

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)
2013/12/04	MF	DS1	7:26:26	B	2.0	139.2	0.61	20.28	32.14	97.68	7.31	11.98	7.98	13
2013/12/04	MF	DS1	7:27:16	T	1.0	229.2	0.49	20.28	32.14	97.59	7.30	11.88	7.99	12
2013/12/04	MF	DS1	7:28:14	B	2.0	346.5	0.17	20.29	32.14	97.60	7.30	12.08	8.00	14
2013/12/04	MF	DS1	7:29:14	T	1.0	229.2	0.49	20.31	32.13	97.72	7.31	11.88	8.01	14
2013/12/04	MF	DS1	7:30:09	B	2.0	339.4	0.07	20.30	32.14	97.53	7.30	13.28	8.01	13
2013/12/04	MF	DS1	7:31:10	T	1.0	229.2	0.49	20.29	32.14	97.64	7.31	13.08	8.02	14
2013/12/04	MF	DS2	7:37:07	B	2.0	293.5	0.17	20.13	32.16	98.01	7.35	12.38	8.05	12
2013/12/04	MF	DS2	7:38:04	T	1.0	308.1	0.08	20.11	32.17	96.91	7.27	10.28	8.04	10
2013/12/04	MF	DS2	7:39:13	B	2.0	212.6	0.56	20.11	32.17	96.62	7.25	10.48	8.04	13
2013/12/04	MF	DS2	7:40:08	T	1.0	308.1	0.08	20.11	32.16	96.73	7.26	10.08	8.04	10
2013/12/04	MF	DS2	7:40:51	B	2.0	212.6	0.56	20.12	32.16	96.64	7.25	12.28	8.04	12
2013/12/04	MF	DS2	7:41:29	T	1.0	308.1	0.08	20.12	32.16	96.65	7.25	10.98	8.04	9
2013/12/04	MF	DS3	7:50:38	M	1.5	203.2	0.01	20.04	32.19	97.15	7.30	9.38	8.05	11
2013/12/04	MF	DS3	7:51:14	M	1.5	203.2	0.01	20.04	32.19	96.96	7.29	9.88	8.05	12
2013/12/04	MF	DS3	7:52:22	M	1.5	203.2	0.01	20.04	32.19	96.77	7.27	9.68	8.04	11
2013/12/04	MF	DS4	8:04:02	M	1.5	215.6	0.12	20.14	32.23	99.52	7.46	15.18	8.05	17
2013/12/04	MF	DS4	8:05:05	M	1.5	215.6	0.12	20.13	32.24	98.22	7.37	13.68	8.04	16
2013/12/04	MF	DS4	8:06:10	M	1.5	215.6	0.12	20.13	32.24	98.13	7.36	14.48	8.03	18
2013/12/04	MF	DS5	8:13:51	B	4.0	206.6	0.41	20.13	32.16	96.71	7.26	10.28	8.03	13
2013/12/04	MF	DS5	8:14:26	M	3.0	39.0	0.24	20.13	32.16	96.51	7.24	9.58	8.03	12
2013/12/04	MF	DS5	8:15:18	T	1.0	37.9	0.31	20.13	32.16	96.52	7.24	9.98	8.03	10
2013/12/04	MF	DS5	8:16:14	B	3.9	140.9	0.20	20.14	32.17	96.13	7.21	12.28	8.03	13
2013/12/04	MF	DS5	8:17:14	M	3.0	207.6	0.54	20.13	32.16	96.24	7.22	10.48	8.02	13
2013/12/04	MF	DS5	8:18:10	T	1.0	260.1	0.23	20.13	32.16	96.66	7.25	9.38	8.02	10
2013/12/04	MF	DS5	8:19:15	B	3.7	6.3	0.22	20.14	32.16	96.47	7.24	10.08	8.02	13
2013/12/04	MF	DS5	8:20:17	M	3.0	90.8	0.41	20.15	32.16	96.38	7.23	9.98	8.02	12
2013/12/04	MF	DS5	8:21:19	T	1.0	260.1	0.23	20.15	32.17	96.69	7.25	9.08	8.02	9
