

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)
2013/10/07	MF	DS1	6:59:33	B	2.0	328.5	0.26	27.33	28.57	93.70	6.33	72.14	7.96	63
2013/10/07	MF	DS1	7:00:14	T	1.0	351.0	0.54	27.32	28.58	93.10	6.29	81.55	7.97	56
2013/10/07	MF	DS1	7:01:07	B	2.0	258.3	0.76	27.32	28.59	92.71	6.26	71.34	7.98	62
2013/10/07	MF	DS1	7:02:08	T	1.2	351.0	0.54	27.32	28.60	92.61	6.25	73.54	7.98	56
2013/10/07	MF	DS1	7:07:07	B	2.1	172.2	0.41	27.31	28.62	92.23	6.23	86.06	8.00	63
2013/10/07	MF	DS1	7:07:57	T	0.9	351.0	0.54	27.31	28.61	92.33	6.23	70.94	8.00	57
2013/10/07	MF	DS2	7:13:01	B	1.9	282.8	0.63	27.28	28.61	93.95	6.35	37.81	8.01	26
2013/10/07	MF	DS2	7:14:19	T	1.0	243.8	0.40	27.26	28.62	92.85	6.27	34.80	8.01	22
2013/10/07	MF	DS2	7:15:11	B	2.0	203.4	0.43	27.28	28.63	92.45	6.25	33.80	8.01	25
2013/10/07	MF	DS2	7:16:38	T	1.1	315.3	1.09	27.28	28.66	92.56	6.25	31.20	8.01	23
2013/10/07	MF	DS2	7:17:27	B	2.0	48.2	0.44	27.26	28.66	92.56	6.25	32.70	8.01	26
2013/10/07	MF	DS2	7:18:29	T	1.1	315.3	1.09	27.25	28.65	92.57	6.26	40.01	8.01	23
2013/10/07	MF	DS3	7:25:08	B	1.9	257.3	0.39	27.23	28.66	93.79	6.34	21.79	8.02	21
2013/10/07	MF	DS3	7:26:18	T	0.9	257.3	0.39	27.20	28.62	93.29	6.31	25.60	8.02	26
2013/10/07	MF	DS3	7:27:16	B	2.0	52.4	1.40	27.22	28.63	92.90	6.28	26.90	8.02	21
2013/10/07	MF	DS3	7:28:15	T	0.9	257.3	0.39	27.22	28.62	92.70	6.27	30.00	8.02	25
2013/10/07	MF	DS3	7:29:37	B	1.8	257.3	0.39	27.23	28.63	92.50	6.25	32.60	8.02	23
2013/10/07	MF	DS3	7:30:55	T	1.1	257.3	0.39	27.22	28.63	92.51	6.26	37.21	8.02	25
2013/10/07	MF	DS4	7:39:28	B	1.5	69.1	0.53	27.27	28.48	92.14	6.23	18.09	8.01	10
2013/10/07	MF	DS4	7:40:09	M	1.5	289.1	1.13	27.27	28.48	92.04	6.22	18.59	8.01	12
2013/10/07	MF	DS4	7:41:23	T	1.5	314.1	0.43	27.28	28.49	91.74	6.20	20.09	8.01	12
2013/10/07	MF	DS5	7:47:04	M	3.0	127.8	0.57	27.21	28.54	94.77	6.41	15.19	8.02	12
2013/10/07	MF	DS5	7:48:16	T	0.9	314.1	0.43	27.23	28.55	92.67	6.27	15.29	8.02	9
2013/10/07	MF	DS5	7:53:39	B	3.0	205.7	0.41	27.27	28.57	93.29	6.31	14.88	8.02	13
2013/10/07	MF	DS5	7:54:15	T	1.3	147.7	0.78	27.27	28.59	92.49	6.25	14.88	8.02	9
2013/10/07	MF	DS5	7:55:07	B	2.9	249.7	0.41	27.27	28.62	92.19	6.23	15.89	8.02	12
