

**Day in the Life of the Hudson River 10/22/19**

**SOUTH DOCK, WEST POINT**

**RIVER MILE: 52**

*Salt Front: ~ RM 53*

**West Point Elementary School- Martin Wormsley**

**55 students 4<sup>th</sup> grade, 15 adults**

**30 Girl Scouts**

**United State Military Academy- Patrick Baker**

**Latitude 41.3933 N & Longitude – 73.9517 W**



**Location:** South Dock, West Point, NY

**Area:** Shallow cover at the south side of Gee’s Point; in the vicinity of Duck Island; beach area on the waterfront along the West Point property

**Surrounding Land Use:** 70% Urban/Residential; 20% Forested; 10% Beach

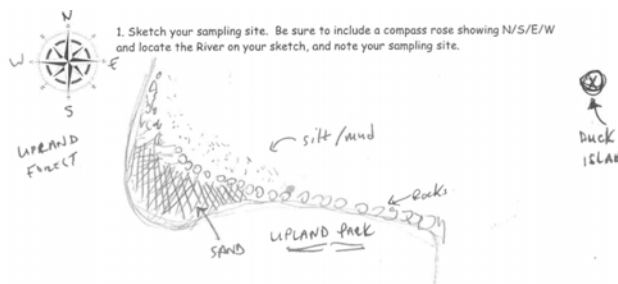
**Sampling Site:** Forested, grassy, parking lot, Beach, banks altered, riprap, pipe entering the water

**Shoreline:** 30% Sandy; 35% Muddy; 30% Rocky

**Water:** 4-6’ depth, calm

**River Bottom:** Muddy, sandy, rocky

**Plants in water:** no plants in water area



| ITEM                                     | Time                             | Reading                           | Comments                               |                                      |
|--|----------------------------------|-----------------------------------|--|--------------------------------------|
| <b>Physical</b>                          |                                  |                                   |  |                                      |
| <b>Air Temperature</b>                   | 2:40 PM                          | 15.1 ° C                          |  |                                      |
| <b>Wind Speed:</b>                       | 2:40 PM                          | Beaufort 1                        | 1.3 m/s                                |                                      |
| <b>Weather today</b>                     | Overcast (100%)                  |                                   |  |                                      |
| <b>Weather past 3 days:</b>              | Nothing unusual                  |                                   |  |                                      |
| <b>Tides- tide stick</b>                 | <b>Time</b>                      | <b>Rising, Falling, Unchanged</b> | <b>Water Height (cm)</b>               | <b>Rate of Tidal Change (cm/min)</b> |
| Measured every 30 minutes from 6:30-12pm | 6:30 AM<br>7:00 AM –<br>12:00 PM | Unchanged<br>Ebb<br>Ebb           | 79 cm (2.6 ft) decrease over 5.5 hours | 0.239                                |
| <b>Current-</b>                          | <b>Time</b>                      | <b>cm/second, Knots</b>           | <b>North/South</b>                     | <b>Ebb/Flood/Still</b>               |
|  | NR                               |                                   |  |                                      |
| <b>Water Temperature-</b>                | 6:30 AM<br>11:30 AM<br>4:30 PM   | 14.7 ° C<br>15.1 ° C<br>15.5 ° C  |  |                                      |
| <b>Turbidity- Turbidimeter</b>           | 6:30 AM<br>11:30 AM<br>4:30 PM   | 11.4 NTU<br>13.8 NTU<br>16 NTU    |  | Water appeared turbid                |
| <b>Chemical</b>                          |                                  |                                   |  |                                      |
| <b>Salinity- Meter</b>                   | 6:30 AM<br>11:30 AM<br>4:30 PM   | 170 ppm<br>160 ppm<br>160 ppm     |  |                                      |
| <b>DO –</b>                              | <b>Time</b>                      | <b>Temp</b>                       | <b>ppm DO</b>                          | <b>% saturation</b>                  |
|  | 6:30 AM<br>11:30 AM              | 14.7 ° C<br>15.1 ° C              | 8.11<br>8.18                           | 80%<br>80%                           |

|                                  |  |   |                                 |                              |
|----------------------------------|--|---|---------------------------------|------------------------------|
|                                  | 4:30 PM  | 15.5 ° C  | 8.21                            | 80%                          |
| <i>pH – meter</i>                | 6:30 AM<br>11:30 AM<br>4:30 PM   | 7.67<br>7.65<br>7.61  |                                 |                              |
| <b>Biological</b>                |  |   |                                 |                              |
| <b><i>Fish</i></b>               | <b><i>Number</i></b>   | <b><i>Name</i></b>  | <b><i>Length of longest</i></b> |                              |
| Seine and Rod & Reel             | 2<br>5<br>8<br>3<br>1  | Pumpkin Seed<br>Spottail Shiner<br>Striped Bass<br>White Perch<br>Smallmouth Bass |                                 |                              |
| <b>Fish Totals</b>               | <b>TOTAL: 19</b>   | <b>Diversity: 5</b>   |                                 |                              |
| <b><i>Macroinvertebrates</i></b> | <b><i>Number</i></b>   | <b><i>Name</i></b>  | <b><i>Length of longest</i></b> |                              |
|                                  | NR   |   |                                 |                              |
| <b>Macroinvertebrate Totals</b>  | <b>TOTAL: 0</b>  | <b>Diversity: 0</b>   |                                 |                              |
| <b><i>Sediment Core</i></b>      | <b><i>Time</i></b>   | <b><i>Oxid Top</i></b>  | <b><i>Grain Size</i></b>        | <b><i>Other Features</i></b> |
|                                  | NR   |   |                                 |                              |
| <b>Boats</b>                     | <b>Time</b>  | <b>Name/Color</b>   | <b>North/South</b>              | <b>Loaded/Light</b>          |
| Commercial                       | 10:15 AM   | Barge   | North                           | Loaded                       |
| Commercial                       | 12:15 AM   | Barge   | North                           | Loaded                       |
| Commercial                       | 1:45 PM  | Barge   | North                           | Loaded                       |
| Commercial                       | 2:45 PM  | Coast guard   | North                           |                              |
| Recreational                     | 6-6:30 AM  | West point crew   | North and South                 |                              |
| Recreational                     | 9:30 AM  | Motorboat   | North and South                 |                              |
| Recreational                     | 12:24 PM   | Motorboat   | North and South                 |                              |
| Recreational                     | 4:45 PM  | West Point Crew   | North and South                 |                              |
| <b>Observations</b>              | Bricks, glass, coal, water chestnut seeds. Heard an owl. Saw gulls, merganser, crow, turkey vulture. |   |                                 |                              |