**Day in the Life of the Hudson River 10/20/16 Data**

**RIVER MILE 153**

**(Salt Front ~ RM 83)**

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

**Dawn Baldwin, SUNY Poly CMOST**

**Art Flynn, Thomas O’Brien Academy for Science and Technology, Lincoln Park, Albany 23 - 4th grade students, 4 adults**

**Latitude 42° 44”53.04” N – Longitude -73° 41’20.62” W**

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

**Area:** Beach area with a lot of vegetation, very muddy and rocky. The Troy dam is directly to the north

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

**Sampling Site**: 50% urban/residential, 40%beach, 10%industrial/commercial

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

**Plants in water:** none noticeable

**Water depth**; Sampling was done from approximately 2 feet of depth

**River Bottom**: mainly rocky

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |  | | |  |  |  |
| Air Temperature | 10:00AM | | | 51°F  °C | 11:10 AM | 54 °F  °C |
|  | 12:00 PM | | | 60 °F  °C |  |  |
| Wind Speed | #2 Beaufort | | | 4-7 mph | 4-6 kts. | South |
| Cloud Cover | Overcast | | |  |  |  |
| Weather today | Started raining as the sampling ended so no effect on results | | | | | |
| Weather recently | Warmer than usual last 3 days with strong breeze blowing | | | | | |
| ***Water surface*** |  | |  | |  |  |
| ***Water Temperature*** | 11:00 AM | | °C | | 60°F  59  60 | Average 59.67°F |
| ***Turbidity –short site tube*** | 12:00 PM | | 0 JTU  10  0 | | 3.33 JTU |  |
| ***Chemical*** | 10:00 AM | | 1.0 | |  |  |
| DO  Drop count kit | 11:10 AM | | 15.5°C | | 9 ppm | 93% |
| pH –indicator solution | 12:10 PM | | 7.5  7.0  7.5 | |  | Average 7.33 |
| Salinity –hydrometer | 12:00 noon | | Below Detection | | Unable to read salinity in this area with hydrometer. | |
| Nitrates | 12:30 PM | | 0.5 ppm | | 3 tests |  |
| ***Fish Catch –*** | ***Time*** | | ***Number Caught*** | | ***Species*** | ***Size Largest*** |
|  |  | | 5 | | Blue Gill | 4 cm |
|  |  | | 4 | | Spottail Shiner | 7.5 cm |
|  |  | | **Diversity 2** | | **Total 9** |  |
| ***Tides*** | ***Time*** | | ***Height in c*** | | ***Rising/Falling*** | ***Rate of change*** |
|  | 9:45 AM | | 50 cm | |  |  |
|  | 10:12 AM | | 32 cm | | Falling | 1.5 CM/min |
|  | 10:21 AM | | 20 cm | | Falling | 1.5 CM/min |
|  | 10:45 AM | | No longer measurable | | Falling |  |
| ***Currents*** | **Time** | **Cm/30 secs** | **Cm/sec** | | **Knots** | **N/S Ebb/Fld/Still** |
| ***Shoreline\**** | 10:57AM | 495 | 16.5cm/sec | | 0.321 | S Ebb |
| ***Channel\**** | 11:15AM | 2286 | 76.2cm/sec | | 1.482 | S Ebb |
| The second orange was thrown much further out into the channel | | | | | | |
| ***Traffic Recreational*** | 11:07 AM | |  | | South |  |
| ***Almanac*** | **Hudson River Almanac Entry The 4th grade students from the Thomas O’Brien Academy for Science and Technology joined CMOST at the River Park in Green Island. The students were excited to be so close to the Troy Dam and the beginning of the estuary. Our morning started with the surprise visit of fish visitors courtesy of DEC fisheries biologists and a wonderful volunteer named Vince. We got to see several species up close and the brave were given a chance to touch, as well. Our favorite was the catfish dining on a small striped bass. Another successful outing and an example of citizen science at it’s best.** | | | | | |