

Impact Water Quality Monitoring for Dredging Activities at SB CMP 1

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)
2013/05/02	MF	DS1	10:09:54	B	3.2	51.4	0.12	22.43	27.39	91.12	6.74	8.50	7.77	8
2013/05/02	MF	DS1	10:11:17	T	1.0	127.9	0.37	22.32	27.22	91.43	6.78	8.20	7.79	8
2013/05/02	MF	DS1	10:12:20	B	3.1	95.9	0.54	22.39	27.34	90.43	6.70	8.30	7.80	10
2013/05/02	MF	DS1	10:13:17	T	1.0	186.4	0.31	22.30	27.15	91.93	6.83	9.10	7.80	9
2013/05/02	MF	DS1	10:14:08	B	3.2	326.2	0.22	22.35	27.31	90.63	6.72	8.80	7.80	8
2013/05/02	MF	DS1	10:15:41	T	1.0	197.3	0.29	22.31	27.16	91.83	6.82	9.20	7.80	8
2013/05/02	MF	DS2	10:26:57	B	2.9	202.3	0.23	22.19	27.20	91.45	6.80	27.60	7.77	35
2013/05/02	MF	DS2	10:27:42	T	1.0	203.4	0.33	22.15	26.70	91.85	6.86	12.30	7.78	9
2013/05/02	MF	DS2	10:28:35	B	2.9	301.5	0.40	22.19	27.19	89.65	6.67	24.00	7.78	36
2013/05/02	MF	DS2	10:29:15	T	0.8	251.6	0.32	22.16	26.69	91.75	6.85	11.60	7.78	9
2013/05/02	MF	DS2	10:30:41	B	2.8	55.4	0.61	22.21	27.22	89.65	6.67	30.80	7.78	35
2013/05/02	MF	DS2	10:31:31	T	0.9	349.4	0.32	22.16	26.73	91.65	6.84	11.60	7.77	11
2013/05/02	MF	DS3	10:39:45	B	3.1	280.3	0.37	22.39	27.54	90.06	6.66	21.80	7.77	24
2013/05/02	MF	DS3	10:41:06	T	0.9	188.8	0.75	22.25	26.80	92.66	6.91	7.10	7.78	6
2013/05/02	MF	DS3	10:42:19	B	3.1	143.6	0.34	22.42	27.34	89.26	6.61	16.90	7.79	22
2013/05/02	MF	DS3	10:43:17	T	0.9	246.8	0.35	22.25	26.55	92.37	6.89	7.50	7.78	6
2013/05/02	MF	DS3	10:44:21	B	3.2	287.2	0.23	22.40	27.45	89.27	6.61	17.00	7.79	23
2013/05/02	MF	DS3	10:45:37	T	1.0	39.4	0.41	22.25	26.55	92.37	6.89	6.90	7.77	5
2013/05/02	MF	DS4	10:52:28	B	2.1	297.2	0.29	22.36	26.70	92.98	6.92	8.40	7.74	9
2013/05/02	MF	DS4	10:53:37	T	1.1	297.8	0.68	22.34	26.55	93.08	6.93	7.60	7.77	7
2013/05/02	MF	DS4	10:54:45	B	2.1	216.9	0.03	22.37	26.83	91.78	6.82	8.50	7.79	8
2013/05/02	MF	DS4	10:55:38	T	1.1	241.6	0.43	22.32	26.51	93.18	6.94	7.50	7.78	7
2013/05/02	MF	DS4	10:56:34	B	2.0	233.6	0.12	22.34	26.62	92.58	6.89	7.80	7.78	7
2013/05/02	MF	DS4	10:57:29	T	1.0	296.7	0.35	22.35	26.68	92.29	6.87	8.00	7.78	8
2013/05/02	MF	DS5	11:04:05	B	3.2	252.8	0.49	22.31	26.40	94.20	7.02	7.50	7.75	7
2013/05/02	MF	DS5	11:05:07	T	1.0	309.3	0.52	22.32	26.38	93.20	6.95	8.10	7.78	6
2013/05/02	MF	DS5	11:06:10	B	3.2	307.1	0.29	22.32	26.41	92.20	6.87	8.40	7.79	8