2013/12/04	MF	US1	8:47:20	B	1.9	119.2	0.11	20.46	31.97	100.12	7.48	12.08	8.02	11
2013/12/04	MF	US1	8:48:08	T	1.0	167.4	0.59	20.46	31.96	97.80	7.30	11.18	8.00	12
2013/12/04	MF	US1	8:49:09	B	2.0	282.5	0.42	20.46	31.96	97.00	7.24	12.08	7.99	12
2013/12/04	MF	US1	8:50:16	T	1.0	167.4	0.59	20.46	31.96	97.02	7.24	10.98	7.99	12
2013/12/04	MF	US1	8:51:12	B	2.0	249.4	0.56	20.46	31.96	97.03	7.25	11.48	7.99	10
2013/12/04	MF	US1	8:52:14	T	1.0	167.4	0.59	20.46	31.96	97.04	7.25	11.38	7.99	11
2013/12/04	MF	US2	8:59:14	B	3.0	294.1	0.40	20.44	31.99	96.92	7.24	9.18	7.98	10
2013/12/04	MF	US2	9:00:16	T	1.0	226.2	0.90	20.44	31.98	96.62	7.22	7.68	7.96	8
2013/12/04	MF	US2	9:01:07	B	3.0	294.1	0.40	20.44	32.00	96.23	7.19	9.08	7.96	9
2013/12/04	MF	US2	9:02:09	T	1.0	45.0	0.07	20.44	31.99	96.44	7.20	8.08	7.96	8
2013/12/04	MF	US2	9:03:14	B	3.0	294.1	0.40	20.44	32.00	96.05	7.17	8.68	7.97	10
2013/12/04	MF	US2	9:04:17	T	1.0	45.0	0.07	20.44	32.00	96.57	7.21	7.88	7.97	8
2013/12/04	MF	MW1	7:14:23	B	18.2	221.8	0.30	20.78	32.21	92.84	6.88	31.18	7.91	34
2013/12/04	MF	MW1	7:15:23	M	10.1	192.2	0.48	20.80	32.24	92.70	6.87	26.03	7.92	26
2013/12/04	MF	MW1	7:16:38	T	1.1	261.4	0.52	20.79	32.24	92.64	6.86	20.88	7.92	20
2013/12/04	MF	MW1	7:17:44	B	18.2	221.8	0.30	20.80	32.25	92.49	6.85	26.78	7.93	34
2013/12/04	MF	MW1	7:18:38	M	9.8	347.1	0.11	20.82	32.27	92.41	6.84	28.17	7.93	26
2013/12/04	MF	MW1	7:19:24	T	1.1	122.0	0.35	20.82	32.28	92.43	6.84	18.33	7.93	18
2013/12/04	MF	MW1	7:20:25	B	18.1	7.3	0.59	20.82	32.29	92.27	6.83	31.99	7.93	33
2013/12/04	MF	MW1	7:21:11	M	10.0	285.2	0.41	20.83	32.30	92.26	6.83	21.02	7.93	27
2013/12/04	MF	MW1	7:22:07	T	1.2	13.7	0.17	20.82	32.29	92.38	6.84	21.41	7.94	21
2013/12/04	MF	THB1	8:19:50	B	3.0	236.1	0.53	20.32	32.23	96.78	7.23	13.23	7.95	15
2013/12/04	MF	THB1	8:20:35	T	1.0	286.1	0.36	20.32	32.23	95.81	7.16	10.95	7.94	14
2013/12/04	MF	THB1	8:21:24	B	3.0	330.3	0.49	20.33	32.23	95.36	7.13	12.37	7.94	16
2013/12/04	MF	THB1	8:22:17	T	1.0	190.5	0.75	20.33	32.23	95.23	7.12	11.37	7.94	12
2013/12/04	MF	THB1	8:23:07	B	3.0	315.9	0.67	20.33	32.23	95.11	7.11	12.05	7.94	16
2013/12/04	MF	THB1	8:24:14	T	1.1	328.7	0.16	20.33	32.22	95.10	7.11	11.32	7.94	13
