

Day in the Life of the Hudson River 10/22/20

MORRIS CANAL BASIN, NEW JERSEY

RIVER MILE: 0.5

Salt Front: ~ RM 75

Lab High School – Susan Price, 2 participants

Hudson Montessori School- Grace Sanvictores, 24 participants

Latitude 40.707725 N & Longitude – 74.03447 W



Location: Morris Canal Basin, Jersey City, Hudson County, New Jersey

Area: Walking and fishing pier along a developed area, walkway with railing, water's edge is rocky.

Surrounding Land Use: 100% Industrial

Sampling Site: Waterfront pier jutting out along the waterfront surrounding a canal inlet, walk down to the water to a rocky shoreline.

Shoreline: 100% Rocky

| <i>ITEM</i> | <i>Time</i> | <i>Reading</i> | | <i>Comments</i> |
|---|--|--------------------------|-------------------------|------------------------|
| Physical | | | | |
| <i>Air Temperature</i> | 10:00 AM | 20 ° C | 68 ° F | |
| | 3:30 PM | 20.5 ° C | 68.9 ° F | |
| <i>Wind Speed:</i> | 9:00 AM | 3.8 m/sec | <1 Beaufort | |
| | 1:00 PM | 0.5 m/sec | | |
| | 3:30 PM | 0 m/sec | | |
| <i>Weather today</i> | 9:00 AM Downpour, 3:30 PM no rain | | | |
| <i>Weather past 3 days:</i> | Rain on previous day, slight overcast, cool at night | | | |
| <i>Tides-</i> | <i>Low Tide</i> | <i>High Tide</i> | <i>Time of Sampling</i> | <i>Tide</i> |
| | 7:27 AM | 1:48 PM | 10:00 AM | Flood |
| <i>Current-</i> | <i>Time</i> | <i>cm/second, Knots</i> | <i>North/South</i> | <i>Ebb/Flood/Still</i> |
| | 10:00 AM | | North | Flood |
| <i>Water Temperature-</i> | 10:00 AM | 17 ° C | 62.6 ° F | |
| | 3:30 PM | 18 ° C | 64.4 ° F | |
| <i>Turbidity- Long sight tube</i> | 10:00 AM | 80 cm (Secchi was 85 cm) | | |
| | 4:00 PM | 33 cm | | |
| Chemical | | | | |
| <i>Salinity- Hydrometer Refractometer</i> | 10:00 AM | 20ppt | | |
| | 3:30 PM | 22 ppt | | |
| <i>DO –</i> | <i>Time</i> | <i>Temp</i> | <i>ppm DO</i> | <i>% saturation</i> |
| <i>Hach Drop Count Chemets Kit</i> | 11:30 AM | 17 ° C | 6 ppm | 65% |
| | 12:30 PM | 17 ° C | 8 ppm | 90% |
| | 3:30 PM | 18 ° C | 7 ppm | 80% |
| <i>pH – Meter</i> | 10:00 AM | 6.5 | | |

| | | | | |
|----------------------------------|----------------------|----------------------------|---------------------------------|----------------------------------|
| <i>Color match kit</i> | 3:30 PM | 8.1 | | |
| <i>Nitrates-</i> | 3:30 PM | 0 ppm | | |
| <i>Biological</i> | | | | |
| <i>Fish</i> | <i>Number</i> | <i>Name</i> | <i>Length of longest</i> | <i>Length of smallest</i> |
| Trap | 2 | Mummichog | 7 cm | 6 cm |
| Fish Totals | TOTAL: 2 | Diversity: 1 | | |
| <i>Macroinvertebrates</i> | <i>Number</i> | <i>Name</i> | <i>Length of longest</i> | <i>Length of smallest</i> |
| | 2 | European Green Crab | | |
| Macroinvertebrate Totals | TOTAL: 2 | Diversity: 1 | | |
| <i>Sediment Core</i> | <i>Time</i> | <i>Oxidized Top</i> | <i>Grain Size</i> | <i>Other Features</i> |
| NR | | | | |
| Boats | Time | Name/Color | North/South | Loaded/Light |
| NR | | | | |
| Observations | 1 dead green crab | | | |