

Day in the Life of the Hudson River 10/14/21

South Dock, West Point

RIVER MILE: 52

Salt Front: ~ 49

MAJ Missy Moorehouse, Patrick Baker & USMA, West Point

36 students & 19 adults

Latitude 41.3933 N & Longitude – 73.9517 W

Location: South Dock, West Point, NY

Area: Shallow cover at the south side of Gee's Point; in the vicinity of Duck Island; beach area on the waterfront along the West Point property

Surrounding Land Use: 70% Urban/Residential; 20% Forested; 10% Beach

Sampling Site: Forested, grassy, parking lot, Beach, banks altered, riprap, pipe entering the water

Shoreline: 30% Sandy; 35% Muddy; 30% Rocky

Water:

River Bottom: Muddy, sandy, rocky

Plants in water:

*NR = Not read/recorded

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>	
Physical					
<i>Air Temperature</i>	11:00 AM	21.6 ° C	70.88 ° F		
<i>Wind Speed:</i>	11:00 AM	<i>Anemometer</i> 3-5 knots	<i>Beaufort</i> 2	<i>Direction</i> N	
<i>Weather today</i>	11:00 AM	26-50% cloud cover	No rain		
<i>Weather the past 3 days:</i>	The days have been sunny, but partly cloudy; no rain; warmer than usual.				
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Height (cm)</i>	
	7:30 AM- 8:34 AM 9:00AM 9:35 AM	Falling Falling Falling Falling		Change 3.8 in 30 mins Change 3.2 in 64 mins Change 3.8 in 26 mins Change 4.5 in 35 mins	
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>	<i>Ebb/Flood/Slack</i>
	11:23 13:15 13:30	0.13 0.30 0.51	0.0025	South South South	Ebb Ebb Ebb
<i>Water Temperature-</i>	10:52 AM	19.2° C		67.5 ° F	
<i>Turbidity- Turbidimeter</i>	10:52 AM	27.4 NTU			
Chemical					
<i>Salinity- Meter/probe</i>	10:52 AM	100 ppm		0.1 ppt	<i>Conductivity – 227 mS/cm</i>
<i>Standardized Salinity- Low Range Quantabs</i>	8:34 AM 10:52 AM 12:11 PM	All 52 ppm Total Salinity			
<i>DO – Meter/probe</i>	<i>Time</i>	<i>Temp</i>		<i>ppm DO</i>	<i>% Saturation</i>
	10:52 AM	19.2° C		8.6	96%
<i>pH – Meter</i>	10:52 AM	7.83			
<i>Nitrates- NR</i>					
<i>Phosphates-NR</i>					
Biological					
<i>Fish -8:00-16:00</i>	<i>Number</i>	<i>Name</i>		<i>Length of longest</i>	<i>Length of smallest</i>

<i>seined</i>					
		1	American Eel -yellow	25.5 cm	NA
		30	Alewife	NR	NR
		9	American Shad	NR	NR
		35	Spottail Shiner	11.4 cm	5.1 cm
		1	White Sucker	49.5	NA
		1	Channel Catfish	45.75	NA
		7	White Perch	6.4	5 cm
		1	Bluegill	NR	NR
		5	Hogchoker	15 cm	2.5 cm
Fish Totals	TOTAL:	90	Diversity: 9		
Macroinvertebrates	Number		Name	Length of longest	Length of smallest
		8	Blue Crab	2.8 cm	0.75 cm
Macroinvertebrate Totals	TOTAL: 8		Diversity: 1		
Sediment Core					
Length	H2S smell	Oxid Top	Oil	Grain Size	Other Features
Boats					
	Time	Name	Color	North/Southbound	Light/Loaded
Commercial					
Residential					