

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)
2013/09/02	MF	DS1	17:02:51	B	1.9	222.5	0.44	28.28	17.63	92.80	6.55	15.80	7.86	16
2013/09/02	MF	DS1	17:03:45	T	1.0	221.8	0.60	29.28	13.94	107.70	7.63	4.20	7.93	6
2013/09/02	MF	DS1	17:04:56	B	2.0	192.7	0.59	28.36	17.28	94.40	6.67	14.20	7.88	17
2013/09/02	MF	DS1	17:05:49	T	1.0	251.0	0.58	29.18	14.34	106.20	7.52	5.20	7.93	6
2013/09/02	MF	DS1	17:06:47	B	2.0	255.3	1.61	28.46	16.55	96.90	6.86	14.00	7.90	15
2013/09/02	MF	DS1	17:08:35	T	1.0	266.2	0.61	29.12	14.44	106.40	7.54	5.10	7.94	5
2013/09/02	MF	DS2	17:13:48	B	1.8	49.5	0.49	28.99	14.94	108.20	7.67	12.80	7.96	11
2013/09/02	MF	DS2	17:15:18	T	1.0	212.0	0.20	29.13	14.43	109.70	7.77	6.20	7.97	4
2013/09/02	MF	DS2	17:16:08	B	2.0	233.5	0.55	28.68	16.32	111.30	7.86	17.10	8.00	10
2013/09/02	MF	DS2	17:17:19	T	0.9	213.2	0.47	29.18	14.15	109.80	7.78	6.10	7.97	4
2013/09/02	MF	DS2	17:18:19	B	2.1	345.1	0.24	28.70	16.17	109.40	7.73	17.40	7.99	12
2013/09/02	MF	DS2	17:19:08	T	1.0	91.8	0.64	29.27	13.87	110.10	7.81	4.50	7.97	3
2013/09/02	MF	DS3	17:25:13	B	2.2	177.3	1.21	28.91	15.94	113.80	8.02	12.50	8.00	5
2013/09/02	MF	DS3	17:26:14	T	1.1	334.9	0.63	29.20	14.07	112.90	8.01	4.10	7.99	5
2013/09/02	MF	DS3	17:27:37	B	1.9	309.4	0.67	28.89	16.07	122.20	8.62	8.60	8.05	4
2013/09/02	MF	DS3	17:29:19	T	1.0	281.8	0.67	29.16	14.29	113.20	8.02	5.80	7.99	4
2013/09/02	MF	DS3	17:30:20	B	2.0	234.2	0.28	28.85	16.12	113.50	8.01	12.50	8.01	5
2013/09/02	MF	DS3	17:33:02	T	1.1	285.9	0.74	29.18	14.11	113.20	8.03	4.30	8.00	5
2013/09/02	MF	DS4	17:41:54	B	3.1	153.4	0.31	28.98	15.90	132.50	9.34	5.20	8.16	7
2013/09/02	MF	DS4	17:43:02	T	0.9	273.8	0.95	29.23	13.98	115.10	8.16	4.10	8.00	5
2013/09/02	MF	DS4	17:44:08	B	3.1	134.3	0.18	28.93	15.50	124.60	8.80	5.70	8.09	6
2013/09/02	MF	DS4	17:45:08	T	1.0	252.6	1.11	29.19	14.11	114.80	8.14	4.20	8.00	4
2013/09/02	MF	DS4	17:46:28	B	3.2	227.7	0.02	28.93	16.38	127.90	9.00	5.60	8.10	7
2013/09/02	MF	DS4	17:47:22	T	0.9	319.1	0.54	29.19	14.18	114.50	8.11	4.20	7.98	6
2013/09/02	MF	DS5	17:52:55	B	5.3	346.3	0.38	27.59	21.71	62.50	4.36	5.20	7.70	9
2013/09/02	MF	DS5	17:53:59	M	3.4	122.1	1.12	29.15	16.42	125.80	8.82	7.60	8.09	7
2013/09/02	MF	DS5	17:54:33	T	0.8	180.3	0.39	29.34	14.12	120.60	8.53	4.00	8.05	4
