

**Day in the Life of the Hudson River 10/13/22**

**Pier 4, Brooklyn Bridge Park, NY**

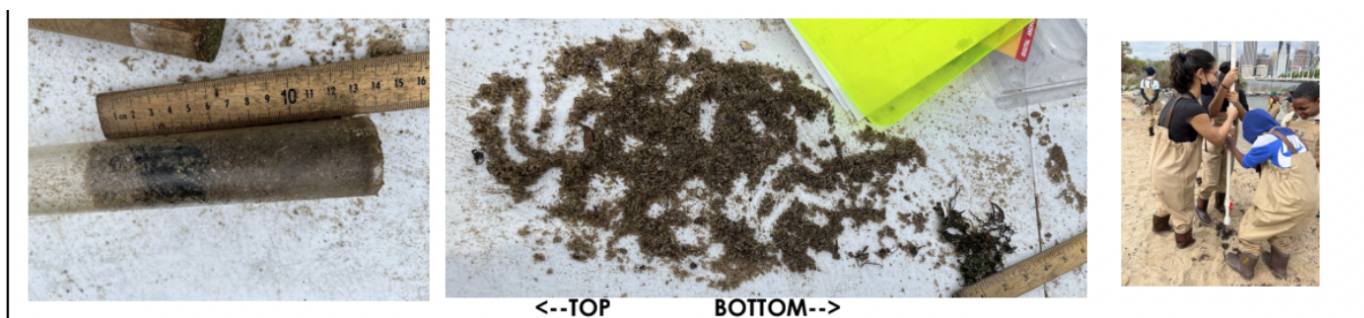
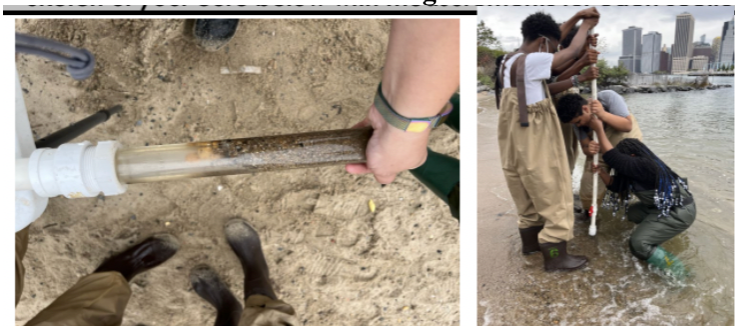
**East RIVER MILE: 1.7**

*Salt Front: ~ 76*

**Brooklyn Bridge Park Conservancy & Fort Greene Prep Academy– Christina Tobitsch**

*35 students & 11 adults*

**Latitude 40.69653°N & Longitude –73.99971°W**



**Location:** Pier 4 Beach, Brooklyn Bridge Park, East River

**Area:** Sandy beach peninsula with sheltered coves between Pier 3 and the One15 Marina

**Sampling Site:** Beach, covered in vegetation, ripraps (large rocks), and pipe entering the water

**Surrounding Land Uses:** Beach and park

**Shoreline:** 85% Sandy & 15% Rocky

**River Bottom:** Sandy

**Water:** Calm

**Plants in the Water:** None

\*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature-</i>	10:35AM- 12:25 PM	21°C	70°F	
	12:40 PM		68°F	
<i>Wind Speed: NR</i>		<i>Anemometer</i>	<i>Beaufort</i>	<i>Direction</i>
<i>Weather today</i>	11:00 AM	>75% cloud cover	Rain began at 12:43 PM; steady rain after 1 PM	
<i>Weather the past 3 days:</i>	Sunny			
<i>Tides- tide stick</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Water Height (cm)</i>	
	10:40 AM- 10:53 AM	Rising	19 cm	HT @ 11:39 AM *tide stick reset several times as it
	11:20 AM	Rising	23 cm	
		Rising	28 cm	

