

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)
2013/12/09	MF	DS1	11:28:59	B	2.0	213.2	0.53	20.29	31.20	87.77	6.60	7.78	7.92	5
2013/12/09	MF	DS1	11:30:34	T	1.0	228.8	0.11	20.35	31.02	87.98	6.62	7.48	7.93	8
2013/12/09	MF	DS1	11:31:40	B	2.0	11.9	0.74	20.30	31.19	87.08	6.55	6.08	7.93	4
2013/12/09	MF	DS1	11:32:24	T	1.0	323.5	0.16	20.38	30.98	87.89	6.61	7.18	7.93	8
2013/12/09	MF	DS1	11:33:14	B	2.0	262.0	0.31	20.34	31.10	87.50	6.58	6.28	7.94	4
2013/12/09	MF	DS1	11:34:04	T	1.0	323.5	0.16	20.39	31.01	88.01	6.62	6.68	7.94	11
2013/12/09	MF	DS2	11:41:24	B	2.0	310.2	0.70	20.21	31.48	86.26	6.49	13.38	7.96	15
2013/12/09	MF	DS2	11:42:09	T	0.9	3.7	0.53	20.35	31.21	87.27	6.56	8.68	7.96	16
2013/12/09	MF	DS2	11:42:59	B	2.0	296.2	0.57	20.23	31.45	86.57	6.51	8.68	7.96	13
2013/12/09	MF	DS2	11:44:24	T	1.0	215.7	0.15	20.44	31.10	88.19	6.62	5.48	7.96	12
2013/12/09	MF	DS2	11:45:09	B	2.0	182.7	0.17	20.44	31.10	87.99	6.61	5.78	7.96	12
2013/12/09	MF	DS2	11:45:59	T	1.0	303.8	0.26	20.46	31.07	88.40	6.64	5.18	7.97	10
2013/12/09	MF	DS3	11:50:44	M	1.5	287.0	0.50	20.31	31.48	87.54	6.57	21.88	7.98	17
2013/12/09	MF	DS3	11:51:39	M	1.5	37.0	0.20	20.31	31.47	86.74	6.51	24.48	7.97	22
2013/12/09	MF	DS3	11:52:29	M	1.5	287.0	0.50	20.30	31.48	86.64	6.51	22.98	7.97	25
2013/12/09	MF	DS4	11:58:48	B	2.0	246.2	0.48	20.41	31.52	88.50	6.63	13.38	8.00	12
2013/12/09	MF	DS4	12:00:32	T	1.1	58.9	0.63	20.37	31.57	88.22	6.60	12.28	7.99	13
2013/12/09	MF	DS4	12:01:18	B	2.0	122.8	0.35	20.42	31.56	87.62	6.56	14.38	7.99	13
2013/12/09	MF	DS4	12:02:00	T	1.1	189.9	0.44	20.45	31.56	87.93	6.58	14.68	7.99	14
2013/12/09	MF	DS4	12:05:10	B	2.0	122.7	0.78	20.41	31.57	87.65	6.57	14.88	7.99	11
2013/12/09	MF	DS4	12:05:59	T	1.0	189.9	0.44	20.43	31.57	87.76	6.57	13.68	7.99	14
2013/12/09	MF	DS5	12:13:44	B	4.0	300.6	0.65	20.40	31.55	88.32	6.62	9.28	7.99	10
2013/12/09	MF	DS5	12:14:29	M	3.0	114.4	0.25	20.47	31.52	88.02	6.59	8.98	7.99	10
2013/12/09	MF	DS5	12:15:29	T	1.0	110.4	0.48	20.53	31.46	89.64	6.70	8.08	7.99	5
2013/12/09	MF	DS5	12:16:19	B	4.0	1.3	0.18	20.35	31.56	87.33	6.55	10.58	7.99	8
2013/12/09	MF	DS5	12:17:05	M	3.0	343.5	0.53	20.49	31.52	87.94	6.58	8.68	7.99	8
2013/12/09	MF	DS5	12:17:59	T	1.0	110.4	0.48	20.59	31.47	89.26	6.67	7.78	7.98	8
