

Day in the Life of the Hudson River 10/16/18 Data

LOUIS ENGEL PARK

Ossining, NY

RIVER MILE: 32.5

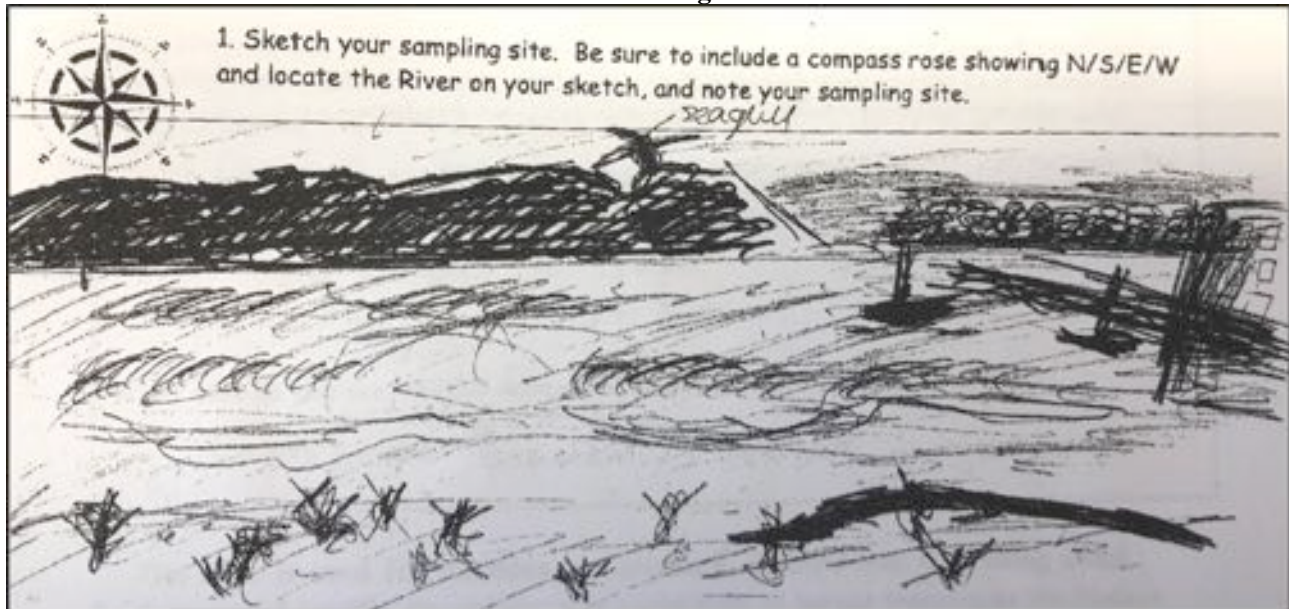
Salt Front: RM 24

Ossining High School, AP Environmental Science-

7 students 11th – 12th grade, 1 adults

Artie Carlucci, Ossining HS

Latitude N 41° 9' & Longitude W 73° 51'



Location: Wading beach at Lewis J. Engel Park, Ossining, NY

Area: Beachfront area with a ferry pier, paved sidewalk & parking lot, slightly grassy, rock wall lining the river

Surrounding Land Use: 50% beach, 15% park, 25% industrial/commercial

Sampling Site: bulkhead lines the shoreline with pier, **altered banks** with rock wall, **beach, riprap**, rocky, and weedy. Used for picnics and boats. Pipe enters the river North of the sample site.

Shoreline: 50% sandy, 10% muddy, 60% rocky

Water Depth: 1-4 feet

Plants in area: weeds and water chestnuts

River Bottom description: muddy, rocky, sandy

Other: Canadian geese, cormorants, sea gulls

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature</i>	10:00 AM	8.89 °C	48°F	
	11:00 AM	10.56 °C	51 °F	
	12:00 PM	11.67 °C	53 °F	
<i>Wind Speed: Wind Meter</i>	10:00 AM	17 mph	14.77 knots	
	2:00 PM	11 mph	9.56 knots	
<i>Weather today</i>	12:00 PM Clear			
<i>Weather recently</i>	Rain showers over the weekend and it rained Monday night.			
Water Temperature	10:00 AM	15 °C	59°F	
	12:00 PM	16 °C	60.8 °F	
	1:00 PM	16 °C	60.8 °F	
Turbidity - long sight tube	10:00 AM	9.5 cm, 10.5 cm, 11 cm, 11 cm		
Chemical				

Salinity- 11:00 AM 1:00 PM 2:00 PM	Chloride: - 35 ppm Cl ⁻ 28 ppm Cl ⁻	Total Salinity: 6000 ppm 63.23 ppm 50.58 ppm	*Hydrometer LR Quantabs LR Quantabs	*6000 ppm with hydrometer is not realistic this year at this site
<i>DO – Tabs from Estuary wide monitoring kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	10:00 AM 1:00 PM	16°C 16 °C	4 4	40% 40%
<i>pH – color match test kit and test strips</i>	10:00 AM 1:00 PM	6, 6.5, 7 6, 6.5, 7		
<i>Nitrates-LaMotte Estuary wide Test Kit</i>	12:00 PM	5 ppm		
<i>Phosphate- LaMotte Estuary wide Test Kit</i>	1:30 PM	1 ppm		
Fish	Number	Name	Length of longest	
<i>Seine- 30 foot net</i>	1 7 11 1	Atlantic Silverside Bay Anchovies Alewife Catfish- dead	4 inches 10 cm 15 cm 50 cm	
Fish Totals	TOTAL: 20	Diversity: 3		
Macroinvertebrates	Number	Name		
<i>Seiner- 30 foot net</i>	2	Asian Shore Crab		
Macroinvertebrate Totals	TOTAL: 2	Diversity: 1		
Tides- tide stick	Rising, Falling, Unchanged	Height (cm)	Rate of Tidal Change (cm/min)	
10:00 AM 11:00 AM 12:00 AM 1:00 PM 1:30 PM 2:00 PM	Unchanged Unchanged Flood Flood Flood Flood	- - 6 40 55 65	0 0 .1 .567 .5 .33	
Boat Traffic commercial	Name	Color	North or South	Loaded or Light
11:05-11:25 AM	Tanker	Red and Black	North	Light
Core Sampling	Description	Rare	Common	Abundant
	28 cm long	Clay Wood Shells Freshwater Mussels	Gravel Pebbles Brick	Sand
Other Observations	Water chestnut with small bugs in them			