**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**

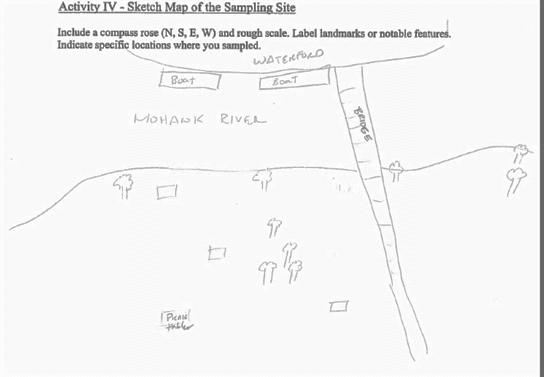
**Laura Murawski, Cohoes High School**

**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 | 9:15AM  11:00 AM | | 51°F  51°F | 10.6°C  10.6°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 AM  9:54 AM  10:45 AM | 13°C  11  12 | | 52°F  51.8  53.6 | X 3  X 2  X 2 |
| ***Turbidity –***  ***long site tube*** | 9:08 AM | 98.8 cm  116.8 cm  118.6 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 | 6.5  7.5  6 | |  | 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 AM  11:30 AM | Kayak  Yacht | | W  S | 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. | | | | |