2013/12/09	MF	DS5	12:18:59	B	4.0	137.4	0.55	20.37	31.53	87.86	6.58	9.18	7.98	8
2013/12/09	MF	DS5	12:19:59	M	3.0	285.9	0.65	20.54	31.51	88.57	6.62	8.18	7.98	8
2013/12/09	MF	DS5	12:21:04	T	1.0	341.1	0.20	20.64	31.46	89.59	6.69	7.38	7.98	7
2013/12/09	MF	US1	13:09:59	B	2.0	49.9	0.71	20.36	30.81	88.26	6.65	6.98	7.97	8
2013/12/09	MF	US1	13:10:59	T	1.0	182.3	0.58	20.49	30.82	89.38	6.72	5.68	7.98	5
2013/12/09	MF	US1	13:11:59	B	2.0	282.6	0.41	20.47	30.81	89.59	6.73	5.08	7.98	6
2013/12/09	MF	US1	13:12:59	T	1.0	182.3	0.58	20.49	30.81	89.81	6.75	4.98	7.98	9
2013/12/09	MF	US1	13:13:59	B	2.0	220.9	0.57	20.49	30.81	89.71	6.74	5.08	7.97	5
2013/12/09	MF	US1	13:14:59	T	1.0	175.9	0.70	20.50	30.81	89.82	6.75	4.98	7.97	8
2013/12/09	MF	US2	13:21:25	B	3.0	277.3	0.16	20.35	30.84	87.54	6.59	6.28	7.95	10
2013/12/09	MF	US2	13:22:14	T	1.0	137.6	0.70	20.49	30.82	88.10	6.61	4.98	7.95	5
2013/12/09	MF	US2	13:23:14	B	3.0	299.4	0.42	20.40	30.83	87.35	6.57	5.78	7.95	6
2013/12/09	MF	US2	13:24:09	T	1.0	155.0	0.44	20.54	30.81	88.27	6.63	4.78	7.95	4
2013/12/09	MF	US2	13:24:59	B	3.0	269.0	0.93	20.45	30.83	87.77	6.60	4.98	7.95	5
2013/12/09	MF	US2	13:25:59	T	1.0	283.1	0.50	20.53	30.82	88.29	6.63	4.58	7.95	4
2013/12/09	MF	MW1	11:45:40	B	18.0	21.4	0.24	20.54	31.79	89.74	6.70	6.75	7.75	8
2013/12/09	MF	MW1	11:46:40	M	9.8	137.3	0.14	20.55	31.77	89.63	6.69	6.70	7.76	6
2013/12/09	MF	MW1	11:47:39	T	1.4	52.2	0.27	20.55	31.76	89.90	6.71	6.09	7.77	6
2013/12/09	MF	MW1	11:48:48	B	18.0	0.5	0.58	20.54	31.82	89.63	6.69	7.71	7.78	7
2013/12/09	MF	MW1	11:49:40	M	10.4	279.2	0.46	20.54	31.77	89.75	6.70	6.44	7.78	7
2013/12/09	MF	MW1	11:50:39	T	1.0	80.9	0.56	20.55	31.71	89.89	6.71	6.01	7.79	6
2013/12/09	MF	MW1	11:51:43	B	18.1	336.0	0.40	20.54	31.84	89.57	6.68	7.05	7.80	7
2013/12/09	MF	MW1	11:52:40	M	10.2	196.1	0.04	20.54	31.78	89.57	6.68	6.36	7.81	8
2013/12/09	MF	MW1	11:53:39	T	1.3	277.1	0.31	20.44	31.27	89.61	6.72	5.36	7.80	4
2013/12/09	MF	THB1	12:56:49	B	3.1	284.3	0.10	20.47	31.19	94.05	7.05	6.89	7.87	6
2013/12/09	MF	THB1	12:57:37	T	1.1	48.8	0.30	20.59	31.01	95.13	7.13	5.10	7.87	5
2013/12/09	MF	THB1	12:58:28	B	2.9	66.2	0.63	20.47	31.16	93.53	7.02	6.41	7.87	4
2013/12/09	MF	THB1	12:59:20	T	1.0	283.1	0.07	20.55	31.05	94.72	7.10	5.39	7.87	4