2013/10/07	MF	DS5	7:56:13	T	1.1	88.1	0.38	27.23	28.63	92.49	6.25	15.79	8.02	8
2013/10/07	MF	US1	8:49:40	B	2.1	229.4	0.37	27.48	28.46	91.27	6.15	37.71	8.02	26
2013/10/07	MF	US1	8:50:29	T	0.9	233.6	0.20	27.49	28.46	91.17	6.14	37.41	8.02	22
2013/10/07	MF	US1	8:51:17	B	2.0	68.2	0.19	27.50	28.47	90.97	6.13	37.21	8.02	24
2013/10/07	MF	US1	8:52:07	T	0.8	233.6	0.20	27.51	28.47	91.08	6.13	37.11	8.02	23
2013/10/07	MF	US1	8:53:07	B	1.8	233.6	0.20	27.51	28.48	91.08	6.13	36.11	8.02	25
2013/10/07	MF	US1	8:54:16	T	0.9	233.6	0.20	27.52	28.48	90.98	6.13	35.21	8.02	23
2013/10/07	MF	US2	8:58:37	B	3.0	327.7	0.85	27.54	28.51	91.90	6.19	44.41	8.02	22
2013/10/07	MF	US2	8:59:55	T	1.1	274.5	0.30	27.54	28.51	91.00	6.13	33.30	8.02	23
2013/10/07	MF	US2	9:01:49	B	2.9	221.0	0.47	27.54	28.51	91.81	6.18	34.10	8.02	22
2013/10/07	MF	US2	9:02:36	T	1.1	274.5	0.30	27.54	28.51	90.81	6.11	37.11	8.02	22
2013/10/07	MF	US2	9:04:40	B	2.9	306.9	0.90	27.55	28.52	91.12	6.13	34.10	8.02	22
2013/10/07	MF	US2	9:05:39	T	1.1	274.5	0.30	27.54	28.52	90.82	6.11	34.00	8.02	22
2013/10/07	MF	MW1	7:15:05	B	19.0	75.0	0.45	27.80	29.76	82.46	5.49	13.28	8.12	13
2013/10/07	MF	MW1	7:16:17	M	10.0	70.5	0.14	27.79	29.75	82.36	5.48	11.68	8.09	14
2013/10/07	MF	MW1	7:17:15	T	1.1	63.2	0.92	27.74	29.40	84.57	5.64	7.68	8.08	9
2013/10/07	MF	MW1	7:21:39	B	19.0	39.6	1.40	27.79	29.79	82.09	5.46	17.39	8.07	14
2013/10/07	MF	MW1	7:22:39	M	9.9	153.7	0.32	27.78	29.77	82.30	5.48	12.88	8.08	14
2013/10/07	MF	MW1	7:23:39	T	0.9	63.2	0.92	27.76	29.61	84.11	5.61	8.38	8.08	8
2013/10/07	MF	MW1	7:29:19	B	18.9	166.5	0.46	27.80	30.06	81.13	5.39	13.58	8.09	14
2013/10/07	MF	MW1	7:30:09	M	10.1	45.9	0.63	27.79	29.89	81.84	5.44	11.08	8.09	14
2013/10/07	MF	MW1	7:31:09	T	1.0	62.6	0.62	27.68	29.28	85.15	5.69	6.38	8.09	8
2013/10/07	MF	THB1	8:33:37	B	2.9	333.9	0.35	27.35	28.62	91.96	6.20	14.68	8.14	17
2013/10/07	MF	THB1	8:34:25	T	1.1	131.5	0.56	27.35	28.62	91.66	6.18	13.98	8.13	14
2013/10/07	MF	THB1	8:35:11	B	2.9	99.2	0.46	27.34	28.62	91.67	6.19	14.28	8.12	16
2013/10/07	MF	THB1	8:36:05	T	1.0	173.4	0.32	27.34	28.62	91.98	6.21	13.08	8.12	15
2013/10/07	MF	THB1	8:37:07	B	2.9	20.7	0.22	27.34	28.62	91.78	6.19	12.98	8.12	17
2013/10/07	MF	THB1	8:38:06	T	1.0	14.4	0.67	27.34	28.61	91.89	6.20	11.78	8.12	15
