

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)
2013/10/18	MF	DS1	16:59:54	B	2.2	64.8	0.18	27.26	28.65	107.82	7.28	10.77	7.95	22
2013/10/18	MF	DS1	17:01:08	T	1.1	222.8	1.31	27.29	28.64	108.48	7.33	8.18	7.95	14
2013/10/18	MF	DS1	17:02:09	B	2.1	270.8	0.37	27.28	28.65	108.48	7.33	12.08	7.95	20
2013/10/18	MF	DS1	17:03:07	T	0.9	11.4	0.48	27.23	28.66	108.00	7.30	16.82	7.95	13
2013/10/18	MF	DS1	17:04:15	B	2.1	277.5	0.76	27.20	28.67	107.01	7.24	11.34	7.95	22
2013/10/18	MF	DS1	17:05:12	T	0.8	71.8	0.92	27.18	28.68	106.65	7.21	13.29	7.95	14
2013/10/18	MF	DS2	17:10:01	B	2.2	290.2	0.46	27.10	28.69	108.94	7.24	11.84	7.96	15
2013/10/18	MF	DS2	17:11:10	T	1.0	233.7	0.30	27.08	28.69	106.97	7.25	10.98	7.96	14
2013/10/18	MF	DS2	17:12:12	B	2.1	283.6	0.41	27.09	28.69	106.82	7.24	12.01	7.96	14
2013/10/18	MF	DS2	17:13:20	T	1.0	27.3	0.15	27.08	28.69	105.99	7.18	12.72	7.96	15
2013/10/18	MF	DS2	17:14:30	B	2.1	129.8	0.39	27.08	28.69	106.25	7.20	12.47	7.96	13
2013/10/18	MF	DS2	17:15:43	T	1.1	346.6	0.57	27.07	28.69	105.99	7.18	11.56	7.96	13
2013/10/18	MF	DS3	17:21:05	B	2.2	260.8	0.88	27.11	28.70	107.02	7.25	12.79	7.97	15
2013/10/18	MF	DS3	17:21:51	T	0.9	234.1	0.32	27.13	28.68	107.36	7.27	12.33	7.97	15
2013/10/18	MF	DS3	17:23:06	B	2.1	192.8	0.28	27.13	28.69	107.12	7.25	13.05	7.97	16
2013/10/18	MF	DS3	17:24:19	T	1.0	234.1	0.32	27.12	28.69	106.86	7.24	13.69	7.97	14
2013/10/18	MF	DS3	17:25:07	B	2.1	295.7	0.09	27.12	28.69	106.86	7.24	14.62	7.97	16
2013/10/18	MF	DS3	17:26:09	T	0.9	234.1	0.32	27.12	28.69	106.91	7.24	13.81	7.97	16
2013/10/18	MF	DS4	17:30:57	B	2.0	295.3	0.70	27.23	28.71	105.67	7.14	8.96	7.96	9
2013/10/18	MF	DS4	17:31:58	T	1.2	355.1	0.78	27.25	28.72	106.27	7.18	7.75	7.96	7
2013/10/18	MF	DS4	17:33:23	B	2.0	221.1	0.66	27.26	28.72	106.07	7.16	8.22	7.96	11
2013/10/18	MF	DS4	17:34:09	T	0.9	233.5	1.19	27.28	28.72	106.68	7.20	7.37	7.96	7
2013/10/18	MF	DS4	17:35:10	B	2.0	115.0	0.13	27.25	28.72	105.82	7.15	8.31	7.96	9
2013/10/18	MF	DS4	17:36:07	T	1.0	206.9	0.21	27.23	28.71	105.49	7.13	8.96	7.95	9
2013/10/18	MF	DS5	17:41:45	B	3.1	335.6	0.67	27.05	28.71	103.36	7.01	9.99	7.95	13
2013/10/18	MF	DS5	17:42:27	T	0.9	133.0	0.45	27.03	28.69	103.21	7.00	9.52	7.95	11
2013/10/18	MF	DS5	17:43:22	B	3.2	244.6	0.95	27.04	28.72	103.22	7.00	10.16	7.95	12
