

**Day in the Life of the Hudson River 10/16/18 Data  
 MACHEACHRON WATERFRONT PARK- KINNALLY COVE, HASTINGS,  
 RIVER MILE: 22**

*Salt Front: ~RM 24*

**Hastings High School- Melissa Shandroff  
 60 students 11<sup>th</sup> -12<sup>th</sup> grade, 4 adults  
 Latitude 40.99776 N & Longitude - 73.88523 W**



**On the morning of 10/16/18 the tide was blown well out into the river leaving wide expanses of mud on the waterfront.**

**Location:** 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

**Plants in area:** Grass and weeds

**River Bottom:** Sandy, Rocky

<i><b>ITEM</b></i>	<i><b>Time</b></i>	<i><b>Reading</b></i>		<i><b>Comments</b></i>
<i><b>Physical</b></i>				
<i>Air Temperature:</i>	9:30 AM	8.2 °C	46.76 °F	
	1:30 PM	12.7 °C	54.86 °F	
<i>Wind Speed:</i>	9:30 AM	26 knots (gust)	133.8 cm/sec	Partly cloudy
	1:30 PM	6.2 knots	318.9 cm/sec	Mostly cloudy
<i>Water Temperature</i>	9:30 AM	13 °C	55.4 °F	
	1:30 PM	16 °C	60.8 °F	
<i>Turbidity- Long site tube</i>	9:30 AM	13.14 cm		
	1:30 PM	6 cm		
<i>Short Site tube</i>	9:30 AM	73 JTU		
	1:30 PM			
<i><b>Chemical</b></i>				
<i>Salinity-</i>	<i>Time</i>	<i>Chloride</i>	<i>Total Salinity</i>	

<i>Hydrometer</i>	9:30 AM 1:30 PM		2900 ppm 7000 ppm	
<i>Refractometer</i>	9:30 AM 1:30 PM		2100 ppm 5000 ppm	
<i>DO – Hach Drop Count Kit</i>	<i>Time</i>	<i>Temp</i>	<i>ppm DO</i>	<i>% saturation</i>
	9:30 AM 1:30 PM	13 °C 16 °C	10 10	93.5% 108%
<i>pH – Test strips</i>	9:30 AM 1:30 PM	6.5 6.5		<i>*LaMotte Kits are higher resolution</i>
<i>LaMotte Kit</i>	9:30 AM 1:30 PM	6.6 7.5		
<i>Nitrates- LaMotte Kit</i>	9:30 AM 1:30 PM	2.5 ppm 2.3 ppm		
<i>Phosphates- LaMotte Kit</i>	9:30 AM 1:30 PM	1.2 ppm 1.5 ppm		
<b><i>Fish-</i></b> Seine 300 feet  <i>1:30 PM</i>	<b><i>Number</i></b>	<b><i>Name</i></b>	<b><i>Length of longest</i></b>	9:30 AM No Fishing- tide too low and bottom too mucky! ☹
	12	Mummichog	5 inches	
	3	Banded Killifish	4 inches	
	1	Striped Bass	3.5 inches	
	1	Atlantic Silversides	3 inches	
	1	Bay Anchovy	2 inches	
	<b>TOTAL: 18</b>	<b>Diversity: 5</b>		
<b><i>Macroinvertebrates</i></b>	<b><i>Number</i></b>	<b><i>Name</i></b>	<b><i>Length of longest</i></b>	4 Male Crabs 1 Female Crab
	5	Blue Crab		
	2	Shrimp		
	<b>TOTAL: 7</b>	<b>Diversity: 2</b>		
<b><i>Currents Flow</i></b>	<b><i>Cm/second</i></b>	<b><i>Knots</i></b>	<b><i>North/South</i></b>	<b><i>Ebb/Flood/Still</i></b>
9:30 AM	24.39	0.4741	South	Ebb
1:30 PM	11.55	0.2245	North	Flood