































Friends of the Bay 2020 Water Quality Data - Site 15, Mill Neck Creek South

Site	Date	Time	H2O Temp TOP	H2O Temp 1.0 m	H2O Temp 0.5 m	Salinity TOP	Salinity 1.0	Salinity BTM	PH Top	PH 1.0	Ph .5 m from	Top DO	DO 1.0	BTM DO	% Sat Top	% Sat 1.0	%Sat BTM	Secchi m	Seafloor Depth (meters)	Air Temp (°C)	H2O Temp	Fecal Colif	Enterococci	Ammonia	Nitrite	Nitrate	OTR	OTR in 24	Rain fall	Tidal Stage	Water Color	Surface Cond	Cloud Cov	Wind DIR	Wind SPE	Weather	Wave Heig	Data Entered	Captain	Sampling Lead	Notes
Site 15	4/19/2021		tide falling, too shallow			tide falling, too shallow			tide falling, too shallow																																
Site 15	4/26/2021		strong wind and waves																																						
Site 15	5/3/2021	8:04 AM	14.04	13.41	too shall	24.75	25.42	too shall	7.80	7.84	too st	7.92	7.90	too st	89.8	88.9	too shall	1.1	1.4	15.1	13	10					0	2	5	6	4	E	1.6	3	0.0	nh	pj	pj	clear surface conditions, shallow		
Site 15	5/10/2021	11:03 AM	13.48	13.48	13.46	24.37	24.36	24.39	7.89	7.89	7.89	8.64	8.62	8.63	97	96.9	96.9	1.6	2.16	17.6	22	2					2	4	5	6	4	E	1.0	3	0.0	nh	pj	pj	clear surface conditions		
Site 15	5/17/2021		too shallow, low tide																																						
Site 15	5/24/2021	11:24 AM	19.04	18.49	18.43	24.89	26.20	26.20	7.84	7.89	7.89	7.64	7.71	7.99	95.2	95.5	98.9	1.0	2.09	21.3	112	31					0	1	5	6	4	SE	2.0	3	0.0	nh	pj	pj	clear surface conditions		
Site 15	6/1/2021	7:36 AM	15.35	15.47	too shall	23.58	24.27	too shall	7.83	7.81	too st	7.84	8.73	too st	89.50	89.00	too shallow	1.32	16.8	16.8	22	4					0	2	5	6	4	0	0.0	3	0.0	nh	pj	pj	clear surface conditions, Secchi hit bottom before disappearing		
Site 15	6/7/2021		too shallow																																						
Site 15	6/15/2021		too shallow, low tide																																						
Site 15	6/21/2/1	8:33 AM	23.22	23.14	22.88	25.18	25.77	25.86	7.85	7.89	7.89	6.74	6.68	6.68	91.7	91.3	90.7	0.6	2.22	23.6	390	210					0	4	5	6	4	S	3.3	3	0.5	nh	pj	pj	clear surface conditions		
Site 15	6/28/2021		too shallow, low tide																																						
Site 15	7/6/2021	8:48 AM	23.65	23.57	23.53	24.60	24.72	24.71	no pH data, sensor un			6.32	6.19	6.00	85.8	83.7	81.3	0.7	1.83	25.0	22	16					0	4	5	6	1	SW	1.2	1	0.0	nh	pj	pj	clear surface conditions		
Site 15	7/12/2021		too shallow, low tide																																						
Site 15	7/19/2021	8:36 AM	25.81	25.80	25.63	25.10	25.20	25.32	7.50	7.50	7.52	5.32	5.07	4.82	75.0	71.4	67.9	0.8	1.95	21.0	300	71					0	2	5	6	4	NW	0.0	3	0.0	nh	pj	pj	clear surface conditions		
Site 15	7/26/2021		too shallow, low tide																																						
Site 15	8/2/2021	8:17 AM	23.64	23.64	too shall	24.51	24.72	too shall no pH data, sensor un			4.60	4.24	too st	62.0	57.4	too shall	0.6	1.84	17.8	33	14					0	1	5	6	0	NW	2.8	1	0.5	nh	pj	pj	clear surface conditions			
Site 15	8/9/2021	11:41 AM	23.55	23.49	23.46	24.29	24.48	24.85	7.64	7.56	7.52	6.39	6.34	5.87	86.2	85.2	78.8	1.9	2.26	23.0	380	170					1	4	5	4	4	NE	3.2	3	0.0	nh	pj	pj	2 dead fish		