2013/05/02	MF	DS5	11:07:08	T	1.0	197.9	0.23	22.33	26.40	92.70	6.91	8.40	7.79	7
2013/05/02	MF	DS5	11:08:43	B	3.1	213.8	0.52	22.34	26.54	91.50	6.81	9.70	7.78	9
2013/05/02	MF	DS5	11:09:39	T	1.0	276.8	0.47	22.33	26.45	92.30	6.88	8.80	7.78	6
2013/05/02	MF	US1	11:45:35	B	4.2	263.9	0.47	22.46	28.72	88.14	6.47	6.10	7.84	8
2013/05/02	MF	US1	11:46:17	M	3.0	194.9	0.32	22.48	28.52	88.84	6.52	5.10	7.85	5
2013/05/02	MF	US1	11:47:12	T	1.0	321.9	0.61	22.55	27.43	91.55	6.76	5.90	7.85	6
2013/05/02	MF	US1	11:48:14	B	4.3	302.0	0.31	22.47	28.60	87.74	6.44	6.80	7.85	6
2013/05/02	MF	US1	11:49:12	M	2.9	27.6	0.16	22.50	28.23	88.35	6.50	5.70	7.84	5
2013/05/02	MF	US1	11:50:11	T	0.8	135.3	0.54	22.54	27.40	92.25	6.81	6.00	7.84	6
2013/05/02	MF	US1	11:51:18	B	4.0	313.1	0.30	22.48	28.37	87.95	6.46	5.00	7.84	6
2013/05/02	MF	US1	11:52:07	M	3.0	23.5	0.32	22.55	28.12	88.25	6.49	5.00	7.83	6
2013/05/02	MF	US1	11:53:21	T	0.9	58.5	0.44	22.55	27.46	91.46	6.75	6.00	7.83	6
2013/05/02	MF	US2	11:59:53	B	6.2	328.9	0.26	22.42	29.71	87.96	6.42	5.10	7.84	6
2013/05/02	MF	US2	12:00:52	M	4.0	132.7	0.04	22.47	28.62	87.16	6.40	5.90	7.82	7
2013/05/02	MF	US2	12:01:42	T	1.1	285.7	0.18	22.53	27.45	91.67	6.77	6.50	7.83	7
2013/05/02	MF	US2	12:02:38	B	6.0	270.3	0.51	22.43	29.59	87.86	6.42	5.30	7.84	6
2013/05/02	MF	US2	12:03:58	M	3.8	38.3	0.23	22.49	27.99	88.97	6.55	5.90	7.82	7
2013/05/02	MF	US2	12:05:01	T	1.0	187.9	0.32	22.53	27.45	92.47	6.83	6.50	7.82	7
2013/05/02	MF	US2	12:06:07	B	6.2	336.5	0.21	22.43	29.67	87.67	6.40	4.80	7.84	6
2013/05/02	MF	US2	12:07:07	M	4.0	116.2	0.32	22.47	28.48	86.77	6.37	5.70	7.81	6
2013/05/02	MF	US2	12:08:37	T	0.9	283.1	0.63	22.50	27.46	91.88	6.79	6.60	7.81	6
2013/05/02	MF	MW1	10:15:53	B	18.9	95.5	0.18	22.31	30.85	86.20	6.26	3.97	7.90	6
2013/05/02	MF	MW1	10:17:18	M	10.0	271.4	0.13	22.27	30.49	86.52	6.31	3.87	7.91	5
2013/05/02	MF	MW1	10:18:17	T	1.0	355.2	0.30	22.31	30.11	87.53	6.39	2.77	7.92	3
2013/05/02	MF	MW1	10:20:09	B	18.5	279.3	0.06	22.29	30.65	86.55	6.30	3.97	7.94	5
2013/05/02	MF	MW1	10:21:01	M	10.7	161.8	0.08	22.28	30.33	87.47	6.38	3.17	7.94	4
2013/05/02	MF	MW1	10:22:18	T	1.1	355.2	0.30	22.32	30.10	87.98	6.42	2.87	7.94	3
2013/05/02	MF	MW1	10:23:35	B	18.5	279.3	0.06	22.30	30.64	86.20	6.27	3.97	7.95	6