2013/12/04	MF	THB2	8:26:56	M	1.2	40.0	0.03	19.82	31.96	97.87	7.39	5.58	7.52	5
2013/12/04	MF	THB2	8:27:56	M	1.2	40.0	0.03	19.80	31.95	96.86	7.32	5.98	7.55	4
2013/12/04	MF	THB2	8:28:56	M	1.2	40.0	0.03	19.78	31.93	95.75	7.24	6.18	7.57	4
2013/12/04	MF	WSR45C	7:50:57	B	11.9	224.4	0.27	20.50	32.13	94.96	7.08	19.99	7.95	19
2013/12/04	MF	WSR45C	7:51:51	M	7.1	264.0	0.53	20.50	32.10	94.52	7.05	15.17	7.94	16
2013/12/04	MF	WSR45C	7:52:40	T	1.0	233.3	0.84	20.55	32.04	94.38	7.03	9.57	7.94	10
2013/12/04	MF	WSR45C	7:53:44	B	11.9	293.3	0.78	20.50	32.12	94.29	7.03	19.24	7.94	21
2013/12/04	MF	WSR45C	7:54:39	M	7.0	209.8	0.28	20.52	32.09	94.15	7.02	15.09	7.94	15
2013/12/04	MF	WSR45C	7:55:45	T	1.1	77.8	0.27	20.54	32.07	94.18	7.02	12.49	7.94	11
2013/12/04	MF	WSR45C	7:56:43	B	12.1	71.6	0.46	20.50	32.12	94.04	7.01	18.83	7.94	21
2013/12/04	MF	WSR45C	7:57:54	M	7.0	254.5	0.81	20.53	32.09	94.00	7.00	15.48	7.94	16
2013/12/04	MF	WSR45C	7:58:45	T	0.9	195.2	0.98	20.54	32.08	94.04	7.01	13.16	7.94	10
2013/12/04	MF	WSR46	9:05:31	B	9.2	18.6	0.13	20.55	31.98	93.71	6.98	22.92	7.92	22
2013/12/04	MF	WSR46	9:06:29	M	5.5	279.2	0.90	20.55	31.99	93.42	6.96	18.18	7.92	19
2013/12/04	MF	WSR46	9:07:16	T	1.0	313.4	0.40	20.55	31.97	93.24	6.95	15.91	7.91	19
2013/12/04	MF	WSR46	9:08:16	B	9.0	181.6	0.18	20.54	31.98	92.99	6.93	22.58	7.91	22
2013/12/04	MF	WSR46	9:09:23	M	5.5	304.9	0.68	20.54	31.98	92.87	6.92	25.52	7.91	20
2013/12/04	MF	WSR46	9:10:27	T	0.9	247.6	0.35	20.55	31.98	93.00	6.93	18.11	7.91	21
2013/12/04	MF	WSR46	9:11:23	B	8.9	325.8	0.48	20.54	31.99	92.87	6.92	24.15	7.91	23
2013/12/04	MF	WSR46	9:12:17	M	5.5	290.0	0.66	20.54	32.00	92.99	6.93	17.85	7.90	18
2013/12/04	MF	WSR46	9:13:11	T	1.0	300.4	0.94	20.55	32.00	93.08	6.94	17.33	7.90	21

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)
2013/12/04	ME	DS1	12:30:55	B	3.0	59.1	0.30	20.54	31.98	94.22	7.02	11.98	7.98	14
2013/12/04	ME	DS1	12:32:02	T	1.0	165.0	0.57	20.81	31.98	94.06	6.98	11.78	7.95	13
2013/12/04	ME	DS1	12:33:40	B	2.7	129.0	0.94	20.75	31.98	94.72	7.03	13.48	7.96	12
2013/12/04	ME	DS1	12:34:23	T	1.0	68.4	0.18	20.83	31.98	95.65	7.09	11.88	7.97	13
