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

**RIVER MILE 3.2**

**Hudson River Pier #51, Manhattan**

**Susan Price & 3 other lab teachers - NYC Lab High School**

**64 APES students (4) 11& (60) 12th grade**

**GPS coordinates: 40.738138, -74.010706**

**Location:** Pier 51 – the Playground Pier, concrete pier

**Area:** Pier used for boating, picnics, fishing, playground, jogging, sitting and walking

**Surrounding Land Use:** 60% Urban/residential; 30% Industrial/Commercial; 5% Entertainment, 5% Planted.

**Sampling Site:** Recreational pier, grassy and concrete

**Shoreline:** Banks altered, wood bulkhead, pipe entering water, riprap, concrete bulkhead

**Water Area:** Bottom muddy, rocky

**Water:** Calm, slight chop, some wind

**Plants in area:** no plants in water, some trees planted on pier

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Air Temp.*** | ***Wind*** | ***Wind*** |
| ***Physical*** |  |  | ***Beaufort #*** | ***Anemometer*** |
| ***Air Temperature & Wind*** | 9:57 AM | 13.4°C | #4 - SW | 4.3 m/s SW |
|  | 10:25 AM | 14°C |  | 3 m/s SW |
|  | 10:46 AM | 17 C |  |  |
| Cloud Cover | Partly | 26-50% |  |  |
| Weather today | Some clouds to the north and to the south but no rain | | | |
| Weather recently | No rain – dry stretch | | | |

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| ***Water Temperature*** | 9:57 AM | 14°C |  |  |
|  | 10:05 AM | 15°C |  |  |
| ***Turbidity –site tube*** | 10:30 AM  10:50 AM | 48 cm  62 cm |  | Average 55 cm |
| ***Chemistry*** | ***Time*** | ***Sigma Test Strip*** | ***Color test match*** |  |
| *pH – Color test match and test strip* | 10:05 AM  10:13 AM  10:27 AM  10:52 AM | N/R  7.5  7.7  7.8 | 8.2  N/R  N/R  N/R |  |
| *Salinity – plastic hydrometer* | 9:52 AM  10:05 AM | 27.5 ppt  28 ppt | Plastic hydrometer  Glass hydrometer temp 15°C | |
| *D.O. - CHEMets* | 9:57 AM  10:05 AM | 15°C  15°C | 5 ppm  7 ppm | 47% saturated  61% |
| *Nitrogen – API Saltwater Master Test Kit* | Nitrate – 1.2 ppm | Ammonia - 0 | Nitrite - 0 |  |
| ***Fish – pole*** | American Eel | Large Adult ` | See photo above |  |
| **Tides** | N/R |  |  |  |
| **Currents:** | 9:58 AM | 580 cm/60 sec | 9.7 cm/sec | N/flood |
|  | 10:11 AM | 600 cm/60 sec | 10 cm/sec | Ebb |
| **\*Currents –** Samplers noted on data sheet that the tide chart said it would be an ebb tide and that the north blowing wind could have affected results, however the NOAA charts show the tide flooding at this time of the day. | | | | |
| **Commercial Traffic** | **Type** | **Color** | **North/South** | **Loaded/Light** |
| **10:05 AM** | NY Waterway | White | North | Loaded with people |
| **10:07 AM** | NY water taxi |  | North | Some People |
| **10:15 AM** | US Army | Navy blue | South | Light |
| **10:30 AM** | Chandra B | White | South | Light |
| **11:57 AM** | Circle Line |  | South | Loaded with people |
| **Recreational Traffic** |  |  |  |  |
| **10:10 AM** | Sailboat | White | North |  |
| **10:15 AM** | Classic Harbor Line | White | South | Small engine propelled |
| **10:41 AM** | Sailboat | White | North |  |
|  |  |  |  |  |
| **Other Observations** | Buildings, pigeons, humans and boats.  We observed a lot of plastic floating near the pier. Also so a dead red-eared slider turtle which was a great teachable moment about caring for exotic pets and to never release them into the wild, especially to a saltwater environment when they are a freshwater species. | | | |