**Snapshot Day 10/20/16 Data**

**Bronx RM 1.5**

**(Salt Front for Hudson ~ RM 80)**

**Concrete Plant Park, Bronx, NY**

**Kathalene Lamboy, Bronx River Alliance**

**Patrick Callahan, Bronx Center for Science & Math**

**15 students, 10-12th AP Environmental Science students, 2 adults**

**40.825506 Lat & -73.884777 Lon**

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**Location:** Concrete plant, Bronx River

**Area:** Pier,Forested bank, grassy area with concrete bike path, RipRap, Concrete Bulkhead, pipe entering the water

**Surrounding Land Use:** 32% Urban/Residential, 2% forested, 60% Industrial/Commercial, 5% lawn/vegetation

**Sampling Site:** No plants in water, trash around

**River Bottom:** Muddy, Rocky

**Plants in area:** No plats in water

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time –*** | | ***Reading 1*** | ***Reading 2*** | ***Reading 3*** |
| ***Physical*** |  | |  |  |  |
| Air Temperature | 10:00 AM  11:00 AM  11:40 AM | | 75°F  68°F  69°f | 24°C  20°C  21°C |  |
| Wind Speed | 11:40 AM | | 7 mph | Southerly |  |
| Cloud Cover | 11:40 AM | | >75% overcast |  |  |
| Weather today | overcast | |  | | |
| Weather last 3 days | Warmer than usual | |  | | |
| ***Water Condition*** |  | | | | |
| ***Water Temperature*** | 10:45 AM  11:15 AM  11:28 AM | 20°C  20  19 | | 68°F  68°F  66°F |  |
| ***Turbidity***  ***secchi*** | 11:00 AM | 105.3 cm  91.2 cm  75 cm | | Average 90.5 cm | Water very clear |
|  | Water became more turbid when the tide became higher. | | | | |
| ***Chemical*** |  |  | |  |  |
| DO  (LaMotte drop count kit) | 10:45 AM  11:15 AM  11:28 AM | 4.2 ppm  4.1  5.3 | | 20°C  20  19 | 28% satur.  29%  37% |
| pH - test strips, color match test kit | 11:24 AM  11:28 AM | 5, 5, 4  5, 4, 4 | |  | 4.9  4.3 |
| Salinity - hydrometer | Reading 1 ppt | Reading 2 ppt | | Reading 3 ppt | Average – ppt |
| 10:45 AM | 15 ppt |  | |  |  |
| 11:15 AM | 15 ppt |  | |  |  |
| 11:28 AM | 15 ppt |  | |  |  |
| ***Fish Catch*** | **Total** | **Fish** | |  | **3-4 seines** |
| ***Div – 2***  ***Total Catch - 83*** | 81 | Silversides | |  |  |
|  | 2 | Banded Killi | |  |  |
|  | 4 | Shore Shrimp | |  |  |
| ***Macro - Div – 2***  ***Total Catch - 5*** | 1 | Mud Crab | |  |  |
| ***Tides*** |  |  | |  |  |
| ***Currents - Time*** | ***Cm/30 secs*** | ***Cm/sec*** | | ***Kts*** | ***E/F/S*** |
| 10:51 AM |  |  | | 3.8 |  |
| ***Ships - commercial*** | 10:30AM | Red/Brown Barge | | Southbound | loaded |
| ***Ships Recreational*** | 11:15 AM | Blue Canoes | | Northbound | loaded |
| ***Other Observations*** | Seagulls, lots of trash, \*dead fish in area. | | | | |

***\*Note that there had been a report of dead fish in the Bronx. DEC team had checked it out before the event and noted that they felt it was from low D.O. levels in the river.***