**Snapshot Day 10/20/15 Data**

**RIVER MILE 32**

**Lewis & Engel Park**

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**Bridget Baumann & Artie Carlucci, Ossining HS AP Environmental Science**

**10th-12th grade – 70 students, 10 adults**

**41°10’N - 73°52’W**

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**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:** 50% beach, 15% park, 25% 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 the water:** 10% water chestnut; 90% water celery

**Shoreline:** 50% Rocky, 50% Sandy

**River Bottom**: sandy, rocky, muddy

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| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |  | |  |  |  |
| Air Temperature | 9:30 AM | | 57°F  14°C | 1:15 PM | 64°F  18°C |
| Wind Speed | 1:18 PM | | Beaufort #2 | South |  |
| Cloud Cover | 1:19 PM | | <25% |  |  |
| Weather today | No Rain | | | | |
| Weather last 3 days | Unseasonably cool, no major rain or precipitation Snow flurries on 10/18 – 40°F | | | | |
| Water | Small wavelets | | | | |
| ***Water Temperature*** | 10:30 AM  11:15 AM | 14 ° C  12 ° C | |  |  |
| ***Turbidity- site tube*** | AM | 35 cm  35  40 | | AVERAGE- | 37cm |
| Turbidity Comment: Water was a little cloudy. We could see the bottom of a 5 gallon bucket | | | | | |
| ***Chemical*** |  |  | |  |  |
| DO – LaMotte Green Water test kit | 10:30 AM  11:15 PM  N/R | 2.0 mg/L  6.0 mg/L  4.0 mg/L | | 14 ° C  12 ° C  16 ° C | 17% saturated  46% saturated  40% saturated |
| pH (test strips – color match) | 9:50 AM  10:23 AM  10:45 AM  11:25 AM | 6.0  7.0  8.0  7.0 | |  |  |
| Salinity- hydrometer | 10:00 AM  10:21 AM  11:34 AM  12:50 PM | 11, 12, 10, 11  10, 7 ppt  2, 2.8, 6 ppt  6, 6, 7, 8 | | Averages | 11 ppt  8.5 ppt  4 ppt  7 ppt |
| Nitrogen | 5 ppm | 5 ppm | |  |  |
| Phosphorous | 2 ppm | 1 ppm | |  |  |
| ***Fish Catch***  ***10 ft. seine*** | ***Number Caught*** | ***Species*** | | ***Length of largest*** |  |
| 10:00-2:00 PM | 136 | Atlantic Silversides | | 10.6 cm | ***Diversity - 3*** |
|  | 1 | Striped Bass | | 10.6 cm | ***Total Count -139*** |
|  | 2 | Herring | | 15 cm |  |
| ***Currents*** | 1:15 PM | 200 cm/30 secs | | 6.7 cm/sec |  |
|  | 1:22 PM | 201 cm/30 secs | | 6.7 cm/sec |  |
| ***Shipping*** | 10:31 AM  12:41 PM | Blue Barge  Black Barge | | North  South | Loaded  Loaded |
| ***Core Description*** | ***Length*** | ***Abundant*** | | ***Common*** | ***Rare*** |
| Collected in 3 ft. water @  11:32 AM | Not listed \*no H2S  \*no O2 top | Sand | | Mud  Gravel | Clay  Pebbles |
| ***Observations*** | **Abiotic –** bricks, shells, and rocks on the ground  **Biotic -** Birds, Insects & water chestnuts were on the ground | | | | |
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