

Day in the Life of the Hudson River 10/22/19
PLUM POINT, KOWAWESE, NEW WINDSOR
RIVER MILE: 58.1

Salt Front: ~ RM 53

Vails Gate STEAM Academy – Krista Espinoza & Janet DeStafanso

Black Rock Consortium- Jack Caldwell

45 students 4th grade, 10 adults

Latitude 41.463043 N & Longitude – 74.0119 W

Location: Plum Point Park Beach, New Windsor, Orange County, NY

Area: Northern sandy public beach bordered by forested area and parking lot. Area used for picnicking, fishing, and kayaking

Surrounding Land Use: 25% Forested; 75% Beach

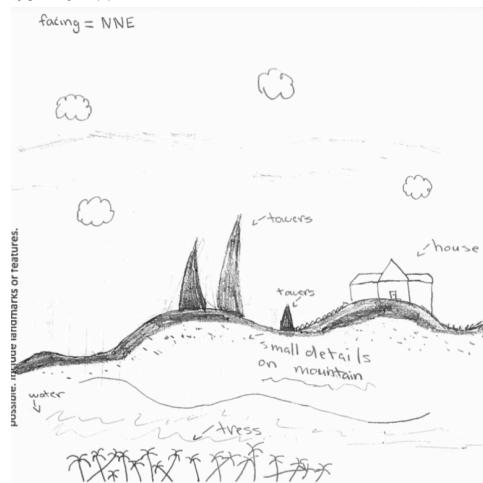
Sampling Site: Sandy Beach (cove)

Shoreline: Beach area, riprap in area of sampling site, debris (broken concrete and docking) in area.

Water: 2 ft, choppy

River Bottom: rocky, sandy

Plants in water: 10% water chestnut



<i>ITEM</i>	<i>Time</i>	<i>Reading</i>	<i>Comments</i>	
Physical				
<i>Air Temperature</i>	10:06 AM	57.3 °F	14 °C	
	11:30 AM	57.2 °F	14 °C	
<i>Wind Speed:</i>	10:15 AM	2.4 mph	Beaufort 2	
	10:41 AM	3.3 mph		
	11:05 AM	3.3 mph		
	11:27 AM	3.6 mph		
<i>Weather today</i>	Overcast (100%)			
<i>Weather the past 3 days:</i>	Rained 2 days before on 10/20/19			
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Height (in)</i>	<i>Rate of Tidal Change (cm/min)</i>
	9:05 AM	Falling		
	10:55 AM	Falling		
	11:20 AM	Falling		
<i>Current-</i>	<i>cm/second</i>	<i>North/South</i>	<i>Knots</i>	<i>Ebb/Flood/Still</i>
10:15 AM	3.1	3.1	0.06	Ebb
10:41 AM	11.7	11.7	0.23	Ebb
11:05 AM	.5	.5	0.01	Ebb
11:27 AM	9	9	0.18	Ebb
<i>Water Temperature</i>	10:20 AM	62 °F	17 °C	
	10:48 AM	62 °F	17 °C	
	11:10 AM	61 °F	16 °C	
	11:33 AM	62 °F	17 °C	
<i>Turbidity- long sight tube</i>	10:57 AM	54.4cm, 56.4 cm, 53.4 cm Avg: 54.7 cm		
Chemical				
<i>Salinity- Quantabs</i>	<i>Time</i>	<i>Chloride ppm Cl</i>	<i>Total Sal. Ppm</i>	
	11:00 AM	Below Detection *maybe quantabs went bad		<i>Standardized Sal:</i> 81 ppm total sal
<i>DO –</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>

	10:30 AM	14 °C	8	80%
pH – pH strips	10:53 AM	7.5, 7.5, 7.5		
Fish	Number	Name	Length of longest	
Seine: 12:20 PM length 20' x pull 20' Number of pulls: 8	2 1 7	American Eel White Perch Striped Bass	8 inches 7 inches 2 inches	
Fish Totals	TOTAL: 27	Diversity: 3		
Macroinvertebrates	Number	Name	Length of longest	
Macroinvertebrate Totals	TOTAL:	Diversity:		
Sediment Core	Time	Oxid Top	Grain Size	Other Features
Length of core: 6 inches		No	Common: sand Rare: clay, mud, gravel, pebbles	Rare: wood, oyster shells
Boats	Time	Name/Color	North/South	Loaded/Light
Commercial Commercial Recreational	9:05 AM 12:55 PM 9-1:00 PM	Barge Barge Sailboat	South North North	
Observations	Water celery, spatterdock, water chestnuts, duckweed on shore. Trains, seagulls, motorboat to fish.			