Site 15	8/24/2021					sonde out of order			sonde out of order			sonde out of order, sonde out of order														es	pj	pj	clear surface conditions												
Site 15	8/31/2021	7:37 AM	25.51	25.65	25.67	23.98	24.76	24.83	pH sensor broken			4.70	4.07	3.60	65.3	56.5	50.3	0.8	1.96	22.2	43	14					1	2	5	6	4	NW	2.0	3	0.0	kp	pj	pj	clear surface conditions, DO in hypoxic range at all depths		
Site 15	9/7/2021	11:28 AM	23.43	23.44	23.33	24.35	24.37	24.46	pH sensor broken			6.26	6.04	5.77	84.5	81.5	77.6	1.0	2.52	22.2	40	11					0	4	4	6	0	w	6.0	1	0.0	es	pj	pj	clear surface conditions		
Site 15	9/13/2021	7:54 AM	23.18	23.32	too shall	23.28	23.99	too shall	pH sensor broken			6.34	5.87	too sh	84.0	77.8	too shall	0.7	too shall	22.7	48	21					0	2	4	6	4	w	11.0	13	0.5	es	pj	pj	clear surface conditions		
Site 15	9/21/2021	11:50 AM	22.89	22.91	23.06	24.54	24.70	24.91	pH sensor broken			7.44	7.42	7.42	98.0	98.0	98.6	0.9	2.38	21.1	46	<1					0	4	5	6	2	E	8.0	2	0.0	fb	pj	pj	clear surface conditions		
Site 15	10/4/2021	8:10 AM	20.73	20.73	20.71	24.55	24.57	24.66	pH sensor broken			6.43	6.13	5.73	81.9	77.5	73.4	0.6	1.93	20.0							<1	4	5	6	3	E	6.0	3	0.5	es	pj	pj	clear surface conditions		
Site 15	10/11/2021		too shallow			too shallow																																			
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Friends of the Bay 2021 Water Quality Data - Site 16, Mill Neck Creek North

Site	Date	Time	H2O Temp TOP (0.5m)	H2O Temp 1.0 m	H2O Temp 0.5 m from BTM	Salinity TOP	Salinity 1.0	Salinity BTM	PH Top	PH 1.0	Ph-5 m from BTM	Top DO	DO 1.0	BTM DO	% Sat Top	% Sat 1.0	%Sat BTM	Secchi m	Seafloor Depth (meters)	Air Temp (°C)	H2O Temp BTM monthly AVG	Fecal Coliform Bacteria	Enterococci (NH3)	Ammonia (NH3)	Nitrate NO3	Nitrite (NO2)	Total Kjeldahl Nitrogen (TKN)	Organic Nitrogen (N)	Total Nitrogen	Rainfall in 24 hours	Tidal Stage	Water Color	Surface Condition	Cloud Cover	Wind DIRECTION	Wind SPEED	Weather	Wave Height	Data Entered by	Captain	Sampling Leader	Notes
Site 16	4/19/2021		tide falling, too shallow			tide falling, too shallow																																				
Site 16	4/26/2021		strong wind and waves			tide falling, too shallow																																				
Site 16	5/3/2021	7:55 AM	13.32	13.20	too shal	25.42	25.52	too shal	7.84	7.85	too shal	8.25	8.21	too shal	92.6	92.0	too shal	1.7	1.7	15.1	1	<1							0	2	5	6	4	E	2.0	3	0.0	nh	pj	pj	clear surface conditions, shallow	
Site 16	5/10/2021	11:13 AM	13.37	13.29	13.13	25.07	25.09	25.48	7.90	7.90	7.90	8.70	8.65	8.61	97.8	97.3	96.6	2.0	2.35	20.4	10	11							2	4	5	6	4	N	2.5	3	0.0	nh	pj	pj	clear surface conditions	
Site 16	5/17/2021		too shallow, low tide																																							
Site 16	5/24/2021	11:12 AM	18.92	18.72	18.72	25.70	25.73	26.00	7.87	7.87	7.88	8.06	7.98	7.96	100.0	99.1	98.6	1.2	2.31	19.1	46	5						0	1	5	6	4	S	1.3	3	0.0	nh	pj	pj	clear surface conditions		