2013/12/04	ME	DS1	12:35:12	B	2.6	133.8	0.30	20.70	31.97	95.07	7.07	11.78	7.97	16
2013/12/04	ME	DS1	12:36:07	T	1.0	68.4	0.18	20.75	31.98	95.41	7.09	11.98	7.97	13
2013/12/04	ME	DS2	12:43:02	B	3.5	333.7	0.59	20.71	32.00	95.23	7.08	9.18	8.00	10
2013/12/04	ME	DS2	12:44:10	T	1.0	234.1	0.31	20.72	32.00	94.86	7.05	8.78	8.00	8
2013/12/04	ME	DS2	12:45:11	B	3.5	333.7	0.59	20.54	32.01	92.76	6.91	11.38	7.99	8
2013/12/04	ME	DS2	12:46:09	T	1.0	234.1	0.31	20.73	32.00	94.52	7.02	8.59	7.99	8
2013/12/04	ME	DS2	12:47:16	B	3.5	262.5	0.19	20.72	32.01	93.94	6.98	8.98	7.99	8
2013/12/04	ME	DS2	12:48:17	T	0.9	234.1	0.31	20.74	32.00	95.00	7.06	8.48	7.99	8
2013/12/04	ME	DS3	12:54:53	B	5.0	125.5	0.42	20.68	32.00	91.74	6.82	7.28	8.00	8
2013/12/04	ME	DS3	12:56:11	M	3.5	168.5	0.76	20.79	31.99	93.11	6.91	5.98	8.00	7
2013/12/04	ME	DS3	12:57:32	T	1.0	136.5	0.67	20.83	32.00	93.67	6.95	5.88	8.00	6
2013/12/04	ME	DS3	12:58:13	B	5.0	55.5	0.47	20.63	31.98	91.85	6.84	7.78	8.00	8
2013/12/04	ME	DS3	12:59:19	M	3.4	8.6	1.16	20.78	32.00	93.22	6.92	6.18	8.00	6
2013/12/04	ME	DS3	13:00:17	T	1.0	136.5	0.67	20.83	32.00	93.86	6.96	6.08	7.99	5
2013/12/04	ME	DS3	13:01:50	B	5.0	180.0	0.43	20.69	32.01	92.79	6.90	6.98	7.96	7
2013/12/04	ME	DS3	13:02:43	M	3.5	0.4	0.16	20.84	31.99	94.04	6.97	5.88	7.97	7
2013/12/04	ME	DS3	13:03:12	T	1.0	136.5	0.67	20.83	31.99	94.26	6.99	5.88	7.97	6
2013/12/04	ME	DS4	13:09:21	B	5.0	13.4	0.08	20.55	32.03	91.90	6.85	10.18	7.98	8
2013/12/04	ME	DS4	13:10:19	M	3.5	188.0	1.07	20.77	31.99	92.04	6.83	5.98	7.98	6
2013/12/04	ME	DS4	13:11:08	T	1.0	199.6	0.18	20.77	31.99	92.16	6.84	5.98	7.98	5
2013/12/04	ME	DS4	13:12:45	B	4.7	81.6	0.38	20.60	32.02	91.50	6.81	8.58	7.98	8
2013/12/04	ME	DS4	13:13:36	M	3.5	24.6	0.78	20.76	32.00	92.24	6.85	6.48	7.98	5
2013/12/04	ME	DS4	13:14:23	T	1.0	199.6	0.18	20.79	31.99	92.37	6.86	5.88	7.97	5
2013/12/04	ME	DS4	13:15:33	B	5.3	59.8	0.43	20.59	32.03	91.79	6.84	8.68	7.98	9
2013/12/04	ME	DS4	13:16:10	M	3.5	87.9	0.28	20.78	32.00	92.53	6.87	6.18	7.97	6
2013/12/04	ME	DS4	13:17:08	T	1.0	184.5	0.43	20.81	31.99	92.77	6.88	5.98	7.97	5
2013/12/04	ME	DS5	13:22:38	B	6.0	121.9	0.40	20.71	32.00	92.02	6.84	6.48	7.98	6
2013/12/04	ME	DS5	13:23:28	M	4.0	32.5	0.50	20.74	32.00	91.43	6.79	6.38	7.98	6
