**Day in the Life of the Hudson River 10/20/15 Data**

**RIVER MILE 5**

**Pier i - 59th Street/Riverside Park**

**Kimberly Schwab, Speyer Legacy School – 10 adults total**

**42 students - 7th & 8th graders**

**N 40.799 W-73.99**



**Sampling took place on the western tip of the pier**

Location: Pier i, New York NY

Area: Restored former railroad pier

Surrounding Land Use: Urban/residential 100%

Sampling Site: Except for seining and taking core samples, all sampling took place on pier i.

**Shoreline:** tiny beach area, shore with bulkhead, riprap, covered with vegetation, Old RR pilings

Plants in area: no submerged aquatic plants in the water but lots of plants on shore

Water depth: ~6 meters

River Bottom – sandy

Plants in water: No plants in the water

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Readings*** |  |  |
| ***Physical*** |   |  |  |  |
| Air Temp.å | NR |  |  |  |
| Wind Speed | 10:08 AM10:35 AM11:00 AM11:30 AM12:00 PM12:30 PM1:00 PM1:30 PM2:00 PM2:30 PM | Beaufort 1Beaufort 2Beaufort 1Beaufort 3Beaufort 2Beaufort 3Beaufort 4Beaufort 4Beaufort 3Beaufort 3 |  |  |
| Cloud Cover | Clear <25% |  |  |  |
| Weather today | No rain, temp rose and Wind increased during the day | ***Water surface*** | Choppy |
| Weather recently | Cool and clear with highs in the 50s |
| ***Water Temperature*** |  |  |  |  |
| ***Turbidity******site tube*** | **Time** | **Surface Sample cm** | **Depth Sample cm** |  |  |
|  | 10:00 AM 10:30 AM11:00 AM11:30 AM12:00 PM12:30 PM1:00 PM1:30 PM2:00 PM | 56.552NRNR4031433837 | NR382732NR22443223 |  |  |
| ***Chemical*** | **Time**  | **mg/l** | **Temp** | **% Sat** |
| \*Water sampled at surface and at depth with niskin bottle reported in two separate sets of readings below. Depth for bottom samples ranged from surface to depth |
|  | **TIME** | **SURFACE****mg/L** | **BOTTOM****mg/L****(~14 ft.)**  | **DEGREES C** | **% Saturation****Surf - Bot** |
| DO - Hach –  | 10:00 AM 10:30 AM11:00 AM11:30 AM12:30 PM1:00 PM1:30 PM2:00 PM | 88865786 | 86887686 | 1516151413171514 | 78%80%78%58%47%70%78%58% | 78%60%78%79%65%60%78%58% |
| pH- LaMotte precision pH | N/R |  |  |  |
| Salinity – | Time | Surface samplerefractometer –PPT(~14 ft)  | Depth Sample refractometer - PPT |  |
|  | 10:00 AM 10:30 AM11:00 AM11:30 AM12:00 PM12:30 PM1:00 PM1:30 PM2:00 PM | NR1010NR889710 | 20 131414NR1011810 |  |
| ***Fish Catch – Rod & Reel***  | ***Number*** | ***Species*** | ***Size*** | ***Time*** |
| ***DIV – 2*** | 1 | Striped Bass | 18 cm |  |
| ***Total @*** | 1  | America Eel | 38 cm |  |
| ***MACROS-***  | 5 | Blue crab – 3 M, 2 F | 18 cm largest |  |
| ***DIV - 3*** | 50  | Periwinkles |  |  |
| ***TOTALS 73*** | 18 | Ctenaphore (Comb Jellies) |  |  |
| ***Tides (from pier to water)***  | ***Time***  | ***Distance to water surface*** | ***D/T*** | ***Cm/min*** |
|  | 10:15 AM  | 14’10” |  |  |
|  | 11:01 AM | 13’11” | 28 cm/46 minutes | 0.61cm/min |
| ***Currents*** | ***Time*** | ***Ft./sec*** | ***Meter/sec*** | ***Cm/sec*** | ***S/N*** | ***E/F/S*** |
| Current speeds were measures at the tip of Pier 1 in between the shoreline and the channel | 10:08 AM | 37.5 | 11.43 | 1143 | S | E |
| 10:35 AM | 18 | 5.49 | 549 | S | E |
| 11:00 AM | 30 | 9.144 | 914 | S | E |
| 11:30 AM | 25 | 7.62 | 762 | S | E |
| 12:00 PM | 30 | 9.14 | 914 | N | F |
| 12:30 PM | 50 | 15.24 | 1524 | N | F |
| 1:00 PM | 57 | 17.37 | 1737 | N | F |
| 1:30 PM | 68 | 20.73 | 2073 | N | F |
| 2:00 PM | 125 | 38.1 | 3810 | N | F |
|  | 2:30 PM | 94 | 28.65 | 2865 | N | F |
| **Sediment Cores** | **Length** | **H2S smell/oil** | **Rare** | **Common** | **Abundant** |
| **12:30 PM****location 1** | 12.7 cm  | No | ClayLeaveswood | Mud, Gravelpebbles | Sand |
| **Shipping Commercial**  |  |  |  |  |  |
| **Name** | **Time** | **Direction** | **Load** | **Type** | **Color** |
| NY WATERWAY | 9:54 AM | SOUTH | LOADED | FERRY | WHITE |
| NJ 6249HB | 10:54 AM | SOUTH |  LIGHT | TUGBOAT | WHITE AND BLUE |
| B. M. L. P. | 10:56 AM | SOUTH | LOADED | BARGE | RED |
| NY POLICE DEPARTMENT | 10:59 AM | NORTH | LIGHT | MOTORBOAT | WHITE |
| NY WATERWAY | 12:15 PM | NORTH | LOADED | FERRY | WHITE |
| MONICO | 12:20 PM | SOUTH |  |  |  |
| CIRCLE LINE SIGHT SEEING CRUISE | 12:27 PM | SOUTH | LOADED | CRUISEBOAT |  |
| NR | 12:48 PM | NORTH | LIGHT |  |  |
| SLOOP  | 12:57 PM | NORTH |  |  |  |
| NR | 12:57 PM | NORTH |  |  |  |
| LUX SPEED | 1:25 PM | NORTH | LOADED |  |  |
| NYPD | 1:55 PM | NORTH |  |  |  |
| **Shipping Recreational** |  |  |  |  |  |
| POSITIVE CARRY | 9:48 AM | NORTH | HEAVY | CRUISEBOAT | WHITE |
| FIREFLY | 9:49 AM | NORTH | LIGHT | SAILBOAT | BLUE |
| NR | 12:13 PM | NORTH | LIGHT | TUGBOAT |  |
| RED BALTEMORE HOOK | 12:20 PM | SOUTH | LIGHT |  |  |
| DOUBLE SKIN 307 | 12:25 PM | NORTH |  |  |  |
| SLOOP | 12:55 PM | SOUTH | LIGHT |  |  |
| HOOK | 1:14 PM | SOUTH | LOADED |  |  |
| RTC 106 | 1:29 PM | NORTH | LIGHT |  |  |