2013/12/09	MF	THB1	13:00:08	B	3.2	116.6	0.41	20.49	31.17	93.53	7.01	6.36	7.87	4
2013/12/09	MF	THB1	13:01:08	T	0.9	23.0	0.24	20.58	31.03	94.84	7.10	5.28	7.88	6
2013/12/09	MF	THB2	13:03:49	M	1.4	40.0	0.03	20.75	31.17	104.34	7.79	7.69	7.42	7
2013/12/09	MF	THB2	13:04:50	M	1.4	40.0	0.03	20.77	31.16	101.93	7.60	7.28	7.42	8
2013/12/09	MF	THB2	13:05:46	M	1.4	40.0	0.03	20.79	31.17	102.80	7.66	6.58	7.43	5
2013/12/09	MF	WSR45C	12:27:55	B	11.9	10.6	0.33	20.34	31.14	90.94	6.84	11.60	7.85	6
2013/12/09	MF	WSR45C	12:28:51	M	7.1	253.5	0.48	20.34	31.01	91.13	6.86	6.99	7.85	7
2013/12/09	MF	WSR45C	12:29:53	T	1.3	221.1	0.58	20.60	30.82	93.84	7.04	4.11	7.85	4
2013/12/09	MF	WSR45C	12:31:05	B	11.3	248.8	0.47	20.33	31.11	90.89	6.84	9.29	7.84	9
2013/12/09	MF	WSR45C	12:32:10	M	7.2	243.2	0.28	20.33	30.97	91.20	6.87	6.07	7.85	6
2013/12/09	MF	WSR45C	12:33:09	T	1.3	309.6	0.61	20.59	30.82	93.68	7.02	4.19	7.86	5
2013/12/09	MF	WSR45C	12:34:11	B	12.2	285.3	0.10	20.34	31.19	90.63	6.81	11.35	7.86	10
2013/12/09	MF	WSR45C	12:35:13	M	7.3	235.4	0.60	20.33	31.07	90.99	6.85	7.48	7.85	6
2013/12/09	MF	WSR45C	12:36:10	T	0.9	113.2	0.18	20.60	30.82	93.73	7.03	4.27	7.85	4
2013/12/09	MF	WSR46	13:35:24	B	9.0	311.0	0.62	20.29	30.98	91.78	6.91	14.84	7.86	10
2013/12/09	MF	WSR46	13:36:25	M	5.5	283.9	0.92	20.30	30.98	91.81	6.91	12.65	7.85	9
2013/12/09	MF	WSR46	13:37:23	T	1.3	219.1	0.77	20.52	30.91	93.48	7.02	5.03	7.85	5
2013/12/09	MF	WSR46	13:38:25	B	9.0	311.0	0.62	20.28	30.99	91.54	6.90	15.26	7.85	14
2013/12/09	MF	WSR46	13:39:24	M	5.4	212.8	0.09	20.31	30.97	91.67	6.90	11.06	7.85	9
2013/12/09	MF	WSR46	13:40:20	T	1.1	21.2	0.35	20.58	30.91	93.73	7.03	4.59	7.85	7
2013/12/09	MF	WSR46	13:41:23	B	8.9	311.0	0.62	20.29	30.98	91.51	6.89	15.73	7.85	12
2013/12/09	MF	WSR46	13:42:23	M	5.5	304.7	0.42	20.29	30.98	91.64	6.90	13.53	7.85	10
2013/12/09	MF	WSR46	13:43:21	T	1.1	201.6	0.76	20.56	30.91	93.64	7.02	5.09	7.85	5

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)
2013/12/09	ME	DS1	17:27:09	B	3.0	97.5	0.33	20.46	30.88	91.39	6.87	13.68	7.88	16
2013/12/09	ME	DS1	17:28:04	T	1.0	163.2	0.56	20.45	30.88	89.59	6.73	14.48	7.90	15
2013/12/09	ME	DS1	17:28:59	B	3.0	164.9	0.42	20.44	30.89	88.70	6.67	16.28	7.90	16
