

**Snapshot Day 10/2/07 Data
(Salt Front RM 78.2)
RIVER MILE 84.5**

**Mills-Norrie Point Environmental Center, Staatsburgh, NY, Dutchess County
Jean Villa McAvoy & Laurie Fila, Hudson River National Estuarine Research
Reserve (HRNERR)**

**Johanna Tomik, Haviland Middle School (116 students 6th graders)
N40°49 minutes, 53.8 seconds, W73°56 minutes, 31.5 seconds**

Location: Sampling done on the southern inlet of Norrie Point. East side of Hudson far from the main channel in a protected cove

Area: Substantial paved areas nearby, large environmental center building adjacent to the water.

Surrounding Land Use: forested 60%; Environmental Education Center (EEC) and concrete patio, parking lots and access area 40%

Sampling Site: Seining area – large parking lot adjacent to shallows – fairly protected bay. By water chemistry area: samples collected off concrete patio adjacent to dock and EEC; Wind and weather taken from inside EEC & concrete patio between building and river

Shoreline: covered with vegetation (some duckweed on surface, water celery in the bay-mostly uprooted), banks altered for EEC building, riprap along RR tracks, collected wood and debris in shallow cove

Plants in area: 7% of water in sampling site is covered with plants.

- cattail
- duckweed
- water celery
- water chestnut
- sedge (unknown variety)
- yellow flag (iris)

Water depth: gravel and rock bottom, 3-6 feet deep where chemistry water collected

River Bottom – gravel and rock bottom where chemistry done. Rocky and partly muddy where seining/sediment/plankton done.

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>	Time		Time (cont.)	
Air Temperature	9:06 am	16°C	11:20 am	22°C
	9:44 am	16°C	11:43 am	22°C
	10:02 am	16°C	1:00 PM	22°C
	10:39 am	21°C	1:33 pm	23°C
	10:56 AM	21°C	2:05 pm	26°C
Wind Speed				

Cloud Cover				
Weather today	Clear and warm			
Weather recently	warm and mild			
Water calm	Water fairly calm – small wavelets around			
Water Temperature	9:28 am	20°C	68°F	Two readings
	10:30am	20°C	68°F	Two readings
	11:03am	22°C	72°F	
	12:00pm	24°C	75°F	
	12:45 pm	23°C	73°F	Two readings
	1:20 pm	24°C	75°F	
Turbidity	Time	Secchi		Average
Sight tube	9:57am	83 cm 73 cm 67 cm		74.3 cm
	10:45am	60cm 19 cm 59 cm		46 cm
	11:30 am	37 cm 48 cm 61 cm		48.6 cm
	1:14 pm	13cm 14 cm 18 cm		15 cm
	1:56 pm	47cm 34 cm 30 cm		37 cm
	Chlorophyll	9:30 AM	2.0	
Chemical				
DO (drop count)	9:28 am	10.0 mg/L	20°C	110%
	9:28 am	6.0 mg/L	20°C	65%
	10:30 am	8.0 mg/L	20°C	70%
	10:34 am	3.0 mg/L	20°C	35%
	11:03 am	10 mg/L	22°C	110%
	12:00 pm	8 mg/L	24°C	95%
	12:45 pm	8 mg/L	23° C	105%
	12:45 pm	8 mg/L	23°C	95%
	1:20 pm	8 mg/L	24 °C	95%
pH	9:39 am	7.5	11:03 am	7.5
	9:43 am	7.5	11:17 am	7.5
	10:28 am	7.5	12:45 pm	7.5
	10:30 am	7.5	1:20 pm	7.5

Phosphate							
Nitrate							
Alkalinity							
Salinity	9:35am	72 mg/l					
-drop count kit	9:54 am	80 mg/L					
	10:23 am	72 mg/L					
	11:03 am	72 mg/L					
	12:00 pm	88 mg/L					
	12:45 pm	72 mg/L					
	1:20 pm	54 mg/L					
<i>Fish seined 39X4 ft. X 0.375 mesh</i>	<i>Group 1</i>	<i>Group 2</i>	<i>Group 3</i>	<i>Group 4</i>	<i>Group 5</i>	<i>DEC</i>	<i>Total</i>
Herring	21 – 6.5 cm	79 – 5.9 cm	122	93 – 3.0 cm	200	16 - 7.5cm	531
Sunfish	43 – 7.5 cm	54 – 8.9 cm	6 – 6.5 cm	45 – 3.0 cm	50	35 – 6.0 cm	233
Banded Killifish	23 – 8.0 cm	28 – 7.7 cm	2 – 3.5 cm	48 – 4.1 cm	30	24 – 8.0 cm	155
Golden Shiner	0	3 – 7.5 cm	0	0	0	8 – 7.5 cm	11
Spottail Shiner	1 – 7.0 cm	1 – 7.5 cm	* 6 – 8.5 cm	3 – 3.0 cm	0	0	11
Tesselated Darter	3 – 6.0 cm	3 – 5.6 cm	0	30 – 6.5 cm	20	11 – 7.0 cm	67
Brown Bullhead	1 – 9.3 cm	0	0	0	1	2 – 9.0 cm	4
American Eel	0	0	0	3 – 3.5 cm	3	1 – 7.5 cm	7
Channel Catfish	0	0	0	0	0	2 – 9.0 cm	2
Catfish (unsure of species)	0	1 – 9.6 cm	0	0	14	0	15
Largemouth Bass	0	0	2 – 8.8 cm	9 – 12.4 cm	0	0	11
White Perch	0	0	0	12 – 6 cm	7	0	19
Carp	0	0	0	3 – 38 cm	0	0	3
Crayfish	2 – 8.5 cm	0	0	0	1	0	3
TOTALS	94	169	138	246	326	99	1072
* not 100% sure of species							
<i>Tides</i>	<i>time</i>	<i>cm</i>	<i>Rising/falling</i>				
	9:06 am	114 cm	unknown				
	9:25 am	108 cm	falling				
	10:01 am	99 cm	falling				
	10:25 am	92 cm	falling				
	10:53 am	84 cm	falling				

	11:10 am	80 cm	falling	
	11: 38 am	78 cm	falling	
	12:50 pm	80 cm	rising	
	1:20 pm -est	89 cm	rising	
	1:38 pm	100 cm	rising	
	1:56 pm	114 cm	rising	
Currents	Not recorded			
* Site is far from main channel – unable to calculate current due to site restrictions				
Core sample	17 cm length	Fine grain, slightly gritty	Plant material in core	Dark gray-black in color, uniform, somewhat anoxic odor but not sulfurous
Traffic	Time	Direction		
Barge, black	10:35am	Northbound	Empty	letters at bow: R.I.C.55
Tugboat pushing barge	10:35am	Northbound		