

Day in the Life of the Hudson River 10/22/19
MACHEACHRON WATER FRONT PARK- KINGALLY COVE, HASTING
RIVER MILE: 22
Salt Front: ~ RM 53
Hasting High School- Melissa Shandroff and 2 teachers
48 students 11-12th grade
Latitude 40.99776 N & Longitude – 73.88523 W

Location: MachEachron Waterfront Park, Kinnally Cove, Hastings-on-Hudson, Westchester County, NY

Area: Beach area with riprap shoreline, next to the park= used both spaces. Beach is totally covered during high tide

Surrounding Land Use: 50% Industrial/Commercial (next to old Anaconda site) but mainly parking lot now; 25% Beach; 15% Forested; 10% Grassy

Sampling Site: Beach, banks altered, riprap on shoreline, bulkhead

Shoreline:

River Bottom: Sandy, rocky

<i>ITEM</i>	<i>Time</i>	<i>Reading</i>		<i>Comments</i>
Physical				
<i>Air Temperature</i>	9:30 AM	14.6 ° C		
	1:30 PM	15.4 ° C		
<i>Wind Speed:</i>	9:30 AM	1.5 knots		
	1:30 PM	2.7 knots		
<i>Weather today</i>	Overcast (100%)			
<i>Weather the past 3 days:</i>	NR			
<i>Tides-</i>	<i>Time</i>	<i>Rising, Falling, Unchanged</i>	<i>Height (in)</i>	<i>Rate of Tidal Change (cm/min)</i>
	NR			
<i>Current-</i>	<i>Time</i>	<i>Speed</i>	<i>North/South</i>	<i>Ebb/Flood/Still</i>
	9:30 AM	0.661 knots	South	Ebb
	1:30 PM	0.65 knots	North	Flood
<i>Water Temperature</i>	9:30 AM	14 ° C		
	1:30 PM	14.4 ° C		
<i>Turbidity- long sight tube & short tube</i>		<i>Long site tube</i>	<i>Short site tube</i>	
	9:30 AM	42.5 cm	50 JTU	
	1:30 PM	45.7 cm	20 JTU	
Chemical				
<i>Salinity-</i>	<i>Time</i>	<i>Hydrometer ppm</i>	<i>Refractometer ppm</i>	
	9:30 AM	7,000 ppm	6,000 ppm	
	1:30 PM	6,700 ppm	7,400 ppm	
<i>DO – Hach kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	9:30 AM	14 ° C	10 ppm	95%
	1:30 PM	14.4 ° C	9 ppm	87%
<i>pH –</i>		<i>Strips</i>	<i>LaMotte Kit</i>	
	9:30 AM	6.8	7.0	
	1:30 PM	7.0	7.0	
<i>Nitrates- LaMotte Kit</i>	9:30 AM	0.7 ppm		3.1 ppm
	1:30 PM			
<i>Phosphates- LaMotte Kit</i>	9:30 AM	1.0 ppm		1.8 ppm
	1:30 PM			
Biological				
<i>Fish</i>	<i>Number</i>	<i>Name</i>		<i>Length of longest</i>
Seine: 30'	9:30 AM	15	Banded Killifish	

1:30 PM	19 1 1 16 1 1	Atlantic Silverside Striped Bass White Perch Atlantic Silverside Bay Anchovy Striped Bass		
Fish Totals	TOTAL: 54	Diversity: 5		
Macroinvertebrates	Number	Name	Length of longest	
9:30 AM	5 2	Blue Crab (M) Blue Crab (F)		
1:30 PM	12 3 5 2	Shrimp spp. Blue Crab (M) Blue Crab (F) Shrimp spp.		
Macroinvertebrate Totals	TOTAL: 29	Diversity: 2		
Sediment Core	Time	Oxid Top	Grain Size	Other Features
NR				
Boats	Time	Name/Color	North/South	Loaded/Light
NR				
Observations				