considered the information contained in the Negative Declaration, before taking action on the Phase 1 pipeline replacement project. This environmental review document is still valid and applicable to this project. Since the Planning Commission has already certified the document, there is no need for them to repeat this step.

Setting: The replacement pipeline will be installed primarily within either CalTrans or San Mateo County street right-of-ways, in most cases adjacent to the existing pipeline. The trenching will commence at the boundary between San Mateo County and the Half Moon Bay city limits. It will then proceed under Cabrillo Highway and then travel northwest, parallel to the highway. The new pipe will pass under Miramar Drive and Arroyo de en Medio Creek by means of jack and bore construction. It will then go east on Medio Avenue, through the Miramar area. Upon leaving the Miramar area, the pipeline will cross the eastern portion of the Mirada Surf property to connect to the existing pipeline in Santiago Avenue in El Granada. The majority of the project area is characterized by single-family residences, with the occasional empty lot. The portion of

the new pipeline that crosses the Mirada Surf parcel is characterized by a mix of open grasslands and a eucalyptus grove.

DISCUSSION

A. KEY ISSUES

1. Conformance with the County General Plan and Zoning Regulations

Pursuant to Section 53091 of the State Government Code, projects undertaken by the Coastside County Water District are exempt from review under the County's General Plan and Zoning Regulations.

2. Conformance with the Local Coastal Program

A Coastal Development Permit (CDP) is required pursuant to San Mateo County Local Coastal Program Policy 2.1, which mandates compliance with the California Coastal Act for any government agency or special district wishing to undertake development in the Coastal Zone. Development includes transmission facilities for water (Policy 2.2). Staff has completed a Coastal Development Checklist for this project. Summarized below are the following sections of the LCP that are relevant:

a. Public Works Component

Policy 2.6 – *Capacity Limits*. This policy limits development or expansion of public works facilities to a capacity which does not exceed that needed to serve buildout of the Local Coastal Program. Both the County's staff report in 1999 and the CCC's report of 2003 have extensive analysis of buildout demand in relation to the proposed transmission pipeline's diameter. It was found by both the County and the CCC that the proposed 16-inch diameter pipe did not exceed project buildout figures for the area served by the Water District. This second phase of the pipeline replacement continues with the same size pipe. The CCC's staff report is included as Attachment D for reference.

b. Sensitive Habitats Component

As discussed above in the Setting Section, a portion of the proposed alignment crosses under Arroyo de en Medio Creek. In addition, the portion of the proposed alignment that travels across the Mirada Surf property traverses a eucalyptus grove, which could provide habitat for monarch butterflies and roosting habitat for raptors. These areas are considered sensitive habitat as defined under Policy 7.1 (*Definition of Sensitive Habitats*). Sensitive habitat areas include all perennial and intermittent streams and their tributaries, and habitats supporting rare, endangered, and unique species.

Policy 7.3 – *Protection of Sensitive Habitats*. This policy requires that development in areas adjacent to sensitive habitats be sited and designed to prevent impacts that could significantly degrade these resources. All uses shall

be compatible with the maintenance of biologic productivity of the habitats. The applicant has proposed using a jack and bore method to tunnel the new pipe under Arroyo de en Medio Creek, thus eliminating any intrusion into the stream channel.

The portion of the new alignment that passes through the Mirada Surf property will utilize an existing dirt road in order to minimize tree removal and disturbance of the site. At the east end of this leg of the alignment, the pipe alignment will leave the road and travel cross-country in order to connect to the existing pipeline at the end of Ventura Street. Staff has walked the proposed alignment and concluded that during the cross-country portion no tree removal will be necessary in order to construct the new pipeline. The District's environmental document identified the potential for raptors and/or monarch butterflies to reside within this portion of the project area, depending upon the time of year. In order to reduce potential impacts upon raptors and monarch butterflies due to construction activities, staff is recommending that the appropriate mitigation measures in the environmental document (restrict construction to the period between April and September, and pre-construction surveys for raptors) be included as conditions of approval of this Coastal Development Permit.

Policy 7.9 – *Permitted Uses in Riparian Corridors*. As discussed previously, a portion of the project will occur within/under a riparian corridor. Policy 7.9 lists the permitted uses within a corridor, which includes necessary water supply projects and pipelines. Both, San Mateo County and the California Coastal Commission, have previously determined that this is a necessary water supply project to ensure adequate amounts of water for both domestic and fire suppression purposes.

Policy 7.10 – *Performance Standards in Riparian Corridors*. This policy requires development permitted in corridors to:

Minimize removal of vegetation: As stated previously, the applicant is proposing to use the "jack and bore" method of construction to place the new pipeline under the bed of Arroyo de en Medio Creek. The applicant has not proposed removing any vegetation in order to do this portion of work, nor does it appear that any will be necessary based upon staff's understanding of the project and the site.

Minimize erosion, sedimentation, and runoff by appropriately grading and replanting modified areas: One of the mitigation measures required under the District's environmental document is to implement erosion control measures around the construction site to prevent the transport of any sediment. These measures include the use of silt fencing and hay bales to entrap sediment and replanting of disturbed areas with an erosion control seed mix, where necessary. This requirement has been incorporated into this project as conditions of approval.

Policy 7.11 – *Establishment of Buffer Zones.* This policy requires the establishment of buffer zones around all riparian corridors. Said buffer zones shall extend 30 feet outward from the limit of riparian vegetation for intermittent streams. Within these buffer zones, Policy 7.12 states that the uses allowed in riparian corridors are also allowed. As stated above, the proposed use is an allowed use in riparian corridors, and thus, is allowed in buffer zones as well.

Policy 7.13 – *Performance Standards in Buffer Zones.* This policy requires uses permitted in buffer zones to: (1) minimize removal of vegetation, (2) conform to natural topography to minimize erosion potential, (3) make provisions (i.e., catch basins) to keep runoff and sedimentation from exceeding pre-development levels, (4) replant where appropriate with native and non-invasive exotics. As stated above, the proposed new pipeline has been designed to minimize potential impact to the riparian corridor's resources by boring under the creek bed.

c. Visual Resources Component

Policy 8.6 – *Streams, Wetlands, and Estuaries.* This policy prohibits structural development in the Coastal Zone which will adversely affect the visual quality of perennial streams and associated riparian habitat, except for those permitted by Sensitive Habitats Component Policies. As stated above, pipelines and necessary water supply projects are allowed in riparian corridors under Policy 7.9. However, it should be noted that the project, once completed, will not have an above-ground component. Additionally, no vegetation removal is proposed within the Arroyo de en Medio Creek corridor that would adversely affect its visual quality.

B. ENVIRONMENTAL REVIEW

The Water District, as lead agency, certified an Initial Study and Negative Declaration for the entire pipeline replacement project on July 14, 1998. In 1999, the Planning Commission certified that it had reviewed and considered the information contained in the Negative Declaration, before taking action on the Phase 1 pipeline replacement project. This environmental review document is still valid and applicable to this project. Since the Planning Commission has already certified the document, there is no need for them to repeat this step.

