

Day in the Life of the Hudson River 10/22/19

PIER 62 CHELSEA, MANHATTAN

RIVER MILE: 4.4

Salt Front: ~ RM 53

PS 340 – Taylor Biedermann

58 students 3rd grade, 15 adults

Latitude 40.748829 N & Longitude – 74.0112 W

Location: Hudson River Park, Pier 62, Chelsea, Manhattan, NY

Area: Pier off of W 22nd street

Surrounding Land Use: 100% Hudson River Park with walkway and small grassy area. 100% Commercial/Urban

Sampling Site: Recreational Pier, near a skate park and The Field House at Chelsea piers.

Shoreline: Banks altered with bulkhead, mainly metal pier

River Bottom: Muddy

| ITEM | Time | Reading | | Comments |
|---|---|----------------------------|-------------------|-------------------------------|
| Physical | | | | |
| Air Temperature | NA | | | |
| Wind Speed: anemometer | | Avg. Wind Speed | High Wind Speed | |
| | 10:20 AM | .7 m/s | 1.4 m/s | |
| | 10:40 AM | .7 m/s | 1.4 m/s | |
| | 10:46 AM | 1.6 m/s | 2.8 m/s | |
| | 10:52 AM | .9 m/s | 1.9 m/s | |
| | 11:00 AM | 1.2 m/s | 2.2 m/s | |
| | 11:10 AM | .3 m/s | 1.1 m/s | |
| | 11:18 AM | .5 m/s | 1.2 m/s | |
| 11:27 AM | .5 m/s | 1.2 m/s | | |
| Weather today | NR | | | |
| Weather the past 3 days: | Sunday 10/20 Rain (sometimes heavy), Monday 10/21 Sunny, Tuesday 10/22 Humid, light rain, cloudy, fog | | | |
| Tides- dock to water | Time | Rising, Falling, Unchanged | Height (in) | Rate of Tidal Change (cm/min) |
| *Tides are a bit confusing with the 201 in being the outlier? | 10:30 AM | NA | 150 | |
| | 10:38 AM | Falling | 201 *changed rope | *perhaps a misread? |
| | 10:46 AM | Rising | 167 | |
| | 10:54 AM | Falling | 170 | |
| | 11:02 AM | Falling | 182 | |
| Current- orange toss | Time | cm/second | North/South | Ebb/Flood/Still |
| *Interesting phenomena that Pier 62, Pier I, and Pier 45 were all ebbing during this time period when LT ~9:30 AM | 10:20 AM | 80 | South | Ebb |
| | 10:22 AM | 37 | South | Ebb |
| | 10:31 AM | 41 | South | Ebb |
| | 10:34 AM | 42 | South | Ebb |
| | 10:40 AM | 26 | South | Ebb |
| | 10:42 AM | 27 | South | Ebb |
| | 10:47 AM | 37 | South | Ebb |
| | 10:55 AM | 58 | South | Ebb |
| | 10:57 AM | 39 | South | Ebb |
| | 11:02 AM | 24 | South | Ebb |
| | 11:04 AM | 47 | South | Ebb |
| | 10:10 AM | 56 | South | Ebb |
| | 11:12 AM | 44 | South | Ebb |
| | 11:17 AM | 44 | South | Ebb |
| | 11:18 AM | 73 | South | Ebb |

| | | | | |
|-----------------------------------|--|---|---|-----------------------|
| <i>Water Temperature-</i> | 10:22 AM 10:26 AM | 64 ° F 61 ° F | 18 ° C 18 ° C | |
| <i>Turbidity- long sight tube</i> | 10:15 AM 10:20 AM 10:40 AM 10:43 AM 10:51 Am 11:02 Am 11:12 AM 11:29 AM | 75 cm 50 cm 58 cm 55 cm 55 cm 52 cm 42 cm 45 cm | | |
| <i>Chemical</i> | | | | |
| <i>Salinity- Hydrometer</i> | 10:30 AM 10:40 AM 10:46 AM 10:52 AM 11:00 AM 11:10 AM 10:18 AM 11:27 AM | 18,000ppm, 16,000 ppm, 17,000 ppm 18,000 ppm, 20,000 ppm, 18,000 ppm 16,000 ppm, 16,000 ppm, 17,000 ppm 16,000 ppm, 14,000 ppm, 16,000 ppm 14,000 ppm, 16,000 ppm, 17,000 ppm 15,000 ppm, 17,000 ppm 17,000 ppm 15,000 ppm, 18,000 ppm 15,000 ppm 18,000 ppm, 17,000 ppm, 17,000 ppm | <i>Avg – 17,000</i> 18,666 ppm 16,333 ppm 15,333 ppm 15,666 ppm 16,333 ppm 16,000 ppm 17,333 ppm | |
| <i>DO –</i> | <i>Time</i> | <i>Temp</i> | <i>ppm DO</i> | <i>% saturation</i> |
| | NR | | | |
| <i>pH –</i> | NR | | | |
| <i>Biological</i> | | | | |
| <i>Fish</i> | <i>Number</i> | <i>Name</i> | <i>Length of longest</i> | |
| Unable to fish | | | | |
| Fish Totals | TOTAL: | Diversity: | | |
| <i>Macroinvertebrates</i> | <i>Number</i> | <i>Name</i> | <i>Length of longest</i> | |
| NA | | | | |
| Macroinvertebrate Totals | TOTAL: | Diversity: | | |
| <i>Sediment Core</i> | <i>Time</i> | <i>Oxidized Top</i> | <i>Grain Size</i> | <i>Other Features</i> |
| Unable to core | NA | | | |
| Boats | Time | Name/Color | North/South | Loaded/Light |
| | NA | | | |
| Observations | | | | |