**Day in the Life of the Hudson River 10/20/15 Data**

**RIVER MILE 153**

**River Park, Green Island Park, Green Island NY**

**Kate Perry, Robert C. Parker School**

**42 students - 2nd & 3rd and 6th and 7th grade students, 14 adults**

**42.75 N -73.69 W**

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**Location:** Green Island Park boat ramp, below the Troy Dam, Albany County, NY

**Area:** Park above bluff and then beach below just south of the Troy dam

**Surrounding Land Use:** Forested,Rocky, Fishing access, gravel, some vegetation

**Sampling Site**: 25% urban/residential, 75%industrial/commercial

**Shoreline:** Rocky, broken concrete docking, very rocky shoreline, slag, concrete at the launch, brick pieces, vegetation, pipe directly across sampling site

**Plants in water:** very few plants in the water – 1%

**Plants in area:** 10% of sample area had goldenrod, smartweed, ox eye daisy, grasses, speckle alder, purple loosestrife

**Water depth**: 0-10 cm along shore

**River Bottom**: mainly rocky, some muddy & weedy

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |  | | |  |  |  |
| Air Temperature | 10:23AM | | | 41 °F  6°C | 10:59 AM | 41 °F  8°C |
| Wind Speed | #2 Beaufort | | | 4-7 mph | 4-6 kts. | South |
| Cloud Cover | Overcast | | |  |  |  |
| Weather today | Light rain on and off <1 cm collected 9:30 -11:30 AM – light periods of showers | | | | | |
| Weather recently | Cold 3 days ago 10/17 – snow and small amount of hail. Sunnier yesterday | | | | | |
| ***Water surface*** | Mostly calm | |  | |  |  |
| ***Water Temperature*** | 10:00 AM  10:20 AM | | 10°C  10 | | 50°F  50 |  |
| ***Turbidity –long site tube*** | 10:00 AM | | 28.33 cm  20.07 cm  31.67cm | | 26.69 cm average |  |
| ***Chemical*** | 10:00 AM | | 1.0 | |  |  |
| DO  (Drop count kit | 10:25 AM | | 10°C | | 16 ppm | 140% |
| pH - paper | 10:10 AM | | 6.0 X 3 | |  | Average 6.0 |
| Salinity –meter | 10:25 AM | | 250 ppm  230  230 | | 236.6 ppm\* expect this might be conductivity u/S | |
| Salinity quantab | 1.2 reading | | 30 ppm Cl- | |  |  |
| Nitrates | 10:00 AM | | 0 ppm | |  |  |
| Phosphates | 10:00 Am | | 0 ppm | |  |  |
| ***Fish Catch –***  ***DEC shocked & shared catch*** | ***Time*** | | ***Number Caught*** | | ***Species*** | ***Size Largest*** |
|  |  | | 2 | | Sucker | 40 cm |
|  |  | | 4 | | Striped Bass | 220 cm |
|  |  | | 2 | | Largemouth bass | 16 cm |
|  |  | | 2 | | Catfish | 54 cm |
|  |  | | 2 | | Redhorse | 48 cm |
|  |  | | 1 | | Walleye | 39 cm |
|  |  | | 1 | | Pumpkin seed | 13 cm |
|  |  | | **Diversity 7** | | **14 Total** |  |
|  | **TOTAL CATCH** | | **25** | | **TOTAL SPECIES** | **4** |
|  | **Macro- invertebrates** | | Waterboat man | | snails |  |
| ***Sediment Core*** | **Length** | | **RARE** | | **NOTES** | **COMMON** |
| ***9:45 Am***  ***Water 70 cm deep*** | 17 cm | | Gravel  Pebbles  Leaves  Wood  Shells  Zebra Mus. Shell  Macroinv  Brick  Coal | | Lowest 2 cm  Lowest 2 cm  Lowest 2 cm  Lowest 4 cm | Clay  Sand  Living Vegetation |
|  | | | | | | |
| ***Tides*** | ***Time*** | | ***Height in c*** | | ***Rising/Falling*** | ***Rate of change*** |
|  | 9:50 AM | | 10 cm | |  |  |
|  | 10:17 AM | | 12 cm | | Rising 12 cm | 0.06 cm/min |
|  | 10:34 AM | | 11.5 cm | | Falling |  |
|  | 10:43 AM | | 12 cm? | | Falling |  |
|  | 10:48 AM | | 8 cm | | Falling |  |
|  | 10:54 AM | | 5 cm | | Falling | 0.17 cm/min |
| ***Currents*** | **Time** | **Cm/30 secs** | **Cm/sec** | | **Knots** | **N/S Ebb/Fld/Still** |
| ***Shoreline\**** | 10:23AM | 45 cm | 1.5cm/sec | | 0.029 | S- Ebb – |
| ***Channel\**** | 10:55AM | 1000 | 33.3cm/sec | | 0.65 | S Ebb |
| Changed location for sampling current to compare shoreline to center channel | | | | | | |
| ***Traffic commercial*** | 10:30 AM | | Tan | | North | Loaded |
|  | 10:30 AM | | DEC Boat | | Stopped here | Fishing Boat |
| ***Recreational*** | 10:30 Am | | White | | North & South | People |
| ***Other Items*** | Bald eagle soaring overhead, many gulls, few crows, pigeons, squirrel - too much garbage | | | | | |
| ***Almanac*** | Troy Dam – Cold rain greeted us at the river’s edge. We put up a tarp, got out our equipment and delved into the data collection A gift or time and effort, the DEC fisheries shocked fish, parents & teachers coordinated groups of inquiring students, and busy data collectors, set to work as official scientists. We were thrilled by a bald eagle, biting walleye and boat traffic. | | | | | |
| ***Marissa DeMartino – 7th grade***  ***Robert C. Parker School*** | As the footprint steps on the Hudson River  We come to see how she is.  As the trees blow and the rain comes down  We go to the water and check her for problems to see if she is OK.  Soon after, we find that all is good  As we leave, the great river looks back at us.  She thanks us and waves goodbye  She might just be a river to you but she is my everything. | | | | | |