

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2013/10/23	MF	DS1	8:47:14	B	2.0	263.7	0.22	26.28	29.03	94.21	6.46	33.63	7.88	42
2013/10/23	MF	DS1	8:48:07	T	1.2	287.2	0.23	26.28	29.04	94.14	6.45	35.64	7.89	43
2013/10/23	MF	DS1	8:49:13	B	2.1	94.8	0.13	26.28	29.04	94.04	6.45	31.37	7.90	43
2013/10/23	MF	DS1	8:50:07	T	1.0	287.2	0.23	26.29	29.04	94.17	6.45	32.75	7.90	44
2013/10/23	MF	DS1	8:51:08	B	2.1	94.8	0.13	26.29	29.04	94.17	6.45	33.34	7.91	43
2013/10/23	MF	DS1	8:52:06	T	1.1	287.2	0.23	26.30	29.04	94.19	6.45	35.38	7.91	43
2013/10/23	MF	DS2	8:57:53	B	1.9	287.2	0.23	26.27	29.10	96.10	6.59	13.32	7.93	26
2013/10/23	MF	DS2	8:58:48	T	0.9	59.5	0.35	26.26	29.09	96.31	6.60	13.13	7.93	23
2013/10/23	MF	DS2	9:00:05	B	2.1	282.6	0.67	26.26	29.09	95.85	6.57	14.77	7.93	26
2013/10/23	MF	DS2	9:01:09	T	1.0	223.9	0.23	26.26	29.08	95.83	6.57	16.80	7.93	23
2013/10/23	MF	DS2	9:02:32	B	2.0	272.1	0.54	26.25	29.07	95.49	6.55	21.63	7.93	28
2013/10/23	MF	DS2	9:03:22	T	0.9	223.9	0.23	26.25	29.07	95.66	6.56	22.41	7.93	23
2013/10/23	MF	DS3	9:11:15	B	2.0	299.9	0.65	26.29	29.10	95.66	6.56	22.40	7.92	24
2013/10/23	MF	DS3	9:12:07	T	1.0	350.3	0.24	26.27	29.11	95.38	6.54	18.66	7.92	24
2013/10/23	MF	DS3	9:13:07	B	2.1	129.5	0.32	26.27	29.11	95.10	6.52	22.74	7.92	24
2013/10/23	MF	DS3	9:14:09	T	0.9	350.3	0.24	26.28	29.11	95.40	6.54	17.93	7.92	24
2013/10/23	MF	DS3	9:15:08	B	2.0	208.6	0.23	26.27	29.11	94.98	6.51	22.47	7.92	25
2013/10/23	MF	DS3	9:16:17	T	1.0	350.3	0.24	26.28	29.11	95.14	6.52	17.62	7.92	24
2013/10/23	MF	DS4	9:22:41	B	2.0	334.1	0.12	26.30	29.06	94.37	6.47	19.26	7.91	30
2013/10/23	MF	DS4	9:23:40	T	1.2	271.1	0.31	26.31	29.07	94.28	6.46	16.46	7.91	24
2013/10/23	MF	DS4	9:24:37	B	2.1	241.9	0.61	26.30	29.07	93.92	6.43	18.71	7.91	31
2013/10/23	MF	DS4	9:25:17	T	1.0	271.1	0.31	26.31	29.08	94.67	6.48	16.17	7.92	24
2013/10/23	MF	DS4	9:26:08	B	1.9	180.8	0.76	26.30	29.08	94.33	6.46	14.79	7.92	31
2013/10/23	MF	DS4	9:27:30	T	1.1	271.1	0.31	26.29	29.09	94.76	6.49	16.74	7.92	26
2013/10/23	MF	DS5	9:32:21	B	2.9	63.6	0.65	26.33	29.11	93.75	6.42	14.77	7.91	23
2013/10/23	MF	DS5	9:34:11	T	1.0	198.0	0.70	26.37	29.10	95.00	6.50	11.37	7.92	18
2013/10/23	MF	DS5	9:35:07	B	3.0	311.2	0.15	26.36	29.11	93.40	6.39	14.42	7.91	22