2013/10/07	MF	THB2	8:24:13	M	1.3	40.0	0.03	27.27	27.27	84.25	5.74	16.69	7.94	8
2013/10/07	MF	THB2	8:25:09	M	1.3	40.0	0.03	27.01	27.20	84.06	5.75	18.09	7.94	10
2013/10/07	MF	THB2	8:26:03	M	1.3	40.0	0.03	27.00	27.20	84.36	5.77	18.79	7.94	10
2013/10/07	MF	WSR45C	8:03:24	B	12.1	106.8	0.12	27.72	29.34	86.04	5.75	17.89	8.14	20
2013/10/07	MF	WSR45C	8:04:39	M	7.1	300.3	0.75	27.62	28.85	86.96	5.83	9.78	8.13	12
2013/10/07	MF	WSR45C	8:05:29	T	0.7	206.9	0.24	27.63	28.82	87.66	5.88	7.58	8.12	8
2013/10/07	MF	WSR45C	8:07:04	B	12.7	203.4	0.18	27.78	29.48	84.36	5.62	23.29	8.11	20
2013/10/07	MF	WSR45C	8:07:52	M	6.9	263.6	0.45	27.65	28.87	86.47	5.80	9.78	8.11	13
2013/10/07	MF	WSR45C	8:08:34	T	1.0	268.4	0.79	27.63	28.82	87.38	5.86	7.88	8.11	8
2013/10/07	MF	WSR45C	8:09:40	B	11.9	217.7	0.70	27.76	29.36	83.87	5.60	20.59	8.11	21
2013/10/07	MF	WSR45C	8:10:19	M	7.3	219.8	0.79	27.70	28.98	85.68	5.74	11.98	8.11	14
2013/10/07	MF	WSR45C	8:10:59	T	0.8	280.8	0.85	27.63	28.81	87.19	5.85	7.88	8.11	9
2013/10/07	MF	WSR46	9:12:37	B	9.2	221.7	0.85	27.58	28.67	88.07	5.92	30.10	8.05	38
2013/10/07	MF	WSR46	9:14:26	M	5.2	269.3	0.61	27.56	28.66	88.78	5.97	18.79	8.04	21
2013/10/07	MF	WSR46	9:15:27	T	1.0	275.3	0.84	27.54	28.65	89.29	6.00	16.29	8.04	19
2013/10/07	MF	WSR46	9:16:44	B	9.1	266.5	0.78	27.58	28.67	87.99	5.91	27.10	8.04	39
2013/10/07	MF	WSR46	9:17:29	M	5.4	285.6	1.04	27.57	28.67	88.40	5.94	20.49	8.04	21
2013/10/07	MF	WSR46	9:18:32	T	1.3	105.1	0.32	27.58	28.66	88.91	5.97	19.19	8.03	20
2013/10/07	MF	WSR46	9:20:07	B	9.6	244.4	0.65	27.59	28.65	88.01	5.91	25.50	8.03	38
2013/10/07	MF	WSR46	9:21:08	M	5.7	328.5	0.87	27.60	28.65	88.22	5.93	24.19	8.03	21
2013/10/07	MF	WSR46	9:22:09	T	1.1	275.3	0.84	27.62	28.63	88.73	5.96	21.89	8.03	18

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)
2013/10/07	ME	DS1	12:48:14	B	3.1	10.0	1.19	27.77	28.40	96.06	6.44	70.84	7.96	58
2013/10/07	ME	DS1	12:49:07	T	1.1	74.1	0.75	27.79	28.40	95.95	6.43	47.82	7.97	34
2013/10/07	ME	DS1	12:50:24	B	2.9	38.9	0.05	27.79	28.42	95.25	6.39	81.25	7.97	60
2013/10/07	ME	DS1	12:51:12	T	1.1	74.1	0.75	27.79	28.42	95.44	6.40	55.73	7.98	35
2013/10/07	ME	DS1	12:52:53	B	2.8	14.4	1.42	27.77	28.45	94.83	6.36	87.66	7.98	59
