

Day in the Life of the Hudson River 10/05/2023
Louis Engel Park, Ossining, NY
RIVER MILE: 32.5
Salt Front: ~ 52
Ossining High School-Bridget Kenny
30 students, 11th-12th grade, 2 adults
Latitude 41.15483°N & Longitude -73.86959°W

Location: Beach at Louis Engel Park, Ossining, NY

Surrounding Land Use: 75% Urban/Residential, 25% Industrial/Commercial

Sampling Site: Bulkhead lines the shoreline with pier, rock wall, beach, riprap, rocky, weedy, used for picnics and boats. Pipe enters the river north of the sample site.

Shoreline: 90% Sandy and 10% Rocky

Water: Calm

River Bottom: Sandy and slightly rocky

Plants in the water: No plants in the water

*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature</i>	11:00 AM 11:28 AM 11:50 AM	21.1° C 21.7° C 22.2° C	70° F 71° F 72° F	
<i>Wind Speed:</i>	11:28 AM	<i>Anemometer</i>	<i>Beaufort</i> 2	<i>Direction</i> Southeast
<i>Weather today</i>	11:30 AM	26-50% Cloud Cover	No Rain	
<i>Weather the past 3 days:</i>	Unseasonably warm in the 80s and sunny			
<i>Tides- Tide Stick</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Height (cm)</i>	
	11:00 AM 11:04 AM 11:30 AM 12:00 PM	- Rising Rising Rising	0 cm 9 cm 15 cm 20 cm	
<i>Current- NR</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>
				<i>Ebb/Flood/Slack</i>
<i>Water Temperature-</i>	11:34 AM 12:00 PM 12:15 PM	21°C 24.5°C 22°C	69.8°F 76.1°F 71.6°F	
<i>Turbidity- Long Sight Tube (120 cm)</i>	11:19 AM 11:57 AM 12:31 PM	87 cm 88.6 cm 112 cm		
<i>Chemical</i>				
<i>Standardized Salinity- High Range Quantabs – 5.8 qt units</i>	12:00 PM	2,741 ppm total salinity	2.7 ppt	1517 Cl-
<i>Student Salinity- Hydrometer</i>	11:38 AM 11:44 AM 11:44 AM 12:07 PM	8,933 ppm 6,667 ppm 6,000 ppm 2,333 ppm	8.9 ppt 6.7 ppt 6 ppt 2.3 ppt	<i>averages</i>
<i>DO – Lamotte Drop Count Kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
<i>*Missing a reagent</i>				
<i>pH – Color Match Kit</i>	11:14 AM 11:14 AM 11:20 AM 11:55 AM	7.5 7 7.3 7.3		

<i>Nitrates- Lamotte Kit</i>	11:15 AM	0 mg/l				
<i>Phosphates- Color Match Kit</i>	11:27 AM	0.2 mg/l 0.6 mg/l 0.8 mg/l Avg: 0.5 mg/l				
Biological						
Fish- Seine (15 hauls)	Number	Name		Length of longest	Notes	
11:15 AM-1:00 PM	24	Atlantic Silverside		9.5 cm		
Fish Totals	TOTAL: 24	Diversity: 1				
Macroinvertebrates	Number	Name		Length of longest		
	2	Harris Mud Crab		2 cm		
Macroinvertebrate Totals	TOTAL: 2	Diversity: 1				
Sediment Core	Time	Oxid Top	H₂S Smell	Oil	Grain Size	Other Features
		No	No	No	<i>Abundant:</i> gravel & pebbles <i>Common:</i> sand <i>Rare:</i> mud	<i>Common:</i> brick <i>Rare:</i> leaves, macroinvertebrates, living vegetation, coal, slag

Boats					
Commercial/ Recreational	Time	Type	Color	Southbound/ Northbound	Light/ Loaded
Commercial	11:25		Red/Black	Northbound	Loaded
Recreational	11:25		White	Southbound	Loaded
Recreational	11:26		White	Southbound	Light