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

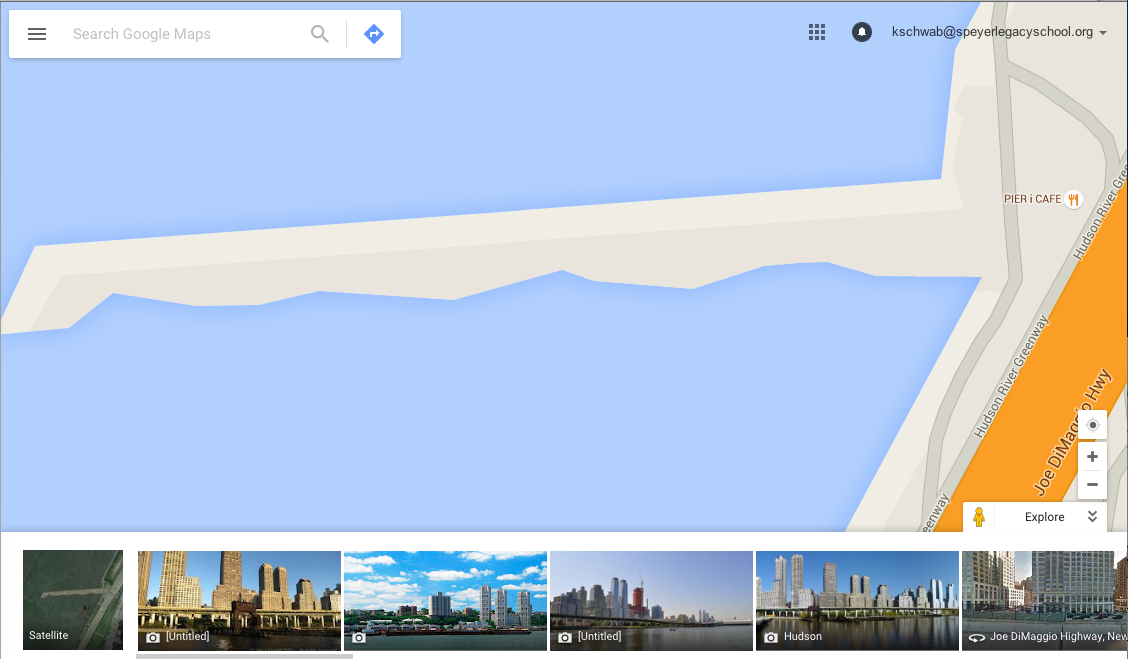
**RIVER MILE 5**

**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 AM  10:35 AM  11:00 AM  11:30 AM  12:00 PM  12:30 PM  1:00 PM  1:30 PM  2:00 PM  2:30 PM | | Beaufort 1  Beaufort 2  Beaufort 1  Beaufort 3  Beaufort 2  Beaufort 3  Beaufort 4  Beaufort 4  Beaufort 3  Beaufort 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 AM  11:00 AM  11:30 AM  12:00 PM  12:30 PM  1:00 PM  1:30 PM  2:00 PM | 56.5  52  NR  NR  40  31  43  38  37 | | NR  38  27  32  NR  22  44  32  23 | |  |  | | |
| ***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 AM  11:00 AM  11:30 AM  12:30 PM  1:00 PM  1:30 PM  2:00 PM | 8  8  8  6  5  7  8  6 | | 8  6  8  8  7  6  8  6 | | 15  16  15  14  13  17  15  14 | 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 sample  refractometer –  PPT  (~14 ft) | | | | Depth Sample refractometer - PPT |  | | |
|  | 10:00 AM  10:30 AM  11:00 AM  11:30 AM  12:00 PM  12:30 PM  1:00 PM  1:30 PM  2:00 PM | NR  10  10  NR  8  8  9  7  10 | | | | 20  13  14  14  NR  10  11  8  10 |  | | |
| ***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 | | | Clay  Leaves  wood | Mud,  Gravel  pebbles | 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 |  |  | | |