

**Day in the Life of the Hudson River 10/22/19 Data
 BROOLYN BRIDGE PARK (WEST), MANHATTAN
 RIVER MILE: East River 2.3**

Salt Front: ~RM 54

**Leman Manhattan Preparatory School- Bill Livingston
 36 students 10th -12th grade, 2 adults
 Latitude 40.7076 N & Longitude – 73.99982 W**



Location: Brooklyn Promenade- Brooklyn Bridge, Manhattan, NY

Area: Beach under the Brooklyn Bridge- 125 feet north of Dover street, west side of the East river. Pier and path for recreational walking, jogging, bike riding, and fishing. Surrounding land is a sandy beach with water. Water used for fishing and boating; beach is open to the public but no swimming; lots of rocks and sand; near parking lot.

Surrounding Land Use: 60% Urban Residential; 30% Industrial/Commercial; 10% Beach

Sampling Site: Sandy, beach, covered in vegetation, pier; banks altered; bulkhead with timbers; debris in area such as broken concrete, docking; riprap; pipe entering river (south CSO ~40 meters- not visible).

Water: Choppy, 4 feet deep

River Bottom: Sandy, rocky (pebbles and stones)

Plants: 3% plants covering the water area: Irish moss and Gracela

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature:</i>	10:00 AM	13.9 °C	° F	
	1:20 PM	17.3 °C	° F	
	1:40 PM	17 °C		
	2:00 PM	16.4 °C		
	2:20 PM	16 °C		
<i>Wind Speed:</i>	10:40 AM	Beaufort: 4		
	2:20 PM	Beaufort: 6		
<i>Weather Today:</i>	NR			
<i>Weather Previous:</i>	NR			
Water Temperature	9:20 AM	17.1 °C	° F	
	10:00 AM	17.8 °C	° F	
	10:20 AM	16 °C	° F	
	10:40 AM	16.1 °C		
	1:20 PM	16.6 °C		
	2:00 PM	16 °C		
	2:20 PM	16.6 °C		
Turbidity - Long site tube	2:00 PM	61.2 cm		
Chemical				
<i>Salinity- hydrometer</i>	9:20 AM	24 ppt		
	10:00 AM	23 ppt		
	10:20 AM	23 ppt		

	1:00 PM 1:20 PM 2:00 PM 2:20 PM	20 ppt 25 ppt 24 ppt 24 ppt		
<i>DO –</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	9:20 AM	17.1 °C	12	105
	10:00 AM	17.8 °C	8	85
	11:40 AM		5.75	58
	1:00 PM 2:00 PM	16 °C	5.5 6	55 63
<i>pH - pH strips</i>	10:00 AM	6		
	10:20 AM	7		
	1:20 PM	6		
	2:00 PM	7		
	2:20 PM	7		
<i>Nitrates – Flinn/Lamotte Color Comparator Kits</i>	10:40 AM	1.5 ppm		
	1:00 PM	4.4 ppm		
	2:20 PM	1.0 ppm		
<i>Phosphates – Flinn/LaMotte Color Comparator Kits</i>	10:40 AM	0.4ppm		
	1:20 PM	6.6 ppm		
	2:20 PM	0.2 ppm		
<i>Fish – Seine</i> <i>Length of seine: 20’</i> <i>Width of seine: 4’</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	
	4	Atlantic Silverside		
	1	Striped Bass		
	1	Herring (shad)		
	TOTAL: 6	Diversity: 3		
<i>Macroinvertebrates-</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	
	20	Comb Jellies		
	TOTAL: 30	Diversity: 1		
	<i>Indirect Evidence from shells as tides prevented exploring in tide pools</i>	Blue Mussels Surf calms Quahog Oyster Blue Crab European Green Crab Ocellated Lady Crab	<i>Mytilus edulis</i>	
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Still</i>	<i>Height (cm)</i>	<i>Rate of Tidal Change (cm/min)</i>
	9:00 AM 9:20 AM 10:00 AM 10:20 AM 10:40 AM 11:00 AM 1:20 PM 1:40 PM 2:00 PM 2:20 PM 2:40 PM		0 cm 2 cm 6 cm 8 cm 10 cm 12 cm 76 cm 83.8 cm 91.4 cm 106 cm 120 cm	
<i>Current- *measured in a</i>	<i>cm/second</i>	<i>Rising, Falling,</i>	<i>Height (cm)</i>	<i>Rate of Change</i>

<i>cove</i>		<i>Unchanged</i>		<i>(cm/min)</i>
<i>Currents Flow</i>	<i>Cm/second</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Still</i>
10:00 AM	13.8			
1:20 PM	3			
1:40 PM	12			
2:00 PM	5			
2:20 PM	8			
2:40 PM	2			