2013/09/02	MF	DS5	17:55:12	B	5.2	149.1	0.17	27.56	22.02	62.90	4.39	5.30	7.69	9
2013/09/02	MF	DS5	17:56:08	M	3.5	253.5	0.63	29.16	16.16	126.00	8.84	6.50	8.10	7
2013/09/02	MF	DS5	17:57:19	T	1.0	266.1	1.23	29.40	13.81	118.80	8.41	4.00	8.03	4
2013/09/02	MF	DS5	17:58:32	B	5.1	269.1	0.56	27.66	21.10	63.80	4.46	5.50	7.69	8
2013/09/02	MF	DS5	17:59:19	M	3.6	302.0	0.35	29.00	16.90	110.70	7.75	9.50	8.00	8
2013/09/02	MF	DS5	18:00:13	T	1.0	266.1	1.23	29.06	15.20	123.50	8.72	4.90	8.06	4
2013/09/02	MF	US1	18:19:17	B	3.3	65.1	0.25	29.61	23.61	58.80	4.11	12.10	7.88	14
2013/09/02	MF	US1	18:20:24	T	1.0	262.9	0.66	27.18	21.49	71.50	5.03	4.00	7.73	4
2013/09/02	MF	US1	18:21:22	B	3.1	150.8	0.55	26.92	23.42	57.70	4.03	10.40	7.68	14
2013/09/02	MF	US1	18:22:14	T	0.9	275.0	0.93	27.16	21.58	69.00	4.85	4.80	7.73	5
2013/09/02	MF	US1	18:23:08	B	3.1	264.1	0.75	26.89	23.69	55.90	3.90	11.80	7.67	14
2013/09/02	MF	US1	18:24:12	T	0.8	209.7	0.35	28.07	18.86	87.40	6.15	3.50	7.83	6
2013/09/02	MF	US2	18:53:43	B	3.2	291.4	0.35	26.54	24.74	53.50	3.74	6.10	7.66	5
2013/09/02	MF	US2	18:55:18	T	1.0	63.0	0.46	27.72	18.94	87.30	6.18	3.10	7.81	5
2013/09/02	MF	US2	18:56:33	B	2.9	324.9	0.39	26.79	23.69	58.90	4.13	5.40	7.68	6
2013/09/02	MF	US2	18:57:13	T	0.9	42.7	0.46	27.90	18.03	89.10	6.32	3.20	7.85	4
2013/09/02	MF	US2	18:59:06	B	3.1	328.2	0.20	26.76	23.53	61.30	4.30	5.40	7.68	6
2013/09/02	MF	US2	19:00:11	T	1.0	300.3	0.60	27.67	19.02	82.00	5.81	2.90	7.79	4
2013/09/02	MF	MW1	18:38:24	B	18.9	307.9	0.46	24.56	31.23	44.70	3.11	8.80	7.55	8
2013/09/02	MF	MW1	18:39:19	M	10.5	127.0	0.64	25.66	28.13	52.50	3.65	6.00	7.63	9
2013/09/02	MF	MW1	18:40:09	T	1.1	276.7	0.18	26.23	26.14	60.00	4.19	4.10	7.68	6
2013/09/02	MF	MW1	18:41:14	B	18.9	235.9	0.55	24.54	31.36	41.90	2.92	9.20	7.52	8
2013/09/02	MF	MW1	18:41:59	M	10.5	229.2	0.22	25.52	28.41	48.10	3.35	6.80	7.60	9
2013/09/02	MF	MW1	18:42:59	T	1.1	212.9	0.46	26.21	26.25	60.30	4.20	3.90	7.70	6
2013/09/02	MF	MW1	18:43:59	B	18.7	33.6	0.25	24.52	31.41	51.90	3.61	7.00	7.54	8
2013/09/02	MF	MW1	18:44:59	M	10.4	128.5	0.41	25.62	28.16	49.20	3.43	7.10	7.64	7
2013/09/02	MF	MW1	18:45:59	T	1.0	129.1	0.59	26.23	25.98	60.10	4.19	4.20	7.71	7