2013/10/23	MF	DS5	9:35:54	T	1.0	306.5	0.29	26.40	29.10	95.27	6.51	11.17	7.92	18
2013/10/23	MF	DS5	9:36:44	B	2.9	319.6	0.25	26.37	29.11	93.78	6.42	13.49	7.91	22
2013/10/23	MF	DS5	9:37:29	T	0.9	277.1	0.71	26.39	29.09	95.43	6.53	11.94	7.92	20
2013/10/23	MF	US1	10:24:21	B	3.0	108.2	0.38	26.51	29.08	93.97	6.41	15.03	7.99	19
2013/10/23	MF	US1	10:25:40	T	0.9	19.7	0.10	26.51	29.03	92.37	6.31	12.19	7.94	18
2013/10/23	MF	US1	10:26:16	B	3.0	289.6	0.80	26.49	29.03	91.75	6.27	13.93	7.93	20
2013/10/23	MF	US1	10:27:10	T	1.0	290.2	0.32	26.51	29.03	91.99	6.28	12.62	7.92	19
2013/10/23	MF	US1	10:28:01	B	2.9	289.6	0.80	26.48	29.03	91.51	6.25	13.95	7.91	20
2013/10/23	MF	US1	10:28:56	T	1.1	290.2	0.32	26.50	29.03	91.83	6.27	13.52	7.90	18
2013/10/23	MF	US2	10:34:04	B	2.9	128.9	0.35	26.53	29.06	91.09	6.22	15.16	7.89	23
2013/10/23	MF	US2	10:35:09	T	0.8	208.7	0.37	26.57	29.09	91.04	6.21	12.85	7.89	23
2013/10/23	MF	US2	10:36:07	B	3.0	66.6	0.27	26.55	29.09	90.65	6.18	14.39	7.88	22
2013/10/23	MF	US2	10:37:16	T	1.1	236.7	0.36	26.57	29.10	90.85	6.19	14.04	7.88	23
2013/10/23	MF	US2	10:38:17	B	2.9	252.3	0.29	26.55	29.10	90.45	6.17	15.24	7.88	22
2013/10/23	MF	US2	10:39:23	T	1.0	194.5	0.26	26.58	29.10	90.79	6.19	13.51	7.88	23
2013/10/23	MF	MW1	8:32:14	B	18.9	252.6	0.40	26.73	29.47	84.63	5.74	11.08	8.08	16
2013/10/23	MF	MW1	8:33:14	M	10.3	126.5	0.42	26.72	29.34	85.43	5.80	8.58	8.07	16
2013/10/23	MF	MW1	8:34:04	T	1.0	111.2	0.36	26.68	29.14	87.04	5.92	6.68	8.05	15
2013/10/23	MF	MW1	8:35:29	B	19.2	252.6	0.40	26.76	29.48	83.85	5.69	9.58	8.02	17
2013/10/23	MF	MW1	8:36:14	M	10.6	74.5	0.86	26.70	29.24	85.56	5.82	6.88	8.02	16
2013/10/23	MF	MW1	8:37:04	T	1.1	174.6	0.53	26.68	29.18	86.96	5.92	5.88	8.03	16
2013/10/23	MF	MW1	8:38:24	B	19.5	13.1	0.79	26.75	29.47	83.97	5.70	10.48	8.02	17
2013/10/23	MF	MW1	8:39:09	M	10.6	74.2	0.38	26.74	29.42	84.88	5.76	8.38	8.02	15
2013/10/23	MF	MW1	8:39:59	T	1.0	307.4	0.80	26.71	29.24	86.49	5.88	6.18	8.02	16
2013/10/23	MF	THB1	9:37:24	B	3.1	322.4	0.72	26.46	28.87	93.96	6.43	16.59	8.03	23
2013/10/23	MF	THB1	9:38:14	T	1.0	177.2	0.41	26.48	28.74	93.57	6.40	13.48	8.03	20
2013/10/23	MF	THB1	9:38:59	B	3.0	306.0	0.26	26.46	28.70	92.97	6.36	14.08	8.03	24
2013/10/23	MF	THB1	9:39:59	T	1.2	184.9	0.08	26.47	28.65	93.08	6.37	14.08	8.03	20
