

DAY IN THE LIFE OF THE HUDSON AND HARBOR EVENT

OCT. 13, 2022

Salt Front on the Hudson River ~ 76

East RM 6 East 62nd St FDR N

Manhattan International High School - Athena Theodoridis

65 students, 8 adults

Latitude : -73.95681°W Longitude: 40.76096°N



Area: East River by (Andrew Howell park) on FDR N around 62nd street, across Roosevelt Island

Surrounding land there is: Shoreline: 100% Rocky → Concrete

Surrounding Land Use: Residential 35%, Forest 20%, Recreation 10%, Industrial & Commercial 35%

Sampling Site: East River, New York, New York near The Rockefeller University

Water: Calm and greenish, grayish, silver colored


Plants: By Andrew Haswell park Lacey Elm Trees, Salvia Yangji plant, Daisy Flowers

ITEM	Time	Reading	Comments
PHYSICAL TESTS			
Air Temperature:	10:39 am 10:42 am 10:39 am 10:38 am 10:41 am	69.8°F 21°C 67°F 19°C 69°F 19°C 69°F 21°C 69°F 21°C	AVERAGE TEMP 68.76 °F 20.2 °C
Wind Speed:	10:41 am 10:45 am 10:47 am 10:33 am 10:43 am	7 mph 13 mph 7 mph 13 mph 13 mph	AVERAGE WIND SPEED 10.6 mph
Weather Today:	- Cloudy, Rainy - Cloudy (overcast >75%) and rainy (12:48 pm)		

	<ul style="list-style-type: none"> - Cloudy, rainy - Cloudy and Rainy -Partly cloudy, Rainy 			
<i>Weather Previous:</i>	<ul style="list-style-type: none"> - Partially sunny - Sunny, and partly sunny, very warm temperatures up to 70°F - Warm and sunny weather which the temperature reach 21°C - Warm and sunny and the temperature at around 70°F - Warm, sunny, temperature was around 69°F 			
<i>Water Temperature - Digital thermometer</i>	<ul style="list-style-type: none"> - 11:10 am - 1:01 pm - 12:41 am - 12:20 pm - 11:59am 	<ul style="list-style-type: none"> • 14.3°C • 17.1°C • 17.1°C • 17°C • 18.9 °C 		AVERAGE WATER TEMPERATURE 16.9 °C
<i>Turbidity - Long site tube</i>	<ul style="list-style-type: none"> - 12:11 - 11:59 am - 11:39 - 12:59pm - 12:44 pm 	<ul style="list-style-type: none"> - 116.2 cm - 105.9 cm - 118 cm - 95cm - 71 cm 		AVERAGE TURBIDITY 101.22 cm
CHEMICAL TESTS				
<i>Salinity- Hydrometer</i>	<ul style="list-style-type: none"> - 11:59 am - 11:37 am - 11:11 am - 12:57 pm - 12:40 pm 	<ul style="list-style-type: none"> -27.1 ppt -27.1 ppt - 28 ppt -28 ppt -28.2 ppt 		AVERAGE SALINITY 27.68 ppt
<i>DO – dissolved oxygen CHEMets Kit</i>	<i>Time:</i>	<i>Water Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	<ul style="list-style-type: none"> -11:14 am -1:06 pm -12:50 pm 12:24 -pm -12:05 pm 	<ul style="list-style-type: none"> • 14.3°C • 17.1°C • 17.1°C • 17 °C • 18°C 	<ul style="list-style-type: none"> • 8 ppm • 8 ppm • 6 ppm • 7ppm • 7ppm <p>AVERAGE DO 7.2 mg/L(ppm)</p>	<ul style="list-style-type: none"> • 75.1 % • 84 % • 60 % • 70 % • 70.1% <p>AVERAGE % saturation DO 71.84%</p>
<i>pH - laMotte kit Precision pH</i>	<ul style="list-style-type: none"> - 11:41am - 11:18 am - 13:03 pm - 12:42 pm - 12:25 pm 		<ul style="list-style-type: none"> - 8 - 7.5 - 8 - 8 - 8 	AVERAGE pH 7.9

Physical Tests and Observations

<p><i>Tides-</i> Low Tide: 6.09 AM High tide: 12:41 PM *Measuring down to water</p>	<p><i>Time Measured</i> 11:11 AM 11:37 AM 12:01 PM 12:44 pm 12:59 pm</p>		<p><i>Height (cm)</i> • 151 cm • 140 cm • 140 cm • 110 cm • 160cm</p>	<p><i>Rate of Tidal Change (cm/min)</i></p>
<p><i>Current- used a stick and measured the distance in 30 sec.</i></p>	<p>11:22 am 11:45 AM 12:13 PM 12:33 PM 1:05 PM</p>		<p><i>Distance:2438 cm/30 sec</i> <i>Distance:569 cm/30 sec-</i> <i>Distance: 557.5 cm/30 sec</i> <i>Distance: 670.56 cm /30 sec</i> <i>Distance:176cm/30 sec</i></p>	<p><i>Rate of Change (cm/sec)</i> • 81.28 cm/sec • 18.95 cm/sec • 18.58 cm/sec • 22.3 cm/sec • 5.87 cm/sec</p>
Boats Commercial	Time	Color	Direction	Loaded or Light
NYC Ferry	10:54 AM	White, black and navy blue	North	Light
NYC Ferry	10:57 AM	White, black and navy blue	Southbound	Light
Circle Line	11:02 AM	Red and white	North	Loaded
James William BMLP	11:08 AM	Red and black	North	Loaded
NYC Ferry	10:50 AM	White,black ,blue	North	Light
Sail boat	12:57 PM	White, Light blue	North	Loaded
Barge	10:39 AM	Black, gray and red	North	Loaded

Circle line	11:03 AM	White and green	North	Loaded
Circle line	11:06 AM	White and red	North	Loaded
DOUBLE SKIN 40	11:17 AM	Black, White and Yellow	South	Loaded
CIRCLE LINE	11:19 AM	White	South	Light
<i>Biological tests</i>	<p>Black Finger and crab Spider crab. Eastern Oyster, Spider Crabs, Chain Tunicate, Blue Mussels, Hydroids, Asian Shore Crab, Clam Worm, Nudibranch, Sea Squirts Blue mussel, green crab, chain tunicate</p>  <p>hydroid</p>			
<i>Other Observations</i>	<p>Although it started raining around 12:48 pm, the direction of the flood of the river in the northwest direction did not change. The river remained calm as well and did not become choppy. There were some seagulls and pigeons observed on the top of some buildings in Roosevelt Island. Behind the residential buildings in Roosevelt Island, there were some factories' chimneys noticed.</p>			