2013/05/02	MF	MW1	10:24:22	M	10.2	349.9	0.06	22.29	30.34	86.91	6.34	3.47	7.95	5
2013/05/02	MF	MW1	10:25:25	T	1.0	355.2	0.30	22.33	30.17	87.82	6.41	2.77	7.94	3
2013/05/02	MF	THB1	11:31:32	B	2.9	186.7	0.05	22.40	27.07	91.73	6.80	6.97	7.79	8
2013/05/02	MF	THB1	11:32:30	T	1.1	117.7	0.42	22.40	26.89	89.11	6.62	7.17	7.79	6
2013/05/02	MF	THB1	11:33:08	B	3.0	179.2	0.42	22.38	26.93	88.91	6.60	5.67	7.79	7
2013/05/02	MF	THB1	11:34:01	T	1.2	117.7	0.42	22.36	26.76	90.04	6.69	5.97	7.79	7
2013/05/02	MF	THB1	11:35:01	B	2.9	157.4	0.20	22.37	26.75	89.95	6.69	6.47	7.79	8
2013/05/02	MF	THB1	11:36:01	T	1.0	117.7	0.42	22.38	26.61	90.77	6.75	5.47	7.79	6
2013/05/02	MF	THB2	11:45:35	M	1.5	40.0	0.05	22.72	26.46	82.57	6.11	4.51	7.85	4
2013/05/02	MF	THB2	11:46:37	M	1.5	40.0	0.05	22.73	26.38	82.29	6.09	5.50	7.88	4
2013/05/02	MF	THB2	11:47:31	M	1.5	40.0	0.05	22.73	26.43	82.72	6.12	5.01	7.89	4
2013/05/02	MF	WSR45C	11:01:25	B	11.8	212.1	0.20	22.41	29.79	88.39	6.45	8.87	7.89	11
2013/05/02	MF	WSR45C	11:02:23	M	6.4	210.1	0.32	22.42	29.24	87.20	6.38	5.67	7.88	7
2013/05/02	MF	WSR45C	11:03:06	T	1.1	157.8	0.30	22.36	27.63	90.33	6.68	5.87	7.86	6
2013/05/02	MF	WSR45C	11:04:41	B	11.8	235.5	0.19	22.40	29.70	87.83	6.42	7.17	7.88	10
2013/05/02	MF	WSR45C	11:05:22	M	6.5	210.1	0.32	22.43	29.11	86.83	6.36	6.07	7.87	9
2013/05/02	MF	WSR45C	11:06:10	T	1.0	157.8	0.30	22.38	27.70	90.07	6.66	6.37	7.86	6
2013/05/02	MF	WSR45C	11:07:18	B	11.7	171.0	0.14	22.41	29.79	86.45	6.31	7.77	7.88	10
2013/05/02	MF	WSR45C	11:08:02	M	6.6	219.7	0.32	22.43	29.14	86.56	6.34	5.77	7.87	7
2013/05/02	MF	WSR45C	11:08:47	T	1.1	195.7	0.63	22.39	28.00	88.59	6.54	6.17	7.85	7
2013/05/02	MF	WSR46	12:15:14	B	8.9	197.8	0.41	22.38	29.55	87.54	6.40	12.77	7.83	12
2013/05/02	MF	WSR46	12:16:16	M	5.1	186.6	0.29	22.29	28.33	90.91	6.71	4.27	7.82	5
2013/05/02	MF	WSR46	12:17:27	T	1.2	202.3	0.61	22.34	27.61	95.11	7.04	3.37	7.82	3
2013/05/02	MF	WSR46	12:19:01	B	9.0	171.2	0.35	22.38	29.51	89.42	6.54	11.07	7.81	10
2013/05/02	MF	WSR46	12:20:01	M	4.9	194.8	0.46	22.30	28.24	91.58	6.76	4.47	7.81	7
2013/05/02	MF	WSR46	12:21:01	T	1.1	202.3	0.61	22.33	27.65	95.06	7.04	3.47	7.81	4
2013/05/02	MF	WSR46	12:22:19	B	9.0	224.7	0.15	22.40	29.43	87.73	6.42	9.97	7.82	12
2013/05/02	MF	WSR46	12:23:06	M	5.0	177.3	0.34	22.31	27.93	92.23	6.82	4.17	7.81	5