2013/10/23	MF	THB1	9:40:59	B	2.9	177.0	0.02	26.46	28.63	92.18	6.31	16.99	8.03	23
2013/10/23	MF	THB1	9:41:59	T	1.1	314.2	0.10	26.48	28.62	92.69	6.36	14.58	8.03	19
2013/10/23	MF	THB2	10:01:50	M	1.3	40.0	0.03	26.76	28.63	87.72	5.98	15.09	7.86	14
2013/10/23	MF	THB2	10:02:46	M	1.3	40.0	0.03	26.77	28.65	87.10	5.93	14.98	7.87	14
2013/10/23	MF	THB2	10:03:54	M	1.3	40.0	0.03	26.89	28.68	87.08	5.92	16.89	7.88	13
2013/10/23	MF	WSR45C	9:10:34	B	11.9	212.8	0.44	26.71	29.14	88.42	6.01	19.29	8.07	22
2013/10/23	MF	WSR45C	9:11:24	M	7.0	135.3	0.14	26.66	28.96	87.93	5.99	14.18	8.06	16
2013/10/23	MF	WSR45C	9:12:09	T	1.1	291.3	0.68	26.58	28.74	90.95	6.21	6.58	8.07	10
2013/10/23	MF	WSR45C	9:15:41	B	12.1	159.6	0.43	26.68	28.90	87.45	5.96	17.69	8.03	24
2013/10/23	MF	WSR45C	9:16:24	M	7.0	226.5	0.30	26.66	28.87	87.36	5.95	13.88	8.03	16
2013/10/23	MF	WSR45C	9:17:09	T	0.9	253.9	0.51	26.63	28.69	90.28	6.16	6.58	8.04	12
2013/10/23	MF	WSR45C	9:18:20	B	12.2	242.6	0.74	26.66	28.90	86.77	5.91	15.29	8.02	22
2013/10/23	MF	WSR45C	9:19:04	M	6.8	213.7	0.79	26.64	28.86	87.28	5.95	11.48	8.02	17
2013/10/23	MF	WSR45C	9:19:59	T	1.0	234.8	0.69	26.61	28.66	90.71	6.20	6.18	8.04	12
2013/10/23	MF	WSR46	10:22:54	B	8.6	310.9	0.88	26.53	28.87	90.69	6.20	24.49	8.05	28
2013/10/23	MF	WSR46	10:23:49	M	5.6	332.5	0.84	26.54	28.78	90.70	6.20	21.29	8.04	24
2013/10/23	MF	WSR46	10:24:44	T	1.1	214.8	0.71	26.62	28.74	91.62	6.25	14.08	8.04	21
2013/10/23	MF	WSR46	10:25:39	B	8.6	300.1	0.77	26.53	28.72	90.21	6.17	22.09	8.03	26
2013/10/23	MF	WSR46	10:26:19	M	5.8	304.7	0.78	26.55	28.71	90.42	6.18	19.89	8.03	25
2013/10/23	MF	WSR46	10:27:19	T	1.1	304.8	0.71	26.59	28.69	91.13	6.23	14.88	8.03	21
2013/10/23	MF	WSR46	10:28:09	B	9.0	192.9	0.21	26.53	28.69	90.13	6.16	19.69	8.03	28
2013/10/23	MF	WSR46	10:28:59	M	5.6	275.0	0.67	26.56	28.69	90.44	6.18	17.49	8.02	26
2013/10/23	MF	WSR46	10:29:59	T	1.0	275.4	1.23	26.56	28.67	90.95	6.22	16.19	8.02	20

Impact Water Quality Monitoring for Dredging Activities at SB CMP 2

Sampling Date	Tide	Station	Time	Depth	Depth (m)	Current Direction	Current Velocity (m/s)	Water Temp (°C)	Salinity (ppt)	D.O. Saturation (%)	D.O. (mg/L)	Turbidity (NTU)	pH	SS (mg/L)
2013/10/23	ME	DS1	13:59:12	B	2.9	103.7	0.45	26.80	29.05	97.12	6.60	9.53	7.83	19
2013/10/23	ME	DS1	14:00:07	T	0.8	51.7	0.37	26.79	29.04	96.80	6.58	8.92	7.87	13