2013/10/18	MF	DS5	17:44:08	T	1.1	341.6	0.76	27.02	28.69	103.25	7.00	9.15	7.95	12
2013/10/18	MF	DS5	17:45:07	B	3.1	36.3	0.15	27.04	28.73	103.20	7.00	10.47	7.95	13
2013/10/18	MF	DS5	17:46:09	T	1.1	256.4	0.33	27.03	28.68	103.21	7.00	9.08	7.94	11
2013/10/18	MF	US1	18:02:10	B	3.0	306.1	0.15	27.35	28.78	102.97	6.94	11.76	7.95	14
2013/10/18	MF	US1	18:03:36	T	1.2	201.8	0.26	27.40	28.80	104.34	7.03	10.24	7.95	11
2013/10/18	MF	US1	18:04:23	B	3.2	172.0	0.19	27.39	28.80	103.82	6.99	11.53	7.95	14
2013/10/18	MF	US1	18:05:08	T	0.9	297.5	0.46	27.45	28.82	105.29	7.09	8.69	7.96	11
2013/10/18	MF	US1	18:06:12	B	3.1	257.5	0.45	27.43	28.82	104.56	7.04	10.51	7.95	14
2013/10/18	MF	US1	18:07:08	T	0.9	195.2	0.56	27.44	28.83	104.65	7.04	11.10	7.95	11
2013/10/18	MF	US2	18:42:40	B	3.1	232.6	0.66	27.22	28.93	98.80	6.67	12.99	7.94	17
2013/10/18	MF	US2	18:43:27	T	1.0	184.1	0.58	27.23	28.93	98.56	6.65	13.23	7.94	17
2013/10/18	MF	US2	18:44:33	B	2.9	351.6	0.80	27.22	28.93	98.44	6.65	13.60	7.93	17
2013/10/18	MF	US2	18:45:29	T	1.2	260.0	0.46	27.24	28.93	98.49	6.65	14.50	7.94	16
2013/10/18	MF	US2	18:46:13	B	3.0	192.6	0.43	27.34	28.94	98.69	6.66	10.39	7.94	17
2013/10/18	MF	US2	18:47:07	T	0.8	55.2	0.16	27.25	28.94	98.70	6.66	10.22	7.94	15
2013/10/18	MF	MW1	18:49:24	B	18.9	54.1	0.23	27.38	30.53	85.82	5.73	13.68	8.03	14
2013/10/18	MF	MW1	18:50:09	M	10.5	279.9	0.80	27.38	30.46	85.93	5.74	14.38	8.02	14
2013/10/18	MF	MW1	18:51:09	T	1.1	44.1	0.45	27.38	30.36	86.54	5.78	11.18	8.02	13
2013/10/18	MF	MW1	18:52:24	B	18.9	100.5	0.68	27.38	30.40	85.14	5.68	14.28	8.02	13
2013/10/18	MF	MW1	18:53:19	M	10.5	342.2	0.09	27.38	30.36	85.55	5.71	13.58	8.02	13
2013/10/18	MF	MW1	18:54:04	T	1.1	192.5	0.36	27.38	30.27	86.56	5.78	10.38	8.02	13
2013/10/18	MF	MW1	18:55:29	B	18.9	99.7	0.45	27.37	30.37	84.85	5.67	13.68	8.01	14
2013/10/18	MF	MW1	18:56:14	M	10.5	28.2	0.23	27.38	30.35	85.37	5.70	13.48	8.01	14
2013/10/18	MF	MW1	18:56:59	T	0.9	263.9	0.95	27.38	30.23	86.58	5.79	10.18	8.01	14
2013/10/18	MF	THB1	17:24:09	B	2.9	306.5	0.68	27.25	28.43	103.52	7.00	9.08	8.18	12
2013/10/18	MF	THB1	17:25:09	T	1.1	62.4	0.21	27.29	28.40	103.63	7.01	8.58	8.16	9
2013/10/18	MF	THB1	17:25:59	B	3.0	262.7	1.20	27.28	28.40	103.23	6.98	8.78	8.17	13