2013/09/02	MF	THB1	17:09:44	B	3.0	137.5	0.59	28.65	16.55	103.20	7.29	6.80	7.90	6
2013/09/02	MF	THB1	17:10:34	T	1.1	241.8	0.83	28.95	14.87	107.30	7.61	5.90	7.94	6
2013/09/02	MF	THB1	17:11:39	B	3.0	137.5	0.59	28.39	17.16	85.80	6.06	9.10	7.78	6
2013/09/02	MF	THB1	17:12:24	T	1.1	241.8	0.83	28.86	15.09	103.80	7.36	6.10	7.95	4
2013/09/02	MF	THB1	17:13:14	B	2.9	264.1	0.58	28.53	18.52	96.50	6.76	7.70	7.79	6
2013/09/02	MF	THB1	17:13:59	T	1.2	241.8	0.83	29.10	14.34	101.30	7.18	6.70	7.98	5
2013/09/02	MF	THB2	17:07:43	M	1.0	40.0	0.03	29.93	16.32	102.10	7.06	6.80	7.45	6
2013/09/02	MF	THB2	17:08:55	M	1.0	40.0	0.03	29.87	16.34	104.20	7.21	7.10	7.54	4
2013/09/02	MF	THB2	17:09:46	M	1.0	40.0	0.03	29.92	16.29	103.40	7.15	7.00	7.54	6
2013/09/02	MF	WSR45C	17:36:05	B	11.8	314.3	0.42	25.35	29.39	44.00	3.06	28.10	7.50	24
2013/09/02	MF	WSR45C	17:36:59	M	7.0	261.3	0.72	25.87	27.80	45.50	3.16	14.10	7.53	11
2013/09/02	MF	WSR45C	17:37:59	T	1.1	305.3	0.91	27.84	18.26	86.80	6.15	3.50	7.88	5
2013/09/02	MF	WSR45C	17:39:01	B	11.8	15.3	0.52	25.31	29.47	48.40	3.37	26.80	7.49	23
2013/09/02	MF	WSR45C	17:39:59	M	7.0	232.5	1.01	25.96	27.63	45.70	3.18	14.40	7.54	11
2013/09/02	MF	WSR45C	17:40:59	T	1.1	152.3	0.87	28.12	17.33	100.80	7.15	4.00	7.99	5
2013/09/02	MF	WSR45C	17:43:29	B	10.8	337.9	0.67	25.70	28.62	42.60	2.96	26.60	7.55	24
2013/09/02	MF	WSR45C	17:44:24	M	6.9	204.8	0.46	25.87	27.97	44.50	3.09	18.90	7.58	11
2013/09/02	MF	WSR45C	17:45:14	T	1.1	232.0	1.10	27.95	17.90	90.10	6.39	4.40	7.97	6
2013/09/02	MF	WSR46	16:42:54	B	8.6	229.1	0.45	25.52	29.04	46.00	3.19	28.90	6.92	20
2013/09/02	MF	WSR46	16:43:49	M	5.7	276.2	0.81	27.33	21.20	64.10	4.51	7.50	7.13	7
2013/09/02	MF	WSR46	16:44:39	T	1.0	56.5	0.97	29.26	13.52	95.00	6.75	5.00	7.43	4
2013/09/02	MF	WSR46	16:45:49	B	7.9	304.6	0.57	25.54	29.00	43.20	3.00	27.20	6.89	21
2013/09/02	MF	WSR46	16:46:34	M	5.5	292.1	0.59	27.47	20.76	64.30	4.53	7.40	7.14	6
2013/09/02	MF	WSR46	16:47:29	T	1.1	1.0	0.56	29.12	14.47	96.70	6.85	4.80	7.49	5
2013/09/02	MF	WSR46	16:48:19	B	8.4	237.6	0.47	25.52	29.03	46.90	3.26	27.40	6.99	22
2013/09/02	MF	WSR46	16:49:54	M	5.5	276.7	1.00	27.56	20.72	64.90	4.56	8.50	7.26	8
2013/09/02	MF	WSR46	16:50:34	T	1.0	244.1	0.41	29.05	14.84	94.00	6.66	4.90	7.56	4