On March 22, 2006, staff received comments from Kevin Lansing of Half Moon Bay (Attachment E). In his letter, Mr. Lansing urges the County to require a subsequent environmental review and opportunity for public comment, pursuant to Section 15162 of the CEQA Guidelines. Mr. Lansing raises the following two issues:

1. The proposed path for the new 16-inch pipeline has changed substantially from that considered in the 1998 Initial Study. Page 34 of the 1998 Initial Study contemplated that the 16-inch pipe would follow the path of the existing 10-inch pipe across the eastern Mirada Surf parcel. Page 9 of the current project description shows that the

16-inch pipe now turns eastward before crossing the Mirada Surf parcel. The 16-inch pipeline is now proposed to cross the parcel along an entirely different path from that considered in the 1998 Initial Study.

The new proposed path for the 16-inch pipeline may require the removal of some trees along the southern edge of the Mirada Surf parcel. These trees could provide nesting habitat for raptors. A nesting survey would need to be conducted to determine whether the project would negatively impact any sensitive habitat.

Staff's Response: The original project design called for the construction of the new 16-inch pipeline adjacent to the existing 10-inch line within an expanded easement. Construction of this design would have resulted in the removal of numerous large eucalyptus trees within the easement. When the applicant submitted their plans for the current CDP application, the route of the new pipeline had been shifted farther east to utilize an existing dirt road and pathway that winds through the eucalyptus grove. This option would have had substantially less impact and resulted in the removal of only 2-3 trees. However, County Parks requested the applicant to redesign this portion of their project so that the new pipeline bisects the Mirada Surf parcel at the shortest possible width. The applicant has redesigned their project to comply with this request, which is reflected in the plans before the Commission today. After walking the proposed new alignment, staff has concluded that no trees must be removed to accommodate the new alignment. In this regard, the modified project is an improvement over the original design. After reviewing this proposed modification with County Counsel, it was determined that this modification was minor in scope and did not justify amending the certified Negative Declaration.

2. The 1998 Initial Study did not analyze in any way the project's potential impact on the habitat of the California Red-Legged Frog (CRLF), which is a protected species under both State and Federal law. In the years since the 1998 Initial Study was prepared, there have been several confirmed sightings of CRLF and habitat designations in areas of the Coastside which are very similar to those which lie in the direct path of the proposed 16-inch pipeline.

   As originally proposed, the 16-inch pipeline will run under Medio Creek. The staff report for a recent project heard on appeal before the California Coastal Commission (A-2-SMC-05-016, March 9, 2006) cited the results of a biological assessment which indicates that Medio Creek provides potential non-breeding dispersal habitat for sensitive and rare species such as the California red-legged frog and the San Francisco garter snake. The report also noted that steelhead may use the creek. In regard to the above, Midcoast LUP Policy 7.3 prohibits development that would have significant adverse impacts on sensitive habitat areas, and regulates development in areas adjacent to sensitive habitat areas. Midcoast LUP Policies 7.35 and 7.46 provide for preservation of critical habitats for rare, endangered, and unique species.

   Staff's Response: As a point of clarification, the original 1998 project design contemplated constructing the new pipe above grade, by suspending the pipe as it crosses Arroyo de en Medio. The applicant is now proposing to use a jack and bore method to drill under the bed of the creek and avoid impacting it entirely.

Compliance with the LCP's Sensitive Habitat policies was discussed above. Based upon the above two issues, staff believes there is insufficient evidence to support the need for a revised or amended Negative Declaration at this time.

C. REVIEWING AGENCIES

Department of Public Works
Parks and Recreation Division
California Coastal Commission
Midcoast Community Council
City of Half Moon Bay

ATTACHMENTS

A. Recommended Findings and Conditions of Approval
B. Site and Detail Plans
C. CCWD Initial Study and Negative Declaration, Adopted July 14, 1998
D. CCC Staff Report of November 21, 2003
E. Letter from Kevin Lansing

MS:fc – MJSQ0992_WFU.DOC

Attachment A

County of San Mateo
Environmental Services Agency
Planning and Building Division

RECOMMENDED FINDINGS AND CONDITIONS OF APPROVAL

Permit or Project File Number: PLN 2006-00020 Hearing Date: September 13, 2006

Prepared By: Michael Schaller For Adoption By: Planning Commission

RECOMMENDED FINDINGS

Regarding the Environmental Review, Find:

1. That the Commission, acting as a responsible agency, has reviewed and considered the Revised Environmental Initial Study for the El Granada Transmission Pipeline Replacement Project, prepared by the Coastside County Water District as lead agency.

Regarding the Coastal Development Permit, Find:

2. That the project, as described in the application and accompanying materials required by Zoning Regulations Section 6328.7 and as conditioned in accordance with Section 6328.14, conforms with the plans, policies, requirements and standards of the San Mateo County Local Coastal Program as discussed in the staff report under Section A.2, including protection of biological and scenic resources.

3. That the project conforms to the specific findings required by policies of the San Mateo County Local Coastal Program as discussed in the staff report under Section A.2. The applicant has redesigned their project to avoid impacts upon tree resources on the Mirada Surf property. Additionally, the applicant has modified their original design to include the "jack and bore" method to place the new pipe under Arroyo de en Medio Creek, thus avoiding impacts to this riparian zone. The project is in compliance with these applicable policies of the LCP.

RECOMMENDED CONDITIONS OF APPROVAL

Planning Division

1. This approval applies only to the proposal, documents and plans described in this report and submitted to and approved by the Planning Commission. Minor revisions or modifications to these projects may be made subject to the review and approval of the Community Development Director.

2. This permit shall be valid for one year, by which time the approved project shall have been started. Any extension of this permit shall require submittal of an application for permit extension and payment of applicable permit extension fees.

3. Prior to the beginning of any construction activities, the applicant shall submit to the Planning Division for review and approval an erosion and drainage control plan which shows how the transport and discharge of soil and pollutants from and within the project site shall be minimized. The plan shall be designed to minimize potential sources of sediment, control the amount of runoff and its ability to carry sediment by diverting incoming flows and impeding internally generated flows, and retain sediment that is picked up on the project site through the use of sediment-capturing devices. The plan shall also limit application, generation, and migration of toxic substances, ensure the proper storage and disposal of toxic materials, apply nutrients at rates necessary to establish and maintain vegetation without causing significant nutrient runoff to surface waters. Said plan shall adhere to the San Mateo Countywide Stormwater Pollution Prevention Program "General Construction and Site Supervision Guidelines," including:

   a. Sequence construction to install sediment-capturing devices first, followed by runoff control measures and runoff conveyances. No construction activities shall begin until after all proposed measures are in place.

   b. Minimize the area of bare soil exposed at one time (phased grading).

   c. Clear only areas essential for construction.

   d. Within five days of clearing or inactivity in construction, stabilize bare soils through either non-vegetative BMPs, such as mulching or vegetative erosion control methods such as seeding. Vegetative erosion control shall be established within two weeks of seeding/planting.

