Day in the Life of the Hudson River 10/20/16 Data (Saltfront ~ RM 83) RIVER MILE 117.5 (a)

Shelley Forester, Cary Institute of Ecosystem Studies Sandra Fischer, Chatham High School, Catham, NY

42 students, Environmental Science, Ecology Club, 6 adults Latitude – N 42°25' Latitude – W -73°80'

Location: Hudson River Waterfront Park, City of Hudson, Columbia County

Area: 1st dock in the waterfront property used for fishing, marina, picnics, large grassy

area, just north of the old quarry site, has a parking lot –

Surrounding Land Use: 50% Industrial/Commercial, 50% Urban Industrial

Sampling Site: waterfront with banks 100% altered to include wooden & concrete

bulkheads and large riprap on shoreline, pier, grassy, parking lot

Plants in area: 1% water chestnut

Water - Calm

River Bottom – bottom rocky

| | Time | Reading 1 | Reading 2 | Comments | |
|------------------|-------------------------------|---------------|-----------|-----------------|--|
| Physical | | | | | |
| Air | 9:04 AM | 13.7°C | °F | | |
| Temperature | 10:30 AM | 15°C | | | |
| - | 12:39 PM | 18.5°C | | | |
| Cloud Cover | All Day | Overcast >75% | | | |
| Wind – | Time | Beaufort | MPH | Direction | |
| | 9:48 AM | 0 | None | none | |
| Weather today | Brief showers noon - 12:30 PM | | | | |
| Weather | Warm, sunny and very dry | | | | |
| recently | | | | | |
| Water | calm | | | | |
| Water | 9:22 AM | 16.6 °C | 62°F | | |
| Temperature – | 10:39 AM | 16.9 | 62°F | | |
| | 12:41 PM | 17 | 63°F | | |
| Turbidity – | 9:13 AM | 120 cm | | Secchi – 120 | |
| • | | 130 cm | | cm avg | |
| | | 110 cm | | | |
| You can't see | 9:13 AM | 40 JTU | | Short site tube | |
| the bottom but | | 0 | | – 13.3 JTU avg. | |
| short tube is | | 0 | | | |
| clear – not very | | | | | |
| turbid | | | | | |
| Chemical | Time | Temp C | DO ppm | % sat. | |
| DO - | 9:22 AM | 16.6 | 8.0 | 40% | |

| | 10:25 AM | 16.8 | 7.0 | 45% |
|-------------------|-------------|------------------|--------------|-----------------------|
| | 12:50 PM | 16.9 | 4.0 | 45% |
| pH – Color | 9:16 AM | 8.2 | 1.0 | 1370 |
| Match | 9:52 AM | 7.96 | | |
| Materi | 10:42 AM | 7.9 | | |
| | 12:02 PM | 8.06 | | |
| Salinity | Time | Quantab # | Chloride ppm | Total Salinity |
| Quantabs | 10:08 AM | 1.6 | 40 ppm | 72 ppm |
| Quintinos | 10:40 AM | 1.4 | 34 ppm | 61 ppm |
| | 12:02 PM | 1.5 | 37 ppm | 67 ppm |
| | 12:15 PM | 1.4 | 34 ppm | 61 ppm |
| Alkalinity | 10:50 AM | 40 ppm | у г ррпп | от ррш |
| Mikaminy | 12:01 PM | 2 ppm | | |
| | 12:15 PM | 30 ppm | | |
| Fish Catch | Time | Species Species | Total Catch | Largest Catch |
| Seine net 20 | 1 mc | Species | for Day | in any one |
| feet X 4 ft., 1.4 | | | Joi Duy | Seine |
| inch mesh | | | | Seine |
| DIV - 7 | | Banded Killifish | 518 | 236 |
| TOTAL - 734 | | Danaea Kiiijisii | 310 | 230 |
| 101712 - 754 | | Spottail Shiner | 139 | 78 |
| | | Bluegill Sunfish | 44 | 44 |
| | | White Perch | 16 | 16 |
| | | Mummichog | 12 | 12 |
| | | Bay Anchovy | 4 | 3 |
| | | Unidentified | 1 | 1 |
| Tides | 9:32 AM | 80 cm | Set point | On a dock |
| | 10:56 AM | 75 cm | Falling | measuring |
| | 1:00 PM | 50 cm | Falling | down to water |
| Currents | Time | Cm/30sec | Cm/sec | Kts - E/F/S |
| | 9:00 AM. | 30/30 sec | 1cm/sec | 0.19 kts Ebb |
| | 10:00 AM | 495/30 sec | 16.5 cm/sec | 0.32 kts Ebb |
| | 12:40 PM | NR | | Ebb |
| Core Sample | Length/ | Rare | Common | Abundant |
| | - 30.5 cm | Gravel | Sand | Clay |
| | - H2S smell | Pebbles | | Mud |
| | - oil top | | | |
| Traffic - | Time | Name | Color | Direction/Load |
| commercial | | 1 | | ed or Light |
| | 9:24 AM | USB Seattle | Red | Southbound, |
| | | | | light |
| | 10:15 AM | Noelle Cutler | Black | Southbound, |
| | | | | light |
| | 10:22 AM | No Name | Black | Southbound, |
| | | | | |

| Recreational | 1:02 PM | Boat | White | Southbound | |
|--------------|---|------|-------|------------|--|
| | 1:03 PM | Boat | White | Northbound | |
| Other | Not overgrown, public park. | | | | |
| Observations | Grassy peninsula with rocky shore, 1 pear, boat launch | | | | |
| | The area is inlets with docks so perhaps the water is not moving as | | | | |
| | freely which might affect sampling. | | | | |
| | There is a creek from an industrial site flowing into the river | | | | |
| | There is rock processing next door as well. | | | | |
| | A few seagulls in the area | | | | |