

Day in the Life of the Hudson River 10/12/17 Data

Salt Front RM 83)

RIVER MILE 10

Pier 125

N 40, W-73

**Diane Lennon, Columbia Secondary School, 35 students 12th grade college
environmental class, 1 adults**



DO: 5

Location: Pier 125, is a pier used for boating and fishing

Area: Pier – made of concrete.

Surrounding Land Use: 100% Urban/Residential

Sampling Site: on a pier, see gulls

Plants in area: no plants in the water area

Water: Calm; mud, sand, weeds, and rocks at bottom

<i>ITEM</i>	<i>Time</i>	<i>Readings</i>		
<i>Physical</i>				
Air Temperature	1:55	67.8°F	19.9°C	
	2:00	68.1	20	
	2:02	67.9	19.9	
Wind Speed		7mph	NW	
Cloud Cover	1:50 PM	Overcast	>75%	
Weather today	Light showers			
Weather recently	Rain			
<i>Water Temperature</i> (measured at 1.1m)	1:43	17°C, 15°C	Average: 16°C	
	1:45	20,19	19.5	
	1:50	22,20	21	

<i>Turbidity</i> (Secchi disk, cm)	1:30	115.24 cm 110.16 120.32	The water is slightly turbid. It takes about 100cm to not be able to see the secchi disk. We tested in different areas so that we could see how light penetration can affect the turbidity and get more accurate results. However, we found that even in more sunlight, the turbidity did not create an outlier.	
<i>Chemical</i>	Time	ppm	Temp	% Sat
DO	1:24 1:48	6.6 5	15°C 15	65% - 50%
pH color match kit	1:25	7, 7.5, 7	Average: 7.2	
Salinity – hydrometer	1:36 1:42 1:48	TS (ppt) 20, 19, 20 20, 20, 20 20, 20, 20		
Nitrates (nitrate tablets)	2:05	0 ppm		
Phosphates	1:30	0.5, 0.5, 0.5		
Alkalinity (Direct reading titrator)	1:35	1000, 1000, 1000 (ppm)		
<i>Tides - water depth</i>				
<i>Currents</i>	Time 1:45 1:52	cm/30 sec	Cm/sec 43.33 26.02	Ebb/Flood/still Still Still Still
<i>Shipping – Commercial</i>	1:52	Black	Stationary, south of GWB	Loaded
<i>Shipping Recreational</i>	1:30	White sailboat	Both directions	
<i>Observations</i>	We are on a pier, there are gulls.			