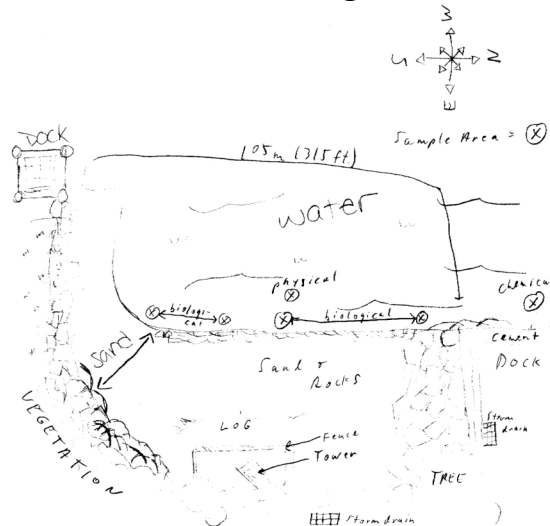


**Snapshot Day 10/7/08 Data
(Salt Front RM 63.4)
RIVER MILE 41**

**Steamboat Dock Park, Verplanck, Westchester
Beth Rhines, Teatown Lake Reservation**

**Bob Connick, Sott Rizzo, Trisha Fuller Johnson & Liz Stevens & Mahopac High
School - Chem Honors, Regents and APES - 9th - 12th graders – 60 students
Latitude N 41° 14'.962" Longitude W 73° 57'.888"**



Location: Steamboat Dock Park beach, City of Verplanck in Westchester County

Area: located in a small cove between a point and a bulkhead – sampled approximately 30 ft. from south end of dock/parking lot

Surrounding Land Use: Urban/residential 10% , Forested 10%, beach 70%, Industrial commercial 10%. Some buildings with large parking lots in front to the north. Beach, a street with houses with some trees to the south

Sampling Site: beach, riprap, banks altered, dock, bulkhead, piping North

Plants in area: *Trees – Honey locust*

Alianthus – tree of heaven (invasive)

Sycamore

Sugar Maple

Shrubs – Indian hemp

Vines – Fox – river grape

Bittersweet (invasive)

Ivy (Invasive)

Non- native variegated decorative grasses

Other Plants - Goldenrod

Deadly nightshade

Some type of burdock–

Spanish needles (Bidens Biginnata)

Devil’s Beggar tick (Bidens Frondosa)

Water – Vallasanaria – Eel grass

Water depth: 3.5’

River Bottom – 20 ft. out rocky then clay

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
Physical				
Air Temperature	11:11 AM	12.1°C		
	12:17 PM	19°C		
Wind Speed	2 Beaufort			
Cloud Cover	none			
Weather today	Clear, cool			
Weather recently	10/4/08 – Hi 16°C; Low 2 °C; Precip 0.48 cm 10/5/08 – Hi 14°C; Low 4 °C; Precip 0.38 cm 10/6/08 - Hi 14°C; Low 3 °C; Precip 0.00cm			
Water Temperature	11:45 AM	22°C 25°C 23°C		average 23.3°C
	12:12 PM	22°C 22°C 21°C		Average 21.7°C
Turbidity - secchi	11:45 AM	0.13 M	0.19 m	0.16 meters
Meter	11:45 AM	33 NTU		
Chlorophyll				
Core	13.5 cm	7.5 cm top layer	6 cm bottom layer	
	Total	Mud rare	Sand common	Brick abundant
Chemical				
DO (drop kits)	11:15 AM	8 mg/L	21°C	90 %
pH Indicator sol	11:15 AM	8.0 8.0 8.0		Average 8.0
Phosphate	11:15 AM	0.29 mg/L	0.37 mg/L	0.34 mg/L
Nitrate	11:15 AM	0.7 mg/L	0.9 mg/L	0.8 mg/L
Alkalinity	11:15 AM	100 mg/L 110 mg/L 120 mg/L		110 mg/L
Salinity meter	11:45 AM	3.5 ppt 3.4 ppt 3.6 ppt		3.5 ppt average
Fish Catch	Number Caught	Species	CPUE	Seine
20 ft net X 4ft– 50 ft. pull	27	Striped bass		
4X6 mm openings	15	White perch		
	91	Atlantic		

		silversides		
	5	Blue crab		
	3	American Eel		
	2	Grass Shrimp		
<i>Tides</i>	TIME	Distance water advanced towards shore	Depth Change over time w/ Meter stick	
	11:20 AM	9 cm	66 cm	
	11:35 AM	19 cm		rising
	11:55 Am	66.5 cm	76 cm	rising
<i>Currents</i>	Cm/60 sec	Cm/sec	Knots	Direction
<i>Slight bay in test area</i>	280 cm/60sec	4.67 cm/sec	0.093 knots	N Flood
	380 cm/60 sec	6.33 cm/sec	0.126 knots	N Flood
<i>Core –</i> From 3.5 ft. of water - 40 ft. from shore	Length - 12-13.5 cm – dark slatey grey	Top 4 cm oxidized – reddish grey with red dots – brick or oxidation?	8-13 cm second layer – fine particles (clay?)	Abundant” Clay
<i>Traffic</i>				
<i>Other Items</i>				