2013/10/18	MF	THB1	17:26:59	T	1.1	93.2	0.78	27.33	28.36	103.84	7.02	6.38	8.17	9
2013/10/18	MF	THB1	17:27:59	B	3.0	262.7	1.20	27.32	28.37	104.05	7.03	7.48	8.17	13
2013/10/18	MF	THB1	17:28:59	T	1.0	139.5	0.86	27.32	28.37	104.46	7.06	7.88	8.17	10
2013/10/18	MF	THB2	16:56:41	M	1.3	40.0	0.03	27.50	28.41	95.85	6.46	10.28	7.81	6
2013/10/18	MF	THB2	16:57:37	M	1.3	40.0	0.03	27.54	28.40	96.15	6.48	9.78	7.81	7
2013/10/18	MF	THB2	16:58:33	M	1.3	40.0	0.03	27.55	28.40	96.55	6.50	9.28	7.82	5
2013/10/18	MF	WSR45C	17:49:19	B	12.0	237.6	0.44	27.38	29.75	89.74	6.01	25.80	8.12	26
2013/10/18	MF	WSR45C	17:50:04	M	7.0	250.9	0.81	27.43	29.25	93.57	6.28	11.08	8.12	13
2013/10/18	MF	WSR45C	17:50:59	T	1.0	261.7	0.72	27.45	28.74	100.82	6.79	3.17	8.14	9
2013/10/18	MF	WSR45C	17:51:59	B	12.1	322.9	0.97	27.39	29.58	89.46	6.00	23.99	8.09	24
2013/10/18	MF	WSR45C	17:52:59	M	6.9	247.8	0.81	27.41	29.31	92.48	6.21	13.08	8.10	14
2013/10/18	MF	WSR45C	17:53:59	T	1.0	264.2	0.36	27.45	28.69	100.64	6.78	3.17	8.13	10
2013/10/18	MF	WSR45C	17:55:26	B	12.2	245.4	0.83	27.39	29.54	89.38	6.00	24.99	8.08	26
2013/10/18	MF	WSR45C	17:56:09	M	7.1	278.0	0.85	27.42	29.20	92.81	6.23	12.28	8.09	14
2013/10/18	MF	WSR45C	17:56:59	T	1.0	166.3	0.99	27.48	28.68	101.07	6.80	3.17	8.13	9
2013/10/18	MF	WSR46	16:58:49	B	9.0	220.6	0.95	27.14	28.86	93.79	6.34	36.21	8.13	38
2013/10/18	MF	WSR46	16:59:39	M	5.4	294.1	1.00	27.25	28.53	94.40	6.38	8.38	8.13	15
2013/10/18	MF	WSR46	17:00:29	T	1.0	257.0	0.63	27.35	28.14	97.21	6.58	4.97	8.13	6
2013/10/18	MF	WSR46	17:01:34	B	9.1	36.6	0.51	27.14	28.94	93.11	6.29	26.50	8.13	36
2013/10/18	MF	WSR46	17:02:24	M	5.6	300.1	0.86	27.29	28.49	94.82	6.41	7.28	8.12	16
2013/10/18	MF	WSR46	17:03:09	T	0.9	257.0	0.63	27.36	28.20	96.93	6.55	5.18	8.12	5
2013/10/18	MF	WSR46	17:04:04	B	9.3	317.1	0.37	27.13	28.96	93.03	6.29	30.70	8.13	36
2013/10/18	MF	WSR46	17:04:59	M	5.5	285.0	0.77	27.30	28.49	95.04	6.42	6.78	8.12	17
2013/10/18	MF	WSR46	17:05:59	T	1.0	257.0	0.63	27.36	28.11	97.35	6.59	4.67	8.11	7

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)
2013/10/18	ME	DS1	11:11:35	B	2.9	87.5	0.53	27.00	29.04	91.50	6.20	34.68	7.74	61
2013/10/18	ME	DS1	11:12:17	T	1.1	102.9	0.58	27.16	29.03	97.31	6.57	5.77	7.77	6