2013/10/07	ME	DS1	12:53:43	T	1.0	74.1	0.75	27.79	28.45	95.23	6.38	63.03	7.98	35
2013/10/07	ME	DS2	12:58:26	B	2.9	111.2	0.41	27.76	28.49	95.11	6.38	36.91	7.98	22
2013/10/07	ME	DS2	12:59:36	T	1.1	115.7	0.17	27.77	28.49	94.70	6.35	34.40	7.98	21
2013/10/07	ME	DS2	13:00:20	B	3.0	34.6	0.60	27.78	28.49	94.50	6.33	33.80	7.98	22
2013/10/07	ME	DS2	13:01:20	T	1.1	57.7	0.43	27.76	28.50	94.59	6.34	34.50	7.98	21
2013/10/07	ME	DS2	13:02:14	B	2.8	8.9	0.21	27.76	28.50	94.29	6.32	35.01	7.98	22
2013/10/07	ME	DS2	13:03:12	T	0.9	331.2	0.39	27.78	28.49	94.68	6.35	31.30	7.98	20
2013/10/07	ME	DS3	13:24:43	B	4.0	61.4	0.52	27.77	28.50	94.08	6.31	46.72	8.00	27
2013/10/07	ME	DS3	13:25:41	M	3.0	78.8	0.66	27.77	28.50	93.97	6.30	39.71	7.99	24
2013/10/07	ME	DS3	13:26:22	T	1.0	104.0	0.28	27.78	28.50	94.27	6.32	35.31	7.99	23
2013/10/07	ME	DS3	13:27:23	B	3.9	224.1	0.22	27.76	28.50	93.46	6.27	39.91	7.99	28
2013/10/07	ME	DS3	13:28:09	M	3.0	74.3	0.55	27.76	28.50	93.66	6.28	40.21	7.99	25
2013/10/07	ME	DS3	13:29:22	T	0.8	229.6	0.61	27.78	28.50	93.95	6.30	34.50	7.99	23
2013/10/07	ME	DS3	13:30:18	B	3.6	14.3	0.53	27.77	28.50	93.65	6.28	39.41	7.99	27
2013/10/07	ME	DS3	13:31:08	M	2.9	199.1	0.06	27.77	28.50	93.84	6.29	37.81	7.99	26
2013/10/07	ME	DS3	13:32:07	T	0.9	140.0	0.77	27.79	28.50	94.14	6.31	33.00	7.99	23
2013/10/07	ME	DS4	13:36:57	B	4.9	34.4	0.80	27.76	28.52	93.02	6.24	40.41	7.98	24
2013/10/07	ME	DS4	13:37:45	M	3.3	52.5	0.25	27.77	28.52	93.11	6.24	38.51	7.97	24
2013/10/07	ME	DS4	13:40:05	T	1.0	44.0	0.39	27.80	28.51	93.60	6.27	37.81	7.97	19
2013/10/07	ME	DS4	13:40:56	B	4.8	37.9	0.25	27.76	28.53	92.50	6.20	41.71	7.97	26
2013/10/07	ME	DS4	13:41:32	M	3.5	35.2	0.36	27.78	28.52	92.60	6.21	40.61	7.97	23
2013/10/07	ME	DS4	13:42:18	T	1.1	44.0	0.32	27.81	28.51	93.69	6.28	36.51	7.98	20
2013/10/07	ME	DS4	13:43:18	B	4.7	311.5	0.20	27.77	28.53	92.79	6.22	40.71	7.97	24
2013/10/07	ME	DS4	13:44:15	M	3.3	52.5	0.25	27.79	28.51	93.38	6.26	37.21	7.97	24
2013/10/07	ME	DS4	13:45:43	T	1.0	44.0	0.18	27.80	28.51	93.97	6.30	35.61	7.98	21
2013/10/07	ME	DS5	13:50:50	B	5.8	106.6	0.66	27.75	28.83	89.17	5.97	32.70	7.96	27
2013/10/07	ME	DS5	13:51:40	M	3.8	73.2	0.54	27.76	28.54	90.46	6.06	31.50	7.97	21
