

**Snapshot Day 10/8/09 Data
(Salt Front RM 60.3)
RIVER MILE 53**

Garrison Landing Park

**Charley Wilkinson, Rich Anderson, Eric Lind, Constitution Marsh Audubon
Center & Sanctuary**

Cathy Bakker, Hudson Highlands Land Trust

Kevin Keegan, Garrison Union Free School

7th graders 31 students

41°22.956'N - 73°56.880'W



Location: Garrison Landing Park, Garrison, Putnam County, NY

Area: Waterfront beach area on front of park

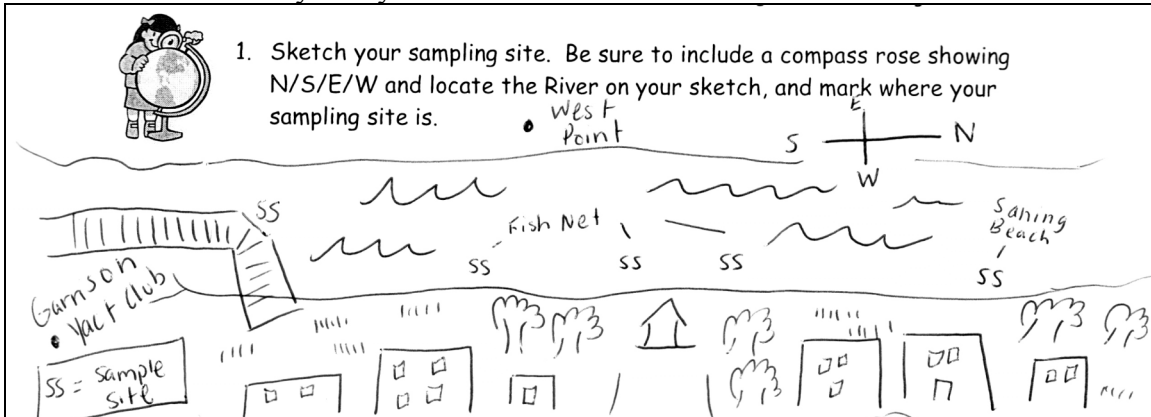
Surrounding Land Use: Urban/residential 30%, Forested 10% , Beach 10%,
Industrial/Commercial 50%

Sampling Site: Pier, shore with bulkhead, debris in area

Plants in area: yes – less than half – water celery 10%

Water depth: 2-15 ft.

River Bottom – muddy/rocky bottom



<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>		<i>Comments</i>
Physical				
Air Temperature	9:34 AM	55 °F		
	10:34 AM	62/60 °F		
	11:37 AM	64°F		
Wind Speed	Beaufort #	Knots	MPH	Direction
	Force #3	7-10	6-12	NNW
Cloud Cover	40% cloud cover	No rain		
Weather today	dry			
Weather recently	Extreme wind yesterday, rainstorms in past few days			
Water Surface	Choppy			
Water Temperature	9:18 AM	18°C 64.4° F		
	9:30 AM	19°C 66.2° F		
	10:20AM	19°C 66.2° F		
	11:35AM	20°C 68° F		
Turbidity - secchi	10:47AM	23 inch 24 23		61.98 cm (24.4 inch)
Chlorophyll	9:30AM	1.0	11:35AM	0.5
Chemical				
DO - drop count	11:34AM	8 mg/L	20°C	70%
pH - meter	11:54AM	7.0 indicator solution 6.5 litmus paper		6.75 avg
Phosphate	10:15 AM	0.mg/L		
Nitrate	10:15AM	0.0 ppm		
Alkalinity	10:15AM	40 ppm		
Salinity - quantab	9:30 AM	33 ppm Cl	41.25 ppm	
	10:30AM	46 ppm Cl	57.5 ppm	
	11:30AM	108 ppm Cl	135.0 ppm	
Tides	Time	Tide Stick		
	9:16 AM	12.7 cm		
	9:43 AM	27.94 cm	rising	0.56
	10:17AM	50.80 cm	rising	0.67
	10:42AM	60.96 cm	rising	0.41
	11:23AM	78.74 cm	rising	0.43

	12:01PM	93.98 cm	rising	0.40
Currents	9:23AM	17.24 cm/sec	South	0.34 knots Ebb
<i>*May have been the result of wind on the surface combating the current</i>	10:24AM			*Still
	11:24AM	33.33 cm/sec	North	0.65 knots Flood
Seine – 60 ft. X 94.2 ft. pull – ¼ inch mesh	TIME	SPECIES	CATCH	SIZE
Minnow trap	9:15AM	Pumpkin Seed	9	125 cm
		Spottail Shiner	7	115 cm
Total catch 85 length of pull 94.2 ft. CPUE 4.65		Banded Killifish	2	9 cm
		White Perch	40	12 cm
		American Eel	1	17 cm
		Striped Bass	6	75 cm
		Tesselated Darter	1	55 cm
		Atlantic Blue Crab	18	10 cm point to point
		Naked Goby	1	2 cm
	10:23AM	Pumpkin Seed	2	11 cm
Total catch 37 length of pull 94.2 ft. CPUE 2.02		Spottail Shiner	12	6 cm
		White Perch	23	17 cm
		Atlantic Blue Crab	3	4 cm
	11:30AM	Largemouth Bass	1	12 cm
Total catch 65 length of pull 94.2 ft. CPUE 3.56		Bay Anchovy	5	7.7 cm
		Alewife	2	7 cm
		Summer Flounder	1	16.9 cm
		Spottail Shiner	6	7.3 cm
		Golden Shiner	1	15.4 cm
		White Perch	40	15 cm
		Striped Bass	3	7 cm
		Banded Killifish	1	10 cm
		Pumpkinseed	5	12.4 cm
		Atlantic Blue Crab (M)	9	
Traffic	10:30AM	Barge/Equipment	South	Full
		Regular MTA Train behind site		

<i>Sediment Core</i>	8 inch	Very moist, slimy sediment. Compact layer very thin	6.5 inch top layer	1.5 inch second layer
<i>Other Items</i>	Bald Eagle, A. crows, chipping and house sparrows, ring-billed gulls, yellow-bellied sapsucker, yellow-rumped warbler			
<i>Journal</i>	The seventh grade students from Garrison Union Free School stood in the sun along the riverside, sleeves pulled over their hands, this cool and breezy morning. The temperature was soon forgotten when a summer flounder dropped out of the net and splashed into our tray. He startled the small, dark naked goby we had placed in a nearby jar just moments before.			