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

**(Above the Troy Dam and the Head of Tide)**

**RIVER MILE 154**

**Peebles Island State Park, Waterford, NY**

**Laura Murawski, Cohoes High School**

**Pine Hills Elementary School**

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**59 students – 9th & 10thgrade, 5 adults total**

**42°47.051’N and 73°40.706 W**

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**Location:** Pavilion at Pebbles Island Park at the confluence of the Hudson River and the Mohawk River, Waterford, NY

**Area:** park just north of the Troy dam at the pavilion, grassy embankment, rip rap

**Surrounding Land Use:** 25% forested, 75% grassy

**Sampling Site:** Park area

**Shoreline:** riprap

**Plants in area:** about 20% has plants - unidentified

**Water depth**: 12 inches

**River Bottom description**: sandy and rocky

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical***  |   |  |  |  |
| Air Temperature | 9:15AM11:00 AM | 51°F51°F | 10.6°C10.6°C |  |
| Wind Speed | AM | Beaufort #1 |  |  |
| Cloud Cover | Mostly cloudy |  |  |  |
| Weather today | Precipitation 0.51 inches – nice in the AM, then cloudy, then heavy rain about noon |
| Weather recently | Sunny and warm, yesterday was also windy |
| ***Water surface*** | Calm  |  |  |  |
| ***Water Temperature*** | 9:15 AM9:54 AM10:45 AM | 13°C 1112 | 52°F51.853.6 |  X 3 X 2X 2 |
| ***Turbidity –******long site tube*** | 9:08 AM | 98.8 cm116.8 cm118.6 cm |  | Avg 111.4 cm |
| ***Chemical*** | ***Time*** |  ***Water Temp*** | ***ppm*** | ***saturation*** |
| DO - drop count | 11:05 AM  | 12 °C | 9 | 80% |
| pH – meter | 9:59 AM | 6.57.56 |  | Average 6.7 |
| ***Fish Catch – 10 ft. net*** | ***Number***  | ***Species***  | ***Size largest*** |  |
| 8ft – 1/4 inch mesh- 25ft pull | 5 | Spottail shiner | 5 cm | 4 seines  |
|  | ***Diversity 1*** | ***Totals 5*** |  |  |
| ***Water Level***  | **Time**  | **Height**  | **Change**  | **Change Rate** |
| *This is above the head of tide.*  | 9:15 AM | No change |  |  |
| 9:43 AM |  |  |  |
| 10:17 AM |  |  |  |
| 11:07 AM |  |  |  |
| ***Water Flow Velocity***  | **Time**  | **Rate of flow**  | **Knots** | **Flow** |
| *Mohawk River Flow – there are some large boats in the area that may influence rate of flow*  | 9:15 AM | 3.4 cm/sec | 0.066 | East  |
| 10:15 AM | 11.08 cm/sec | 0.22  |  |
| 11:00 AM | 9.2 cm/sec | 0.18  |  |
| ***Sediment Core*** | ***Description***  | ***Rare*** | ***Common***  | ***Abundant*** |
|  | 28 cm length | none | Sand | Clay |
|  | H2S smell  |  |  | Mud |
| ***Boat Traffic - recreational*** | 9:07 AM11:30 AM | Kayak Yacht | WS | Into Mohawk |
| ***Commercial*** | 10:30 AM | Large Boat | N |  |
| ***Other***  | 1 leaned a lot about how to better collect & organize the data for next year, but not bad for the first time.  |