**Snapshot Day 10/12/17 Data**

**(Salt Front ~RM 65)**

**RIVER MILE 51.5**

**Garrison Landing Park**

**Lisa Mechaley,** **Hudson Highlands Land Trust**

**Kevin Keegan, Garrison Union Free School**

**7th & 8th graders 20 students, 6 adults**

**41 22 57 N – 73 36 93 W**

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**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**: 3 – 30 cms

**River Bottom** – muddy/rocky bottom

**Plants in the water** – none in water,

**Water** – Calm no waves

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** |  | ***Comments*** |
| ***Physical*** |  |  |  |  |
| **Air Temperature** | 10:15 AM  11:24AM  12:34 PM | °F | 16 °C  18°C  22°C |  |
| **Wind Speed** | **Beaufort #** | **Knots** | **Mph** | **Direction** |
| 10:19 AM  11:25 AM  12:35 PM | #1  #1  #1 |  |  | North-North/West |
| Cloud Cover | 10:12 AM  11:26 AM  12:39 PM | Mostly cloudy  Partly Cloudy  Clear | 51-75%  26-50%  <25% |  |
| Weather today | No rain except this AM at 6:00-6:45 AM | | | |
| Weather recently | No Unusually temperatures/weather | | | |
| ***Water Surface*** | Calm, small waves – early in day brownish water | |  |  |
| ***Water Temperature*** | 9:53 AM  11:14 AM  12:52 PM | 21°C  21°C  21°C | ° F | 0.5 ft. |
| ***Turbidity – secchi disk*** | 10:43 AM | 51 cm |  |  |
| ***Chemical*** |  | | | |
| DO -titrator strips color match | 11:14 AM  12:52 PM | 3 mg/L  2 mg/L | 21°C  21°C | 21 %  15 % |
| pH – color match test | ***Time*** | ***Reading*** |  | ***Averages*** |
|  | 12:24 PM | 6  7.5 |  | 6.75 |
| ***Salinity – quantabs HR*** | 9:36 AM  11:04 AM | 1830 ppm Cl-  1989 ppm Cl- | 6.4 units  6.6 units | 3306 ppm TS  3592 ppm TS |
| ***Tides - Time*** | ***Cm start ht*** | ***Stop Time*** | ***Cm end*** | ***Tide*** |
|  |  |  |  |  |
| ***Currents/Time*** | **Cm/30 secs** | **Cm/Sec** | **Knots** | **Ebb/Flood/ Still** |
|  |  |  |  |  |
| ***Seine – 60 ft. X 94.2 ft. pull – ¼ inch mesh*** | **TIME** | **SPECIES** | **CATCH** | **SIZE/CM** |
| **Fish Group #1** | 10:05 AM | Bay Anchovy | 34 | 6.5 cm |
|  |  | White Perch | 3 | 15 cm |
|  |  | Alewife Herring | 4 | 13 cm |
|  |  | Striped Bass | 2 | 8 cm |
|  |  | Blueback Herring | 6 | 7.5 cm |
| **Fish** |  | **Diversity 5** | **Totals 49** |  |
| **Macroinvertebrates** |  | Blue Crab | **1** |  |
|  |  | **Diversity 1** | **Totals 1** |  |
| **Fish Group #2** | 11:00 AM | Blueback Herring | 3 | 6.7 cm |
|  |  | Alewife | 2 | 14 cm |
|  |  | Bay Anchovy | 51 | 7 cm |
|  |  | Striped Bass | 2 | 8 cm |
| **Fish** |  | **Diversity 4** | **Totals 58** |  |
| **Macroinvertebrates** |  | Blue Crab | 1 | Male |
|  |  | **Diversity 1** | **Totals 1** |  |
| **Fish Group #3** | 12:15 PM | Blueback Herring | 21 | 6.5 cm |
|  |  | Banded Killifish | 3 | 6.5 |
|  |  | Hogchokers | 2 | 10 |
|  |  | Bay Anchovy | 9 | 6.5 |
|  |  | White Catfish | 1 | 8 |
|  |  | White Perch | 1 | 6 |
|  |  | Shiner | 1 | 17 |
|  |  | Smallmouth Bass | 1 | 9.5 |
|  |  | Striped Bass | 3 | 6.5 |
| **Fish** |  | **Diversity 9** | **Totals 42** |  |
| **Macroinvertebrates** |  | Blue Crab | 3 | Male |
|  |  | **Diversity 1** | **Totals 3** |  |
| ***GRAND TOTAL*** | DIV | **10** | **COUNT** | **149** |
| ***MACRO TOTAL*** | DIV | **1** | **COUNT** | **5** |