

Impact Water Quality Monitoring for Dredging Activities

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)
25/10/2012	MF	US1	16:16:19	T	6.5	276.8	0.40	26.82	29.67	85.5	5.79	13.5	7.86	17
25/10/2012	MF	US1	16:17:06	M	3.7	262.7	0.65	26.88	28.65	89.7	6.10	5.9	7.87	15
25/10/2012	MF	US1	16:18:00	B	0.9	275.0	0.56	27.33	27.31	106.0	7.21	3.6	7.95	10
25/10/2012	MF	US1	16:18:57	T	6.9	262.8	0.73	26.83	29.74	87.1	5.89	14.5	7.85	9
25/10/2012	MF	US1	16:19:38	M	4.4	273.4	0.65	26.90	28.63	90.6	6.16	5.6	7.86	7
25/10/2012	MF	US1	16:20:26	B	1.0	285.3	0.67	27.36	27.26	108.5	7.38	3.6	7.95	6
25/10/2012	MF	US2	16:25:50	T	6.8	268.1	0.57	26.86	29.62	90.5	6.12	14.7	7.87	17
25/10/2012	MF	US2	16:26:35	M	4.1	297.5	0.66	27.25	28.35	102.5	6.94	4.2	7.93	17
25/10/2012	MF	US2	16:27:25	B	0.9	281.8	0.52	27.22	27.99	103.3	7.01	3.9	7.92	8
25/10/2012	MF	US2	16:28:18	T	7.1	255.6	0.30	26.87	29.59	91.1	6.16	15.1	7.86	6
25/10/2012	MF	US2	16:29:05	M	3.9	274.3	0.54	27.21	28.40	102.4	6.93	4.5	7.93	8
25/10/2012	MF	US2	16:29:44	B	0.9	283.8	0.58	27.22	28.00	103.5	7.02	3.9	7.92	7
25/10/2012	MF	DS1	16:07:20	T	8.6	261.0	0.55	26.79	29.97	83.4	5.63	14.0	7.83	19
25/10/2012	MF	DS1	16:08:14	M	5.0	297.4	0.74	26.80	29.67	83.7	5.66	9.3	7.84	20
25/10/2012	MF	DS1	16:09:01	B	1.1	288.7	0.66	27.03	28.04	91.0	6.20	4.7	7.86	19
25/10/2012	MF	DS1	16:09:53	T	9.1	262.9	0.63	26.79	29.95	83.3	5.63	15.9	7.83	20
25/10/2012	MF	DS1	16:10:37	M	4.9	272.7	0.51	26.80	29.69	83.8	5.67	11.6	7.83	8
25/10/2012	MF	DS1	16:11:18	B	0.9	281.2	0.53	27.05	27.93	90.7	6.17	4.7	7.85	10
25/10/2012	MF	DS2	15:56:29	T	9.2	287.4	0.17	26.78	29.84	81.8	5.53	21.2	7.85	26
25/10/2012	MF	DS2	15:57:17	M	4.8	282.6	0.75	26.84	28.82	83.2	5.65	8.4	7.85	26
25/10/2012	MF	DS2	15:58:10	B	1.1	297.2	0.75	27.50	26.67	100.1	6.81	2.9	7.92	10
25/10/2012	MF	DS2	15:59:08	T	9.0	281.8	0.43	26.78	29.86	81.9	5.54	20.9	7.83	11
25/10/2012	MF	DS2	15:59:53	M	4.9	260.4	0.60	26.82	29.16	83.3	5.65	8.2	7.84	7
25/10/2012	MF	DS2	16:00:41	B	1.2	305.9	0.79	27.51	26.63	101.7	6.92	3.0	7.92	8
25/10/2012	MF	DS3	15:45:02	T	25.1	325.4	0.22	26.82	30.24	82.9	5.59	4.1	7.83	6
25/10/2012	MF	DS3	15:46:13	M	13.1	270.5	0.51	26.81	29.22	83.0	5.63	13.2	7.83	8
25/10/2012	MF	DS3	15:47:20	B	1.0	348.1	0.42	27.58	26.58	96.6	6.56	3.0	7.88	15
25/10/2012	MF	DS3	15:48:34	T	25.1	255.3	0.30	26.81	30.07	82.8	5.59	9.4	7.83	16
25/10/2012	MF	DS3	15:49:31	M	13.0	233.6	0.43	26.83	29.20	82.9	5.62	11.4	7.83	5
25/10/2012	MF	DS3	15:50:34	B	1.0	315.8	0.51	27.53	26.68	95.7	6.51	3.1	7.87	6
25/10/2012	MF	DS4	15:34:32	T	7.8	267.5	0.54	26.82	28.92	84.1	5.72	11.7	7.83	17
