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

**RIVER MILE 40**

**George’s Island County Park, Montrose**

**Alethea Lynch, Fox Meadow Elementary**

**80 – 3rd grade students, 20 adults**

**Latitude 41**°**14’N Longitude 73°56’40”W**

**Location:** Waterfront park in Westchester County Park

**Area:** Shoreline is rocky with brick pieces, forested, grassy with parking area

**Surrounding Land Use:** Park picnic area & boat launch – Park 70%, Industrial/Commercial 30%

**Sampling Site:** Beach, Rip Rap and Concrete Bulkhead

**Plants in area:** none listed

**Water depth**:

**River Bottom** – muddy

\*The kit we used for DO was a Lamotte Estuary kit. I am not sure what happened there- it was very low compared to last year. We did use a plastic hydrometer- we must have read the wrong side- sorry!

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***ITEM*** | ***Time*** | |  | ***Reading 2*** | ***Comments*** | |
| ***Physical*** |  | |  |  |  | |
| Air Temperature | ***Reading 1°F*** | | ***Reading 1°C*** | ***Reading 2°F*** | ***Reading 2°C*** | |
| 10:37 AM  10:56 AM  11:08 AM  11:32 AM  11:48 AM  12:30 AM  12:53 AM  1:18 AM | 63  63  63  63  64  66  68  68 | | 17  17  17  17  18  19  20  20 | 63  63  63  63  64  66  68  68 | 17  17  17  17  18  19  20  20 | |
| 10:56 AM | Time | | Beaufort # | Anenometer | Direction | |
| 10:37 AM  10:56 AM  11:08 AM  11:32 AM  11:48 AM  12:30 AM  12:53 AM  1:18 AM | 10:20 AM  10:40 AM  11:07 AM  11:20 AM  11:40 AM  12:00 PM  12:55 PM  1:09 PM | | 1  1/2  2  2  2  2  2  3 |  | N  N  N  N  N  S  S  S | |
| Cloud Cover | 90-100% all day - Stratus | | | | |
| Weather Today | No rain | | | | |
| Weather Last 3 Days | Warm and dry temps. | | | | |
| ***Turbidity – Secchi Disk*** | Reading 1 | Reading 2 | | Reading 3 | Average cm | |
| ***10:35 AM*** | 183 cm |  | |  |  | |
| ***10:45 AM*** | 178 cm |  | |  |  | |
| ***11:05 AM*** | 180 cm |  | |  |  | |
| ***11:50 AM*** | 198 cm |  | |  |  | |
| ***12:58 PM*** | 157 cm |  | |  |  | |
| ***1:25 PM*** | 219 cm |  | |  |  | |
| ***1:30 PM*** | 225 cm |  | |  |  | |
| ***Chemical*** |  |  | |  |  | |
| DO  (drop count kit) | Time | Temp °C | | ppm | % saturated | |
| *Group 1* | 10:35 | 20°C | | 2 | 18% | |
| *Group 2* | 11:00 |  | | 2 |  | |
| *Group 3* | 11:11 |  | | 1 |  | |
| *Group 4* | 11:20 |  | | 2 |  | |
| *Group 5* | 11:47 |  | | 2 |  | |
| *Group 6* | 12:30 |  | | 2 |  | |
| *Group 7* | 12:50 |  | | 2 | Average 2ppm | |
| pH – *Group 1* | 10:35 | 20°C | | 8 |  | |
| *Group 2* | 11:00 |  | | 7.5 |  | |
| *Group 3* | 11:11 |  | | 7.5 |  | |
| *Group 4* | 11:20 |  | | 8 |  | |
| *Group 5* | 11:47 |  | | 7.5 |  | |
| *Group 6* | 12:30 |  | | 7.5 |  | |
| *Group 7* | 12:50 |  | | 8 | Average 7.7 | |
| Salinity - *Group 1* | 10:35 | 20°C | | 1.008 ppt | 11.4 | |
| *Group 2* | 11:00 |  | | 1.008 | 11.4 | |
| *Group 3* | 11:11 |  | | 1.006 | 8.8 | |
| *Group 4* | 11:20 |  | | 1.005 | 7.4 | |
| *Group 5* | 11:47 |  | | 1.006 | 8.8 | |
| *Group 6* | 12:30 |  | | 1.008 | 11.4 | |
| *Group 7* | 12:50 |  | | 1.008 | 10.1 | |
|  |  | ***Seems high*** | | ***Hydrometer*** | ***10 ppt average*** | |
| ***Fish Catch***  *12 hauls* | ***Number Caught*** | ***Species*** | | ***Size*** |  | |
| **Fish** | 3 | American Eel | | **DIVERSITY** | **5** | |
|  | 2 | Atlantic Silverside | | **TOTAL CATCH** | **19** | |
|  | 7 | Northern Pipefish | |  |  | |
|  | 1 | Striped Bass | |  |  | |
|  | 6 | Atlantic Menhaden \* | | \*Saw several huge schools but they were too fast to net | | |
| **Macros** | 23 | Blue Crab | | **DIVERSITY** | **2** | |
|  | 4 | Shrimp | | **TOTAL CATCH** | **27** | |
| ***Tides –*** |  |  | |  | ***Rise/Fall/***  ***Unchanged*** | |
| 10:37AM | Rising |  | |  |  | |
| 10:AM | Rising |  | |  |  | |
| 11:00 AM | Rising |  | |  |  | |
| 11:26 AM | Rising |  | |  |  | |
| 11:47 AM | Rising |  | |  |  | |
| 12:28 PM | Rising |  | |  |  | |
| 12:52 AM | Rising |  | |  |  | |
| ***Currents*** | 10:37 AM | Ebb | |  |  | |
|  | 10:56 AM | Ebb | |  |  | |
|  | 11:19AM |  | | Flood |  | |
|  | 11:35 AM |  | | Flood |  | |
|  | 11:57 AM |  | | Flood |  | |
|  | 12:42 PM |  | | Flood |  | |
|  | 12:53 |  | | Flood |  | |
|  | 1:24 PM |  | | Flood |  | |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Traffic Commercial*** | 1:00 PM | BBC Charburg | Blue/ Red & White | Northbound Empty |
| ***Traffic Recreational*** | 10:35 AM  10:53 AM  11:00AM  11:00AM  11:03 AM  11:23 AM  11:34 AM  11:40 AM  11:54 AM  11:55 AM  12:02PM  12:04 PM  12:34 PM  12:34 PM  1:15 PM  1:24 PM | Sailboat/ Wind  Motorboat/Gas  Motorboat/Gas  Motorboat/Gas  Motorboat/Gas  Sailboat/ Wind  Motorboat/Gas  Motorboat/Gas  Motorboat/Gas  Motorboat/Gas  Motorboat/Gas  Motorboat/Gas  Sailboat/ Wind  Motorboat/Gas  Motorboat/Gas  Motorboat/Gas | White  White  White  White  White  White  White  White  White  White  White  White  White  White  White  White | Southbound  Southbound  Northbound  Northbound  Southbound  Northbound Southbound Northbound Southbound Northbound Southbound Southbound Southbound Southbound Northbound Northbound |
| ***Other Items*** | Three trains |  |  |  |
| ***Observed*** | 5 crows, 5 egrets, 12 geese, 2 red-billed gull, 1 eagle, 1wren | | | |