2013/10/23	ME	DS1	14:01:39	B	2.9	181.7	0.79	26.75	29.05	95.51	6.49	13.09	7.88	19
2013/10/23	ME	DS1	14:04:19	T	1.1	256.6	0.41	26.78	29.05	96.50	6.56	11.98	7.90	12
2013/10/23	ME	DS1	14:05:20	B	3.0	117.4	0.56	26.79	29.05	96.60	6.56	15.37	7.90	19
2013/10/23	ME	DS1	14:06:20	T	1.0	256.6	0.41	26.80	29.05	97.12	6.60	9.26	7.91	13
2013/10/23	ME	DS2	14:14:28	B	2.8	10.3	0.38	26.71	29.10	94.05	6.40	12.19	7.91	21
2013/10/23	ME	DS2	14:15:18	T	0.8	172.3	0.54	26.83	29.09	96.74	6.57	12.03	7.92	19
2013/10/23	ME	DS2	14:16:31	B	3.1	211.6	0.13	26.70	29.11	92.58	6.30	14.87	7.91	20
2013/10/23	ME	DS2	14:18:53	T	0.7	209.4	0.60	26.74	29.09	94.00	6.39	22.47	7.90	20
2013/10/23	ME	DS2	14:20:20	B	2.9	28.4	0.38	26.70	29.11	92.47	6.29	20.19	7.90	21
2013/10/23	ME	DS2	14:21:13	T	0.9	353.7	0.89	26.73	29.09	93.93	6.39	26.29	7.90	20
2013/10/23	ME	DS3	14:28:53	B	4.9	52.2	1.08	26.65	29.16	91.24	6.21	9.69	7.89	12
2013/10/23	ME	DS3	14:30:06	M	3.4	34.8	0.39	26.69	29.12	92.90	6.32	8.40	7.90	10
2013/10/23	ME	DS3	14:31:09	T	1.1	137.1	0.49	26.71	29.11	93.63	6.37	8.09	7.91	10
2013/10/23	ME	DS3	14:32:11	B	5.1	357.7	0.55	26.69	29.13	92.51	6.29	8.57	7.90	11
2013/10/23	ME	DS3	14:32:59	M	3.5	99.4	0.34	26.70	29.13	92.64	6.30	8.67	7.90	11
2013/10/23	ME	DS3	14:33:50	T	0.8	62.6	1.50	26.72	29.10	93.91	6.39	8.38	7.91	9
2013/10/23	ME	DS3	14:34:58	B	4.9	52.2	1.08	26.63	29.33	88.80	6.04	10.24	7.89	12
2013/10/23	ME	DS3	14:36:10	M	3.4	102.5	0.45	26.69	29.13	92.33	6.28	8.77	7.90	11
2013/10/23	ME	DS3	14:37:12	T	1.1	62.6	1.50	26.72	29.12	93.48	6.36	8.50	7.91	10
2013/10/23	ME	DS4	14:52:45	B	9.3	14.9	0.54	26.74	29.82	83.77	5.67	15.83	7.87	22
2013/10/23	ME	DS4	14:53:32	M	5.3	172.5	0.43	26.75	29.17	92.42	6.28	8.84	7.90	12
2013/10/23	ME	DS4	14:54:23	T	1.0	88.0	0.61	26.75	29.13	94.06	6.39	7.74	7.90	11
2013/10/23	ME	DS4	14:55:27	B	9.0	2.5	0.33	26.71	29.77	84.61	5.73	12.91	7.87	20
2013/10/23	ME	DS4	14:56:25	M	5.5	66.8	0.62	26.73	29.17	92.58	6.29	8.77	7.90	12
2013/10/23	ME	DS4	14:57:12	T	0.8	284.8	0.16	26.74	29.13	93.70	6.37	7.89	7.90	10
2013/10/23	ME	DS4	14:58:19	B	9.0	2.5	0.33	26.70	29.73	85.30	5.78	10.66	7.87	21
2013/10/23	ME	DS4	14:59:07	M	5.5	51.0	0.42	26.71	29.15	92.10	6.26	9.09	7.90	12
2013/10/23	ME	DS4	15:00:14	T	1.2	284.8	0.16	26.73	29.13	93.55	6.36	8.31	7.90	11
