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

**(Salt Front RM 64.3)**

**RIVER MILE 32**

**Lewis & Engel Park**

**Artie Carlucci, Ossining HS AP Environmental Science**

**10th-12th grade – 22 students, 2 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

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |  | |  |  |  |
| Air Temperature | 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*** | PM | 64.4° F  18°C | |  |  |
| ***Turbidity- long site tube*** | PM | 64 cm | |  |  |
| ***Chemical*** |  |  | |  |  |
| DO – LaMotte Green Water test kit  \*expect error and did not include in calculations | PM | 5.0 mg/L  6.0 mg/L  \*18 mg/L  8 mg/L  8 mg/L | | AVERAGE | 6.75 mg/L |
| pH (indicator sol.) | PM | 7.0  7.0  7.0  7.0  8.0 | | AVERAGE | 7.2 |
| Salinity- hydrometer | PM | 3.6 ppt? | |  | Recorded as 36 ppt- expect missed decimal |
| Nitrates | PM | 3 ppm  4 ppm  5 ppm  3 ppm | | AVERAGE | 3.75 ppm |
| Phosphates | PM | 2 ppm  2 ppm  2 ppm  2ppm | | AVERAGE | 2 ppm |
| ***Fish Catch***  ***30 ft. seine*** | ***Number Caught*** | ***Species*** | | ***Length of largest*** |  |
| PM | 8 | Atlantic Silversides | | 3 inches | ***Diversity - 2*** |
|  | 1 | Striped Bass | | 5.5 inches | ***Total Count -9*** |
| **MACROS** | 1 | Blue Crab | | ***Diversity – 1*** | ***Total Count - 1*** |