**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,

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** |  | ***Comments*** |
| ***Physical*** |  |  |  |  |
| **Air Temperature** | 12:00 PM | 68 °F | 20 °C |  |
| **Wind Speed** | **Beaufort #** | **Knots** | **Mph** | **Direction** |
| 12:04 PM | Force #3 |  |  | NorthWest |
| Cloud Cover | Partly cloudy | 26-50% cover |  |  |
| Weather today | Clear but windy | | | |
| Weather recently | Unusually warm, humid, off and on rain | | | |
| ***Water Surface*** | Calm & choppy at times | |  |  |
| ***Water Temperature*** | 11:04 AM | 18.9°C | 66° F |  |
| ***Turbidity -*** |  |  |  |  |
| ***Chemical*** |  | | | |
| DO -colormetric analysis | 11:17 AM | 9 mg/L | 18.9°C | 95 % |
| pH – color match test | ***Time*** | ***Reading*** |  | ***Averages*** |
|  | 11:10 AM | 7.8  8.0 |  | 7.9 average |
| ***Salinity - quantab*** | 11:00 AM | 989 ppm Cl  5.2 scale | 1787 ppm total salinity |  |
| ***Tides*** | ***Time*** | ***Observation*** |  |  |
| LT 8:16 AM | 11:51AM | Moved away by 4 ft. | Flood | North |
| ***Currents/Time*** | **Cm/30 secs** | **Cm/Sec** | **Knots** | **Ebb/Flood/ Still** |
| 12:15 PM | 486 | 16.2 cm/sec | 0.32 kts |  |
| ***Seine – 60 ft. X 94.2 ft. pull – ¼ inch mesh*** | **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** |  |
| ***Traffic – Commerical*** |  |  |  |  |
| 11:37AM | Barge | Reddish rust | Northbound | Light |
| 11:37AM | Tug | Blue | Northbound | Loaded |
| ***Recreational*** |  |  |  |  |
| 11:56 AM | Speedboat | White | Northbound | Light |
| 11:58 AM | Speedboat | White | Southbound | Light |
| 12:00 PM | Speedboat | Blue/White | Northbound | Light |
| ***Sediment Core – 11:36 AM*** | ***No length provided*** | **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** | | | |
| ***Other Items*** | Overgrown trees in the area.  The wind & weather may have had an impact on our sampling collection today. | | | |