2013/05/02	MF	WSR46	12:24:01	T	1.0	216.8	0.35	22.33	27.64	95.20	7.05	3.47	7.81	4

Impact Water Quality Monitoring for Dredging Activities at SB CMP 1

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)
2013/05/02	ME	DS1	16:57:20	B	3.2	20.8	0.64	22.53	27.49	94.22	6.95	32.80	7.73	55
2013/05/02	ME	DS1	16:58:56	T	0.9	65.2	0.37	22.52	27.36	93.41	6.90	22.50	7.83	22
2013/05/02	ME	DS1	17:00:27	B	3.2	89.5	0.33	22.52	27.60	91.11	6.72	30.90	7.84	54
2013/05/02	ME	DS1	17:01:15	T	0.9	61.7	0.40	22.54	27.33	93.10	6.88	16.60	7.85	21
2013/05/02	ME	DS1	17:05:36	B	3.0	90.7	0.72	22.52	27.60	92.08	6.79	43.20	7.86	54
2013/05/02	ME	DS1	17:06:31	T	0.9	107.7	0.94	22.52	27.34	93.67	6.92	20.20	7.86	20
2013/05/02	ME	DS2	17:22:16	B	3.2	36.0	0.60	22.45	27.24	93.59	6.93	8.50	7.88	13
2013/05/02	ME	DS2	17:23:10	T	1.0	308.3	0.45	22.46	27.23	93.08	6.89	8.10	7.89	8
2013/05/02	ME	DS2	17:25:26	B	3.0	69.6	0.45	22.52	27.35	92.77	6.85	10.80	7.91	14
2013/05/02	ME	DS2	17:26:24	T	1.1	68.3	0.39	22.44	27.15	92.57	6.86	6.80	7.90	9
2013/05/02	ME	DS2	17:27:12	B	3.0	92.8	0.51	22.51	27.33	92.56	6.84	9.50	7.91	14
2013/05/02	ME	DS2	17:28:21	T	0.9	32.1	0.62	22.42	27.13	92.55	6.86	6.40	7.89	8
2013/05/02	ME	DS3	17:33:41	B	8.2	74.4	0.56	22.50	28.75	85.75	6.29	13.00	7.88	22
2013/05/02	ME	DS3	17:34:39	M	5.0	112.5	0.72	22.53	27.75	89.33	6.58	11.40	7.89	18
2013/05/02	ME	DS3	17:35:42	T	1.0	58.8	0.42	22.38	26.98	91.82	6.82	6.30	7.88	7
2013/05/02	ME	DS3	17:36:47	B	8.0	42.1	0.54	22.52	28.34	84.93	6.24	12.40	7.88	20
2013/05/02	ME	DS3	17:37:51	M	5.2	26.7	0.32	22.54	27.64	89.21	6.58	11.80	7.89	19
2013/05/02	ME	DS3	17:38:53	T	0.9	53.0	0.78	22.36	26.93	91.20	6.77	6.50	7.87	9
2013/05/02	ME	DS3	17:39:49	B	8.0	31.1	0.30	22.52	28.49	84.92	6.23	12.30	7.88	21
2013/05/02	ME	DS3	17:40:45	M	5.0	60.6	0.50	22.55	27.48	89.90	6.63	13.70	7.89	19
2013/05/02	ME	DS3	17:41:36	T	0.9	67.7	0.44	22.37	26.97	91.29	6.78	6.90	7.87	8
2013/05/02	ME	DS4	17:46:57	B	3.2	101.1	0.24	22.55	27.53	93.65	6.91	6.20	7.86	12
2013/05/02	ME	DS4	17:47:59	T	0.8	55.7	0.31	22.46	27.35	89.26	6.60	7.20	7.86	9
2013/05/02	ME	DS4	17:49:08	B	2.9	97.7	0.73	22.55	27.56	91.15	6.72	8.10	7.88	13
2013/05/02	ME	DS4	17:50:06	T	1.0	26.3	0.36	22.53	27.46	90.94	6.71	7.20	7.88	11
2013/05/02	ME	DS4	17:51:08	B	3.0	68.9	1.18	22.55	27.49	92.63	6.83	6.60	7.89	13
