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

**(Salt Front Estimated ~ RM 83)**

**RIVER MILE 38**

**Haverstraw Bay County Park, Haverstraw Waterfront**

**Beth Michaluk –21 students, 11th & 12th graders in RCC course on Environmental Pollution, 3 adults**

**Location:** North beach, dock and walking pier, Haverstraw Bay Park, Haverstraw waterfront, Rockland County NY

**Area:** Parking lot, recreation, fishing

**Surrounding Land Use**: 20% parkland, 40% Industrial/commercial, 30% urban/residential

**Sampling Site:** small beach, bank altered, large rip rap, bulkhead, concrete bulkhead, covered in vegetation

**Water depth**: 5 to 18 inches

**River Bottom** – muddy and rocky

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |   |  |  |  |
| Air Temperature | 9:58 AM11:17 AM12:39 PM | 21°C2021 | 66°F6370 |  |
| Wind Speed | 10:10 AM11:20 AM12:30 AM  | 2 kts1.8 kts6.4 kts | Anenometer Avg 3.4 kts N then S | Beaufort 1-3 |
| Cloud Cover | Partly Cloudy early | Mostly cloudy later |  |  |
| Weather today | Overcast  | No rain |  |  |
| Weather last 3 days | Very warm, no rain  |
| ***Water***  | Calm & choppy during the day |  |  |
| ***Water Temp. avg. depth 2.5 ft*** | 9:58 AM11:15 AM12:40 PM  | 18.9°C19.221 | 66°F66.669  |  |
| ***Turbidity – Long site tube*** | 9:30 AM10:30 AM11:30 AM | 27cm35 cm43 cm |  |  |
| ***Chemical*** |  |  |  |  |
| DO *Drop count* | 10:20 AM11:30 AM12:45 PM | 19°C18.920.5 | 11 ppm14 ppm13 ppm  | 115 % sat.150 %145% sat. |
| pH  | **Time**  | **Test Strips\*** | **Color Match Test Kit** | **Note\*** |
|  | 9:50 AM11:00 AM12:30 PM | 5.555 | 7.27.57.5 | Test strips reading too low  |
| Salinity:*Quantabs HR (read 8)* | 9:40 AM11:00 AM12:45 PM | 0.744 %NaCl | 4511 ppm Cl-4511 ppm Cl-4511 ppm Cl- | 8149 ppm TS8149 ppm Cl-8149 ppm Cl- |
| *Hydrometer* | 9:40 AM11:00 AM12:45 PM | 9.5 ppt8.5 ppt10.0 ppt |  | ***Avergae 9.4 ppt*** |
| ***Turbidity - secchi*** | 9:50 AM11:00 AM12:36 PM | 80,70,60 cm80, 100, 80110,120,160 | **Avg. 70 cm****Avg. 87 cm****Avg. 130cm**  | Water very turbid, wavy, moving rapidly at times |
| ***Turbidity – long sight tube*** | 9:50 AM11:00 AM12:36 PM | 95,77,87 cm73, 73, 6948,50, | **Avg. 86 cm****Avg. 72 cm****Avg. 49 cm** |
| ***Tides*** | 9:46 AM10:04 AM11:20 AM12:27 AM  | 10 cm12cm20cm40cm |  | Rising – flood tide |
| ***Currents*** | ***CM/30 secs*** | **Cm/Sec** | **North/South Ebb/Flood/** | **Knots**  |
| 9:56 AM11:11 AM12:36 PM | 106 cm/30s792.5 cm/30s548.6 cm/30s | 3.5 cm/sec26.4 cm/sec18.3 cm/sec | FloodFloodFlood | .06 kts.51 kts.35 kts |
| ***Core –***  | **Properties** | **Rare**  | **Common**  | **Abundant** |
| ***10 cm long*** | No smell, oil or oxidation  | brick | pebbles | ClayMudSandGravel |
| ***Shipping – Commercial***  |  |  |  |  |
| ***12:52PM*** | Barge | Grey/Blue | Northbound | Loaded |
| ***Shipping Recreational***  |  |  |  |  |
| ***9:10PAM******11:40AM******12:48 PM*** | CruiserSpeedboatSmall Boat | BlueWhiteWhite | NorthboundNorthboundSouthbound | LightLightLight |
| ***Observations*** | Many bricks, coal, crab shells, rock and sand in the area. Old industry of brickyards, coal transport and use, industry pollution. Also saw birds, chipmunks, bees, butterflies and flies |