**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°F14°C | 1:15 PM | 64°F18°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 AM11:15 AM | 14 ° C12 ° C |  |  |
| ***Turbidity- site tube***  | AM | 35 cm3540  | 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 AM11:15 PMN/R | 2.0 mg/L6.0 mg/L4.0 mg/L | 14 ° C12 ° C16 ° C | 17% saturated46% saturated40% saturated |
| pH (test strips – color match)  | 9:50 AM10:23 AM10:45 AM11:25 AM | 6.07.08.07.0 |  |  |
| Salinity- hydrometer | 10:00 AM10:21 AM11:34 AM12:50 PM | 11, 12, 10, 1110, 7 ppt2, 2.8, 6 ppt6, 6, 7, 8 | Averages  | 11 ppt8.5 ppt4 ppt7 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 AM12:41 PM  | Blue BargeBlack Barge | NorthSouth  | LoadedLoaded |
| ***Core Description*** | ***Length*** | ***Abundant*** | ***Common*** | ***Rare*** |
| Collected in 3 ft. water @11:32 AM | Not listed \*no H2S \*no O2 top | Sand | MudGravel | ClayPebbles |
| ***Observations*** | **Abiotic –** bricks, shells, and rocks on the ground **Biotic -** Birds, Insects & water chestnuts were on the ground  |
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