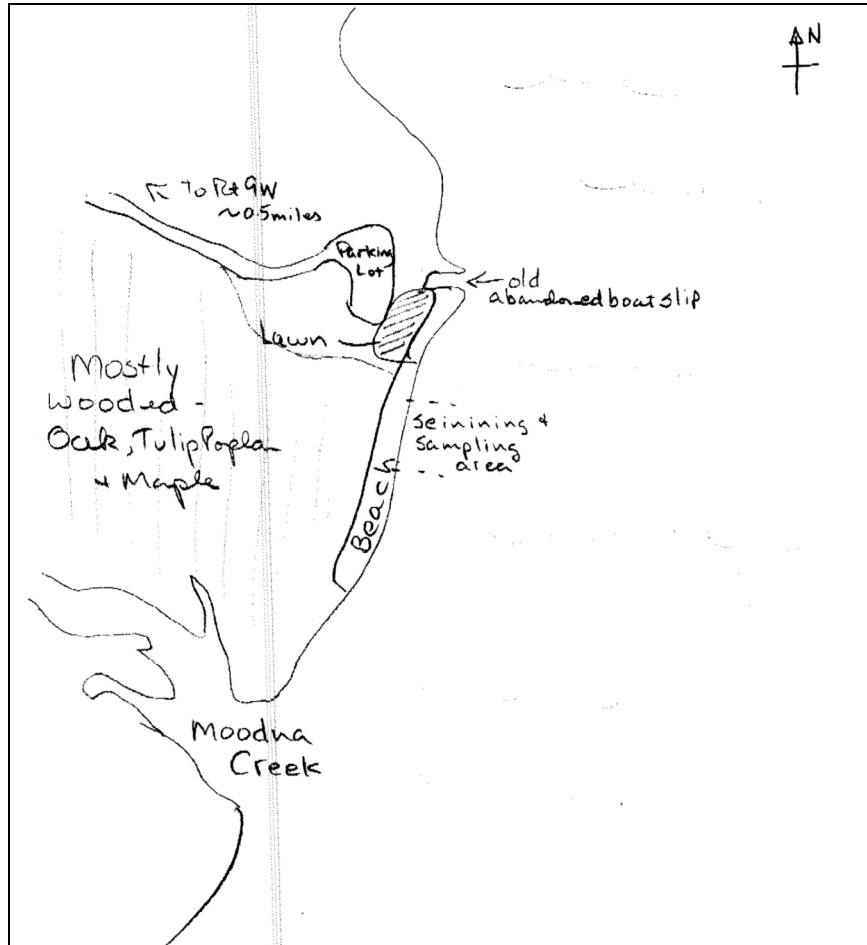


**Snapshot Day 10/7/08 Data
(Salt Front RM 63.4)
RIVER MILE 58**

**Kowawese Unique Area, Plum Point, New Windsor, Orange County, NY
Pam Golben & Judy Onufer, Museum of the Hudson Highlands
Bernadette Kleister, Bishop Dunn Memorial School - 8th grade – 34 students
GPS Latitude 41°27'44"N Longitude 74°00'41"W**



Location: Sandy beach at Kowawese, New Windsor, Orange County, Public Shore, Picnic Area

Area: Sandy beach with scattered tidal debris, Forested above beach to South, grass and trees and picnic area to North. Parking above beach area. No swimming. People fish and launch boats here.

Surrounding Land Use: Forested 90%, beach 10%

Sampling Site: sandy beach (cove), vegetation 500 ft. south of sampling site, Much wood washed up on beach.

Plants in area: < 5% of sampling area – 90% of plants Water celery – sporadic not dense 10% - water chestnut.

Other trees in area – mostly wooded – oak, tulip, poplar and maple.

Water depth: ~ 1 meter; At low tide depth at 100 ft. fro shore is ~ 3.5 ft.

River Bottom – Sand with occasional larger rock

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	9:30 AM	17.8°C 64°F		
	10:50 AM	19.5°C 67°F		
Wind Speed	1 knot	NE		
Cloud Cover	None - clear			
Weather today	Clear and cool			
Weather recently	Light rain overnight Sat. 10/4 to Sunday 10/5 Sunny and clear Monday 10/6			
<i>Water Temperature</i>	9:30 AM	64.4° F 18°C		
	10:00 AM	67.1° F 19.5°C		
	10:45 AM	68° F 20°C		
<i>Water Calm</i>	yes			
<i>Turbidity sight tube</i>	10:00 AM	60 JTU 50 JTU 20 JTU		43.3 JTU
<i>Chlorophyll</i>	9:45 AM	1.5		
	10:15 AM	1.5		
	10:45 Am	2.0		
<i>Chemical</i>				
DO (drop kit)	10:00 AM	8.0 mg/L	19.5°C	87%
pH (litmus paper)	10:45 AM	6.0 6.0 7.0		6.3 average
Salinity Quantabs – low range strips –	10:45 AM	0.009 % 0.010 % 0.010 %		Average .0097% %NaCl
<i>Fish Catch</i> 85 ft. seine X 40 ft. pull	<i>Number Caught</i>	<i>Species</i>	<i>CPUE</i>	<i>Seine</i> 2 seines –with Tom Lake
	10	American Shad		
	55	Banded Killifish	3 inch	
	1	Blue crab	1.5 inch	female
	65	Blue back herring		

	1	Hog Choker	1.5 inch	
	40	Striped Bass	2.5 inches	
	30	White Perch	3 inches	
Seine	Time	Total Catch	Length Pull	CPUE
1	11:25	~120	25.9	3.09
2	11:40	~80	25.9	4.63
Tides	9:30 AM	40.6 cm	* Tidal range in this section of the Hudson is less extreme than further up or downriver, and on this date, with the moon in first quarter, the predicted water levels at high and low tide were only a bit more than a foot apart. Low tide was expected at 12:36 AM so tide should have been falling all morning but the student data doesn't show this – perhaps students were confused by wave activity early in the day and missed subtle changes later in the AM.	
	9:50 AM	41.8 cm		
	10:10 AM	42.5 cm		
	10:35 AM	45.6 cm		
	10:50 AM	45.6		
	11:05 AM	45.6		
Currents	MAIN CHANNEL Flowing South - slowly		NEAR SHORE Flowing North Very slowly	
Core – 30' from shore Water depth 24 inches	~20 cm total NO LAYERS – no cap	Abundant - unconsolidated loose gray sand	Common – Gravel Pebbles	Rare— Leaves
Traffic	10:45 AM	Cargo ship	Southbound	