2013/10/07	ME	DS5	13:52:50	T	1.0	10.1	0.69	27.81	28.52	93.44	6.26	33.70	7.98	20
2013/10/07	ME	DS5	13:54:33	B	5.9	7.6	0.58	27.76	28.82	88.95	5.95	39.31	7.96	26
2013/10/07	ME	DS5	13:55:41	M	4.0	40.6	0.71	27.77	28.58	91.73	6.15	39.31	7.97	22
2013/10/07	ME	DS5	13:56:38	T	1.1	27.4	0.98	27.80	28.54	92.92	6.23	37.31	7.97	21
2013/10/07	ME	DS5	13:57:36	B	5.9	140.4	0.38	27.76	28.68	90.23	6.04	53.52	7.96	26
2013/10/07	ME	DS5	13:58:09	M	3.9	77.8	0.49	27.78	28.56	91.92	6.16	44.91	7.96	22
2013/10/07	ME	DS5	13:58:42	T	1.1	40.1	0.47	27.80	28.54	93.11	6.24	38.41	7.96	21
2013/10/07	ME	US1	14:14:38	B	3.0	105.6	0.57	27.67	28.48	99.49	6.68	20.69	8.01	11
2013/10/07	ME	US1	14:15:33	T	1.1	67.4	0.57	27.68	28.49	99.39	6.67	19.49	8.01	11
2013/10/07	ME	US1	14:16:15	B	3.1	103.2	0.84	27.67	28.49	99.09	6.66	19.69	8.00	12
2013/10/07	ME	US1	14:17:14	T	1.1	67.4	0.57	27.67	28.49	99.18	6.66	19.09	7.99	12
2013/10/07	ME	US1	14:18:36	B	3.1	105.6	0.57	27.67	28.49	98.97	6.65	19.19	7.99	12
2013/10/07	ME	US1	14:19:19	T	1.0	67.4	0.57	27.68	28.49	99.27	6.67	18.69	7.99	11
2013/10/07	ME	US2	14:35:28	B	2.2	149.8	0.72	27.67	28.57	99.28	6.67	20.59	8.00	10
2013/10/07	ME	US2	14:36:27	T	1.2	139.7	0.69	27.67	28.57	99.08	6.65	20.79	7.98	11
2013/10/07	ME	US2	14:37:15	B	2.0	138.3	0.34	27.67	28.57	98.58	6.62	20.59	7.98	10
2013/10/07	ME	US2	14:38:09	T	1.0	159.0	0.48	27.67	28.57	98.67	6.62	20.09	7.98	11
2013/10/07	ME	US2	14:39:07	B	2.0	84.6	0.63	27.66	28.57	98.37	6.61	20.59	7.98	11
2013/10/07	ME	US2	14:40:10	T	1.0	221.7	0.09	27.67	28.57	98.36	6.60	20.49	7.98	10
2013/10/07	ME	MW1	14:55:23	B	17.9	75.6	1.02	27.90	30.25	87.42	5.79	7.38	8.05	6
2013/10/07	ME	MW1	14:56:44	M	9.3	35.6	0.61	27.92	30.18	87.96	5.83	6.18	8.04	6
2013/10/07	ME	MW1	14:57:32	T	0.9	48.0	1.15	27.92	30.15	88.50	5.86	5.98	8.04	6
2013/10/07	ME	MW1	14:59:36	B	18.1	46.4	0.98	27.91	30.15	87.20	5.78	7.08	8.03	6
2013/10/07	ME	MW1	15:00:27	M	9.4	127.2	0.35	27.92	30.12	87.63	5.81	6.68	8.03	5
2013/10/07	ME	MW1	15:01:15	T	1.0	48.0	1.15	27.94	30.09	89.00	5.90	5.58	8.03	5
2013/10/07	ME	MW1	15:02:34	B	18.2	334.5	0.50	27.93	30.13	87.47	5.80	6.88	8.03	5
2013/10/07	ME	MW1	15:04:02	M	9.4	75.3	0.71	27.93	30.13	88.02	5.83	6.68	8.03	5