2013/05/02	ME	DS4	17:52:08	T	1.0	61.6	0.39	22.51	27.42	91.03	6.72	6.80	7.87	9
2013/05/02	ME	DS5	17:56:40	B	2.1	112.4	0.57	22.46	27.77	88.92	6.56	8.50	7.83	12
2013/05/02	ME	DS5	17:57:38	T	1.0	48.9	0.41	22.47	27.72	88.12	6.50	8.90	7.86	11
2013/05/02	ME	DS5	17:58:43	B	2.0	258.8	0.25	22.47	27.80	87.31	6.44	9.10	7.86	14
2013/05/02	ME	DS5	17:59:25	T	0.9	122.0	0.19	22.47	27.70	87.91	6.49	9.00	7.86	12
2013/05/02	ME	DS5	18:00:16	B	2.1	127.0	0.82	22.47	27.82	87.11	6.42	9.20	7.86	12
2013/05/02	ME	DS5	18:01:09	T	1.0	84.3	0.35	22.49	27.70	87.50	6.46	9.20	7.86	13
2013/05/02	ME	US1	18:36:39	B	2.8	322.7	0.18	22.49	27.99	90.30	6.65	11.10	7.91	12
2013/05/02	ME	US1	18:37:27	T	1.1	357.0	0.21	22.39	26.96	93.67	6.95	7.30	7.92	6
2013/05/02	ME	US1	18:38:16	B	3.1	66.7	0.86	22.50	27.97	87.71	6.46	10.80	7.92	11
2013/05/02	ME	US1	18:39:10	T	1.1	74.0	0.67	22.38	26.87	93.07	6.91	7.30	7.93	6
2013/05/02	ME	US1	18:40:21	B	3.0	60.5	0.55	22.49	27.73	88.29	6.51	11.00	7.93	11
2013/05/02	ME	US1	18:41:10	T	1.0	10.0	0.41	22.35	26.79	93.85	6.98	6.40	7.92	7
2013/05/02	ME	US2	18:47:26	B	2.0	126.0	0.01	22.42	27.56	91.73	6.78	14.80	7.88	14
2013/05/02	ME	US2	18:48:19	T	0.8	63.6	0.77	22.33	26.71	94.11	7.00	10.60	7.90	10
2013/05/02	ME	US2	18:49:17	B	2.2	140.2	0.20	22.40	27.21	91.13	6.75	13.00	7.90	13
2013/05/02	ME	US2	18:50:15	T	1.0	59.5	0.31	22.35	26.77	93.51	6.95	9.90	7.90	10
2013/05/02	ME	US2	18:51:14	B	1.9	91.6	0.26	22.40	27.25	90.32	6.69	14.50	7.90	14
2013/05/02	ME	US2	18:52:11	T	1.0	191.9	0.58	22.34	26.75	93.49	6.95	10.10	7.90	11
2013/05/02	ME	MW1	19:02:15	B	18.8	116.4	0.21	22.36	30.04	89.15	6.50	4.67	7.88	10
2013/05/02	ME	MW1	19:03:15	M	9.9	117.5	0.16	22.37	29.89	89.36	6.52	3.47	7.88	7
2013/05/02	ME	MW1	19:04:12	T	1.1	180.9	0.72	22.42	28.63	93.26	6.85	3.07	7.87	8
2013/05/02	ME	MW1	19:07:16	B	18.7	141.1	0.47	22.38	29.75	88.96	6.50	5.57	7.87	10
2013/05/02	ME	MW1	19:08:15	M	8.4	161.7	0.68	22.39	29.58	89.76	6.56	4.17	7.86	8
2013/05/02	ME	MW1	19:09:13	T	1.2	172.2	0.80	22.43	28.77	92.37	6.78	3.57	7.85	8
2013/05/02	ME	MW1	19:12:17	B	18.3	16.8	0.18	22.40	29.69	89.17	6.51	7.07	7.85	11
2013/05/02	ME	MW1	19:13:10	M	10.0	131.9	0.59	22.41	29.41	90.27	6.60	4.77	7.85	8
2013/05/02	ME	MW1	19:14:03	T	0.5	202.7	0.83	22.41	28.50	93.48	6.87	3.67	7.84	8