2013/10/18	ME	DS1	11:13:09	B	3.3	106.0	0.54	27.01	29.05	91.87	6.22	36.41	7.76	47
2013/10/18	ME	DS1	11:14:07	T	0.9	341.1	0.29	27.19	29.03	98.15	6.63	4.72	7.80	7
2013/10/18	ME	DS1	11:18:28	B	3.3	358.7	0.64	27.02	29.05	92.69	6.27	25.82	7.82	16
2013/10/18	ME	DS1	11:19:14	T	1.0	187.6	0.42	27.11	29.00	96.66	6.53	5.42	7.83	7
2013/10/18	ME	DS2	11:31:30	B	4.2	44.7	0.51	27.04	29.08	93.63	6.33	17.47	7.87	22
2013/10/18	ME	DS2	11:32:17	M	3.3	92.7	0.44	27.15	29.04	96.85	6.54	6.27	7.88	9
2013/10/18	ME	DS2	11:33:11	T	1.1	188.0	0.47	27.21	29.03	98.21	6.63	4.82	7.88	7
2013/10/18	ME	DS2	11:34:21	B	4.1	78.5	0.21	27.06	29.07	94.14	6.37	15.88	7.87	22
2013/10/18	ME	DS2	11:35:07	M	3.1	113.0	0.71	27.13	29.05	96.89	6.55	7.28	7.88	10
2013/10/18	ME	DS2	11:36:07	T	0.9	188.0	0.47	27.18	29.05	98.15	6.63	5.71	7.89	8
2013/10/18	ME	DS2	11:36:46	B	4.3	106.3	0.92	27.05	29.08	93.89	6.35	18.85	7.87	22
2013/10/18	ME	DS2	11:37:17	M	3.1	12.8	0.45	27.18	29.05	98.06	6.62	5.60	7.89	10
2013/10/18	ME	DS2	11:38:31	T	1.0	188.0	0.47	27.23	29.03	98.60	6.65	5.64	7.89	8
2013/10/18	ME	DS3	11:43:22	B	6.9	10.9	0.69	27.16	29.49	89.21	6.01	10.40	7.85	21
2013/10/18	ME	DS3	11:44:24	M	4.7	3.3	0.30	27.04	29.10	92.50	6.26	12.70	7.86	18
2013/10/18	ME	DS3	11:45:07	T	0.9	254.9	0.09	27.28	29.08	97.63	6.58	4.61	7.89	7
2013/10/18	ME	DS3	11:46:08	B	7.2	40.9	0.54	27.17	29.50	88.75	5.98	10.84	7.85	22
2013/10/18	ME	DS3	11:47:07	M	4.5	19.4	0.51	27.09	29.23	90.51	6.11	12.96	7.86	18
2013/10/18	ME	DS3	11:48:08	T	1.1	341.8	0.75	27.20	29.06	97.25	6.56	5.21	7.89	8
2013/10/18	ME	DS3	11:49:08	B	7.3	37.2	0.03	27.18	29.58	88.44	5.95	10.36	7.85	23
2013/10/18	ME	DS3	11:50:14	M	4.5	96.8	0.20	27.06	29.11	92.46	6.25	10.66	7.87	17
2013/10/18	ME	DS3	11:51:09	T	1.1	282.6	0.41	27.25	29.02	98.17	6.82	4.70	7.89	6
2013/10/18	ME	DS4	11:55:51	B	5.3	131.9	0.29	27.17	29.56	89.26	6.01	14.99	7.85	16
2013/10/18	ME	DS4	11:56:53	M	3.6	15.2	0.55	27.15	29.46	89.67	6.04	11.12	7.85	11
2013/10/18	ME	DS4	11:57:25	T	0.9	89.6	0.91	27.23	29.01	98.15	6.62	4.69	7.88	8
2013/10/18	ME	DS4	11:58:17	B	5.1	159.3	0.51	27.18	29.59	88.86	5.98	14.33	7.85	17
2013/10/18	ME	DS4	11:59:08	M	3.5	74.8	0.69	27.14	29.38	90.18	6.08	8.65	7.86	11
2013/10/18	ME	DS4	12:00:12	T	1.1	58.1	0.81	27.23	29.01	99.22	6.69	4.78	7.89	8