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)
2013/09/02	ME	DS1	10:10:25	B	3.2	56.1	0.24	28.05	16.77	90.40	6.44	5.70	7.79	8
2013/09/02	ME	DS1	10:12:10	T	1.3	187.8	0.43	28.41	14.68	87.00	6.23	8.20	7.75	11
2013/09/02	ME	DS1	10:13:20	B	3.2	187.3	0.35	28.02	17.22	83.60	5.94	4.20	7.80	9
2013/09/02	ME	DS1	10:14:10	T	1.5	187.8	0.43	28.41	14.20	88.90	6.38	10.30	7.78	11
2013/09/02	ME	DS1	10:15:08	B	3.1	187.3	0.35	28.03	17.05	87.90	6.25	4.20	7.82	9
2013/09/02	ME	DS1	10:16:22	T	1.2	181.6	0.14	28.37	14.71	88.50	6.34	8.70	7.78	10
2013/09/02	ME	DS2	10:21:54	B	3.3	33.5	0.60	28.11	16.10	88.30	6.31	4.30	7.83	5
2013/09/02	ME	DS2	10:22:51	T	1.0	327.6	0.46	28.52	13.87	85.90	6.17	4.00	7.73	3
2013/09/02	ME	DS2	10:23:25	B	3.2	23.6	0.41	28.08	16.63	90.60	6.46	4.10	7.84	5
2013/09/02	ME	DS2	10:24:52	T	0.9	181.0	0.22	28.38	13.98	86.40	6.22	4.00	7.77	3
2013/09/02	ME	DS2	10:25:47	B	3.2	56.2	0.41	28.00	16.73	90.70	6.47	4.10	7.85	5
2013/09/02	ME	DS2	10:26:57	T	0.8	153.5	0.39	28.27	14.54	86.70	6.23	4.30	7.78	4
2013/09/02	ME	DS3	10:32:12	B	7.0	65.1	0.15	26.58	24.33	56.00	3.92	6.00	7.72	7
2013/09/02	ME	DS3	10:33:31	M	4.5	48.8	0.51	28.17	16.89	88.40	6.28	4.00	7.85	4
2013/09/02	ME	DS3	10:34:11	T	0.9	68.6	0.37	28.25	14.67	87.50	6.28	4.10	7.79	3
2013/09/02	ME	DS3	10:35:31	B	7.1	340.3	0.35	26.39	25.05	55.60	3.89	6.70	7.72	8
2013/09/02	ME	DS3	10:36:22	M	4.6	101.0	0.16	28.16	17.02	87.30	6.20	3.90	7.85	5
2013/09/02	ME	DS3	10:37:19	T	1.1	243.1	0.18	28.29	14.51	85.20	6.12	4.00	7.77	3
2013/09/02	ME	DS3	10:38:25	B	7.1	103.2	0.31	26.57	24.40	53.30	3.73	7.40	7.71	8
2013/09/02	ME	DS3	10:39:28	M	4.8	61.7	0.50	28.16	17.07	87.40	6.21	3.90	7.86	5
2013/09/02	ME	DS3	10:40:33	T	1.0	21.4	0.79	28.23	14.71	87.60	6.29	4.10	7.80	2
2013/09/02	ME	DS4	10:46:16	B	3.3	52.5	0.24	28.11	16.94	91.90	6.54	3.00	7.88	2
2013/09/02	ME	DS4	10:47:17	T	0.9	34.1	0.81	28.57	13.50	89.00	6.40	3.50	7.78	3
2013/09/02	ME	DS4	10:48:57	B	3.2	341.4	0.24	28.20	16.27	95.20	6.79	3.10	7.90	3
2013/09/02	ME	DS4	10:49:44	T	1.0	107.1	0.68	28.62	13.32	88.90	6.39	3.60	7.77	3
2013/09/02	ME	DS4	10:50:39	M	3.3	49.2	0.37	28.26	16.29	92.90	6.61	2.90	7.87	3
2013/09/02	ME	DS4	10:51:21	T	0.9	117.9	0.45	28.64	13.31	89.50	6.44	3.70	7.78	2