25/10/2012	MF	DS4	15:35:12	M	4.6	310.6	0.60	26.93	28.18	85.4	5.82	6.5	7.83	17
25/10/2012	MF	DS4	15:36:00	B	0.9	331.3	0.57	27.16	27.44	88.7	6.04	4.2	7.84	11
25/10/2012	MF	DS4	15:36:51	T	8.0	311.2	0.24	26.81	28.99	83.4	5.67	11.6	7.83	10
25/10/2012	MF	DS4	15:37:30	M	4.5	305.1	0.81	26.91	28.19	84.9	5.78	6.4	7.83	5
25/10/2012	MF	DS4	15:38:14	B	1.0	302.7	0.51	27.41	26.62	93.7	6.39	3.8	7.85	6
25/10/2012	MF	DS5	15:23:20	T	8.0	316.7	0.31	26.86	28.74	83.1	5.65	8.2	7.84	12
25/10/2012	MF	DS5	15:24:02	M	4.5	315.3	0.25	26.94	28.18	83.8	5.71	4.7	7.83	12
25/10/2012	MF	DS5	15:24:52	B	0.9	306.7	0.32	27.52	25.77	92.6	6.33	4.3	7.85	10
25/10/2012	MF	DS5	15:26:30	T	8.1	287.4	0.43	26.86	28.78	82.4	5.60	12.0	7.83	9
25/10/2012	MF	DS5	15:27:07	M	4.5	317.0	0.47	26.99	27.98	84.0	5.73	4.8	7.83	8
25/10/2012	MF	DS5	15:27:48	B	1.0	277.5	0.28	27.70	25.07	95.2	6.51	4.3	7.85	7
25/10/2012	MF	MW1	17:22:39	T	18.9	102.8	0.43	26.80	31.10	90.8	6.10	8.4	7.88	14
25/10/2012	MF	MW1	17:23:34	M	10.2	80.1	0.19	26.80	31.01	91.6	6.16	6.4	7.87	13
25/10/2012	MF	MW1	17:24:23	B	1.0	67.8	0.14	26.78	30.58	95.2	6.41	3.9	7.88	13
25/10/2012	MF	MW1	17:25:12	T	19.0	120.3	0.13	26.81	31.36	89.3	5.99	11.2	7.84	13
25/10/2012	MF	MW1	17:25:55	M	10.0	52.8	0.13	26.80	31.07	91.1	6.12	7.3	7.84	8
25/10/2012	MF	MW1	17:26:37	B	0.9	153.8	0.07	26.79	30.61	94.6	6.37	4.4	7.86	8

Impact Water Quality Monitoring for Dredging Activities

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)
25/10/2012	ME	US1	09:42:49	T	11.1	182.2	0.11	26.77	29.39	86.1	5.84	7.0	7.85	8
25/10/2012	ME	US1	09:43:35	M	5.5	112.7	0.53	26.82	28.24	88.9	6.06	3.8	7.86	9
25/10/2012	ME	US1	09:44:32	B	0.9	141.5	0.60	27.15	26.90	103.3	7.06	3.4	7.90	8
25/10/2012	ME	US1	09:45:53	T	11.0	69.2	0.32	26.78	29.41	86.4	5.86	6.6	7.85	6
25/10/2012	ME	US1	09:46:41	M	5.9	110.8	0.67	26.81	28.39	88.5	6.03	3.9	7.85	7
25/10/2012	ME	US1	09:47:29	B	1.2	108.4	0.60	27.15	26.99	105.0	7.17	3.4	7.92	5
25/10/2012	ME	US2	09:30:20	T	10.0	85.7	0.24	26.78	29.59	86.9	5.89	5.2	7.87	8
25/10/2012	ME	US2	09:31:16	M	5.7	117.6	0.73	26.76	28.73	87.3	5.95	4.6	7.88	7
25/10/2012	ME	US2	09:32:08	B	0.8	94.6	0.45	27.04	26.75	99.1	6.79	3.1	7.90	7
25/10/2012	ME	US2	09:33:13	T	9.5	109.2	0.23	26.77	29.38	100.8	6.84	3.1	7.88	8
25/10/2012	ME	US2	09:34:08	M	5.6	122.3	0.40	26.82	28.08	89.1	6.08	3.4	7.87	8
25/10/2012	ME	US2	09:35:10	B	1.1	152.4	0.80	27.02	26.64	98.3	6.74	2.9	7.88	8
25/10/2012	ME	DS1	09:54:33	T	6.9	45.3	0.14	26.74	28.95	86.9	5.91	7.4	7.84	10
25/10/2012	ME	DS1	09:55:16	M	3.9	129.5	0.71	26.85	28.20	89.8	6.12	4.6	7.85	12
25/10/2012	ME	DS1	09:56:07	B	0.8	113.9	0.76	27.24	27.05	106.6	7.27	3.2	7.92	9