Site 16	6/1/2021	7:50 AM	15.17	15.21	too shal	24.06	24.46	too shal	7.67	7.66	too shal	8.11	7.88	too shal	92.5	90.1	too shallow		1.4	16.0	34	8						0	2	5	6	4	0	0.0	3	0.0	nh	pj	pj	clear surface conditions, Secchi hit bottom before disappearing, bald eagle		
Site 16	6/7/2021	8:25 AM	20.66	20.61	too shal	25.58	25.57	too shal	7.82	7.82	too shal	7.87	7.95	too shal	101.7	102.6	too shal	1.0	1.69	22.6	18	7						0	4	5	6	2	S	0.5	1	0.0	nh	pj	pj	clear surface conditions, 2 osprey		
Site 16	6/15/2021		too shallow, low tide																																							
Site 16	6/21/2021	8:21 AM	22.56	22.62	22.52	25.92	25.97	25.96	7.97	7.96	7.98	7.29	7.32	7.32	98.9	99.0	99.1	0.8	2.35	24.2	33	18						0	4	5	6	4	S	2.2	3	0.5	nh	pj	pj	clear surface conditions		
Site 16	6/28/2021		too shallow, low tide																																							
Site 16	7/6/2021	8:21 AM	23.32	23.31	23.31	25.05	25.15	25.09	no pH data, sensor unop			6.80	6.69	6.43	92.0	90.4	86.8	0.7	1.84	24.0	11	5						0	4	5	6	3	SW	1.5	3	0.0	nh	pj	pj	clear surface conditions		
Site 16	7/12/2021		too shallow, low tide																																							
Site 16	7/19/2021	8:24 AM	25.39	25.38	25.37	25.46	25.45	25.51	7.57	7.57	7.58	5.39	5.28	5.21	75.7	74.4	73.2	0.8	2.25	21.0	47	19						0	2	5	6	4	NW	1.3	3	0.0	nh	pj	pj	clear surface conditions		
Site 16	7/26/2021		too shallow, low tide																																							
Site 16	8/2/2021	8:05 AM	23.77	23.77	23.76	25.06	25.07	25.10	no pH data, sensor unop			5.63	5.39	5.20	76.7	73.2	71.2	0.9	2.09	17.8	5	4						0	1	5	6	0	NW	3.7	1	0.5	nh	pj	pj	clear surface conditions		
Site 16	8/9/2021	11:53 AM	23.68	23.54	23.46	24.98	25.60	25.90	7.62	7.67	7.68	6.34	6.17	6.00	86.1	83.6	81.5	1.2	2.49	23.0	90	47						1	4	5	6	4	NE	1.8	3	0.0	nh	pj	pj	clear surface conditions		
Site 16	8/24/2021															sonde out of order, sonde out of order																										
Site 16	8/31/2021	7:28 AM	25.37	25.50	25.5	24.76	24.94	25.34	pH sensor broken			5.81	5.49	5.35	81.4	77.1	75.6	0.7	2.14	22.2	13	4						1	2	6	0	4	NW	2.0	3	0.0	kp	pj	pj	oil slick, debris, bubbles		
Site 16	9/7/2021	11:38 AM	23.41	23.30	23.23	24.91	24.94	24.98	pH sensor broken			6.85	6.81	6.63	93.0	92.1	89.4	1.1	2.75	23.8	13	<1						0	4	4	6	0	W	6.0	1	0.0	es	pj	pj	clear surface conditions		
Site 16	9/15/2021	7:41 AM	23.16	23.16	too shal	24.73	24.93	too shal	pH sensor broken			5.91	5.81	too shal	79.0	77.9	too shal	0.7	1.49	22.7	15	8						0	2	4	6	4	W	10.0	3	0.5	es	pj	pj	clear surface conditions		
Site 16	9/21/2021	12:02 PM	23.21	23.17	23.15	25.11	25.25	25.24	pH sensor broken			7.79	7.92	8.14	104.0	106.0	108.4	0.9	2.61	22.2	10	<1						0	4	5	6	2	E	8.0	2	0.0	fb	pj	pj	clear surface conditions		
Site 16	10/4/2021	8:21 AM	20.61	20.62	20.62	24.83	24.91	24.99	pH sensor broken			6.50	6.72	6.59	88.5	86.1	84.8	1.0	2.22	20.0								<1	4	5	6	4	ENE	5.0	3	0.5	es	pj	pj	clear surface conditions		
Site 16	10/11/2021		too shallow			too shallow										too shallow																										
