

Day in the Life of the Hudson River 10/05/2023
Nyack Memorial Park, Nyack, NY
RIVER MILE: 28
Salt Front: ~ 52
Nyack High School-Kristen Kleinman
39 students, 10th-12th grade, 7 adults
Latitude 41.08742°N & Longitude -73.91576°W

Location: Nyack Memorial Park, Nyack, Rockland County, NY
Surrounding Land Use: Urban/Residential, Forested, Industrial/Commercial, Beach
Sampling Site: Pier, bulkhead, beach, marshy area, pipe entering the water
Shoreline: NR
Water: Calm
River Bottom: Muddy, Sandy & Rocky
Plants in the water: NR
 *NR = Not read/recorded

ITEM	Time	Reading		Comments	
<i>Physical</i>					
<i>Air Temperature</i>	12:00 PM	21.1 °C	70 ° F		
<i>Wind Speed:</i>	NR	<i>Anemometer</i>	<i>Beaufort</i>	<i>Direction</i>	
<i>Weather today</i>	12:00 PM	< 25% Cloud Cover	No Rain		
<i>Weather the past 3 days:</i>	Slight wind, extreme rain event 6 days prior				
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Height (cm)</i>	
	9:30 AM-12:00 PM	Rising		9 cm 72 cm	
<i>Current- NR</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i> <i>Ebb/Flood/Slack</i>	
<i>Water Temperature-</i>	9:15 AM	17.9°C	64.2°F	(Stream to River↓)	
		18°C	64.4°F		
		18.3°C	64.9°F		
		18.3°C	64.9°F		
		18.7°C	65.7°F		
		18.7°C	65.7°F		
		19.2°C	66.6°F		
		19.1°C	66.4°F		
		19.4°C	66.9°F		
		20.8°C	69.4°F		
	12:00 PM	18.9°C	66°F		(Stream to River↓)
		18.9°C	66°F		
		19°C	66.2°F		
		19.8°C	67.6°F		
		20.5°C	68.9°F		
		21.2°C	70.2°F		
		21.3°C	70.3°F		
		20.4°C	68.7°F		
		21.3°C	70.3°F		
		21.6°C	70.9°F		
<i>Turbidity- Secchi Disk (cm)</i>	9:15 AM	48.4 cm	-		
		49.6 cm	By Bridge		
		98.0 cm	By Boat		
	12:00 PM	96.2 cm	-		
		77.5 cm	By Bridge		

		15.7 cm	By Boat	
<i>Chemical</i>				
<i>Standardized Salinity-High Ranger Quantabs 6.6 qt units</i>	11:00 AM	3,734 ppm	3.7 ppt	2067 ppm CL-
<i>Student Salinity- Meter/ Probe</i>	9:15 AM	670 ppm 700 ppm 1,090 ppm 1,360 ppm 740 ppm 850 ppm 900 ppm 900 ppm 1,030 ppm	0.67 ppt 0.70 ppt 1.09 ppt 1.36 ppt 0.74 ppt 0.85 ppt 0.90 ppt 0.90 ppt 1.03 ppt	(Stream to River ↓)
	12:00 PM	6,400 ppm 680 ppm 1,640 ppm 3,380 ppm 3,200 ppm 1,960 ppm 1,750 ppm 2,600 ppm 3,300 ppm 3,000 ppm 4,500 ppm	6.40 ppt 0.68 ppt 1.64 ppt 3.38 ppt 3.2 ppt 1.96 ppt 1.75 ppt 2.60 ppt 3.30 ppt 3.00 ppt 4.5 ppt	(Stream to River ↓)
<i>DO – Chemets Kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
(Stream to River ↓)	9:15 AM	17.9°C 18°C 18.3°C 18.3°C 18.7°C 18.7°C 19.2°C 19.1°C 19.4°C	7 ppm 4.6 ppm 6.5 ppm 4.4 ppm 6.2 ppm 4.3 ppm 6.8 ppm 4.5 ppm 7.6 ppm	
	12:00 PM	20.8°C 18.9°C 18.9°C 19°C 19.8°C 20.5°C 21.2°C 21.3°C 20.4°C 21.3°C 21.6°C	4.5 ppm 7.6 ppm 5 ppm 7.7 ppm 4.7 ppm 6.9 ppm 5 ppm 7.5 ppm 5 ppm 6.5 ppm 8 ppm	(Stream to River ↓)
<i>pH – Meter</i>	9:00 AM	8.1 7.7 7.3 7.5 7.4 7.4 7.4 7.4 7.4 7.2		Stream to River ↓
	12:00 PM	7.7		Stream to River

		7.4 7.5 7.3 7.1 7.5 7.4 7.6 7.1 7.2				
<i>Nitrates-</i>	9:15 AM 12:00 PM	2 ppm 2 ppm				
<i>Phosphates-</i>	9:15 AM 12:00 PM	0.4 ppm 0 ppm 0.2 ppm 0 ppm				
Biological						
<i>Fish- Seine (20 Hauls)</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Notes</i>		
	1	*American eel		*Swimming but did not net		
	1	Northern Pipefish	17.8 cm			
	3	White Perch	20.3 cm			
	80	Atlantic Silverside	15.2 cm			
Fish Totals	TOTAL: 84	Diversity: 3				
<i>Macroinvertebrates</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>			
	6	Ctenophore spp.	7.6 cm			
	6	Blue Crabs	7.6 cm			
	8	Shrimp spp.	7.6 cm			
Macroinvertebrate Totals	TOTAL: 20	Diversity: 3				
<i>Sediment Core - NR</i>	<i>Time</i>	<i>Oxid Top</i>	<i>H₂S Smell</i>	<i>Oil</i>	<i>Grain Size</i>	<i>Other Features</i>

Boats-NR					
Commercial/ Recreational	Time	Name	Color	Southbound/ Northbound	Light/ Loaded