   e. Construction entrances shall be stabilized immediately after grading and frequently maintained to prevent erosion and control dust.

   f. Control wind-born dust through the installation of wind barriers such as hay bales and/or sprinkling.

   g. Soil and/or other construction-related material stockpiled on-site shall be placed a minimum of 200 feet from all wetlands and drain courses. Stockpiled soils shall be covered with tarps at all times of the year.

   h. Excess fill shall not be disposed of in the Coastal Zone unless authorized through either an amendment to this Coastal Development Permit or a new Coastal Development Permit.

   i. Intercept runoff above disturbed slopes and convey it to a permanent channel or storm drains by using earth dikes, perimeter dikes or swales, or diversions. Use check dams where appropriate.

j. Provide protection for runoff conveyance outlets by reducing flow velocity and dissipating flow energy.

k. Install storm drain inlet protection that traps sediment before it enters the storm sewer system. This barrier could consist of filter fabric, straw bales, gravel, or sand bags.

l. Install sediment traps/basins at outlets of diversions, channels, slope drains, or other runoff conveyances that discharge sediment-laden water. Sediment traps/basins shall be cleaned out when 50% full (by volume).

m. Use silt fence and/or vegetated filter strips to trap sediment contained in sheet flow. The maximum drainage area to the fence should be 0.5 acre or less per 100 feet of fence. Silt fences shall be inspected regularly and sediment removed when it reaches 1/3 the fence height. Vegetated filter strips should have relatively flat slopes and be vegetated with erosion-resistant species.

n. Throughout the construction period, the applicant shall conduct regular inspections of the condition and operational status of all structural BMPs required by the approved erosion control plan.

4. Noise levels produced by proposed construction activities shall not exceed the 80-dBA level at any one moment. Construction activities shall be limited to the hours from 7:00 a.m. to 6:00 p.m., Monday through Friday, and 9:00 a.m. to 5:00 p.m. on Saturday. Construction operations shall be prohibited on Sunday and any national holiday.

5. Prior to the issuance of the encroachment permit from the Department of Public Works and beginning of construction of the segment that is on the County-owned Mirada Surf property, the applicant shall obtain an easement from the County Real Properties Division that matches the plans reviewed and approved by the County Planning Commission.

Department of Public Works

6. No proposed construction work within the County right-of-way shall begin until County requirements for the issuance of an encroachment permit, including review of the plans, have been met and an encroachment permit issued.

Mitigation Measures from CCWD's Initial Study/Mitigated Negative Declaration

7. **Construction Disturbance**: Following completion of construction, the site shall be restored to its pre-construction condition.

8. **Construction Dust**: All construction contractors shall be required to prepare and implement a detailed dust control plan during all phases of construction. Said plan shall be submitted to the County Planning Division for review and approval, prior to the beginning of construction activities. At a minimum, the dust control plan shall require that the contractor(s):

a. Water or cover stockpiles of soil, sand or other materials that can be blown by the wind.

b. Minimize drop heights when loading vehicles with excavated materials.

c. Sweep adjacent streets of all mud and debris from the project area, since this material can be pulverized and later be re-suspended by vehicle traffic.

d. Limit the speed of all construction vehicles on unpaved surfaces to 5 miles per hour while on the site.

e. Cover or wet all materials transported on or from the site in order to suppress visible dust.

f. Treat inactive portions of the construction site that have exposed soil surfaces with an appropriate dust suppressant or cover them or reseed them as quickly as practicable.

g. Suspend earthmoving or other dust-producing activities during periods of high winds whenever dust control measures are unable to prevent visible dust plumes.

Biology

9. To avoid potential construction activity impacts to over-wintering monarch butterfly, eucalyptus trees shall only be removed between April and September.

10. Prior to removal of any trees, they will be checked by a qualified biologist for Falconiformes' and Strigiformes' nests. If nests are found, tree removal will not take place until offsprings are fledged so that none of these birds will be impacted during construction activities.

11. To avoid construction activity impacts to migrating steelhead adults and juveniles and San Francisco garter snakes occurring or migrating through the project corridor in Frenchman's or Arroyo de en Medio Creeks, no construction activities, equipment use, or material storage shall occur within the wetted portion of the stream channels.

12. To minimize potential construction phase and post-construction impacts to the streams that provide potential habitat to sensitive species, measures to prevent bank erosion and sediment input into the streams shall include, but not be limited to, installation of silt fences and/or properly staked straw bails.

13. A qualified biologist will be on-site to observe all construction activities within 100 feet of the Frenchman's Creek and Arroyo de en Medio Creek water bodies, and to verify that the practices of clean-up and site restoration are completed in a manner that will avoid significant impacts to these species.

14. To minimize post-construction impacts, the project corridor will be restored, including recontouring and stabilizing soils and installing vegetation cover.

Cultural Resources

15. **General**: In the event that archaeological resources are discovered during any phase of the project excavation, work will be stopped in the immediate area and a qualified archaeologist will be called upon to determine appropriate treatment.

16. **Section 5**: The District Engineer will consult with a qualified archaeologist during the design of the pipeline in Sections 5 to ascertain the location and limits of CA-SMA-149 to determine whether the pipeline can be feasibly realigned to avoid the site. If avoidance is not possible, the District will implement a mitigation program as defined in Appendix K of the CEQA Guidelines involving a full evaluation of the significance and integrity of the site, and, if required, the design and implementation of an excavation plan.

17. **Section 5**: A qualified archaeologist will be present to monitor excavation and construction work in the vicinity of the Highway 1 crossing near Mirada Road, continuing to Medio Avenue.

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Environmental Services Agency
Planning Commission

County Office Building
455 County Center
Redwood City, California 94063
(650) 363-1859

Notice of Public Hearing

SAN MATEO COUNTY PLANNING COMMISSION
MEETING NO. 1450

Wednesday, September 13, 2006
9:00 a.m.
Board of Supervisors Chambers
400 County Center, Redwood City

Planning Commission meetings are accessible to people with disabilities. Individuals who need special assistance or a disability-related modification or accommodation (including auxiliary aids or services) to participate in this meeting; or who have a disability and wish to request an alternative format for the agenda, meeting notice, agenda packet or other writings that may be distributed at the meeting, should contact the Planning Commission Secretary at least five (5) working days before the meeting at 650/363-1859, Facsimile 650/363-4849 or e-mail krud@co.sanmateo.ca.us. Notification in advance of the meeting will enable the Secretary to make reasonable arrangements to ensure accessibility to this meeting and the materials related to it.

SPEAKING AT THE PUBLIC HEARING:
All parties wishing to speak will have an opportunity to do so after filling out a speaker's slip and depositing it in the speaker's slip box. The Commission has established time limits for speakers, allowing 15 minutes for the applicant and appellant, if any, and 5 minutes for all others. These time limits may be modified by the Commission's Chairperson in order to accommodate all speakers.

