

Day in the Life of the Hudson & Harbor 10/22/19 Data

125th STREET PIER, Manhattan, NY

RIVER MILE: 10

Salt Front: ~ RM 53

Diane Lennon, Columbia Secondary School, Environmental Science

22 students 12th grade, 2 adults

Latitude 40 N & Longitude - 73 W

Location: Pier on 125th Street, Manhattan

Area: Concrete pier; used for boating and fishing; at the pier there are birds that are feeding on food scraps or other small organisms around the vicinity. Rocky shoreline, riprap edges and concrete bulkehead.

Surrounding Land Use: 100% Urban/Residential

Sampling Site: Pier

Plants in area: No plants in the water area

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature</i>	1:32 PM	13.6 ° C	62.6° F	
	1:34 PM	13.8 ° C	62.24 ° F	
	1:46 PM	15.7 ° C	60.98 ° F	
<i>Wind Speed: anemometer</i>	1:30 PM	5 mph (meter)	North	
<i>Weather today</i>	1:38 PM, light rain, misty and drizzly - mostly cloudy (51-75%) – It is very cloudy and foggy & chilly			
<i>Weather recently</i>	Rain 2 days ago and cloudy			
<i>Water Temperature –</i>	1:38 PM	17 ° C	62.6 ° F	
	1:48 PM	16.8 ° C	60.8 ° F	
	2:00 PM	16.1 ° C	60.8 ° F	
<i>Turbidity - Secchi disc & short sight tube</i>	2:00 PM	Secchi Disk – 152 cm		*With the secchi disk the water was very green and cloudy, with the short site tube the water was yellow & partly cloudy
		Short site tube - 1.5 JTU X 2 samples		
		*Although they noted cloudy water the numbers show pretty good visibility		
Chemical				
<i>Salinity- Hydrometer</i>	1:50 PM	12 ppt		<i>Average – 13 ppt</i>
	1:53 PM	14 ppt		
	1:54 PM	12 ppt		
<i>DO –</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	1:10 PM	17 ° C	8	69%
	1:33 PM	17 ° C	9.3	89%
<i>pH – Color match kit* very acidic - wonder if there was something in the water collected?</i>	1:40 PM	3.5 X 3		AVG: 3.5*
	1:45 PM	6.5, 6.5, 6.3		6.4
	1:50 PM	7 X 3		7.0
				Overall average 5.6
<i>Nitrates</i>	1:44 PM	0 X 3		
Current-	Distance	cm/second	Cm/Sec	Ebb/Flood/Still
	~1:45 PM	384 cm	32 seconds	12
	396 cm	11 6 seconds	36	Flood
Boat Traffic – Commercial	Name	Color	North or South	Loaded or Light
	1:25 PM	Barge	Grey	North
1:30 PM	Barge	Black	South	Loaded

1:36 PM	Tug	White	South	Loaded
Recreational				
1:29 PM	Speedboat	White/gray	North	
1:50 PM	Yacht	White	North	
<p>Journal #1: I can hear the flags on a nearby ship ruffling. There is a highway nearby so I hear cars and a train. In terms of weather it is a little misty/foggy. It rained earlier so it is a little wet out and I can feel some water, it could be from the river or drizzle. I think the wind may affect the direction of the water, or how the orange will move when we are trying to figure out direction.</p>				
<p>Journal #2: The weather is windy, it's cold. I hear cars, as well as the train and my peers chatting. I see a large body of water as well as the Jersey shore. I saw a bucket hitting the wall, That startled me, as well as fog that covers the Jersey buildings. The wind that could redirect the current and has an effect on the current.</p>				