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

**RIVER MILE 28**

**Nyack Memorial Park**

**Kirsten Kleinman & Karl Mattesen, Nyack High School 2 APES Classes 60 students, 11-12th graders, 6 adults**

**Latitude 40°05.243’N, Longitude 73°54.988 ‘W**

**Location:** Nyack Park where Nyack Brook feeds in

**Area:** Open and grassy, has a parking lot, used for picnics, fishing

**Surrounding Land Use:** 100% park

**Sampling Site:** beach, banks altered, riprap on shoreline, bulkhead

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

**Water depth**: varied

**River Bottom** – sandy/muddy bottom , water calm

**This year the Nyack students compared a high tide and a low tide sampling as well as their normal transect that runs from Nyack Brook (Station #1) out towards the Hudson River (Station #10)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical*** |  |  |  |  |
| Air Temperature |  |  |  |  |
| ***Fish Catch***  ***Seine 12X4*** | ***Number Caught*** | ***Species*** | ***Length of longest*** | ***Seine*** |
| **10:10 AM** | 5 | *Atlantic Silversides* | *8 cm* |  |
|  | 12 | *Striped Bass* | *10 cm* |  |
|  | 3 | *Northern Pipefish* | *15 cm* |  |
|  | 4 | *White Perch* | *18 cm* |  |
|  | 3 | *Banded Killifish* | *10 cm* |  |

Sketch Map of Sampling Site

1

2

3

4

Nyack Brook

5

6

7

8

9

10

Hudson River

**Time: \_\_\_9:15 AM\_\_\_ Tide: \_\_Low\_\_\_\_\_ Depth: Surface Sample**

**Turbidity: Secchi**

**7 meters off new pier - 25 cm**

**Boat Launch – 20 cm**

**Station 7 – 14 cm**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Station #** | **Distance (m)** | **Depth cm** | **Salinity (ppt)** | **Conductivity m/S** | **Temp (ºC)** | **DO mg/L** | **pH** | **Nitrate** | **Phosphate** |
| 1 | 0 | 5.5 | 0.79 | 1.3 | 11.8 | 7.5 | 7.8 | 8,8 | 1 |
| 2 | 10 | 11 | 0.81 | 1.3 | 11.8 | 7.3 | 8.5 |  |  |
| 3 | 20 | 16 | 0.82 | 1.4 | 12 | 7.3 | 7.7 |  |  |
| 4 | 30 | 55 | 0.9 | 1.7 | 12.1 | 7.4 | 7.4 |  |  |
| 5 | 40 | 31.5 | 0.94 | 1.9 | 12.6 | 10 | 7.2 |  |  |
| 6 | 50 | 13 | 1.85 | 2.8 | 12.4 | 8.1 | 7.4 |  |  |
| 7 | 60 | 35 | 1.92 | 2.9 | 12.9 | 7.6 | 7.2 |  |  |
| 8 | 70 | 25 | 1.56 | 1.3 | 12.7 | 7.7 | 7.1 |  |  |
| 9 | 80 | 6.5 | 2.31 | 1.3 | 12.4 | 7.6 | 7.4 |  |  |
| 10 | 150 | 13.5 | 6.46 | 8.4 | 12.7 | 7.4 | 7.3 | 4.4 | 2 |

**Data Table 2: Time \_12:30 PM Tide \_\_\_High Depth Surface Sample**

**Turbidity: Secchi**

**7 meters off new pier - 43 cm**

**Boat Launch – 20 cm**

**Station 7 – 25 cm**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **12** | **Distance (m)** | **Depth (cm)** | **Salinity (ppt)** | **Conductivity (mS)** | **Temp (oC)** | **DO (mg/L)** | **pH** | **Nitrate** | **Phosphate** |
| 1 | 0 | 8 | 0.75 | 1.3 | 12.7 | 7.7 | 9 | 6.6 | 1.0 |
| 2 | 10 | 11 | 0.75 | 1.3 | 12.9 | 8.2 | 8 |  |  |
| 3 | 20 | 25 | 0.76 | 1.4 | 13.3 | 8.3 | 7.7 |  |  |
| 4 | 30 | 68 | 0.72 | 2.1 | 13.2 | 10.2 | 7.6 |  |  |
| 5 | 40 | 45 | 1.23 | 2.1 | 13.4 | 7.2 | 7.5 |  |  |
| 6 | 50 | 23 | 1.31 | 5 | 14.4 | 8.2 | 7.4 |  |  |
| 7 | 60 | 58 | 1.68 | 3.6 | 15.7 | 7.6 | 7.4 |  |  |
| 8 | 70 | 34 | 3.67 | 5.2 | 16 | 7.6 | 7.4 |  |  |
| 9 | 80 | 15 | 6.68 | 9.4 | 16.4 | 7.7 | 7.5 |  |  |
| 10 | 150 | 27 | 7.03 | 12.1 | 15.6 | 8 | 7.7 | 4.4 | 2.0 |