CORRESPONDENCE TO THE COMMISSION:
Letters to the Commission should be addressed: Planning Commission, County Government Center, 455 County Center, 2nd Floor, Mail Drop PLN122, Redwood City, CA 94063. The Commission e-mail address is **planning-commission@co.sanmateo.ca.us**. The Commission Secretary can be reached at 650/363-1859, Facsimile 650/363-4849. *It is preferred that your letters be received at least five (5) days prior to the scheduled hearing to allow sufficient time for your comments and concerns to be considered by the Commission.*

RETENTION OF MATERIALS PRESENTED AT HEARING:
All materials (including but not limited to models and pictures) presented by any person speaking on any item on the agenda are considered part of the administrative record for that item, and must be retained by the Commission Secretary until such time as all administrative appeals are exhausted and the time for legal challenge to a decision on the item has passed. If you wish to retain the original of an item, a legible copy must be left with the Commission Secretary. The original or a computer generated copy of a photograph must be submitted. Fifteen (15) copies of written material should be provided so that each Commission member, staff and other interested parties will have copies to review.

DECISIONS AND APPEALS PROCESS:
Decisions made by the Planning Commission are appealable to the Board of Supervisors. The appeal fee is $451. Appeals must be filed no later than ten (10) business days following the hearing at the San Mateo County Planning Counter located at 455 County Center, 2nd Floor, Redwood City.

AGENDAS ON LINE:
For your convenience, Planning Commission agendas are now available electronically. To subscribe to the Planning Commission agenda mailing list, please send a blank e-mail to:
join-pc-agenda@listserver.co.sanmateo.ca.us.

For further information on any item listed below, please phone the Project Planner indicated.

AGENDA

1. Pledge of Allegiance

2. Roll Call:

   Commissioners: Bomberger, Dworetzky, Silver, Slocum, Wong
   Staff: Raines, Grote, Raftery, Ekers

3. **Oral Communications** to allow the public to address the Commission on any matter not on the agenda. If your subject is not on the agenda, the Chair will recognize you at this time. ***Speakers are customarily limited to five minutes.*** A speaker's slip is required.

4. **Consideration of the Minutes** of the Planning Commission meeting of August 23, 2006.

CONSENT AGENDA

Consent items are considered and voted on by the Planning Commission at the beginning of the regular session. If a member of the Commission wishes specifically to hear a consent item, or a member of the public wishes to speak on a consent item, the Commission will remove the item to the Regular Agenda for hearing. If you wish to address the Commission on a consent item, please be sure to submit a speaker's slip to the Commission Secretary before the meeting begins. Otherwise, the action of the Commission will be to approve consent items as a group in accordance with the staff recommendation on each item.

9:00 a.m.

5.

Owner:	**Craig Rosa Trust**
Applicant:	**Real PropertyDivision, County of San Mateo**
File No.:	PLN2006-00346
Location:	295 Ferndale Way, Emerald Lake Hills
Assessor's Parcel No.:	057-081-030 and 057-081-240

Consideration of a request to determine if the vacation and relocation of a pedestrian path right-of-way between Ferndale Way and Sylvan Way in the unincorporated Emerald Lake Hills area of San Mateo County conforms with the General Plan. Application filed June 13, 2006. PROJECT PLANNER: Alison Sand. Telephone: 650/363-1828.

6. **Owner:** **County of San Mateo**
Applicant: **Sprint**
File No.: PLN2000-00123
Location: On a parcel accessed via 21 Tower Road, San Mateo
Assessor's Parcel No.: 041-320-090

Consideration of a Use Permit Amendment, pursuant to Section 6500 of the County Zoning Regulations, and Architectural Review pursuant to the State Streets and Highways Code to allow the continued operation of a temporary wireless communications facility consisting of three panel antennas mounted on an existing water tower structure, equipment cabinets, and underground power and communication lines. The facility is located on a parcel accessed via 21 Tower Road in the unincorporated San Mateo Highlands area of San Mateo County. Application filed February 1, 2006. PROJECT PLANNER: Kevin Guy. Telephone: 650/985-2590. PROJECT MANAGER: Lisa Aozasa. Telephone: 650/363-4852.

END OF THE CONSENT AGENDA

REGULAR AGENDA
9:00 a.m.

7. **Owner:** **Shao Ling Chen**
Applicant: **Vincent Liu**
File No.: PLN2004-00273
Location: 301 Sixth Avenue, North Fair Oaks
Assessor's Parcel No.: 060-091-370

Consideration of (1) Zoning Text and Map Amendments, pursuant to Section 6550 of the County Zoning Regulations, to rezone the subject parcel from R-3/S-3 (Multi-Family Residential) to Planned Unit Development (PUD), (2) a Major Subdivision, pursuant to the State Subdivision Map Act and to Section 7010 of the County Subdivision Ordinance, (3) an exception to the Subdivision Regulations, pursuant to Section 7096 of the County Subdivision Ordinance, and (4) certification of a Mitigated Negative Declaration, pursuant to the California Environmental Quality Act, to subdivide an 11,761 sq. ft. parcel to create a 6-unit town-home development, at 301 Sixth Avenue in the unincorporated North Fair Oaks area of San Mateo County. Application filed June 1, 2004. PROJECT PLANNER: Matthew Seubert. Telephone: 650/363-1829.

9:30 a.m.

8. **Owner:** **Various (Public Right-of-Way)**
Applicant: **Coastside County Water District**
File No.: PLN2006-00020
Location: Cabrillo Highway, Miramar

Consideration of a Coastal Development Permit, pursuant to Section 6328.4 of the County Zoning Regulations, to allow the replacement of an existing 10-inch water transmission pipeline with a new 16-inch transmission pipeline, in the unincorporated Miramar area of San Mateo County. This project is appealable to the California Coastal Commission. Application filed January 12, 2006. PROJECT PLANNER: Mike Schaller. Telephone: 650/363-1849.

9. Correspondence and Other Matters

10. Consideration of Study Session for Next Meeting

11. Director's Report

12. Adjournment

Agenda items published in the San Mateo County Times on September 2, 2006.

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STAFF REPORT

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

From: **Ed Schmidt, General Manager**

Agenda: **September 12, 2006**

Report Date: September 8, 2006

Subject: **Discussion and possible direction to staff regarding the Advisory Committees of the District**

Recommendation

1. Review Advisory Committee List (Draft) prepared by President Ascher and the General Manager and decide which committees are still necessary.
2. Decide on committee classifications, Standing or Ad hoc (We have taken a stab at this already).
3. Decide if there will be any changes to committee membership.
4. Decide if all committee meetings will be agendized or just the Standing Committee meetings. (Brown Act recommends posting all committee meetings as public meetings).
5. Decide if all committee meeting attendance is to be reimbursed.

Background

Given the resignation of former Director John Muller and the subsequent appointment of Director Bob Feldman, it is appropriate to discuss the composition of the District's Advisory Committees.

The attached (Draft) Committee list identifies twelve (12) Advisory Committees.

The Brown Act defines legislative body to include Advisory Committees.