2013/10/18	ME	DS4	12:01:07	B	4.9	62.9	0.61	27.18	29.58	88.96	5.99	11.08	7.85	15
2013/10/18	ME	DS4	12:02:08	M	3.4	16.0	0.19	27.09	29.15	92.72	6.27	7.76	7.87	10
2013/10/18	ME	DS4	12:03:07	T	1.1	22.9	0.53	27.27	29.03	99.04	6.68	4.54	7.88	7
2013/10/18	ME	DS5	12:07:43	B	6.1	246.8	1.43	27.21	29.70	87.53	5.88	13.32	7.84	16
2013/10/18	ME	DS5	12:08:27	M	4.0	55.7	0.88	27.15	29.24	92.63	6.25	7.03	7.87	10
2013/10/18	ME	DS5	12:09:13	T	1.0	46.9	0.51	27.22	29.04	99.45	6.71	4.68	7.89	5
2013/10/18	ME	DS5	12:10:08	B	6.0	337.6	0.28	27.20	29.64	87.75	5.90	13.20	7.84	16
2013/10/18	ME	DS5	12:11:38	M	4.2	92.9	0.18	27.17	29.53	89.15	6.00	8.81	7.85	11
2013/10/18	ME	DS5	12:12:24	T	0.8	163.5	0.32	27.30	28.99	99.12	6.88	4.32	7.88	6
2013/10/18	ME	DS5	12:13:20	B	6.0	60.9	0.67	27.20	29.65	87.87	5.91	12.37	7.84	16
2013/10/18	ME	DS5	12:14:22	M	4.1	0.7	0.88	27.14	29.31	91.74	6.19	8.96	7.85	11
2013/10/18	ME	DS5	12:15:09	T	0.9	258.8	0.61	27.30	29.02	99.41	6.70	4.23	7.88	7
2013/10/18	ME	US1	12:34:41	B	3.2	70.4	0.63	26.95	28.68	97.54	6.62	8.71	7.86	13
2013/10/18	ME	US1	12:35:14	T	0.8	357.0	0.52	26.98	28.68	99.67	6.77	6.94	7.87	11
2013/10/18	ME	US1	12:36:24	B	3.0	199.0	0.23	26.85	28.72	94.54	6.43	10.40	7.85	14
2013/10/18	ME	US1	12:37:58	T	1.1	53.7	0.61	27.19	28.64	104.33	7.06	4.27	7.89	11
2013/10/18	ME	US1	12:38:59	B	2.8	351.8	0.33	26.86	28.71	95.35	6.48	9.59	7.85	12
2013/10/18	ME	US1	12:40:10	T	1.0	347.3	0.44	27.18	28.65	104.10	7.04	4.34	7.89	11
2013/10/18	ME	US2	12:45:49	B	2.1	93.1	0.48	26.85	28.67	100.93	6.87	7.05	7.87	10
2013/10/18	ME	US2	12:46:43	T	1.1	71.7	0.39	27.08	28.62	104.14	7.06	4.78	7.88	8
2013/10/18	ME	US2	12:47:19	B	2.4	64.0	0.68	26.85	28.68	100.75	6.85	7.52	7.87	11
2013/10/18	ME	US2	12:48:11	T	1.0	99.2	0.91	26.97	28.64	103.06	7.00	5.54	7.88	9
2013/10/18	ME	US2	12:49:10	B	2.3	66.3	0.57	26.87	28.67	100.93	6.86	6.89	7.87	9
2013/10/18	ME	US2	12:50:10	T	1.0	222.6	0.19	27.12	28.62	105.73	7.16	4.37	7.89	7
2013/10/18	ME	MW1	11:12:34	B	18.8	16.2	1.15	27.25	30.36	85.84	5.75	11.48	8.10	11
2013/10/18	ME	MW1	11:13:34	M	10.5	13.4	0.64	27.24	30.41	85.54	5.72	7.18	8.10	8
2013/10/18	ME	MW1	11:14:24	T	1.1	69.1	0.89	27.33	30.24	87.05	5.82	5.18	8.09	6
2013/10/18	ME	MW1	11:16:09	B	19.2	2.4	0.10	27.25	30.43	84.66	5.66	13.58	8.10	11
