Day in the Life of the Hudson River 10/05/2023 Haverstraw Bay Park, Haverstraw, NY RIVER MILE: 38 Salt Front: ~ 52 Albertus Magnus High School-Millie Mendelson Members of SCA Rockland County Parks Staff 30 students, 11<sup>th</sup>-12<sup>th</sup> grade, 5 adults Latitude 41.212559°N & Longitude –73.963759°W



Location: Haverstraw Bay Park, Haverstraw, Rockland County, NY

Surrounding Land Use: 60% Urban/Residential, 30% Industrial/Commercial, 5% Beach

**Sampling Site:** Small beach, banks altered, large rip rap, boat launch, bulkhead, concrete bulkhead, covered in vegetation, grassy area, parking lot adjacent.

Shoreline: 40% Sandy, 20% Muddy & 40% Rocky Water: NR

River Bottom: Muddy, Sandy & Rocky Plants in the water: NR \*NR = Not read/recorded

ITEM	Time	Reading		Comments					
Physical									
Air Temperature	11:05 AM	21.11 ° C		70° F					
	11:23 AM	21.67 ° C		71 ° F					
	12:55 PM	25.56 ° C		78 ° F					
Wind Speed:		Anemometer		Beaufort	Direction				
	10:44 AM	4-6 mph		2	Southeast				
Weather today	11:08 AM	26-50% Cloud Cover		Drizzle					
Weather the past 3	Warm, humid, sunny								
days:		-							
Tides-	Time	Rising, Falling,		Height (cm)					
		Unchanged							
	11:08 AM	Rising Falling Falling		336.6 cm					
	12:25 PM			302.6 cm					
	1:04 PM			292.1 cm					
Current-	Time	Cm/sec	Knots	North/South	Ebb/Flood/Slack				
	10:35 AM	2.71							
	10:47 AM	3.4							
	12:32 PM	11.55			Flood				
Water Temperature-	10:25 AM	20.8°C		69.44°F					

	11:04 AM	20.7°C		69	9.26°F			
12:13		22.8°C	73.04°F					
12:47		22.8°C		73.04°F				
Turbidity- Long Sight	11:00 AM	46.6 cm	avg	39	9.8 - 49.6 -	– 50.4 cm		
Tube (120 cm) -	12:10 PM	38.5 cm			– 41 cm			
Each reading is an	12:45 PM			avg 10.4 - 15.8 -		– 12.8 cm	(boat? Or v	vind impact?)
average of 3								
			Ch	emical				
Standardized Salinity- High		:32 AM	1,107 ppm Cl <sup>-</sup> /5.0 qt units		2,000 pp		2.0 ppt TS	
Range Quantabs						(total sa		
Student Salinity- High Range		0:40 AM	1,296 ppm Cl <sup>-</sup> /5.4 qt units		2431 pp		2.4 ppt TS	
Quantabs		1:18 AM	1,020 ppm $Cl^{-}/4.8$ qt units		1843 pp		1.8 ppt TS	
		12:59 PM 93		939 ppm Cl <sup>-</sup> / 4.6 qt units		1696 pp		1.7 ppt TS
<b>DO</b> – Hach Drop Count Kit		Time Temp				ppm DO		% saturation
		:45 AM	20.8		11 ppm		120%	
		:48 AM	20.8		13 ppm		142%	
		:18 AM	20.7		9 ppm		100%	
		:47 AM	20.7		9 ppm		100%	
		:29 PM	22.8			12 ppm		128%
		:47 PM	22.8			11 ppm		122%
<b>pH</b> – Color Match Kit		10:33 AM 7						
		:36 AM	7.5					
		:09 AM	7.4					
		:13 AM	7.4					
		:22 PM	7.8					
		12:50 PM 7.6 12:57 PM 7.6						
	12	.57 F WI		logical				
Fish- Seine	Nı	mber	Name	iogicai		Lenoth a	of longest	Smallest
						j tongest	8. 0 smallest	
10:28 AM-12:50 PM		128	Atlantic Silverside		8.5 cm		o. o smanest	
		6 3	Striped			6 cm 20 cm		
			White Perch		20 CIII			
Fish Totals		DTAL: 7	Diversity: 3					
Macroinvertebrates		mber	Name		Length o	of longest		
Macroinvertebrate Totals		DTAL: 0	Diversity: 0					
Macroinvertebrate Tot	tals TO	/IAL. V				1		
Macroinvertebrate Tot Sediment Core -NR				$H_2S$	Oil	Grain S	lize	<b>Other Features</b>
		ne	Oxid Top	H <sub>2</sub> S Smell	Oil	Grain S	lize	Other Features

Boats						
Commercial/	Time	Type Color		Southbound/	Light/	
Recreational				Northbound	Loaded	
Commercial	11:41	Barge	Red	Northbound	Loaded	
Commercial	10:37	Tugboat	White	Northbound	Loaded	
Commercial	11:15	Barge	Black	Northbound	Loaded	
Recreational	10:02	Sailboat	White	Southbound	Light	
Recreational	10:11	Speedboat	White	Southbound	Light	
Recreational	12:20	Yacht	White	Southbound	Light	
Recreational	12:42	Yacht	White	Northbound	Light	