

**Day in the Life of the Hudson River 10/16/18 Data  
BUSH TERMINAL PIERS PARK, BROOKLYN**

**RIVER MILE: -4**

*Salt Front: ~RM 24*

**Katie McCarthy, Sunset Park High School**

**Blyss Buitrago, Billion Oyster Program**

**100 students 10th & 11th graders, 3 Adults**

**Latitude 40.654525 N & Longitude – 74.018978 W**



**Location:** Bush Terminal Park, Brooklyn, NY

**Area:** Old industrial waterfront area surrounding a small marshy bay

**Surrounding Land Use:** 80% Abandoned Industrial, 20% reestablishing park use

**Sampling Site:** sandy cove, marsh grasses (mainly spartina), man made rocky edges

**Shoreline:** Sandy coves with rocky edges on back side (mad made)

**River Bottom:** Sandy

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature:</i>		15.3 °C	59.54 °F	
		15.3 °C	59.54 °F	
		9.5 °C	49.1 °F	
		°C	32 °F	
		°C	32 °F	
<i>Wind Speed:</i>		2.5 m/s	15 mph	Southeast
<i>Weather Today:</i>	Partly cloudy, sunny, 36-48% humidity			
<i>Weather Previous:</i>	Rained all last week and yesterday			
<i>Water Temperature</i>	9:47 AM	14 °C	57.2 °F	
	9:50 AM	14 °C	57.2 °F	
	10:03 AM	13 °C	55.4 °F	
	1:36 PM	17 °C	62.6 °F	
	2:15 PM	16 °C	60.8 °F	
<i>Turbidity- long sight tube</i>	9:45 AM	77 cm		
	9:47 AM	77 cm		
	10:01 AM	74 cm		
	1:36 PM	123 cm		
	1:40 PM	123 cm		

<b>Chemical</b>					
<b>Salinity-</b>		15 ppt TS			
	1:44 PM	14 ppt TS			
		17 ppt TS			
		12 ppt TS			
<b>Dissolved Oxygen –</b>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>	
	Trial 1	14 °C	9 ppm	87%	
	Trial 2	13 °C	8 ppm	75%	
	Trail 3	10 °C	12 ppm	103%	
	Trial 1	14 °C	12 ppm	115%	
	Trial 2	12 °C	12 ppm	110%	
	Trial 3	10 °C	12 ppm	107%	
<b>pH - pH strips</b>	9:35 AM	7.6, 7.6, 8		7.7 avg.	
	9:44 AM	7.6, 8, 7.9		7.8 avg.	
	10:10 AM	9, 8*		8.5 avg	
	1:40 PM	7, 8.4, 8.5		7.96 avg	
	1:48 PM	8.4, 7, 8.5		7.96 avg	
<b>Nitrates- tablets</b>	9:44 AM	0, 0			
<b>Ammonia- drops test kit</b>	9:36 AM	0.25 ppm, 0.50 ppm, 0.25 ppm			
	9:50 AM	0.2 ppm, 0.25 ppm			
	2:02 PM	0.5 ppm			
<b>Biological</b>					
<b>Fish – seine</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>	No abundance listed next to organisms	
		Seahorses Mummichogs Sea Robins Winter Flounder Black Fish			
	<b>TOTAL: 0</b>	<b>DIVERSITY: 5</b>			
<b>Macroinvertebrates- Oyster Cages with the Billion Oyster Program from submerged cage 9.5 cm (also noted as &lt;1ft)</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>	No abundance listed next to most organisms. Light bioaccumulation on cage	
	5 (4 alive, 1 dead)	Oysters Shore Shrimp Blue crabs Sea squirts Barnacles Limpets Slipper Shells Glass Shrimp Asian Shore Crb Sponges	70, 75, 50, 80, 26 mm       2.0 cm		
	<b>TOTAL: 0</b>	<b>DIVERSITY: 10</b>			
<b>Tides</b>	<b>Time</b>	<b>Rising, Falling, Still</b>	<b>Height (cm)</b>	<b>Rate of Tidal Change (cm/min)</b>	Unable to report

	<i>Time</i>	<i>Cm/second</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Still</i>
<i>Currents Flow</i>		2.89	0.06	South	80 cm/sec seems unrealistic unless a wave moved through
		80.00	1.56	South	
		7.01	0.14	South	
<i>Other Observations</i>	Water is freezing cold, dark blue, light and dark green, no oil sheen, no garbage in water. Seagulls, crabs, ducks fish, seahorses... Coliform Bacteria was positive for AM and PM				