2013/09/02	ME	DS5	10:56:27	B	2.3	56.1	0.07	28.40	13.78	92.20	6.64	3.50	7.80	3
2013/09/02	ME	DS5	10:57:30	T	1.1	256.4	0.17	28.67	13.00	90.10	6.48	3.70	7.77	3
2013/09/02	ME	DS5	10:58:17	B	2.2	61.2	0.06	28.44	13.60	91.00	6.56	3.80	7.79	3
2013/09/02	ME	DS5	10:59:07	T	1.1	115.5	0.20	28.58	13.17	90.40	6.51	3.70	7.77	3
2013/09/02	ME	DS5	11:00:13	B	1.9	229.0	0.19	28.66	12.96	90.20	6.50	3.50	7.77	2
2013/09/02	ME	DS5	11:01:47	T	0.9	268.6	0.04	28.70	12.87	89.90	6.47	3.60	7.76	4
2013/09/02	ME	US1	11:30:33	B	3.2	353.3	0.14	28.02	18.05	80.20	5.68	10.10	7.80	11
2013/09/02	ME	US1	11:31:58	T	0.8	256.8	0.47	28.65	15.79	104.30	7.39	7.10	7.96	9
2013/09/02	ME	US1	11:32:52	B	3.1	344.5	0.33	27.94	18.69	74.90	5.29	10.60	7.76	11
2013/09/02	ME	US1	11:33:51	T	0.9	359.9	0.75	28.26	16.67	94.00	6.67	6.50	7.90	8
2013/09/02	ME	US1	11:35:01	B	2.9	345.5	0.33	27.97	18.57	75.60	5.34	11.00	7.77	11
2013/09/02	ME	US1	11:36:10	T	1.1	93.3	1.44	28.23	16.97	93.70	6.65	7.80	7.88	9
2013/09/02	ME	US2	11:45:52	B	1.8	188.6	0.09	28.11	18.03	83.20	5.98	4.90	7.82	8
2013/09/02	ME	US2	11:46:51	T	0.9	13.7	0.22	28.28	17.39	90.20	6.38	5.30	7.86	6
2013/09/02	ME	US2	11:48:00	B	2.1	165.8	0.27	28.03	18.71	75.00	5.29	5.60	7.77	8
2013/09/02	ME	US2	11:49:39	T	0.9	268.8	0.09	28.18	17.74	86.50	6.11	4.80	7.84	7
2013/09/02	ME	US2	11:50:46	B	1.8	353.9	0.16	28.16	17.85	85.20	6.02	4.90	7.83	8
2013/09/02	ME	US2	11:51:49	T	1.0	347.8	0.34	28.36	17.14	95.10	6.73	5.00	7.90	7
2013/09/02	ME	MW1	9:48:39	B	18.9	322.1	0.15	24.13	32.58	39.30	2.74	4.80	7.04	5
2013/09/02	ME	MW1	9:49:24	M	10.8	62.4	0.23	24.95	41.80	2.91	3.60	7.11	6	
2013/09/02	ME	MW1	9:50:24	T	0.8	88.2	0.41	27.99	16.04	77.30	5.54	3.00	7.55	3
2013/09/02	ME	MW1	9:51:34	B	18.5	57.0	0.33	24.23	32.38	39.70	2.76	4.50	7.13	5
2013/09/02	ME	MW1	9:52:29	M	10.6	276.7	0.27	26.40	23.95	59.80	4.21	2.50	7.39	6
2013/09/02	ME	MW1	9:53:14	T	1.2	95.0	0.69	27.92	16.32	82.70	5.92	3.00	7.62	3
2013/09/02	ME	MW1	9:54:19	B	18.7	9.5	0.31	24.23	32.43	40.60	2.83	3.90	7.23	6
2013/09/02	ME	MW1	9:55:09	M	10.6	162.7	0.33	26.48	23.92	57.40	4.04	2.50	7.48	7
2013/09/02	ME	MW1	9:55:59	T	1.0	78.6	0.73	27.89	16.18	82.60	5.92	3.20	7.71	4
2013/09/02	ME	THB1	11:06:09	B	3.1	112.8	0.60	28.27	18.20	85.00	5.98	6.80	8.02	10
