**Snapshot Day 10/21/14 Data**

**(Salt Front RM 64.3)**

**RIVER MILE 32**

**Lewis & Engel Park**

**Bridget Baumann, Ossining HS AP Environmental Science**

**10th-12th grade – 30 students, 3 adults**

**41°10’N - 73°52’W**

**Location:** Wading beach at Lewis J. Engel Park, Ossining, NY

**Area:** Beachfront area with a ferry pier,paved sidewalk, rock wall lining the river, riprap, grass by metro north station

**Surrounding Land Use:** 80% beach, 10% urban/residential, 10% industrial/commercial

**Sampling Site:** bulkhead lines the shoreline with pier, rock wall, beach, riprap, rocky, weedy, used for picnics and boats. Pipe enters the river North of the sample site.

**Plants in area:** 90% grass, one tree, in the water was some water celery (Vallisnaria)

**Water depth**: 8-10 feet deep

**River Bottom**: sandy, rocky and weedy – very dirty

***Sampling in the afternoon***

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |  | |  |  |  |
| Air Temperature | 1:40 PM | | 55.4°F  13°C |  |  |
| Wind Speed |  | |  |  |  |
| Cloud Cover | Overcast | |  |  |  |
| Weather today | Rain around 2PM | | | | |
| Weather last 3 days | Rain last few days, wind picked up during day. Clouds. | | | | |
| Water | Between calm and choppy | | | | |
| ***Water Temperature*** | 1:43 PM | 68° F  20°C | |  | Water Depth 1.5 ft. |
| ***Turbidity- site tube*** | 1:50 PM | 21.6 cm  30.2  25.0 | | AVERAGE- | 25.4 cm |
| Turbidity Comment: Water was a little cloudy. We could see the bottom of a 5 gallon bucket | | | | | |
| ***Chemical*** |  |  | |  |  |
| DO – LaMotte Green Water test kit | 1:30 PM  1:50 PM | 8.0 mg/L  8.0 mg/L | | 20 ° C  20 ° C | 90% saturated  90% saturated |
| pH (indicator sol.) | 1:30 PM  1:52 PM  1:55 PM | 8.0  7.0  7.0 | |  |  |
| Salinity- hydrometer | 1:40 PM | 1.004 density | | 4.8 ppt |  |
| ***Fish Catch***  ***30 ft. seine*** | ***Number Caught*** | ***Species*** | | ***Length of largest*** |  |
| 1:00-2:00 PM | 8 | Atlantic Silversides | | 3 inches | ***Diversity - 2*** |
|  | 6 | Striped Bass | | 5.5 inches | ***Total Count -14*** |
| **MACROS** | 4 | Shrimp | |  | ***Diversity - 2*** |
|  | 1 | Crab  (tiny brown) | | Mud crab | ***Total Count - 5*** |
| ***Shipping*** | None from 12:15-2:05 PM |  | |  |  |
| ***Core Description*** | ***Length*** | ***Abundant*** | | ***Common*** | ***Rare*** |
|  | Not listed | Sand  Gravel  Pebbles | |  |  |
| ***Observations*** | **Abiotic –** sand, logs, clam and mussel shells  **Biotic -** Seagulls, ducks, very big grasshopper  **Impacts –** plastic bags (litter) and parking lot run off | | | | |