

**Day in the Life of the Hudson River 10/20/16 Data**  
**(Salt Front ~ RM 83)**  
**RIVER MILE 60.2**  
**Newburgh Yatch Club, Newburgh, Orange County NY**  
**Jennifer Reid, GAMS Newburgh Enlarged School District**  
**5th graders (97 students and 10 adults)**  
**Latitude 41.5, Longitude -74**

**Location:** Newburgh Yatch Club, Newburgh, Orange County NY

**Area:** Pier, dock with bulk heads, rip rap and wood bulkhead

**Surrounding Land Use:** Urban/residential 100%

**Shoreline:** Rocky

**Sampling Site:** beach, covered in vegetation, banks altered, rip rap

**Plants in the water:** 80% water chestnut and 20% water celery

**Water depth:** <1 m

**Bottom Surface:** muddy

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature	9:00 AM 12:00 PM 2:00 PM	17°C 20 19	62°F 68 66	
Wind Speed	Beaufort	#4	4.1 mph	N
Cloud Cover	9:00 AM	Partly cloudy	26-50%	Noon – mostly cloudy 51-75%
Weather today	No rain			
Weather recently	Hot and dry 80s			
<i>Water Surface</i>	Choppy & calm at different times			
<i>Water Temperature</i>	Time	Degrees °C		
	9:17 AM 10:42 AM 1:48 PM	18°C 17 22	64°F 63 72	
<i>Turbidity-long sight tube</i>	8:27 AM 9:32 AM 11:28 AM	51 cm 69 48		
<i>Chemical</i>	<i>Time</i>	<i>DO</i>	<i>Temp</i>	<i>% saturation</i>
DO (drop kit)	9:17 AM 11:09 AM 1:48 PM	12 ppm 12 14	18°C 17 22	140% 140% 140 + %
pH – litmus paper	9:17 AM 11:00 am 12:00 PM 1:48 PM	7.8 7.2 7.7 7.9		Average 7.65

<i>Nitrates</i>	11:30 AM	20 ppm X 3	??		
<i>Salinity – QTs- Time</i>	<i>Time</i>	<i>Chloride reading</i>		<i>Total Salinity conversion</i>	
	9:48 AM HR Quantabs	759 ppm		1372 ppm TS	
<i>Fish Catch seine 8X4feet</i>	<i>Number Caught</i>	<i>Species</i>	<i>Length</i>	<b><i>Fish DIV 4 TOTAL 10</i></b>	
4X6 ft. pull	4	*Northern Kingfish	5 cm	*probably mis ID	
	1	Yellow Perch			
	3	Banded Killi			
	2	Darter			
<b><i>Sediment Core</i></b>	<b><i>Description</i></b>	<b><i>Rare</i></b>	<b><i>Common</i></b>	<b><i>Abundant</i></b>	
	H2O smell	Shells Zebra mussel Macroinverts Some water celery	Leaves Wood	Clay Mud	
<i>Tides</i>	<i>Time</i>	<i>Tide Stick</i>	<i>Flood/Ebb Still</i>	<i>Rate of change</i>	
	NR				
<i>Currents</i>	<i>Time</i>	<i>Cm/30 secs</i>	<i>Cm/sec</i>	<i>knots</i>	<i>Ebb Flood</i>
	9:30 AM 10:00 AM 1:00 PM 1:30 PM	1371 cm 944 cm 160 cm 251 cm	45.7 cm/sec 31.5 cm/sec 5.33 cm/sec 8.37 cm/sec		
Commercial Shipping	2:15 PM 2:15 PM	CHART UBC	Beige Red	North south	loaded
Recreational Shipping	12:00 noon			South	light
Other Observations	Water chestnut seeds all over the docks				