2013/12/04	ME	DS5	13:24:19	T	1.0	53.6	0.76	20.75	32.00	91.66	6.81	6.48	7.98	7
2013/12/04	ME	DS5	13:25:15	B	6.0	121.9	0.40	20.62	32.00	90.66	6.75	7.18	7.98	8
2013/12/04	ME	DS5	13:26:10	M	4.0	192.1	0.72	20.73	32.00	91.21	6.78	6.28	7.98	7
2013/12/04	ME	DS5	13:27:11	T	1.0	346.6	0.43	20.74	32.00	91.55	6.80	6.68	7.98	6
2013/12/04	ME	DS5	13:28:32	B	5.5	52.2	0.20	20.71	32.00	91.08	6.77	7.38	7.97	6
2013/12/04	ME	DS5	13:29:22	M	4.0	156.6	0.63	20.72	32.00	91.41	6.79	6.38	7.97	6
2013/12/04	ME	DS5	13:30:09	T	1.0	278.0	0.12	20.76	32.00	91.85	6.82	6.08	7.97	6
2013/12/04	ME	US1	14:13:18	B	2.0	318.7	0.99	20.86	31.90	107.75	7.99	6.38	8.01	6
2013/12/04	ME	US1	14:14:41	T	1.0	30.1	1.07	20.93	31.87	104.45	7.74	5.98	8.01	6
2013/12/04	ME	US1	14:17:28	B	2.0	123.6	0.29	20.90	32.05	104.13	7.71	5.98	8.00	6
2013/12/04	ME	US1	14:18:15	T	1.0	3.6	0.27	20.88	32.05	104.05	7.71	6.18	8.00	6
2013/12/04	ME	US1	14:19:06	B	2.0	31.0	0.20	20.88	32.05	103.87	7.69	6.18	8.00	6
2013/12/04	ME	US1	14:19:52	T	1.0	3.6	0.27	20.88	32.05	104.01	7.70	6.18	8.00	6
2013/12/04	ME	US2	14:28:39	B	2.0	350.0	0.35	20.56	32.19	101.28	7.54	7.08	7.98	12
2013/12/04	ME	US2	14:29:28	T	1.3	66.9	0.12	20.58	32.18	101.52	7.55	6.58	7.98	8
2013/12/04	ME	US2	14:30:43	B	2.0	350.0	0.35	20.58	32.18	101.56	7.56	6.58	7.98	11
2013/12/04	ME	US2	14:31:28	T	1.0	66.9	0.12	20.59	32.18	101.80	7.57	6.38	7.98	10
2013/12/04	ME	US2	14:33:09	B	2.0	350.0	0.35	20.57	32.18	101.76	7.57	6.78	7.96	13
2013/12/04	ME	US2	14:34:07	T	1.0	66.9	0.12	20.55	32.18	101.79	7.58	7.18	7.96	9
2013/12/04	ME	MW1	14:15:12	B	18.2	354.5	0.41	21.06	32.59	89.63	6.60	14.21	7.94	8
2013/12/04	ME	MW1	14:17:54	M	10.2	7.6	0.36	21.07	32.59	89.17	6.56	5.68	7.92	5
2013/12/04	ME	MW1	14:18:49	T	1.1	29.2	0.59	21.07	32.58	88.93	6.54	5.99	7.92	6
2013/12/04	ME	MW1	14:20:09	B	17.9	17.8	0.28	21.06	32.61	88.24	6.49	11.64	7.91	8
2013/12/04	ME	MW1	14:21:07	M	10.5	60.6	0.78	21.07	32.61	88.61	6.52	6.98	7.92	7
2013/12/04	ME	MW1	14:22:18	T	1.1	10.4	0.76	21.10	32.58	89.53	6.58	5.39	7.92	6
2013/12/04	ME	MW1	14:25:49	B	19.1	277.8	0.67	21.08	32.62	88.27	6.49	8.41	7.90	6
2013/12/04	ME	MW1	14:27:06	M	9.3	14.9	0.26	21.10	32.60	89.04	6.55	6.54	7.91	6