2013/10/18	ME	MW1	11:16:59	M	10.5	46.2	0.35	27.27	30.41	85.36	5.71	5.39	8.10	6
2013/10/18	ME	MW1	11:17:59	T	1.1	263.0	0.18	27.29	30.41	86.67	5.80	4.67	8.10	7
2013/10/18	ME	MW1	11:19:51	B	19.9	316.5	0.30	27.26	30.43	84.68	5.66	12.88	8.10	10
2013/10/18	ME	MW1	11:20:40	M	10.5	176.7	0.38	27.30	30.40	85.69	5.73	5.38	8.10	6
2013/10/18	ME	MW1	11:21:24	T	1.1	64.2	0.98	27.34	30.35	87.40	5.84	3.87	8.10	8
2013/10/18	ME	THB1	13:01:19	B	3.0	72.8	0.40	27.00	28.58	101.95	6.92	33.30	8.04	81
2013/10/18	ME	THB1	13:02:09	T	1.1	16.4	0.55	26.99	28.56	100.94	6.85	14.28	8.03	21
2013/10/18	ME	THB1	13:04:59	B	3.0	312.8	0.42	26.97	28.55	101.77	6.91	6.98	8.02	12
2013/10/18	ME	THB1	13:05:59	T	1.0	16.4	0.55	27.27	28.48	105.42	7.13	3.87	8.04	21
2013/10/18	ME	THB1	13:06:59	B	3.0	312.8	0.42	26.99	28.53	101.68	6.91	6.48	8.01	58
2013/10/18	ME	THB1	13:07:59	T	1.0	16.4	0.55	27.33	28.47	105.53	7.13	3.47	8.02	20
2013/10/18	ME	THB2	12:44:44	M	1.4	40.0	0.03	27.48	28.34	93.91	6.33	10.78	7.86	8
2013/10/18	ME	THB2	12:45:47	M	1.4	40.0	0.03	27.49	28.34	92.82	6.26	11.58	7.86	9
2013/10/18	ME	THB2	12:46:47	M	1.4	40.0	0.03	27.49	28.34	91.94	6.20	11.78	7.86	9
2013/10/18	ME	WSR45C	11:59:24	B	12.0	45.9	0.95	27.27	30.16	86.42	5.79	15.79	8.07	20
2013/10/18	ME	WSR45C	12:00:19	M	7.0	115.0	0.15	27.27	29.76	86.63	5.82	8.78	8.07	10
2013/10/18	ME	WSR45C	12:01:04	T	1.0	50.1	0.27	27.42	29.07	96.79	6.51	5.48	8.10	7
2013/10/18	ME	WSR45C	12:01:59	B	12.0	58.0	1.11	27.27	30.06	85.53	5.73	15.89	8.06	18
2013/10/18	ME	WSR45C	12:02:59	M	7.1	146.5	0.21	27.26	29.76	86.34	5.80	7.98	8.06	11
2013/10/18	ME	WSR45C	12:04:04	T	1.0	74.6	0.51	27.44	28.99	98.02	6.59	5.58	8.10	6
2013/10/18	ME	WSR45C	12:05:04	B	12.0	48.7	0.51	27.27	30.03	85.25	5.71	17.49	8.06	19
2013/10/18	ME	WSR45C	12:05:59	M	7.2	167.2	0.08	27.26	29.75	86.16	5.79	7.98	8.06	10
2013/10/18	ME	WSR45C	12:06:59	T	1.0	35.1	1.19	27.35	28.97	97.94	6.60	5.08	8.10	5
2013/10/18	ME	WSR46	12:27:04	B	8.9	131.9	0.21	27.10	29.06	92.13	6.23	16.19	8.06	18
2013/10/18	ME	WSR46	12:27:59	M	5.5	113.1	0.89	27.08	28.97	92.54	6.26	10.68	8.06	13
2013/10/18	ME	WSR46	12:28:59	T	1.0	99.8	0.53	27.20	28.69	100.11	6.77	4.97	8.09	7
2013/10/18	ME	WSR46	12:29:59	B	8.9	168.9	0.33	27.11	29.01	91.44	6.18	16.39	8.05	18
2013/10/18	ME	WSR46	12:30:59	M	5.5									