2013/12/09	ME	DS1	17:29:59	T	1.0	352.5	0.58	20.44	30.88	88.31	6.64	16.18	7.91	16
2013/12/09	ME	DS1	17:30:59	B	3.0	226.4	0.29	20.45	30.89	88.11	6.62	16.58	7.92	17
2013/12/09	ME	DS1	17:31:59	T	1.0	352.5	0.58	20.45	30.88	88.32	6.64	15.88	7.92	17
2013/12/09	ME	DS2	17:40:29	B	4.0	152.4	0.10	20.27	30.97	85.48	6.44	6.78	7.93	7
2013/12/09	ME	DS2	17:41:19	M	3.0	31.5	0.92	20.31	30.91	85.19	6.42	6.38	7.93	6
2013/12/09	ME	DS2	17:42:04	T	1.0	309.9	0.24	20.39	30.87	86.10	6.48	7.28	7.93	6
2013/12/09	ME	DS2	17:42:59	B	4.0	223.6	0.41	20.28	30.95	85.00	6.41	6.48	7.93	6
2013/12/09	ME	DS2	17:44:00	M	3.0	177.9	0.59	20.33	30.90	85.31	6.43	6.68	7.94	6
2013/12/09	ME	DS2	17:44:59	T	1.0	125.0	0.88	20.47	30.85	87.22	6.55	6.88	7.93	7
2013/12/09	ME	DS2	17:45:59	B	4.0	38.9	0.22	20.28	30.96	85.02	6.41	6.38	7.93	7
2013/12/09	ME	DS2	17:46:59	M	3.0	257.0	0.67	20.30	30.93	85.23	6.42	6.38	7.93	6
2013/12/09	ME	DS2	17:48:00	T	1.0	125.0	0.88	20.44	30.86	86.85	6.53	6.68	7.94	7
2013/12/09	ME	DS3	17:54:09	B	4.1	35.1	0.36	20.31	30.89	86.09	6.49	5.48	7.95	5
2013/12/09	ME	DS3	17:54:59	M	3.0	114.8	0.92	20.41	30.85	85.90	6.46	6.88	7.94	7
2013/12/09	ME	DS3	17:55:59	T	1.0	70.2	0.25	20.54	30.84	87.82	6.59	3.98	7.94	4
2013/12/09	ME	DS3	17:56:59	B	4.0	141.2	1.09	20.32	30.89	85.31	6.43	5.48	7.94	4
2013/12/09	ME	DS3	17:57:59	M	3.0	102.6	0.38	20.43	30.85	86.02	6.47	6.78	7.94	6
2013/12/09	ME	DS3	17:58:59	T	1.0	70.2	0.25	20.53	30.85	87.94	6.60	3.98	7.95	4
2013/12/09	ME	DS3	17:59:59	B	4.0	27.4	0.25	20.29	30.92	85.34	6.43	5.38	7.94	7
2013/12/09	ME	DS3	18:00:59	M	3.0	31.2	0.40	20.40	30.86	85.85	6.46	6.08	7.93	7
2013/12/09	ME	DS3	18:01:59	T	1.0	70.2	0.25	20.54	30.85	87.97	6.60	4.08	7.94	3
2013/12/09	ME	DS4	18:08:24	B	5.0	213.5	0.84	20.35	31.11	84.40	6.35	6.68	7.94	7
2013/12/09	ME	DS4	18:09:29	M	3.5	128.1	0.48	20.50	30.85	84.30	6.33	6.28	7.92	7
2013/12/09	ME	DS4	18:10:20	T	1.0	49.3	0.21	20.58	30.83	87.33	6.55	3.98	7.92	5
2013/12/09	ME	DS4	18:11:04	B	5.0	114.2	0.24	20.37	31.28	83.51	6.27	7.28	7.92	5
2013/12/09	ME	DS4	18:11:59	M	3.5	324.7	0.59	20.30	30.90	84.53	6.37	6.08	7.92	4
2013/12/09	ME	DS4	18:12:59	T	1.0	40.0	0.50	20.57	30.84	87.85	6.59	3.58	7.93	4
2013/12/09	ME	DS4	18:14:04	B	4.8	19.8	0.37	20.37	31.29	82.53	6.20	7.68	7.93	6