There are two (2) types of "Advisory Committees": "Standing Committees" and "Ad hoc Committees".

Standing Committees are covered by the Brown Act. For example, if a governing body creates a long-term committee or budget, finance, facilities, etc., those are Standing Committees, subject to the public notification requirements of the Brown Act.

An **Ad hoc Committee** is exempted from the public notification process. Ad hoc means they serve a limited or single purpose, are not perpetual and are dissolved once their specific task is competed.

From the California Open Meeting Law: *"It can be difficult to determine whether a committee falls into the category of a standing committee or an exempt ad hoc committee. Suppose a subcommittee is created to explore the renewal of a franchise or a topic of similarly limited scope and duration? Is it a standing committee or an exempt ad hoc committee? The answer may depend on factors such as how meeting schedules are determined, the scope of the committee's charge, or whether the group persists long enough to have "continuing jurisdiction".*

"The prudent assumption is that an advisory committee or task force is subject to the Brown Act. Even if one clearly is not, it may want to comply with the Brown Act. Public meetings may reduce the possibility of misunderstanding and controversy".

Board President Ascher is recommending two (2) new Advisory Committees, a "Public Outreach Committee", comprised of President Ascher and Director Feldman and an "Information Technology Committee", comprised of Directors Larimer and Feldman.

Because these two new committees are not "ad hoc" in nature, (ad hoc meaning they serve a limited or single purpose, are not perpetual and are to be dissolved once their specific task is completed); I have categorized them as Standing Committees, subject to the Brown Act.

Fiscal Impact

The fiscal impact of the District's committees is approximately $3,400 annually. Per the District's Resolution 2004-11, Board members are compensated for duly noticed Standing Committee meetings only. Compensation for attendance at ad hoc committee meetings must be approved by the Board in advance of the meeting.

A copy of Resolution 2004-11 - Amending Code of Conduct to Authorize Board Member Compensation for Attendance at Standing Committee Meetings, is attached.

DRAFT

COASTSIDE COUNTY WATER DISTRICT
COMMITTEES
Effective – September 2006

	COMMITTEES	REPRESENTATIVES
1	Finance Committee (S)	Directors Ascher & Coverdell
2	ACWA/JPIA Representative (S)	President Ascher
3	Water Quality Compliance Committee (S)	Directors Mickelsen & Feldman
4	Human Resources Advisory Committee (S)	Directors Ascher & Larimer
5	Montara Sanitary District-Mutual Interest Committee (S)	Directors Larimer & Coverdell
6	SFPUC Policy Advisory Committee (S)	Directors Feldman & Mickelsen
7	Bay Area Water Supply & Conservation Agency (S)	Director Mickelsen
8	District Facilities Committee (S)	Directors Larimer & Coverdell
9	Infrastructure Fee Committee (A)	Directors Larimer and Feldman
10	Denniston Reservoir Restoration Project Application for Scope of Work Committee (A)	President Ascher & Director Coverdell
11	Public Outreach Committee (S)	Directors Ascher & Feldman
12	Information Technology Committee (S)	Directors Larimer & Feldman

Legend: S = Standing Committee
A = Ad Hoc Committee

10 Standing / 2 Ad Hoc Committees

President Ascher / 5
Director Coverdell / 4
Director Feldman / 5
Director Larimer / 5
Director Mickelsen /3

RESOLUTION NO 2004-11

AMENDING CODE OF CONDUCT TO AUTHORIZE
BOARD MEMBER COMPENSATION FOR ATTENDANCE
AT STANDING COMMITTEE MEETINGS

COASTSIDE COUNTY WATER DISTRICT

BE IT RESOLVED by the Board of Directors of the Coastside County Water District that subsection (a) of Section XII of the Code of Conduct, adopted by the Board of Directors on April 13, 1004 as Resolution No. 2004-06 is hereby amended to read as follows:

a. "Compensation for Attendance at Conferences and Meetings. Each member of the Board is authorized to receive compensation in the amount of $100.00 per meeting for attendance at regular or special meetings of the Board and standing committees thereof that are duly noticed in accordance with the requirements of the Ralph M. Brown Act (Cal. Govt. Code §54950, et seq.), and for other service rendered as a director at the request of the Board, subject to a maximum of $100.00 per day and $400.00 per calendar month. Attendance at meetings of (a) the Association of California Water Agencies/ ACWA Joint Powers Insurance Authority Board; (b) the San Mateo County Chapter of the California Special Districts Association; and (c) the San Mateo City-County Association of Governments and committees thereof, by the member of this Board appointed as a representative to such organizations (or his or her alternate) is service rendered at the request of the Board and shall be compensated. All other activities must be approved by the Board in advance and compensation specifically authorized in order to be considered service rendered at the request of the Board, except for emergency meetings as defined below. Attendance at meetings of special committees of the Board does not constitute service rendered at the request of the Board and is not compensable unless the Board specifically directs otherwise in advance of a particular committee meeting. Such compensation will be provided in addition to any reasonable and necessary reimbursement for meals, lodging and travel expenses incurred in attending any conference, meeting or approved event. Compensation will be paid only if the Board member submits a written form that sets forth the date, location and District purpose of the meeting for which compensation is requested. Each member of the Board shall be reimbursed for travel, lodging and meal expenses incurred in the performance of service rendered at the request of the Board, other than attending meetings of the Board. All activities for which expense reimbursement is sought must be approved in advance by the Board, except for categories (a) through (c), above, and emergency meetings. Reimbursement is contingent upon submission of appropriate documentation to the General Manager, and shall furthermore be in accordance with the guidelines set forth herein.

BE IT RESOLVED FURTHER that General Manager is directed to incorporate the Code of Conduct into the District's Policies and Procedures Manual.

BE IT RESOLVED FURTHER that this amendment shall be effective commencing August 1, 2004.

PASSED AND ADOPTED this 13th day of July, 2004, by the following vote of the Board of Directors:

AYES: Directors Ascher, Coverdell, Mickelsen

NOES: Director Larimer, President Muller

ABSENT:

_____
John Muller
President, Board of Directors
Coastside County Water District

ATTEST:

_____
Secretary of the Board of Directors

STAFF REPORT

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

From: **Ed Schmidt, General Manager**

Agenda: **September 12, 2006**
Report
Date: September 7, 2006

Subject: **Status Report on the Current Major Capital Improvement Projects**

Avenue Balboa Pipeline Replacement Project

As with other completed construction projects, satisfaction surveys were hand delivered to all of the customers within the construction area to solicit their comments on this project. Approximately eighty-five (85) surveys were distributed. Seventeen (17) completed surveys were returned to the District and are included, following this report. Several of the letters need a District response.

Denniston Filter Media Replacement Project

Filter backwash and surface wash flows are now equal between all filters and the filters are performing well. This project has been completed and a final report received from the contractor, ERS. A notice of completion has been presented to the Board under the Consent Calendar portion of this September 12, 2006 Board of Directors meeting agenda.