2013/09/02	ME	THB1	11:06:59	T	1.1	353.2	0.44	29.01	16.15	108.50	7.63	5.20	8.32	6
2013/09/02	ME	THB1	11:07:59	B	3.0	13.1	0.25	28.19	18.49	74.90	5.27	4.70	8.02	3
2013/09/02	ME	THB1	11:08:59	T	1.1	353.9	0.24	28.61	16.32	106.30	7.52	5.80	8.31	10
2013/09/02	ME	THB1	11:09:59	B	3.0	295.0	0.24	28.20	18.46	75.70	5.33	5.00	8.03	6
2013/09/02	ME	THB1	11:10:59	T	1.1	190.8	0.91	29.04	16.19	103.90	7.30	5.40	8.29	3
2013/09/02	ME	THB2	11:32:08	M	1.3	40.0	0.03	28.87	16.41	70.60	4.97	4.10	7.17	5
2013/09/02	ME	THB2	11:33:23	M	1.3	40.0	0.03	28.90	16.37	72.90	5.13	4.80	7.26	5
2013/09/02	ME	THB2	11:34:25	M	1.3	40.0	0.03	28.90	16.43	73.40	5.16	5.00	7.28	5
2013/09/02	ME	WSR45C	10:39:14	B	11.8	269.6	0.46	24.42	31.95	39.20	2.73	14.50	7.54	15
2013/09/02	ME	WSR45C	10:40:04	M	7.0	27.0	0.69	25.78	28.06	46.10	3.20	3.60	7.64	6
2013/09/02	ME	WSR45C	10:40:59	T	1.0	86.6	0.18	29.10	10.48	85.10	6.17	5.00	7.93	4
2013/09/02	ME	WSR45C	10:41:59	B	11.8	27.0	0.29	24.45	31.94	38.60	2.69	15.00	7.59	16
2013/09/02	ME	WSR45C	10:42:59	M	7.0	27.0	0.69	25.80	27.97	47.20	3.28	2.80	7.68	6
2013/09/02	ME	WSR45C	10:43:59	T	0.8	86.6	0.18	28.53	13.16	83.60	6.03	4.70	7.95	4
2013/09/02	ME	WSR45C	10:44:59	B	11.9	9.9	0.23	24.54	31.69	38.20	2.66	13.70	7.60	16
2013/09/02	ME	WSR45C	10:45:59	M	6.9	44.0	0.47	25.85	27.75	47.90	3.33	2.40	7.71	5
2013/09/02	ME	WSR45C	10:46:59	T	1.1	31.7	0.33	28.25	14.13	83.20	6.00	4.50	7.96	4
2013/09/02	ME	WSR46	11:41:34	B	9.0	86.4	0.30	26.17	27.05	52.70	3.66	12.10	7.57	11
2013/09/02	ME	WSR46	11:42:29	M	5.5	110.6	0.66	26.52	26.10	50.60	3.51	6.20	7.57	6
2013/09/02	ME	WSR46	11:43:24	T	0.9	129.6	0.77	29.00	10.03	84.80	6.17	5.60	7.75	3
2013/09/02	ME	WSR46	11:44:24	B	8.7	134.4	0.59	26.21	26.98	49.70	3.45	13.00	7.56	4
2013/09/02	ME	WSR46	11:45:09	M	5.4	102.2	0.31	26.35	26.41	49.00	3.41	7.10	7.55	3
2013/09/02	ME	WSR46	11:46:09	T	1.2	129.6	0.77	28.52	13.23	76.60	5.52	4.90	7.70	5
2013/09/02	ME	WSR46	11:47:24	B	8.8	178.0	0.46	26.25	26.90	50.20	3.48	12.10	7.58	4
2013/09/02	ME	WSR46	11:48:19	M	5.4	92.4	0.48	26.39	26.35	48.60	3.37	7.30	7.57	4
2013/09/02	ME	WSR46	11:48:59	T	0.9	97.2	0.92	28.83	11.52	80.70	5.84	5.50	7.77	4

Remarks: No current speeds and directions were measured at Station THB2.