2013/10/07	ME	MW1	15:05:12	T	1.1	10.4	0.70	27.94	30.09	88.77	5.88	5.78	8.03	6
2013/10/07	ME	THB1	13:37:08	B	3.0	143.5	0.30	27.64	28.77	100.53	6.74	10.78	8.15	14
2013/10/07	ME	THB1	13:38:06	T	1.1	89.0	0.61	27.64	28.66	100.25	6.73	10.68	8.13	12
2013/10/07	ME	THB1	13:38:52	B	2.9	135.2	0.51	27.63	28.63	99.76	6.70	11.38	8.12	14
2013/10/07	ME	THB1	13:39:40	T	0.9	154.3	0.59	27.64	28.63	100.79	6.77	10.18	8.13	13
2013/10/07	ME	THB1	13:40:31	B	3.2	144.5	0.71	27.63	28.60	100.51	6.75	10.98	8.12	13
2013/10/07	ME	THB1	13:41:17	T	0.9	135.5	0.61	27.65	28.58	100.53	6.75	10.88	8.12	13
2013/10/07	ME	THB2	12:57:00	M	1.4	40.0	0.03	27.35	28.30	96.75	6.54	9.69	7.64	13
2013/10/07	ME	THB2	12:58:00	M	1.4	40.0	0.03	27.38	28.20	96.47	6.52	9.19	7.65	14
2013/10/07	ME	THB2	12:59:03	M	1.4	40.0	0.03	27.37	28.24	96.48	6.52	9.39	7.66	14
2013/10/07	ME	WSR45C	14:02:34	B	11.9	342.8	0.33	27.81	29.45	85.25	5.68	10.88	8.05	21
2013/10/07	ME	WSR45C	14:03:19	M	6.5	36.2	1.38	27.82	29.05	89.04	5.95	8.48	8.06	13
2013/10/07	ME	WSR45C	14:04:25	T	1.2	58.2	0.62	27.88	28.89	93.45	6.24	6.28	8.07	8
2013/10/07	ME	WSR45C	14:05:36	B	10.8	121.1	0.26	27.82	29.21	87.66	5.85	14.28	8.05	22
2013/10/07	ME	WSR45C	14:07:25	M	7.0	88.1	0.48	27.81	29.19	88.52	5.91	9.98	8.05	11
2013/10/07	ME	WSR45C	14:09:00	T	1.0	58.2	0.62	27.91	28.94	93.97	6.27	6.08	8.07	6
2013/10/07	ME	WSR45C	14:11:09	B	11.0	76.6	0.62	27.82	29.46	85.03	5.67	12.28	8.04	22
2013/10/07	ME	WSR45C	14:12:05	M	6.5	334.7	0.69	27.84	29.01	89.44	5.97	7.58	8.05	12
2013/10/07	ME	WSR45C	14:13:05	T	0.9	123.7	1.50	27.90	28.91	94.17	6.29	5.88	8.06	6
2013/10/07	ME	WSR46	12:59:33	B	9.4	299.3	0.26	27.80	29.19	88.26	5.89	9.28	8.05	10
2013/10/07	ME	WSR46	13:00:26	M	5.6	62.4	0.55	27.72	28.80	90.79	6.08	10.08	8.05	11
2013/10/07	ME	WSR46	13:01:33	T	0.8	66.3	0.88	27.67	28.54	92.22	6.19	10.28	8.05	9
2013/10/07	ME	WSR46	13:02:32	B	9.2	98.6	0.73	27.78	29.12	88.52	5.91	9.48	8.05	11
2013/10/07	ME	WSR46	13:03:17	M	5.8	331.7	0.41	27.68	28.70	90.55	6.07	10.38	8.05	11
2013/10/07	ME	WSR46	13:04:17	T	0.7	66.3	0.88	27.64	28.43	93.08	6.26	10.18	8.05	8
2013/10/07	ME	WSR46	13:05:09	B	9.0	98.1	0.52	27.78	29.14	92.80	6.20	10.48	8.05	10
2013/10/07														