2013/10/23	ME	DS5	15:05:04	B	4.9	282.7	0.23	26.70	29.56	87.90	5.97	8.98	7.88	13
2013/10/23	ME	DS5	15:06:31	M	3.4	355.0	0.51	26.78	29.19	94.04	6.39	7.60	7.90	12
2013/10/23	ME	DS5	15:07:36	T	1.0	40.5	0.33	26.81	29.16	95.33	6.47	7.50	7.91	12
2013/10/23	ME	DS5	15:08:36	B	5.1	18.4	0.54	26.73	29.64	87.31	5.92	10.06	7.88	14
2013/10/23	ME	DS5	15:09:20	M	3.6	202.4	0.45	26.73	29.31	90.79	6.17	8.00	7.89	12
2013/10/23	ME	DS5	15:10:07	T	1.1	201.1	0.44	26.78	29.15	94.74	6.44	7.82	7.91	11
2013/10/23	ME	DS5	15:11:06	B	4.9	282.7	0.23	26.73	29.53	88.61	6.01	9.52	7.89	14
2013/10/23	ME	DS5	15:12:14	M	3.5	358.0	0.34	26.76	29.17	93.74	6.37	7.85	7.90	13
2013/10/23	ME	DS5	15:13:12	T	1.0	335.7	1.77	26.77	29.13	94.92	6.45	7.91	7.91	12
2013/10/23	ME	US1	15:32:51	B	3.2	208.2	0.44	26.70	29.06	99.93	6.80	14.36	7.93	16
2013/10/23	ME	US1	15:33:54	T	1.2	264.5	0.40	26.83	29.07	104.12	7.07	8.85	7.94	11
2013/10/23	ME	US1	15:34:51	B	2.8	27.7	0.41	26.76	29.07	102.62	6.97	12.55	7.94	16
2013/10/23	ME	US1	15:35:35	T	0.9	66.0	0.45	26.84	29.07	105.07	7.13	8.10	7.95	12
2013/10/23	ME	US1	15:36:24	B	3.0	174.7	0.51	26.72	29.06	100.30	6.82	11.95	7.93	16
2013/10/23	ME	US1	15:37:16	T	0.8	73.7	0.10	26.81	29.07	104.61	7.11	8.30	7.95	12
2013/10/23	ME	US2	15:47:07	B	2.8	83.9	0.46	26.61	29.07	104.41	7.12	11.34	7.94	14
2013/10/23	ME	US2	15:48:07	T	1.1	63.0	0.70	26.65	29.08	105.30	7.17	9.55	7.94	11
2013/10/23	ME	US2	15:49:10	B	3.0	352.0	0.55	26.61	29.08	103.11	7.03	12.63	7.93	13
2013/10/23	ME	US2	15:50:27	T	1.0	243.4	0.43	26.62	29.08	102.89	7.01	14.66	7.93	11
2013/10/23	ME	US2	15:51:34	B	2.9	349.4	0.79	26.63	29.08	103.15	7.03	16.15	7.93	14
2013/10/23	ME	US2	15:52:33	T	1.0	72.0	0.42	26.64	29.09	104.29	7.10	10.40	7.94	9
2013/10/23	ME	MW1	15:53:44	B	18.0	202.1	0.34	26.89	30.22	85.33	5.75	7.28	7.98	17
2013/10/23	ME	MW1	15:54:29	M	10.5	339.7	0.89	26.89	30.21	85.54	5.76	7.08	7.98	12
2013/10/23	ME	MW1	15:55:14	T	1.0	39.6	0.75	26.88	30.07	87.06	5.87	5.48	7.98	9
2013/10/23	ME	MW1	15:58:58	B	19.1	349.1	0.16	26.89	30.20	85.46	5.76	8.28	7.97	17
2013/10/23	ME	MW1	15:59:44	M	10.4	247.1	0.38	26.88	30.19	85.37	5.75	6.98	7.97	11
2013/10/23	ME	MW1	16:00:24	T	1.1	103.9	0.69	26.88	30.05	88.08	5.81	5.88	7.98	10
2013/10/23	ME	MW1	16:01:39	B	18.6	268.2	0.56	26.89	30.17	85.08	5.73	7.58	7.98	18
