**Day in the Life of the Hudson River 10/16/14 Data**

**(Salt Front RM 65.9)**

**RIVER MILE 152.2**



**Hudson Shores Park, Watervleit, NY**

**Amy Parks/Stacey Shepard, North Colonie CSD**

**30 students, 5th grade students and 6 adults**

**Latitude 73\* 41’ 55” W** **Longitude** **42\* 43’ 41” N**

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**Location:** Hudson Shores Park, Watervleit, Albany County, NY

**Area:** Rowing dock at park right on the river’s edge

**Surrounding Land Use:** Fishing launch,Rocky with weedy vegetation and a few small shrubs (gravelly)

**Sampling Site**: 10%beach at low tide,70% park/parking area, 20% planted/forested, - across the river land use100% Industrial/Commercial

**Shoreline:** beach area, pier, shore with bulkhead, area covered with vegetation

**Plants in area:** none in the water

**Water depth**:

**River Bottom**: mixture of sand/mud, small rocks

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | | ***Reading 1*** | ***Reading 2*** | ***Comments*** |
| ***Physical -*  Air Temperature** | **Time** | | **°F** | **°C** | **Average** |
|  | 9:50 am | | 72\* | 22\* | 72\* F/22\*C |
|  | 10:46 am | | 74\* | 24\* |  |
|  | 12:09 pm | | 71\* | 21\* |  |
|  | 12:55 pm | | 72\* | 22\* |  |
| **Wind Speed:** | **Time** | | **Beaufort** | **Anemometer** | **Direction** |
|  | 10:10 am | | 3 | 4.6 m/s | **N** |
|  | 10:48 am | | 3/4 | 5.6 m/s | **N** |
|  | 12:14 pm | | 3 | 4.5 m/s | **N f** |
| **Cloud Cover** | **Clear (<25%)** | | **Partly Cloudy (26-50%)** | **Mostly Cloudy (51-75%)** | **Overcast (>75%)** |
| 10:12 am |  | |  |  | ✓ |
| 10:53 am |  | |  |  | ✓ |
| 12:14 pm |  | |  |  | ✓ |
| 12:45 pm |  | |  |  | ✓ |
| **Precipitation** | **Time** | | **Rain** | **Describe** |  |
|  | 10:12 am | | N |  |  |
|  | 10:54 am | | N |  |  |
|  | 12:00 pm | | Y | Heavy mist |  |
|  | 12:47 pm | | N |  |  |
| **Weather last 3 days** | Today is Thursday. Monday – Wednesday were nice days. Tuesday & Wednesday had humid weather. Heavy rains Wednesday night into Thursday morning. | | | | |
| ***Water Temperature*** | **Time** | | **ºC** | **ºF** | **Average** |
|  | 9:55 am | | 19.46\* | 67\* | 18.76C /65.75F |
|  | 10:31 am | | 18.9\* | 66\* |  |
|  | 11:52 am | | 17.79\* | 64\* |  |
|  | 12:25 pm | | 18.9\* | 66\* |  |
| ***Turbidity – long site tube*** | **Reading 1** | | **Reading 2** | **Reading 3** | **Average** |
| 9:55 am | 73 cm | | 82 cm | 95 cm | 83 cm |
| 10:50 am | 74 cm | | 81 cm | 89 cm | 81 cm |
| 12:04 pm | 45 cm | | 47 cm | 49 cm | 47 cm |
| 12:23 pm | 57 cm | | 70 cm | 64 cm | 64 cm |
| ***Chemical*** | **Time** | | **mg/L** | **Water Temp** | **% Saturation** |
| ***DO (Hach Drop count)*** | 10:19 am | | 10 mg/L | 20\* | 108% |
|  | 10:55 am | | 9 mg/L | 20\* | 99% |
|  | 12:15 pm | | 7 mg/L | 20\* | 80% |
|  | 12:55 pm | | 9 mg/L | 20\* | 97% |
| **pH** – color match test kit | 10:02 am | | 7.5 |  |  |
|  | 10:37 am | | 7.5 |  |  |
|  | 11:55 am | | 7.5 |  |  |
|  |  | | 7.5 |  |  |
| ***Salinity - quantab*** |  | |  |  |  |
| ***Fish Catch -*** | ***Time*** | | ***ID*** | ***Number*** | ***Longest*** |
| Set 2 minnow traps & seined | Nothing in traps | |  |  |  |
| Seined | 10:00 AM | | Spot-Tail Shiner | 9 | 8 cm |
| Seined | 11:00 AM | | Spot-Tail Shiner | 1 | 6cm |
| T**OTALS** |  | | **Diversity 1** | **Totals 10** |  |
|  |  | |  |  |  |
| ***Tides -***  ***\*calculate by: change in elevation/change in time*** | ***Time*** | | ***Water height*** |  | ***\*Rate of change*** |
| 8:35 AM | | 204.47 cm | Base reading |  |
| 9:42 AM | | 254 cm | Rising |  |
| 10:37 am | | 271.78 cm | Rising |  |
| \*\*HT in Albany 11:58 AM | 11:53 am | | 287.02 cm | Rising\*\* |  |
| 12:46 pm | | 259.08 cm | Falling |  |
| ***Currents -*** | **Feet** | **cm** | **cm/30 sec** | **Cm/sec** | **N/S\*** |
| 10:00 am | 6’2” | 190 | 190cm/30 sec | 6.3cm/sec | S |
| 10:43 am | 9’9” | 297 | 297cm/30 sec | 9.9 cm/sec | S |
| 12:03 am | 11’ 6” | 351 | 351cm/30 sec | 11.7 cm/sec | S |

***\*Samplers expected a North flowing current because of the flood tide but it seems the recent run off from the rains overwhelmed the tidal current and caused the orange to flow south.***