

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

**RENSELAER BOAT LAUNCH**

**RIVER MILE: 146**

*Salt Front: ~ RM 49*

**Tech Valley High School- Diana Weldon, Tim Muzio and 3 other teachers**

**68 students, 9<sup>th</sup> grade biology, 12<sup>th</sup> grade statistics**

**Latitude 42.6587 N & Longitude – 73.73452 W**

**Location:** Rensselaer Boat Launch, Rensselaer County, NY

**Area:** Concrete boat launch with small beach area, removable dock, wooded, landscaped, adjacent to urban, residential, and industrial areas.

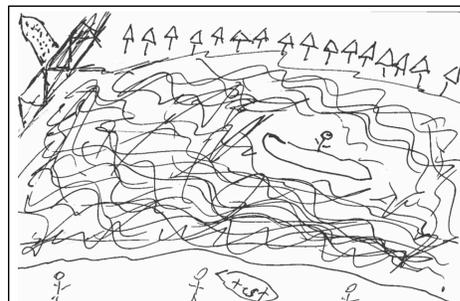
**Surrounding Land Use:** 30% Urban/Residential, 30% Industrial/Commercial, 15% Park, 15% Beach, 10% Forested

**Sampling Site:** Beach, forested

**Shoreline:** Sandy

**Water:** calm

**River Bottom:** muddy



<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
<b>Physical</b>				
<i>Air Temperature</i>	9:00 AM	17.8 °C	64 ° F	
	9:00 AM	18.6 °C	65.5 ° F	
	9:30 AM	18.2 °C	65 ° F	
	10:30 AM	22 °C	71.6 ° F	
	12:00 PM	20 °C	68 ° F	
	12:00 PM	21 °C	70 ° F	
	12:15 PM	22 °C	72 ° F	
	1:00 PM	24 °C	75 ° F	
<i>Wind Speed:</i>	NR			
<i>Weather today</i>	10:00 AM- partly-cloudy (26-50%)			
<i>Weather the past 3 days:</i>	NR			
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>		<i>Height (cm)</i>
	NR			
<i>Current-</i>	<i>Time</i>	<i>Cm/sec</i>	<i>Knots</i>	<i>North/South</i>
	NR			
<i>Water Temperature- Water depth &lt;1 ft</i>	9:30 AM	17, 19, Avg: 17.6° C		62.6, 66.2, Avg: 63.7 °F
	12:30 PM	19, 20, Avg: 19.4 °C		66.2, 68, Avg: 67 ° F
<i>Turbidity- Long sight tube</i>	9:30 AM	15 cm, 20 cm, 10 cm		*highly turbid readings
	12:30 PM	10 cm, 5 cm		
<b>Chemical</b>				
<i>Salinity- used LaMotte salinity titration - test kit (7459-02)</i>	9:30 AM	1000 ppm, 500 pp, 500		These readings are very high. Possibly due to kit used. Would not expect these levels even if they were measuring salt from soil or groundwater leaching
	12:30 PM	ppm, 500 ppm, 750 ppm, 250 ppm		
<i>DO – Chemets</i>	<i>Time</i>	<i>Temp</i>		<i>ppm DO</i>
	9:30 AM	20 °C		9 ppm
	9:30 AM	13 °C		10 ppm
	12:30 PM	18 °C		12ppm
	12:30 PM	20 °C		10 ppm
	12:30 PM	21 °C		9 ppm
<i>pH – test strips</i>	9:30 AM	6, 6.4, 6.8		
	12:30 PM	6.4, 6.4, 6.4		
<i>Alkalinity- LaMotte</i>	9:30 AM	60 ppm, 90 ppm, 70 ppm		

<i>Titration</i>	12:30 PM	40 ppm, 60 ppm, 90 ppm		
<i>Nitrate- used two different methods</i>	9:30 AM	<i>LaMotte</i> : 2 ppm, 1 ppm		<i>Chemets</i> : 0 ppm
	12:30 PM	<i>LaMotte</i> : 1 ppm, 0 ppm, 2 ppm		<i>Chemets</i> : 0 ppm
<i>Phosphate- Chemets</i>	9:30 AM	<1 ppm		
	12:30 PM	<1 ppm, 1 ppm		
<b><i>Biological</i></b>				
<i>Fish- Did not fish</i>	<i>Number</i>	<i>Name</i>	<i>Length of longest</i>	<i>Length of smallest</i>
<b>Fish Totals</b>	<b>TOTAL:</b>	<b>Diversity:</b>		