

Day in the Life of the Hudson River 10/22/19

RENSSELAER BOAT LAUNCH

RIVER MILE: 146

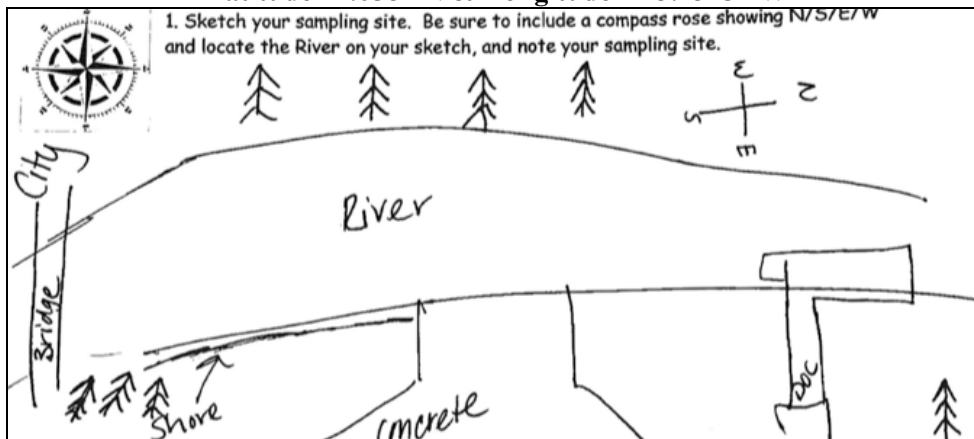
Salt Front: ~ RM 53

Tech Valley High- Ashley Phillips

39 students 9th grade, 6 adults

CMOST- Dawn Baldwin

Latitude 42.6587 N & Longitude – 73.73452 W



Location: Rensselaer Boat Launch, Rensselaer County, NY

Area: Boat launch with small beach area, 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: Concrete boat launch with beach, removable dock

Shoreline: Beach with sandy, small rocks, concrete boat launch

Water: 2-4 ft, ripples

River Bottom: muddy

Plants in water: no plants in water area

ITEM	Time	Reading		Comments
Physical				
Air Temperature	9:06 AM 10:02 AM	52 ° F 53 ° F	11.11 ° C 11.67 ° C	
Wind Speed:		Beaufort 1	Southwest	
Weather today	Overcast, no rain			
Weather past 3 days:	Fairly consistent on the 19 th -21 st . Mid 50's with some sun. Breezy on 10/21			
Tides- tide stick	Time	Rising, Falling, Unchanged	Water Height (cm)	Rate of Tidal Change (cm/min)
	8:05 AM 9:06 AM 9:25 AM 9:56 AM	NA Rising Rising Rising	45 53 60 70	NA 0.157 0.368 0.323
Current-	Time	cm/second, Knots	North/South	Ebb/Flood/Still
In the earlier tests, there was a lot of push to the north, but eventually travelled south	9:06 AM 9:38 Am 10:02 AM 10:10 AM	6.10 cm/s, .12 knots 5.04 cm/s, .10 knots 11.18 cm/s, .22 knots 32.5 cm/s, .63 knots	South South South South	Ebb Ebb Ebb Ebb
Water Temperature-	9:40 AM 9:08 AM 10:09 AM	52.8° F, 48.2° F, 53.42° F Avg: 51.5 ° F 52.88° F, 50° F, 52.34 ° F Avg: 51.74 ° F 50° F, 51.62° F, 52.16° F	11.6° C, 9° C, 11.9 ° C Avg: 10.83 ° C 11.6 ° C,10 ° C, 11.3 ° C Avg: 10.967 ° C 10 ° C, 10.9 ° C, 11.2 ° C	

		Avg: 51.26 ° F		Avg: 10.7 ° C	
Turbidity-	NR				
Chemical					
Salinity- Refractometer	10:00 AM	Below Detection for this instrument			
DO – drop count	Time	Temp	ppm DO	% saturation	
	9:25 AM	11.6 ° C	10	90%	
pH – pH strip	9:51 AM	6.5, 6.4, 6.6, Avg: 6.5			
Nitrates-	10:09 AM	0ppm, 0.1ppm, 0.4ppm, Avg: .17 ppm			
Phosphates	9:10 AM	0ppm, 0ppm, 0ppm			
Alkalinity	9:30 AM	50 ppm, 50 ppm, 52 ppm, Avg: 50.67 ppm			
Biological					
Fish	Number	Name	Length of longest		
Seine 10 pulls		No fish			
Fish Totals	TOTAL: 0	Diversity: 0			
Macroinvertebrates	Number	Name	Length of longest		
Macroinvertebrate Totals	TOTAL: 0	Diversity: 0			
Sediment Core	Time	Oxid Top	Grain Size	Other Features	
NR					
Boats	Time	Name/Color	North/South	Loaded/Light	
Recreational	9:11 AM		South		
Observations	9:30 AM “On a cloudy morning at the Rensselaer boat launch, students from Tech Valley high School were discussing why DITL was important. A 9 th grader summed it up by saying we can look at climate change markers and help scientists prove that it is real.”				