2013/10/23	ME	MW1	16:02:24	M	10.2	14.7	0.57	26.88	30.12	85.49	5.76	5.98	7.98	11
2013/10/23	ME	MW1	16:03:09	T	1.1	62.1	0.83	26.88	30.07	86.40	5.83	5.88	7.98	11
2013/10/23	ME	THB1	14:26:54	B	2.9	186.1	0.29	26.97	28.84	100.53	6.82	7.48	8.10	17
2013/10/23	ME	THB1	14:27:54	T	1.0	179.0	0.23	27.06	28.75	101.84	6.90	7.18	8.09	18
2013/10/23	ME	THB1	14:28:44	B	3.0	178.8	0.42	27.05	28.73	101.14	6.85	7.48	8.09	19
2013/10/23	ME	THB1	14:29:34	T	1.1	139.8	0.83	27.07	28.72	101.65	6.89	7.18	8.09	19
2013/10/23	ME	THB1	14:30:24	B	3.0	125.8	0.83	27.05	28.72	101.46	6.88	7.08	8.08	18
2013/10/23	ME	THB1	14:31:09	T	1.1	218.2	0.93	27.08	28.70	101.66	6.89	7.28	8.08	17
2013/10/23	ME	THB2	15:38:56	M	1.4	40.0	0.03	27.49	28.65	106.03	7.14	10.08	7.89	12
2013/10/23	ME	THB2	15:39:50	M	1.4	40.0	0.03	27.47	28.66	106.09	7.14	10.08	7.90	11
2013/10/23	ME	THB2	15:40:39	M	1.4	40.0	0.03	27.48	28.66	105.96	7.13	10.28	7.90	10
2013/10/23	ME	WSR45C	14:53:04	B	11.9	185.0	0.69	26.81	29.99	85.34	5.77	9.18	8.02	12
2013/10/23	ME	WSR45C	14:54:14	M	7.0	232.5	0.72	26.78	29.70	86.36	5.85	7.68	8.03	10
2013/10/23	ME	WSR45C	14:55:09	T	1.0	102.1	1.65	26.93	28.97	96.32	6.53	6.08	8.06	11
2013/10/23	ME	WSR45C	15:02:29	B	11.9	49.8	0.80	26.79	29.87	84.60	5.72	11.78	8.01	12
2013/10/23	ME	WSR45C	15:03:29	M	7.1	4.0	0.52	26.77	29.88	86.01	5.83	7.68	8.02	11
2013/10/23	ME	WSR45C	15:04:20	T	1.0	111.1	1.66	26.90	28.96	95.07	6.45	6.48	8.05	11
2013/10/23	ME	WSR45C	15:05:29	B	11.8	36.0	0.45	26.80	29.89	84.52	5.71	10.68	8.01	12
2013/10/23	ME	WSR45C	15:06:14	M	7.0	323.6	0.36	26.77	29.71	85.73	5.81	8.08	8.01	10
2013/10/23	ME	WSR45C	15:06:59	T	1.1	321.6	0.37	26.81	29.27	89.86	6.10	6.98	8.02	11
2013/10/23	ME	WSR46	14:00:19	B	9.0	149.9	0.24	26.75	28.99	91.52	6.22	8.98	8.09	18
2013/10/23	ME	WSR46	14:01:14	M	5.5	54.4	0.13	26.72	28.75	92.13	6.28	10.38	8.09	17
2013/10/23	ME	WSR46	14:02:09	T	1.1	169.3	0.08	26.74	28.68	94.13	6.41	11.68	8.09	18
2013/10/23	ME	WSR46	14:03:09	B	8.9	53.3	0.47	26.78	29.06	90.14	6.12	9.98	8.06	19
2013/10/23	ME	WSR46	14:03:59	M	5.5	70.7	0.30	26.73	28.83	90.94	6.19	9.78	8.05	18
2013/10/23	ME	WSR46	14:04:59	T	1.1	94.6	0.58	26.74	28.68	93.95	6.40	12.38	8.06	18
2013/10/23	ME	WSR46	14:05:59	B	9.0	286.3	0.18	26.79	29.12	89.85	6.10	8.68	8.03	20
2013/														