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## GENERAL TRIP NOTES

DATE	SITE	
4/19/2021	13-19	water clarity-very green, murky in Mill Neck creek
4/26/2021		anchor loop broke left side, winch slipping at rope anchor connection point, notification tag on anchor line, more bumpers and lines
6/1/2021		anchor line frayed, may need winch adjustment
6/7/2021		anchor line frayed at anchor chain, needs fixing ASAP
6/7/2021	ALL Locations	Air Temp excessive - data sheets have most locations mid to high 30's (converts to 90's - 100 F) *accuweather.com shows a high of 82 on 6/7
6/7/2021	1-11,13,14	% SAT either at top of or exceeding range at top and 1m levels, occasionally bottom (top of range is 120%)
6/7/2021	12,16,18,19	Closer to normal (avg. around 100%) but high for locations compared to other dates this season and time of year
6/7/2021	15,17	No data recorded due to tide being too low and shallow depths
6/7/2021	ALL Locations	** % SAT very high and untypical for most locations
6/15/2021	9,10,11,19	% SAT at top of range at (top of range is 120%)
6/15/2021	15,16,17	No data recorded due to tide being too low and shallow depths
6/28/2021	Inner Cold Spring	dead fish!
6/28/2021	7,8, 15-18	No data recorded due to tide being too low and shallow depths
7/6/2021		winch is slipping on rope, pH sensor unoperative
7/12/2021		2 x CO2 canisters for life vests
7/12/2021	15-17	No data recorded due to tide being too low and shallow depths
7/19/2021	14	observed one dead fish, one dead crab
7/19/2021	2,15	Dissolved Oxygen is in the mid-4 mg/l range at the bottom water level at one site in CSH & one site in MNC
7/19/2021	17	Dissolved Oxygen is in the mid-4 mg/l range at all water levels at one site in MNC * DO in the 2-4 mg/l range is harmful to marine life
7/26/2021		bunker schooling at surface Oyster Bay, mostly Cold Spring Harbor)
8/2/2021		pH unreliable, consistently read same value
8/9/2021		pH seems to be working, still iffy
8/9/2021	1	DO in hypoxic range at all depths
8/9/2021	2	DO in hypoxic range at all depths
8/9/2021	3	DO in hypoxic range at bottom depth
8/9/2021	15	observed two dead fish
8/9/2021		<b>bacteria levels extremely high after rainfall in previous 24 hrs. Lab sheets have asterisks next to some enterococci. I think some of highest numbers we've seen. I don't know what they symbolize but I have to ask David.</b>
8/16/2021	NO SAMPLING	<b>Engine Troubleshooting</b>
8/24/2021	1,2,5	DO is in top of hypoxic range at all depths
8/24/2021	3,6	DO is in top of hypoxic range at Btm. Depth
8/24/2021	12	DO is in top of hypoxic range at top and 1m depths
8/24/2021	9,18	No Btm. Depth data recorded due to shallow depths
8/24/2021	13-17, 19	Sonde started malfunctioning at site 13 and thru 17 & 19
8/31/2021	2,15	DO is in hypoxic range at all depths
8/31/2021	17	DO is in hypoxic range at top and 1m depths; No Btm. Depth data recorded due to shallow depths
9/7/2021	2	DO is at top of hypoxic range at all depths pH sensor sent for repair - still being serviced