2013/12/09	ME	DS4	18:15:04	M	3.5	334.0	0.18	20.31	30.98	84.15	6.34	6.38	7.93	4
2013/12/09	ME	DS4	18:15:59	T	1.0	61.4	0.32	20.34	30.90	84.96	6.40	5.68	7.93	4
2013/12/09	ME	DS5	18:22:40	B	7.0	328.0	0.35	20.37	31.37	83.20	6.24	8.08	7.94	7
2013/12/09	ME	DS5	18:23:29	M	4.5	319.1	0.13	20.33	30.97	83.31	6.27	6.58	7.93	5
2013/12/09	ME	DS5	18:24:24	T	1.0	84.9	1.91	20.62	30.83	87.55	6.56	3.68	7.94	3
2013/12/09	ME	DS5	18:25:24	B	7.0	332.7	0.18	20.38	31.38	82.31	6.18	7.78	7.94	9
2013/12/09	ME	DS5	18:26:29	M	4.5	87.2	0.80	20.33	31.04	82.83	6.23	6.98	7.93	6
2013/12/09	ME	DS5	18:27:29	T	1.0	288.1	0.33	20.62	30.83	87.57	6.56	4.48	7.94	3
2013/12/09	ME	DS5	18:28:29	B	7.0	90.8	0.44	20.38	31.37	82.34	6.18	8.58	7.94	7
2013/12/09	ME	DS6	18:29:14	M	4.5	124.8	0.26	20.33	30.99	83.95	6.24	6.58	7.93	6
2013/12/09	ME	DS5	18:30:19	T	1.0	41.4	0.84	20.60	30.83	87.39	6.55	3.78	7.94	3
2013/12/09	ME	US1	19:01:04	B	3.0	167.4	0.28	20.53	31.09	90.27	6.77	6.88	7.95	7
2013/12/09	ME	US1	19:01:59	T	1.0	120.2	1.84	20.55	30.98	90.99	6.82	4.48	7.95	2
2013/12/09	ME	US1	19:02:59	B	3.0	331.6	0.60	20.52	31.11	89.58	6.72	6.88	7.94	6
2013/12/09	ME	US1	19:03:59	T	1.0	255.7	0.33	20.54	30.98	90.80	6.81	4.78	7.95	3
2013/12/09	ME	US1	19:04:59	B	3.0	110.7	0.56	20.49	31.15	89.60	6.72	7.48	7.94	6
2013/12/09	ME	US1	19:05:59	T	1.0	255.7	0.33	20.54	30.97	90.82	6.81	4.78	7.95	4
2013/12/09	ME	US2	19:11:14	B	1.9	166.1	0.40	20.66	31.20	91.47	6.84	6.18	7.93	5
2013/12/09	ME	US2	19:12:14	T	1.0	172.8	0.08	20.67	31.10	90.98	6.80	4.38	7.93	4
2013/12/09	ME	US2	19:12:59	B	2.0	105.9	0.11	20.64	31.23	90.88	6.79	6.68	7.93	5
2013/12/09	ME	US2	19:13:59	T	1.0	88.0	0.50	20.66	31.08	90.89	6.80	4.58	7.93	3
2013/12/09	ME	US2	19:14:59	B	2.0	195.1	1.13	20.64	31.22	90.80	6.79	6.58	7.93	4
2013/12/09	ME	US2	19:15:59	T	1.0	63.2	0.28	20.67	31.07	91.01	6.81	4.38	7.93	4
2013/12/09	ME	MW1	19:25:40	B	19.0	10.2	0.23	20.66	31.95	91.15	6.78	3.96	7.88	3
2013/12/09	ME	MW1	19:26:40	M	10.1	316.0	0.42	20.66	31.98	90.67	6.74	3.75	7.87	3
2013/12/09	ME	MW1	19:27:33	T	1.4	40.9	0.59	20.65	31.90	90.67	6.75	3.98	7.87	3
2013/12/09	ME	MW1	19:28:37	B	19.2	340.6	0.12	20.66	31.96	90.30	6.72	3.76	7.87	3
2013/12/09	ME	MW1	19:29:41	M	10.2	212.8	0.47	20.65	31.92	90.39	6.73	3.93	7.87	3
