

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

Salt Front RM 83)

RIVER MILE 9

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 2:00 2:02	67.8°F 68.1 67.9	19.9°C 20 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 1:45 1:50	17°C, 15°C 20,19 22,20	Average: 16°C 19.5 21	

Turbidity (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.	
Chemical	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)		
Tides - water depth				
Currents	Time	cm/30 sec	Cm/sec	Ebb/Flood/still
	1:45 1:52		43.33 26.02	Still Still Still
Shipping – Commercial	1:52	Black	Stationary, south of GWB	Loaded
Shipping Recreational	1:30	White sailboat	Both directions	
Observations	We are on a pier, there are gulls.			