

Snapshot Day 10/17/14 Data
(Salt Front RM 65.3)
RIVER MILE 53
Garrison Landing Park
Cathy Bakker, Hudson Highlands Land Trust
Kevin Keegan, Garrison Union Free School
7th graders 27 students, 6 adults
41 22 57 N – 73 36 93 W

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

Area: Waterfront beach area on front of grassy park primarily used for boating & picnics

Surrounding Land Use: Forested 60%, Urban/residential 20%, Industrial/commercial 10%, Forested 5%, Other 10%,

Sampling Site: Rocky shoreline, Pier, shore with bulkhead, riprap, grassy, parking lot

Shoreline: Sandy, muddy, rocky

Plants in area: 50% trees, 10% bushes, 30% grasses and 10% other plants

Water depth: 39.5 inches

River Bottom – muddy/rocky bottom

Plants in the Area – willows, grass,

| <i>ITEM</i> | <i>Time</i> | <i>Reading 1</i> | | <i>Comments</i> |
|---------------------------|----------------------------------------|-------------------------|----------------------------|------------------|
| <i>Physical</i> | | | | |
| Air Temperature | 12:00 PM | 68 °F | 20 °C | |
| Wind Speed | Beaufort # | Knots | Mph | Direction |
| 12:04 PM | Force #3 | | | North West |
| Cloud Cover | Partly cloudy | 26-50% cover | | |
| Weather today | Clear but windy | | | |
| Weather recently | Unusually warm, humid, off and on rain | | | |
| <i>Water Surface</i> | Calm & choppy at times | | | |
| <i>Water Temperature</i> | 11:04 AM | 18.9°C | 66° F | |
| <i>Turbidity -</i> | | | | |
| <i>Chemical</i> | | | | |
| DO -colormetric analysis | 11:17 AM | 9 mg/L | 18.9°C | 95 % |
| pH – color match test | <i>Time</i> | <i>Reading</i> | | <i>Averages</i> |
| | 11:10 AM | 7.8 8.0 | | 7.9 average |
| <i>Salinity - quantab</i> | 11:00 AM | 989 ppm Cl 5.2 scale | 1787 ppm total salinity | |
| <i>Tides</i> | <i>Time</i> | <i>Observation</i> | | |

| | | | | |
|------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|------------------------|----------------------|----------------------------|
| LT 8:16 AM | 11:51AM | Moved away by 4 ft. | Flood | North |
| <i>Currents/Time</i> | Cm/30 secs | Cm/Sec | Knots | Ebb/Flood/Still |
| 12:15 PM | 486 | 16.2 cm/sec | 0.32 kts | |
| <i>Seine – 60 ft. X 94.2 ft. pull – ¼ inch mesh</i> | TIME | SPECIES | CATCH | SIZE/CM |
| Fish | 10:00 AM | Striped Bass | 3 | 7.5 cm |
| | | White Perch | 4 | 15 cm |
| | | Bay Anchovy | 80 | 8 cm |
| | | Smallmouth Bass | 5 | 7.5 cm |
| | | Hog Choker | 3 | 10 cm |
| | | American Eel | 1 | 28 cm |
| | | Diversity 6 | Totals 96 | |
| Macroinvertebrates | | Shrimp | 1 | 4 cm |
| | | Blue Crab | 1 | 2.5 cm |
| | | Diversity 2 | Totals 2 | |
| <i>Traffic – Commerical</i> | | | | |
| 11:37AM | Barge | Reddish rust | Northbound | Light |
| 11:37AM | Tug | Blue | Northbound | Loaded |
| <i>Recreational</i> | | | | |
| 11:56 AM | Speedboat | White | Northbound | Light |
| 11:58 AM | Speedboat | White | Southbound | Light |
| 12:00 PM | Speedboat | Blue/White | Northbound | Light |
| <i>Sediment Core – 11:36 AM</i> | <i>No length provided</i> | Abundant – Sand | Common Gravel | Rare Pebbles Leaves |
| | Sketch of core shows gravel (~1/3 of core) at top, then pebble, and bottom 2/3 sand | | | |
| <i>Other Items</i> | Overgrown trees in the area. The wind & weather may have had an impact on our sampling collection today. | | | |