2013/05/02	ME	THB1	17:30:45	B	2.9	201.9	0.13	22.48	26.91	90.85	6.73	7.97	7.83	12
2013/05/02	ME	THB1	17:32:16	T	1.1	129.8	0.19	22.40	26.74	91.15	6.77	5.87	7.85	9
2013/05/02	ME	THB1	17:33:10	B	2.9	248.3	0.50	22.47	26.97	90.65	6.72	7.97	7.86	14
2013/05/02	ME	THB1	17:34:01	T	1.1	129.8	0.19	22.42	26.71	91.45	6.79	5.87	7.85	9
2013/05/02	ME	THB1	17:35:02	B	2.8	8.1	0.13	22.48	27.00	90.05	6.67	7.37	7.86	14
2013/05/02	ME	THB1	17:36:02	T	1.3	129.8	0.19	22.36	26.66	91.66	6.82	5.57	7.85	9
2013/05/02	ME	THB2	16:56:09	M	1.5	40.0	0.05	22.65	26.41	82.79	6.14	5.20	7.69	7
2013/05/02	ME	THB2	16:57:08	M	1.5	40.0	0.05	22.67	26.39	83.16	6.16	5.20	7.70	7
2013/05/02	ME	THB2	16:58:07	M	1.6	40.0	0.05	22.70	26.39	82.91	6.14	4.81	7.70	8
2013/05/02	ME	WSR45C	17:56:23	B	11.8	111.0	0.59	22.44	29.59	85.77	6.26	11.47	7.85	22
2013/05/02	ME	WSR45C	17:57:39	M	6.6	134.6	0.48	22.46	29.04	85.18	6.24	7.27	7.86	16
2013/05/02	ME	WSR45C	17:58:30	T	1.1	189.8	0.44	22.52	27.49	92.28	6.81	7.87	7.86	12
2013/05/02	ME	WSR45C	18:04:09	B	11.7	201.0	0.50	22.46	29.44	83.88	6.13	9.47	7.86	21
2013/05/02	ME	WSR45C	18:05:05	M	6.5	201.0	0.68	22.46	28.98	85.18	6.24	7.47	7.86	18
2013/05/02	ME	WSR45C	18:06:02	T	1.3	254.2	0.80	22.43	27.22	90.79	6.72	8.07	7.84	12
2013/05/02	ME	WSR45C	18:07:16	B	11.8	252.6	0.27	22.43	29.77	83.48	6.09	9.57	7.86	21
2013/05/02	ME	WSR45C	18:08:08	M	6.5	232.3	0.41	22.45	29.33	84.39	6.17	7.37	7.85	17
2013/05/02	ME	WSR45C	18:09:00	T	1.4	254.2	0.80	22.42	27.21	90.69	6.72	7.87	7.83	14
2013/05/02	ME	WSR46	16:59:54	B	8.8	200.9	0.50	22.34	29.26	88.21	6.47	6.27	7.79	12
2013/05/02	ME	WSR46	17:00:37	M	5.0	203.1	0.36	22.34	28.93	87.81	6.45	5.67	7.80	8
2013/05/02	ME	WSR46	17:02:22	T	1.1	14.3	0.32	22.60	27.58	91.21	6.72	5.97	7.81	8
2013/05/02	ME	WSR46	17:04:08	B	8.8	155.2	0.43	22.35	29.20	88.02	6.45	6.77	7.85	10
2013/05/02	ME	WSR46	17:05:01	M	5.0	243.5	0.42	22.36	28.80	87.52	6.43	6.07	7.84	7
2013/05/02	ME	WSR46	17:06:03	T	1.1	14.3	0.32	22.56	27.49	91.62	6.76	7.67	7.83	8
2013/05/02	ME	WSR46	17:07:17	B	8.7	94.2	0.31	22.35	29.23	87.02	6.38	7.67	7.86	11
2013/05/02	ME	WSR46	17:08:10	M	5.0	91.0	0.36	22.35	28.76	87.62	6.44	5.17	7.85	7
2013/05/02	ME	WSR46	17:09:01	T	1.0	14.3	0.32	22.55	27.48	91.52	6.75	7.07	7.84	8

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