25/10/2012	ME	DS1	09:57:08	T	7.1	78.5	0.29	26.74	28.99	86.8	5.91	7.2	7.85	9
25/10/2012	ME	DS1	09:57:51	M	4.2	94.1	0.58	26.83	28.32	88.7	6.05	5.0	7.85	6
25/10/2012	ME	DS1	09:58:42	B	1.0	106.3	0.88	27.21	27.17	102.8	7.01	3.2	7.91	7
25/10/2012	ME	DS2	10:04:46	T	7.1	52.8	0.42	26.74	29.09	86.3	5.86	11.6	7.85	16
25/10/2012	ME	DS2	10:05:30	M	4.0	61.5	0.35	26.84	28.19	89.9	6.13	4.6	7.86	16
25/10/2012	ME	DS2	10:06:31	B	1.2	84.5	0.59	27.22	27.23	103.6	7.06	3.0	7.91	8
25/10/2012	ME	DS2	10:07:25	T	7.1	85.2	0.10	26.74	29.06	86.1	5.86	12.1	7.83	7
25/10/2012	ME	DS2	10:08:17	M	4.1	64.5	0.35	26.82	28.29	89.3	6.09	5.0	7.83	6
25/10/2012	ME	DS2	10:09:09	B	1.1	104.5	0.63	27.23	27.21	104.5	7.12	3.2	7.90	5
25/10/2012	ME	DS3	10:15:07	T	5.6	74.4	0.53	26.74	29.00	86.1	5.86	7.8	7.83	13
25/10/2012	ME	DS3	10:15:57	M	3.6	102.7	0.51	26.90	27.95	94.0	6.41	3.6	7.85	11
25/10/2012	ME	DS3	10:16:54	B	1.0	135.8	0.58	27.32	27.16	115.3	7.85	3.5	7.97	6
25/10/2012	ME	DS3	10:19:45	T	5.9	57.9	0.30	26.75	29.16	86.7	5.89	8.6	7.83	6
25/10/2012	ME	DS3	10:20:29	M	3.5	104.6	0.58	26.86	27.97	91.5	6.25	4.4	7.84	6
25/10/2012	ME	DS3	10:21:26	B	1.0	94.6	0.46	27.26	27.30	104.5	7.11	2.9	7.90	8
25/10/2012	ME	DS4	10:28:09	T	3.8	86.2	0.52	26.76	28.98	88.4	6.01	6.5	7.83	8
25/10/2012	ME	DS4	10:28:54	M	2.5	98.8	0.51	27.00	27.71	99.6	6.79	3.2	7.87	9
25/10/2012	ME	DS4	10:29:40	B	1.0	104.9	0.80	27.29	27.38	112.9	7.68	2.5	7.94	7
25/10/2012	ME	DS4	10:30:32	T	3.8	121.0	0.30	26.88	28.07	93.8	6.40	3.8	7.84	5
25/10/2012	ME	DS4	10:31:15	M	2.7	106.4	0.38	27.08	27.59	100.9	6.88	2.8	7.88	4
25/10/2012	ME	DS4	10:31:58	B	1.0	88.7	0.26	27.28	27.33	113.9	7.75	2.7	7.94	3
25/10/2012	ME	DS5	10:37:37	T	3.0	179.0	0.24	26.81	28.44	90.8	6.18	5.6	7.83	9
25/10/2012	ME	DS5	10:38:16	M	1.9	95.1	0.52	26.91	27.92	94.3	6.43	3.7	7.85	10
25/10/2012	ME	DS5	10:39:05	B	1.1	26.7	0.21	27.22	27.43	113.2	7.71	2.5	7.94	7
25/10/2012	ME	DS5	10:39:53	T	3.2	116.3	0.11	26.82	28.46	92.0	6.27	5.2	7.84	8
25/10/2012	ME	DS5	10:40:35	M	2.0	165.7	0.41	26.99	27.86	99.9	6.81	3.8	7.87	6
25/10/2012	ME	DS5	10:41:24	B	0.9	112.5	0.36	27.27	27.40	119.6	8.13	2.6	7.97	6
25/10/2012	ME	MW1	08:08:26	T	19.1	358.1	0.28	26.75	31.26	88.0	5.91	3.5	7.88	8
25/10/2012	ME	MW1	08:09:17	M	10.1	44.0	0.35	26.75	31.23	88.0	5.91	4.1	7.91	8
25/10/2012	ME	MW1	08:10:18	B	1.0	68.1	0.32	26.72	31.09	89.3	6.01	2.1	7.92	8
25/10/2012	ME	MW1	08:13:11	T	19.2	50.2	0.40	26.75	31.30	87.6	5.88	2.8	7.93	8
25/10/2012	ME	MW1	08:14:23	M	10.1	6.3	0.18	26.75	31.25	87.9	5.90	2.8	7.93	7
25/10/2012	ME	MW1	08:15:34	B	1.2	53.5	0.22	26.74	31.12	88.7	5.96	2.2	7.94	9