

TO: MR BILL SALMON

SUBJECT: SOUTH DELTA WATER QUALITY

Enclosed is a copy of the *South Delta Water Quality: 2001 Temporary Barriers Project* report. I also included some preliminary water quality data for Undine Road for 2002-03. Currently, the 2002 report is a work in progress. I will send you a copy as soon as it's completed. If you have any questions or would like any additional information, please call or email me.

Sincerely,



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CALIFORNIA DEPARTMENT OF WATER RESOURCES - CENTRAL DISTRICT

MIDDLE RIVER @ UNDINE ROAD (B9D75011230)
 South Delta Temporary Barriers Project - 2002 Weekly Water Quality Sampling Data

DATE & TIME (mm/dd/yy PST)	FIELD READINGS					BRYTE LAB RESULTS						
	TEMP. (°C)	D.O. (mg/L)	E.C. (uS/cm)	TURB. (NTU)	GAGE HEIGHT (ft)	NH ₃ -N (mg/L)	NO ₂ +NO ₃ -N (mg/L)	ORG.-N (mg/L)	PO ₄ (mg/L)	TURB. (NTU)	CHL.-A (ug/L)	PHEO.-A (ug/L)
3/28/02 7:23	13.2	7.5	948	10.8	5.02							
4/2/02 6:54	17.7	7.8	993		4.88	0.06	1.3	1.0	0.09	26.0	57.80	15.30
4/8/02 5:31	17.1	8.1	868	20.6	4.62							
4/16/02 6:21	16.0	9.2	853		4.53	0.03	1.3	1.2	0.09	13	38.7	10.9
4/28/02 5:35	16.5	8.0	883	10.3	4.60							
4/30/02 5:30	13.1	8.4	374		4.41	0.13	0.96	0.5	0.22	28.0	7.43	3.80
5/7/02 5:33	15.7	8.2	381	12.2	5.20							
5/14/02 5:50	15.6	7.9	419		5.38	0.06	0.97	0.3	0.08	11.6	7.75	3.37
5/21/02 5:41	16.8	7.8	548	8.9	5.43							
5/28/02 5:53	19.4	8.7	561		5.00	0.02	1.21	0.3	0.02	22.0	81.40	11.60
6/4/02 5:40	21.1	8.5	682	24.5	5.35							
6/11/02 5:40	19.8	10.4	754		5.44	0.04	0.80	0.2	0.08	33.0	87.10	28
6/18/02 5:55	21.0	7.2	801	24.8	5.00							
6/25/02 5:55	23.4	8.2	781		5.84	0.11	0.75	0.10	0.03	35.0	55.8	13
7/2/02 6:11	25.7	6.8	731	30.0	5.35							
7/9/02 6:00	23.9	7.7	750		5.31	0.06	1.30	0.8	0.09	29.0	100.8	32.2
7/16/02 5:51	23.6	8.2	761	22.2	5.44							
7/23/02 5:58	23.5	8.2	782		5.44	0.18	1.28	0.2	0.12	33.0	85.4	27
7/30/02 5:58	23.5	8.2	782	18.7	5.44							
8/6/02 5:58	25.0	8.2	851	24.8	5.44							
8/13/02 5:58	25.0	8.2	851	24.8	5.44							
8/20/02 5:58	25.0	8.2	851	24.8	5.44							
8/27/02 5:58	25.0	8.2	851	24.8	5.44							
9/3/02 5:58	25.0	8.2	851	24.8	5.44							
9/10/02 5:58	25.0	8.2	851	24.8	5.44							
9/17/02 5:58	25.0	8.2	851	24.8	5.44							
9/24/02 5:58	25.0	8.2	851	24.8	5.44							
10/1/02 5:58	25.0	8.2	851	24.8	5.44							
10/8/02 5:58	25.0	8.2	851	24.8	5.44							
10/15/02 5:58	25.0	8.2	851	24.8	5.44							
10/22/02 5:58	25.0	8.2	851	24.8	5.44							
10/29/02 5:58	25.0	8.2	851	24.8	5.44							
11/5/02 5:58	25.0	8.2	851	24.8	5.44							
11/12/02 5:58	25.0	8.2	851	24.8	5.44							
11/19/02 5:58	25.0	8.2	851	24.8	5.44							
11/26/02 6:40	11.4	7.7	822		3.30	0.25	1.80	1.1	0.14	6.0	7.04	2.31
12/3/02 6:25	10.1	9.3	924	33.7	4.35							

☐ = Middle River barrier in place from 4/15/02 - 11/21/02.

	TEMP. (°C)	D.O. (mg/L)	E.C. (uS/cm)	TURB. (NTU)	GAGE HEIGHT (ft)	NH ₃ -N (mg/L)	NO ₂ +NO ₃ -N (mg/L)	ORG.-N (mg/L)	PO ₄ (mg/L)	TURB. (NTU)	CHL.-A (ug/L)	PHEO.-A (ug/L)
MAXIMUM	25.70	10.40	884.00	34.80	8.43	0.20	2.10	1.20	0.22	48.00	90.80	42.80
MINIMUM	11.50	5.80	374.00	4.35	4.35	0.02	0.75	0.30	0.03	10.00	5.16	3.17
MEAN	19.39	7.66	700.19	16.24	5.53	0.52	1.28	0.71	0.11	24.89	41.55	18.52
Range	14.20	4.60	510.00	30.45	4.08	0.18	1.35	0.90	0.19	33.00	85.64	39.63
Standard Deviation	3.91	1.09	145.63	7.92	0.84	0.06	0.35	0.29	0.04	9.84	28.55	13.56
Sample Variance	15.28	1.19	21,206.74	62.78	0.70	0.00	0.13	0.08	0.00	98.90	815.13	183.97
Standard Error	3.94	1.07	138.65	7.65	0.88	0.06	0.34	0.29	0.05	10.17	22.24	6.15
Median	20.10	7.85	754.00	15.70	5.15	0.14	1.20	0.85	0.11	25.50	40.55	16.50
Mode	19.40	7.60	784.00	#N/A	6.00	0.18	1.20	0.60	0.12	28.00	#N/A	11.60
Kurtosis	-0.85	0.13	0.31	0.47	4.86	-1.29	0.61	-1.12	1.97	-0.87	-1.19	-0.98
Skewness	-0.37	0.17	-1.19	0.85	1.74	-0.38	0.86	0.23	0.84	0.11	0.21	0.45
Count	32	32	32	16	32	16	16	16	16	16	16	16
Confidence Level (95%)	1.35	0.38	50.46	3.88	0.29	0.03	0.17	0.14	0.02	4.87	13.89	6.65

* All descriptive statistics were calculated from data recorded while the Middle River barrier was in place.