	12:00 PM 12:23 PM	Falling Falling	20.3 cm 18 cm	fell
<b>Current- NR</b>	<b>Time</b>	<b>Cm/sec</b>	<b>Knots</b>	<b>North/South</b>
<b>Water Temperature-</b>	10:20 AM 11:57 AM	19°C 20°C	67°F 68°F	
<b>Turbidity- Long Sight Tube (120 cm)</b>	12: 58 AM	102 cm		
<b>Chemical</b>				
<b>Salinity-Hydrometer</b>	10:20 AM 10:45 AM 11:05 AM 11:57 AM 12:15 PM 12:37 PM	27 ppt 26 ppt 26.3 ppt 23.6ppt 24.6 ppt 23.5 ppt		
<b>Standardized Salinity – Refractometer</b>	12:07 PM	25 ppt		
<b>DO – Color Tablets</b>	<b>Time</b>	<b>Temp</b>	<b>ppm DO</b>	<b>% saturation</b>
	10:20 AM 10:45 11:05 11:57 12:15 PM 12:37	19°C   20°C	7 ppm 6 ppm 8 ppm 7 ppm 7 ppm 6 ppm	NR
<b>pH – Color Match Kit</b>	11:05 AM	7		*multiple readings 10:20-12:37 PM all between 7 and 7.5

MEASUREMENTS WITH MULTIPARAMETER PROBE (brand: HORIBA)								
LOCATION:	(North side/ pier side)				(South side/marina side and CSO)			
TIME:	1:06 PM	1:07 PM	1:08 PM	AVERAGES	1:09 PM	4:08 PM	5:08 PM	AVERAGES
TEMP (F):	62.6 F	62.5	62.5	62.5	63.6	63.4	63.4	63.46667
SALINITY (ppt):	25.78	25.81	25.81	25.8	25.26	25.29	25.29	25.28
pH:	7.93	7.95	7.97	7.95	8.1	8.11	8.12	8.11
DO (mg/L):	7.11	7.02	6.86	6.9966667	7.87	7.38	7.41	7.5533333
% DO sat:	86%	84.80%	82.90%	85%	95.80%	89.80%	90.10%	92%
TURB (NTU):	12.6	13.1	13.3	13	13.6	13.3	13.6	13.5

<b>Biological-</b>					
<b>Fish – Seine</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>	<b>Length of smallest</b>	
10:30 AM-12:30 PM	148	Atlantic Menhaden	10.5 cm	7 cm	
	131	Atlantic Silverside	NR	NR	
	2	Bluefish	19.5 cm	13 cm	
	1	Winter Flounder	8 cm	-	
<b>Fish Totals</b>	<b>TOTAL: 282</b>	<b>Diversity: 4</b>			
<b>Macroinvertebrates</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>	<b>Length of smallest</b>	
	5	Comb jellies			
<b>Macroinvertebrate Totals</b>	<b>TOTAL: 5</b>	<b>Diversity: 1</b>			
<b>Sediment Core – 10:14 AM, 10:30 AM, 11:10 AM, 12:10 PM &amp; 12:30 PM collection</b>					
<b>Length</b>	<b>H2S</b>	<b>Oxid Top</b>	<b>Oil</b>	<b>Grain Size</b>	<b>Other Features</b>

	<b>smell</b>				
10:14 AM 12 cm	No	No	No	Abundant: sand Rare: gravel, pebbles	Rare: oyster/clam shell mix, living vegetation algae
10:30 AM 14 cm	Yes	No	No	Abundant: sand Rare: pebbles	Rare: oyster shells, brick, 1 microplastic
11:10 AM 13 cm	No	No	No	Abundant: sand Rare: gravel	Common: living vegetation algae Rare: wood, oyster /clam shells
12:10 PM 10 cm	No	No	No	Abundant: sand Common: gravel Rare: pebbles	-
12:30 PM 13 cm	No	No	No	Abundant: sand Rare: gravel, pebbles	Rare: oysters /clam shells, brick
<b><i>Boats- NR</i></b>					
	<b>Time</b>	<b>Name</b>	<b>Color</b>	<b>North/Southbound</b>	<b>Light/Loaded</b>
Commercial					
Recreational					