

**Snapshot Day 10/18/11
(Salt Front RM 35.7)
RIVER MILE 58**

**Kowawese Unique Area, Plum Point, New Windsor, Orange County, NY
Judy Onufer & Pam Golben Museum of the Hudson Highlands
Dr. Bhalla and Mt. St. Mary's College
Bernadette Kleister, Bishop Dunn Memorial School - 7th grade – 36 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 bordered by forested area and parking lot. Used for picnic, fishing, kayaking

Surrounding Land Use: Forested 40%, beach 50%, Urban/residential 20%

Sampling Site: sandy beach (cove), rip rap in area of sampling site, debris in the area such as broken concrete, docking

Plants in area: Yes - < 10% of sampling area – 5% of plants Water Chestnut– 95% - other vegetation. (no water celery at all this year – more intact water chestnut than in prior years – perhaps storms and high water level dislodged plants that were washed downriver?)

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

Water depth: <1 meter; Ebb tide early, followed by flood tide (low @ 10:14)

River Bottom –Mostly mud/sand with a few larger rocks.

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	10:30 AM	11°C 52°F		
Wind Speed	0 – calm early in day	Increased to 2 later in day		
Cloud Cover	Partly cloudy	No precipitation	Sky became more clear with sunny intervals by 11:30 AM	

Weather today	Sunny 60s			
Weather recently				
Water Surface	calm			
Water Temperature	9:30 AM	59.9 ° F 15.5 °C		
	10:10 AM	60.3° F 15.7°C		
	11:45 AM	64.6° F 18.1°C		
	12:25 PM	65.3° F 18.5°C		
Water Calm	yes			
Turbidity <i>Short sight tube</i>	9:30 AM	50 JTU 60 60		56.7 JTU avg.
Chlorophyll	8:50 AM	3.0	100cc only*	
Chemical				
DO (drop kit)	TIME	Temp	DO	% Sat
DO – drop count test kits	9:30 AM	15.5 °C	9	90
	10:15 AM	16.7	10	102.5
	11:40 AM	16.2	11	110
	12:30 PM	17.1	11	100
pH - meter	9:30 AM	7.20		
	10:15 AM	7.18		
	11:40 AM	7.18		
	12:30 PM	7.30		
Salinity -Quantabs	TIME	ppt	Cl-	Total Salinity
	9:30 AM	1.0	23 ppm	41.6 ppm
	12:30 PM	1.2	29 ppm	52.4 ppm
Fish Catch 35 ' X 3 ' with ¼ inch mesh	Time	Species	#	Size of largest (inches)
Water temp 12°C	9:30 AM X 2 pulls	Alewives	70	2
		Spottail Shiner	7	3
		White Perch	4	5.5
		Gizzard Shad	3	4
Water temp 12°C	10:15 AM X 2 pulls	Alewives	63	2
		Spottail Shiner	7	3

		White Perch	3	5
		Gizzard Shad	6	4
Water temp 18°C	11:45 AM X 2 pull	Alewives	45	2
		Spottail Shiner	4	3
		Gizzard Shad	1	4
		Striped Bass (yoy)	2	2
Water temp 18°C	12:30 PM X 2 pulls	Alewives	29	2
		Spottail Shiner	2	3
		Striped Bass	3	2.5
<i>Tides - (low tide in Newburgh 10:14 AM)</i>	Time	Height in cm	Rate of change	Rising/falling
	9:30AM	0 inch		
	10:33 AM	-1 inch		Falling
	11:30 AM	15 inch		Rising
	12:01 PM	18 inch		Risinf
<i>Currents</i>	Very little	Water very quiet and still early in the day		
<i>Core</i>	4 inch	1 inch top – sandy/pebbly	3 inch lower - clay-like – sulfur odor	
<i>Traffic</i>				
<i>Other</i>				