2013/12/04	ME	MW1	14:28:32	T	1.2	44.7	0.37	21.09	32.63	89.98	6.62	5.80	7.91	6
2013/12/04	ME	THB1	13:00:08	B	3.1	291.4	0.51	20.53	32.15	97.41	7.26	10.39	8.00	6
2013/12/04	ME	THB1	13:01:07	T	1.0	127.5	0.59	20.78	32.08	99.30	7.37	7.52	8.00	6
2013/12/04	ME	THB1	13:02:24	B	2.9	267.3	0.88	20.46	32.16	97.24	7.25	9.45	7.98	6
2013/12/04	ME	THB1	13:03:08	T	1.0	4.9	0.59	20.95	32.06	99.78	7.38	6.09	7.99	6
2013/12/04	ME	THB1	13:04:03	B	2.7	51.9	0.60	20.58	32.15	97.93	7.29	8.67	7.98	6
2013/12/04	ME	THB1	13:05:39	T	1.0	155.0	0.16	20.98	32.06	99.90	7.38	5.99	7.99	6
2013/12/04	ME	THB2	13:08:37	M	1.3	40.0	0.03	20.46	32.21	110.55	8.24	7.18	7.68	5
2013/12/04	ME	THB2	13:09:35	M	1.3	40.0	0.03	20.44	32.21	109.17	8.14	7.59	7.68	6
2013/12/04	ME	THB2	13:10:31	M	1.3	40.0	0.03	20.43	32.21	108.09	8.06	7.79	7.66	6
2013/12/04	ME	WSR45C	13:36:54	B	12.0	339.5	0.16	20.84	32.33	91.65	6.78	9.30	7.96	10
2013/12/04	ME	WSR45C	13:37:40	M	7.0	313.7	0.58	20.70	32.16	92.25	6.85	8.18	7.96	10
2013/12/04	ME	WSR45C	13:38:33	T	1.1	1.9	0.46	20.90	32.04	94.45	6.99	6.40	7.96	6
2013/12/04	ME	WSR45C	13:39:29	B	12.0	19.6	0.31	20.84	32.33	91.31	6.76	9.54	7.95	11
2013/12/04	ME	WSR45C	13:40:26	M	7.0	272.7	0.13	20.69	32.14	91.95	6.83	8.58	7.94	9
2013/12/04	ME	WSR45C	13:41:12	T	1.0	70.2	0.75	20.90	32.04	94.28	6.98	6.29	7.94	8
2013/12/04	ME	WSR45C	13:42:09	B	11.9	321.7	0.09	20.83	32.33	91.24	6.75	9.93	7.93	11
2013/12/04	ME	WSR45C	13:42:59	M	7.1	16.8	1.21	20.67	32.12	91.93	6.83	7.69	7.94	8
2013/12/04	ME	WSR45C	13:44:25	T	1.1	51.9	1.04	20.91	32.04	94.44	6.99	6.43	7.94	7
2013/12/04	ME	WSR46	12:30:28	B	8.9	126.2	0.20	20.52	31.94	93.49	6.97	27.54	7.94	24
2013/12/04	ME	WSR46	12:31:17	M	5.7	299.7	0.02	20.52	31.95	93.52	6.98	24.64	7.95	20
2013/12/04	ME	WSR46	12:32:24	T	1.0	159.1	0.44	20.59	31.94	94.17	7.02	12.84	7.95	17
2013/12/04	ME	WSR46	12:33:36	B	9.1	100.0	0.28	20.52	31.96	93.45	6.97	28.89	7.96	24
2013/12/04	ME	WSR46	12:34:49	M	5.5	59.1	0.71	20.54	31.95	93.64	6.98	29.35	7.96	21
2013/12/04	ME	WSR46	12:36:05	T	1.1	59.9	0.84	20.58	31.96	93.90	7.00	24.13	7.96	17
2013/12/04	ME	WSR46	12:37:08	B	9.0	38.7	0.23	20.52	31.97	93.53	6.98	28.67	7.96	24
2013/12/04	ME	WSR46	12:38:04	M	5.7	88.0	0.63	20.52	31.97	93.59				