**Day in the Life of the Hudson River 10/10/13 Data**

**(Salt Front RM 69.3)**

**RIVER MILE 90**

**George Freer Memorial Park, Port Ewen, Ulster County**

**Meg Meisch, Rondout Valley High School**

**54 students 9th graders, 6 adult helpers**

**GPS Latitude 41°907 N Longitude 73°978 W**

**Location:** George Freer Memorial Park, Town of Ulster, Ulster, NY

**Area:** Park space with grassy area, used for picnics, fishing and boating

**Surrounding Land Use**: 30% urban/residential; 20% forested; 40% industrial/commercial

**Sampling Site:** Shore is beach, muddy and rocky along the water, banks have been altered with piping noted entering the river, bits of brick and charcoal on beach

**Plants in area:** no

**Water depth**:

**River Bottom** : muddy, rocky

**About the site:** area has bricks and brick pieces, water chestnut seeds, goose droppings.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical***  |   |  |  |  |
| Air Temperature | 10:11 AM11:12 AM12:27 PM | 11°C12.313.4 | 51.8 °F54.156.1 |  |
| Wind Speed | 10:22 AM12:30 PM | 1.8 m/s1.1 m/s | North |
| Cloud Cover | Mostly cloudy  |  |
| Weather today | No rain  |
| Weather recently | Sunny and warmer |
| ***Water Temperature*** | 9:53 AM | 16.7°C |  |  |
|  | 10:45 AM | 16°C |  |  |
|  | 12:21 PM | 17 °C |  |  |
| ***Water surface*** | choppy |  |  |  |
| ***Turbidity long******Site tube*** | 10:00 AM10:38 AM11:56 AM12:28 PM | 58.5 cm59.25 cm33.5 cm10.32 cm |  |  |
| ***Chlorophyll*** | 10:00AM10:38 AM10:56 AM | 0.30.50.1 |  |  |
| ***Chemical*** |  |  |  |  |
| **DO** ***Wards D.O.*** | **Time** | **Temp °C** | **DO**  | **% saturated** |
|  | 9:53 AM | 16°C | 8 ppm  | 82%  |
|  | 10:45 AM | 16°C | 6 | 62% |
|  | 11:17 AM | 15°C | 5.5 | 55% |
|  | 12:36 PM | 17°C | 8 ppm | 87%  |
| pH – indicator solution | 10:00 AM | 7.47.97.9 |  | Average 7.7 |
|  | 10:34 AM | 7.87.87.4 |  | Average 7.6 |
|  | 12:00 PM | 7.87.87.8 |  | Average 7.8 |
| Salinity - Quantab | 1.2 scale | 28 ppm Cl- | Converts to 51 ppm total salinity |  |
| ***Fish Catch****30’seine X 4 ft.*  | ***Number Caught-*** | ***Species -*** | ***Largest Size*** | ***Diversity & Totals*** |
|  | 2 | Pumpkinseed | 18 cm | ***Div = 4*** |
|  | 2 | Bluegill | 19 cm | ***Totals = 6*** |
|  | 1 | Killifish | 4 cm |  |
|  | 1 | American Eel | 16 cm |  |
| ***Also collected*** | 6 | Snails | 1-2 cm |  |
| ***Tides*** | 10:00 AM | 25.4cm | start |  |
|  | 10:30 AM | 12.7 cm | falling | 0.42 cm/min |
|  | 11:08 AM | 22.86 cm | Falling (moved stick) |  |
|  | 11:53 AM | 11.42 cm | falling | 0.25 cm/min |
| ***Currents*** | ***Time*** | ***Cm/30 secs*** | ***Cm/sec*** | ***Knots – Ebb Flood*** |
|  | 10:06 AM | 274.3 cm/30 sec | 9.1 cm/sec | 0.18 knots – South/Ebb |
|  | 10:43 AM | 152.4 | 5.1 | 0.10 -S/Ebb |
|  | 11:00 AM | 88.9 | 3.0 | 0.06 -S/Ebb |
|  | 12:07 AM  | 342.9 | 11.43 | 0.22 -S/Ebb |
|  | 12:40 AM | 66.0 | 2.2 | 0.04 -S/Ebb |
| ***Recreational Traffic*** | 10:05 AM | Sailboat –  | North |  |
|  | 10:46 AM | Speedboat White | North |  |
| ***Core –*** | **Length** | **Rare** | **Common** | **Abundant** |