Main Street / Highway 92 Pipeline Replacement Project

The Coastal Development Permit (CDP) for this $1.3 million dollar

construction project was approved by the City of Half Moon Bay Planning Commission on Thursday, October 27, 2005. The California Coastal Commission's appeal period ended on December 2, 2005, with no appeals filed.

The agreement with the City of Half Moon Bay for reimbursement of costs for the water system component of the Main Street/Highway 92 Improvement Project has been executed by CCWD and the City.

The City of Half Moon Bay has awarded the contract for this project, with construction reported to begin within the next few weeks. Per Paul Nagengast on September 7, 2006, "Construction will start about the end of September".

Water Treatment Plant Short-Term Improvements Phase 3 - El Granada Pipeline Replacement Project

Water Treatment Plant Short-Term Improvements. Preliminary engineering work is continuing:

Nunes Water Treatment Plant- At a meeting held at the WTP on August 25, 2006, the District Engineer met with the WTP operating staff (Twitchell and Donovan) to present another series of concept design drawings for the layout of the chemical feed systems pumps, storage tanks and containment walls. Following discussion, the operating staff selected what they considered the best alternative, which was reviewed and approved by Joe Guistino. On September 5, Joe Guistino contacted the District Engineer to inform him that he was in agreement with the same alternative concept design as the WTP operators. District Engineer will now proceed with the final design work.

Denniston Water Treatment Plant - Similar to the Nunes WTP improvements, the WTP operating staff is currently finalizing the locations for the chemical feed system pumps, tanks and containment walls. Once those decisions are finalized, the District Engineer will proceed with preparation of plans and specifications for the chemical feed facilities and piping modifications. Meanwhile, the District Engineer has been working on the plans for the piping revisions to the Denniston storage tank and the new pipeline from the treatment plant to the tank.

El Granada Pipeline Replacement Project Phase 3

City portion

On Thursday, August 24, 2006, the City Planning Commission granted a Coastal Development Permit (CDP) to the District, subject to two (2) appeal periods. A September 12, 2006 deadline to the City Council and a September 26, 2006 deadline for appeal to the California Coastal Commission.

The much-anticipated Biological consultation with U.S. Fish and Wildlife is scheduled for Tuesday, September 12, 2006. Results of that effort will be presented at the Board meeting on Tuesday evening.

County portion

The application for a coastal development permit for replacement of the remaining 3,660 linear foot segment of this pipeline replacement project (Phase 3B) was submitted to the San Mateo County Planning Department on December 29, 2005.

District staff met with staff members from the County of San Mateo on Tuesday, March 21, 2006 to discuss several questions about our existing easement through County property and their desire to have CCWD pursue an alternative alignment around the Quarry Park property.

District staff had another meeting with the San Mateo County Planner for the project, Mike Schaller on June 19, 2006.

Jim Teter submitted the revised pipeline alignment drawings to the County by August 1, 2006, as requested.

This item has been discussed earlier in this agenda. The Public Hearing has been scheduled for September 13, 2006. San Mateo County staff are recommending approval of the project with conditions that are acceptable to Tony Condotti and myself.

Survey for Avenue Balboa Pipeline Replacement Project

Please complete the survey and return it to the Coastside County Water District in the provided envelope. Your cooperation and feedback are greatly appreciated!

Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

(Yes) No Don't Know

Comments:

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments:

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting (Mildly Disrupting) Not Disrupting to my day

Comments:

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments:

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

I thought it was handled well.

Name: Gina Cordosi

Address: 347 Vallejo

COASTSIDE COUNTY WATER DISTRICT

Thank you for your constructive feedback!
-Coastside County Water District

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Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

Yes No Don't Know

Comments:

---

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

Yes No Don't Know

Comments:

---

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting Mildly Disrupting Not Disrupting to my day

Comments:

---

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

Yes No Don't Know

Comments: eventually

---

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

Name: _____

Address: _____

Thank you for your constructive feedback!
-Coastside County Water District

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(Yes) No Don't Know

Comments:

---

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

very

(Yes) No Don't Know

Comments:

---

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Very Disrupting Mildly Disrupting (Not Disrupting to my day)

Comments:

---

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments:

---

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

Name: Elaine Agius

Address: P.O Box 82

El Granada

324 Vallejo St

RECEIVED

AUG 2 1 2006

COASTSIDE COUNTY WATER DISTRICT

COASTSIDE COUNTY WATER DISTRICT

Thank you for your constructive feedback!
-Coastside County Water District

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(Yes) No Don't Know

Comments:

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

RECEIVED

AUG 2 1 2006

COASTSIDE COUNTY WATER DISTRICT

Name: Paul R. Sylvestri
Addres P.O. Box 843 El Granada, CA 94018 739 Sawtelle Ave.

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

Please complete the survey and return it to the Coastside County Water District in the provided envelope. Your cooperation and feedback are greatly appreciated!

Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

RECEIVED
AUG 10 2006
COASTSIDE COUNTY WATER DISTRICT

Yes No Don't Know

Comments:

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Yes No Don't Know

Comments:

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting Mildly Disrupting Not Disrupting to my day

Comments:

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

Yes No Don't Know

Comments: Big ruts in the street, They are now in the process of Block Topping the street it a mess. They should do th

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

Name: Joanne Franklin
Address: 239 Valley ST

COASTSIDE COUNTY WATER DISTRICT

Thank you for your constructive feedback!
-Coastside County Water District

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Please complete the survey and return it to the Coastside County Water District in the provided envelope. Your cooperation and feedback are greatly appreciated!

Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

(Yes) No Don't Know

Comments:

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) (No) Don't Know

Comments:
Yes on respect, see #4 for details on No

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting Mildly Disrupting (Not Disrupting to my day)

Comments:

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

Yes No Don't Know

Comments:
Our street is not in its original condition since this pipe was let go awaiting the replacement. All homes paid to have our street paved and it was smooth & even. Then this pipe had to be fixed "many" times and sections torn up, especially in front of our home. I think it should be repaved by the water district. I bet if I went to look at any of the other streets, ours would be the saddest looking!

5) ~~Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?~~

Name: Mrs. Lonnie Hanckel

Address: 138 Presidio Ave.

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

Please complete the survey and return it to the Coastside County Water District in the provided envelope. Your cooperation and feedback are greatly appreciated!

Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

(Yes) No Don't Know

Comments: _____

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments: _____

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting (Mildly Disrupting) Not Disrupting to my day

Comments: crew was very accomadating to us

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments: _____

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

_____

_____

_____

Name: _____

Address: _____

COASTSIDE COUNTY WATER DISTRICT

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

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Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

(Yes) No Don't Know

Comments:

---

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments:

---

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting Mildly Disrupting (Not Disrupting to my day)

Comments:

---

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments:

---

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

Yes, please repair the street - the surface is very uneven with the patches placed after the construction and with rain large potholes are created in the soft surface material which is dangerous for cars + bikes.

