

**Day in the Life of the Hudson River 10/13/22**

**Nyack Memorial Park, Nyack, NY**

**RIVER MILE: 28**

*Salt Front: ~RM75*

**Nyack High School- Kirsten Kleinman**

*60 students & 15 adults*

**Latitude 41.08742 N & Longitude – 73.91576 W**



**Location:** Nyack Memorial Park, Nyack

**Area:** Drainage pipe from Nyack Brook forming stream that leads into Hudson River

**Surrounding Land Use:** Forested, beach, park

**Sampling Site:** Pier, forested, beach, altered banks, grassy, covered in vegetation, RipRap, pipe entering the water

**Shoreline:** 30% Sandy; 70% Rocky

**Water:** Choppy

**River Bottom:** muddy, sandy, rocky

\*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<i>Physical</i>				
<i>Air Temperature</i>	7:00 AM 11:00 AM	15° C 20° C	59°F 68°F	
<i>Wind Speed: NR</i>	*Noted only that it was windy	<i>Anemometer</i>	<i>Beaufort</i>	<i>Direction</i>
<i>Weather today</i>	9:00 -11:30 AM	> 75% cloud cover	Small Showers @ 10 AM	
<i>Weather the past 3 days:</i>	Normal, sunny weather past 3 days			
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Water Height (cm)</i>
	9:00 AM-11:30 AM	Rising		6 cm 38 cm Low tide at 7 am High tide at 1 pm
<i>Current- NR</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i> <i>Ebb/Flood/Still</i>
		*Noted pier and cove with stream flowing into it – not a good place to measure currents		

<b>Water Temperature-</b>	11:30 AM	17.8°C			
<b>Turbidity- Secchi Disk (cm)</b>	11:30 AM	103.5 cm			
<b>Chemical</b>					
<b>Salinity-</b>	11:30 AM	10.6 ppt			
<b>Standardized Salinity – HR Quantabs</b>	11:50 AM	8,536 ppm			
<b>DO – Chemets Kit</b>	<i>Time</i> 11:30 AM	<i>Temp</i> 17.8°C	<i>ppm DO</i> 8 ppm	<i>% saturation</i> NR	
<b>pH – Meter</b>	11:30 AM	6.7			
<b>Nitrates-</b>	11:30 AM	0 ppm			
<b>Phosphates-</b>	11:30 AM	0.4 ppm			
<b>Alkalinity- NR</b>					
<b>Biological</b>					
<b>Fish – Seine</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>	<b>Length of smallest</b>	
10:00-11:00 AM	1	Herring sp.	5 cm	25 cm	
	2	Channel Catfish	35 cm		
	1	Banded Killifish	5 cm	5 cm	
	50	Atlantic Silverside	10 cm		
	1	White Perch	20 cm		
	3	Striped Bass	12.7 cm		
<b>Fish Totals</b>	<b>TOTAL:78</b>	<b>Diversity: 6</b>		1 Snapping Turtle 30.4 cm	
<b>Macroinvertebrates</b>	<b>Number</b>	<b>Name</b>	<b>Length of longest</b>	<b>Length of smallest</b>	
	2	Blue Crab	5 cm	2 cm	
	20	Ctenophore spp.	5 cm		
<b>Macroinvertebrate Totals</b>	<b>TOTAL: 22</b>	<b>Diversity:2</b>			
<b>Sediment Core -</b>					
<b>Length</b>	<b>H2S smell</b>	<b>Oxid Top</b>	<b>Oil</b>	<b>Grain Size</b>	<b>Other Features</b>
<b>Boats-NR</b>					
	<b>Time</b>	<b>Name</b>	<b>Color</b>	<b>North/Southbound</b>	<b>Light/Loaded</b>

NYACK HS TRANSECT MEASUREMENTS – Brook to Hudson  
9:00 AM LT

Station #	Distance (M)	Depth (cm)	Salinity ppt	Temp °C	DO ppm	pH
1	0	6	0.6	18	10	7.6
2	10	10	0.6	17.6	10	8.1
3	20	21	0.6	17.6	10	7.4
4	30	54	4.8	17.3	8	7.2
5	40	115	5.6	17.8	8	6.8
6	50		4.9	17.4	7	7.3
7	60		2.3	17.4	6	6.9
8	70	63	7.3	17.2	8	7.0
9	80	43	2.9	17.3	7	7.4
10	90	28	4.6	17.7	8	6.4

	<b>Nitrates</b>	<b>Phosphates</b>		<b>Turbidity cm visibility</b>	<b>Location</b>
Station 1	2 ppm	0 ppm		93 cm	Butterfly garden
Station 10	2 ppm	0.2 ppm		83 cm	Shakey Dock
				103 cm	Far Pier
<b>Salinity</b> – not sure where?	Quantab reading	2.8		392 ppm Cl-	708 TS

11:30 AM Rising Tide (HT 1PM)

<b>Station #</b>	<b>Distance (M)</b>	<b>Depth (cm)</b>	<b>Salinity ppt</b>	<b>Temp °C</b>	<b>DO ppm</b>	<b>pH</b>
1	0	38 cm	2.6	18.3	9.0	7.3
2	10	52 cm	2.7	18.0	8.0	7.5
3	20	87 cm	4.4	17.6	8.0	7.4
4	30	100 cm	6.8	17.6	8.0	7.4
5	40	NR	7.5	17.9	8.0	7.2
6	50	NR	6.7	17.6	NR	7.2
7	60	NR	8.0	17.4	NR	7.5
8	70	86 cm	11.1	17.6	NR	6.5
9	80	52 cm	10.6	18.3	NR	6.5
10	90	75 cm	10.6	17.8	NR	6.7
	<b>Nitrates</b>	<b>Phosphates</b>		<b>Turbidity cm visibility</b>	<b>Location</b>	
Station 1	2 ppm	0.2 ppm		103.5 cm	Butterfly garden	
Station 10	0 ppm	0.4 ppm		94 cm	Shakey Dock	
				93 cm	Far Pier	