2013/12/09	ME	MW1	19:30:30	T	1.3	25.2	0.77	20.61	31.83	90.68	6.76	3.42	7.87	3
2013/12/09	ME	MW1	19:31:34	B	19.2	5.9	0.56	20.66	31.94	90.33	6.72	3.71	7.87	4
2013/12/09	ME	MW1	19:32:26	M	10.7	88.6	0.37	20.66	31.93	90.29	6.72	3.60	7.87	3
2013/12/09	ME	MW1	19:33:24	T	1.0	53.7	0.13	20.63	31.85	90.49	6.74	3.74	7.86	4
2013/12/09	ME	THB1	17:33:09	B	2.9	240.3	0.70	20.81	31.05	98.37	7.34	3.92	7.75	3
2013/12/09	ME	THB1	17:34:08	T	1.1	317.0	0.99	20.73	30.89	97.32	7.28	3.48	7.83	3
2013/12/09	ME	THB1	17:35:11	B	3.0	203.4	0.43	20.80	31.02	96.83	7.23	4.05	7.85	3
2013/12/09	ME	THB1	17:36:15	T	1.2	288.6	0.73	20.74	30.91	97.01	7.25	3.57	7.86	3
2013/12/09	ME	THB1	17:37:44	B	2.8	8.2	0.89	20.78	31.02	96.36	7.19	3.87	7.87	5
2013/12/09	ME	THB1	17:38:28	T	1.0	353.2	0.96	20.74	30.93	96.97	7.25	3.47	7.88	3
2013/12/09	ME	THB2	17:35:20	M	1.4	40.0	0.03	21.13	31.71	100.84	7.45	8.29	7.45	6
2013/12/09	ME	THB2	17:36:28	M	1.4	40.0	0.03	21.13	31.69	99.73	7.37	6.88	7.44	6
2013/12/09	ME	THB2	17:37:15	M	1.4	40.0	0.03	21.08	31.66	99.61	7.37	7.59	7.44	6
2013/12/09	ME	WSR45C	18:29:22	B	11.8	67.4	0.34	20.51	31.71	89.42	6.68	7.51	7.87	5
2013/12/09	ME	WSR45C	18:30:20	M	7.2	293.7	0.83	20.37	31.30	89.68	6.75	7.01	7.87	5
2013/12/09	ME	WSR45C	18:31:20	T	1.3	59.3	1.66	20.62	30.88	94.88	7.11	3.34	7.87	3
2013/12/09	ME	WSR45C	18:32:20	B	12.0	68.0	0.36	20.52	31.74	89.50	6.68	7.01	7.87	8
2013/12/09	ME	WSR45C	18:33:16	M	6.9	137.3	0.41	20.37	31.28	89.87	6.75	7.02	7.87	7
2013/12/09	ME	WSR45C	18:34:14	T	0.9	37.9	0.40	20.64	30.87	95.07	7.12	3.27	7.88	4
2013/12/09	ME	WSR45C	18:35:16	B	12.1	74.0	0.73	20.50	31.69	89.47	6.69	7.10	7.87	7
2013/12/09	ME	WSR45C	18:36:16	M	6.6	337.9	0.41	20.37	31.20	90.38	6.79	6.27	7.87	6
2013/12/09	ME	WSR45C	18:37:10	T	1.2	265.9	0.16	20.56	30.88	94.61	7.10	3.58	7.87	2
2013/12/09	ME	WSR46	18:03:35	B	8.9	251.1	0.63	20.29	31.02	92.41	6.96	8.81	7.88	10
2013/12/09	ME	WSR46	18:04:40	M	5.5	44.9	0.79	20.29	31.01	92.42	6.96	8.17	7.88	9
2013/12/09	ME	WSR46	18:05:31	T	1.3	81.1	0.48	20.50	29.74	93.51	7.07	4.54	7.84	4
2013/12/09	ME	WSR46	18:06:28	B	9.0	339.3	0.17	20.29	31.02	91.99	6.93	9.28	7.88	8
2013/12/09	ME	WSR46	18:07:29	M	5.7	71.3	0.73	20.30	30.98	92.24	6.95	7.57	7.86	