Thank you -

Name: Debra Gerardi

Address: 322 Avenue Balboa

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

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WATER DISTRICT

Please complete the survey and return it to the Coastside County Water District in the provided envelope. Your cooperation and feedback are greatly appreciated!

Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

(Yes) No Don't Know

Comments:

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments:

3) During the construction period, how disrupting was the pipeline installation to your day?

(Very Disrupting) Mildly Disrupting Not Disrupting to my day

Comments:
NOT NOTIFIED OF WATER SHUTOFF, THE NEXT TIME WATER WAS SHUT OFF BEFORE SCHEDULE OF 9:00AM. I WAS IN SHOWER AT 8:20AM WHEN IT WAS SHUT OFF.

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments:
I WAS MAD TO SAY THE LEAST.

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

Name: _____

Address: 306 AVE BALBOA

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

Please complete the survey and return it to the Coastside County Water District in the provided envelope. Your cooperation and feedback are greatly appreciated!

Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

Yes No (Don't Know)

Comments:
Don't recall receiving a notice, but had no problems w/ access.

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments:

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting Mildly Disrupting (Not Disrupting to my day)

Comments:

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes, but) No Don't Know

Comments: Across the street from my house, the contractor repaired the road & created a new asphalt curb along the front of a vacant lot. The problem is, the new curb juts out into the street and doesn't follow the line of the curb before or after it. Seems the contractor could have trimmed back the grass on the lot to road width or left out building a curb altogether. It just doesn't look good and maybe they could go back and fix it. Thanks.

5) ~~Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?~~

Name: Lee Miller
Address: 354 Columbus Street

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

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Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

   Yes No (Don't Know)

   Comments: _____

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

   Yes No (Don't Know)

   Comments: _____

3) During the construction period, how disrupting was the pipeline installation to your day?

   Very Disrupting Mildly Disrupting (Not Disrupting to my day)

   Comments: _____

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

   Yes No (Don't Know)

   Comments: We were out of town.

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

   _____

   _____

   _____

Name: Steve & Betsy Terrazas

Address: 122 Presidio Ave.

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COASTSIDE COUNTY WATER DISTRICT

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

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(Yes) No Don't Know

Comments: _____

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments: _____

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting Mildly Disrupting (Not Disrupting to my day)

Comments: _____

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments: _____

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

_____

_____

_____

Name: J. Nauman

Address: POB 2925, 224 Village St, EG

COASTSIDE COUNTY WATER DISTRICT

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

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(Yes) No Don't Know

Comments: _____

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments: _____

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Very Disrupting Mildly Disrupting (Not Disrupting to my day)

Comments: _____

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(Yes) No Don't Know

Comments: _____

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

_____

_____

_____

Name: _____

Address: _____

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

Please complete the survey and return it to the Coastside County Water District in the provided envelope. Your cooperation and feedback are greatly appreciated!

Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

(Yes) No Don't Know

Comments: However there were last minute changes to the start date that threw us off a bit

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments:

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting (Mildly Disrupting) Not Disrupting to my day

Comments:

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments: Great job on the clean up!

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

Name: Janine Barger

Address: 347 Vallejo St Ed

Thank you for your constructive feedback!
-Coastside County Water District

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Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

(Yes) No Don't Know

Comments:

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments:

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting (Mildly Disrupting) Not Disrupting to my day

Comments:
ONLY FROM Necessary Noise

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments:

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

Name: N. THOMPSON
Address: 358 COLUMBUS ST.

COASTSIDE COUNTY WATER DISTRICT

Thank you for your constructive feedback!
-Coastside County Water District

Survey for Avenue Balboa Pipeline Replacement Project

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Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

(Yes) No Don't Know

Comments: _____

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments: _____

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting (Mildly Disrupting) Not Disrupting to my day

Comments: I WORK OUT OF MY HOME. THE CREW WORKED WITH ME TO GAIN ACCESS TO MY DRIVEWAY

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments: VALLEJO ST IS A TYPICAL POORLY MAINTAINED STREET, THE WORKERS JUST PATCHED, SO IT DIDN'T MATTER MUCH.

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

_____

_____

_____

Name: Tory Kennedy

Address: 223 VALLEJO ST EC

COASTSIDE COUNTY WATER DISTRICT

Thank you for your constructive feedback!
-Coastside County Water District

Note - Referred this to Customer Service

Survey for Avenue Balboa Pipeline Replacement Project

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Please Circle:

1) Were you given adequate notification of the construction project to make other arrangements for street parking and access?

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(Yes) No Don't Know

Comments:

2) Was the quality and respect of the construction crew satisfactory to your home and construction concerns?

(Yes) No Don't Know

Comments:

3) During the construction period, how disrupting was the pipeline installation to your day?

Very Disrupting (Mildly Disrupting) Not Disrupting to my day

Comments: Trucks parked in front of my driveway.

4) Once construction was completed, was clean up of the roadway and surrounding area satisfactory?

(Yes) No Don't Know

Comments:

5) Can you make any suggestions or recommendations that would allow the District to improve its construction projects when residential areas are affected?

I noticed that my water pipe is "T" with my neighbor. All other houses around us have a single pipe per house. Plus, we had a leak at the meter. I have seen a "reduction" in water pressure ever since the pipe was changed. I think something was lodged in our house pipes from the change.

Name: Mark Hannan

Address: 314 Avenue Balboa

Thank you for your constructive feedback!
-Coastside County Water District

1

Ed,

congrats on getting the pipeline approval over a major hurdle.

The residents of El Granada need more people like the Board & Staff of CCWD.

Thank You! Tammy Hannon

9-1-06

2

SFPUC Water Enterprise Environmental Stewardship Policy
FINAL DRAFT
June 27, 2006

The mission of the San Francisco Public Utilities Commission (SFPUC) is to serve San Francisco and its Bay Area customers with reliable, high quality, and affordable water and wastewater treatment while maximizing benefits from power operations and responsibly managing the resources—human, physical, and natural—entrusted to its care.

The purpose of the Water Enterprise Environmental Stewardship Policy is to establish long-term management direction for SFPUC-owned lands and natural resources affected by operation of the SFPUC water system within the Tuolumne River, Alameda Creek, and Peninsula watersheds. Environmental stewardship is a fundamental component of the Water Enterprise mission, and a responsibility of all Water Enterprise employees.

The SFPUC is committed to responsible natural resources management that protects and restores viable populations of native species and maintains the integrity of the ecosystems that support them for current and future generations. The SFPUC strives to become a leader in science-based and collaborative environmental stewardship in order to continue providing high-quality and reliable water supplies to San Francisco residents and SFPUC customers.

Watershed Management

The SFPUC will proactively manage the watersheds under its responsibility in a manner that maintains the integrity of the natural resources, restores habitats for native species, and enhances ecosystem function. The SFPUC believes that partnership and collaboration with agencies, communities and other stakeholders in the watersheds are the best way to maximize investment in environmental stewardship.

To the maximum extent practicable, the SFPUC will ensure that all operations of the SFPUC water system (including water diversion, storage and transport), construction and maintenance of infrastructure, land management policies and practices, purchase and sale of watershed lands, and lease agreements for watershed lands protect and restore native species and the ecosystems that support them. In cases where the SFPUC has limited control, but where impacts of its operations exist, the SFPUC will work with responsible parties to improve ecosystem health.

It is the policy of the SFPUC to operate the SFPUC water system in a manner that protects and restores native fish and wildlife downstream of SFPUC dams and water diversions, within SFPUC reservoirs, and on SFPUC watershed lands. Releases from SFPUC reservoirs will (consistent with the SFPUC mission described above, existing agreements, and applicable state and federal laws), mimic the variation of the seasonal hydrology (e.g., magnitude, timing, duration, and frequency) of their corresponding watersheds in order to sustain the aquatic and riparian ecosystems upon which these native fish and wildlife species depend.

The SFPUC will actively monitor the health of the terrestrial and aquatic habitats both under SFPUC ownership and affected by SFPUC operations in order to continually improve ecosystem

PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO. 06-0105

WHEREAS, The General Manager and Deputy General Manager directed the Natural Resources Division Manager to lead the development of a SFPUC Stewardship Policy, consonant with CEQA requirements, for consideration by the Commission at a meeting in June 2006; and

WHEREAS, In response to this direction, a Water Enterprise Environmental Stewardship Policy has been prepared with input from the Water Enterprise Divisions and the Bay Area Water Stewards, including the Alameda Creek Alliance, Clean Water Action, Sierra Club (San Francisco Group), and the Tuolumne River Trust; and

WHEREAS, This Water Enterprise Environmental Stewardship Policy establishes direction for management of SFPUC-managed lands and natural resources affected by operation of the SFPUC water system; and

WHEREAS, This Water Enterprise Environmental Stewardship Policy outlines an implementation strategy to be pursued in partnership and collaboration with public interest and community groups, and local, state, and federal agencies; now, therefore, be it

RESOLVED, That this Commission hereby adopts the Water Enterprise Environmental Stewardship Policy; and, be it

FURTHER RESOLVED, That this Commission directs Water Enterprise staff to integrate this policy into its planning and operation of the SFPUC water system as described in the Policy statement.

I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of June 27, 2006

Secretary, Public Utilities Commission

3

Global Warming Fact Sheet

SFPUC - Hetch Hetchy Water and Power

7 September 2006 – Bruce McGurk, Operations Manager

Background

Scientific and anecdotal evidence show that the snow line is rising in the Sierra Nevada. Global circulation models link increased greenhouse gases with rising temperatures but no significant change in precipitation in California. Many climatologists suggest that a 3° C temperature rise is likely by 2050, and that a 6° C rise is likely by 2100. The temperature rise will raise the snow line farther during this century, and that rise has an effect of the snowpack resource on which we depend for our water supply.

The SFPUC manages three Sierran reservoirs and five local reservoirs to meet water demands in the Bay Area. The Sierran watersheds have typically had significant snowmelt runoff from March through June or July, allowing the reservoirs to be topped off late in the spring season, provide that summer's water supply, and also have reserve storage in case subsequent years are dry.

Physical Characteristics

The Hetch Hetchy basin above O'Shaughnessy dam covers 459 square miles. About 87% is above 6,000 ft, and about 76% is above 7,000 ft. The Cherry Creek basin above Lake Lloyd is 116 square miles, and about 76% is above 6,000 ft, and about 52% is above 7,000 ft. The Eleanor Creek basin above Lake Eleanor is 79 square miles, and about 60% is above 6,000 feet and 26% is above 7,000 feet

Snowmelt and Runoff Patterns

It is expected that by 2025 the snowline will increase to about 7,000 ft. This change means that more of the precipitation falls as rain due to the increased occurrence of warmer storms. It also means that the snowpack, on average, will contain less water and produce less snowmelt runoff. While the total runoff volume is likely to stay about the same, the pattern of the runoff will change. The November-through-March fraction of the runoff will increase, and the April-through-July fraction of the runoff will decrease.

Reservoir Operations and Water Supply

Normal water year variability includes a broad range of annual runoff volume (at least 40% to 200% of average), and each winter's pattern of storms is different. HHWP Operations are based on the "water first" protocol, and discretionary drafts of the reservoir do not occur until forecasting tools confirm that snowmelt runoff will fill the reservoirs. This policy will protect against water supply shortages in the foreseeable future.

Global Warming Analysis

Preliminary results from the HHWP's runoff forecasting model confirm the shift of runoff from late winter months to early winter months between 2000 and 2025. A 3° F warming factor was added to historical temperatures, and runoff by month for the 1948-1995 period was examined. Inflow to all three Sierran reservoirs show the shift, and there is also a slight change in the amount of water estimated to be available to the City under Raker Act provisions. Further analysis will be forthcoming, and if it is deemed necessary, further and more sophisticated modeling may be undertaken. The shift is well within the range of historic variability.

H+H Watershed produces 600,000 ac ft / yr
Storage reservoir capacity — 350,000 ac ft / yr

STAFF REPORT

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

From: **Anthony P. Condotti, Legal Counsel**

Agenda: **September 12, 2006**

Report Date : September 7, 2006

Subject: DISCUSSION AND POSSIBLE DIRECTION CONCERNING ADJUSTMENT OF BOARD MEMBER COMPENSATION FOR ATTENDANCE AT MEETINGS AND FOR SERVICE RENDERED TO THE DISTRICT

Recommendation:

Consider establishment of October 10th, at 7:30 p.m. as the date and time of a public hearing to consider adoption of an ordinance amending Section XII(a) of the Code of Conduct to increase Board Member compensation from the current amount of $100 per meeting attended (or for each day of service rendered on behalf of the District) up to 5% per calendar year since the date of the last adjustment (August 11, 1992).

Background

Currently Board Members receive compensation in the amount of $100.00 for attendance at regular or special meetings of the Board and standing committees, and for other service rendered as a director at the request of the Board, subject to a maximum of $100.00 per day and $400.00 per calendar month. Resolution No. 813, adopted on August 11, 1992, established the current limits. President Ascher recently requested a report on the process for considering a compensation adjustment.

Under the California Water Code, the Board may increase compensation in an amount not to exceed 5% for each calendar year following the operative date of the last adjustment, for a total amount of up to ten days in any calendar month. Any increase in compensation must be adopted by ordinance after a noticed public hearing. Notice of the public hearing must be published in a newspaper of general circulation at least once a week for two successive weeks prior to the public hearing.

An ordinance increasing Board member compensation does not go into effect until 60 days after its adoption, unless a referendum petition is submitted containing signatures of at least 10% of all voters in the District who voted in the last gubernatorial election. In that event, the Board must either repeal the ordinance or place it on the ballot.

Fiscal Impact

An increase in the amount of 5% per calendar year since August, 1992 would result in compensation at a rate of $198.00 per meeting. Assuming Board members attend an average of approximately 10 meetings (collectively) per month, fiscal impact would be approximately $12,000.00 per year.