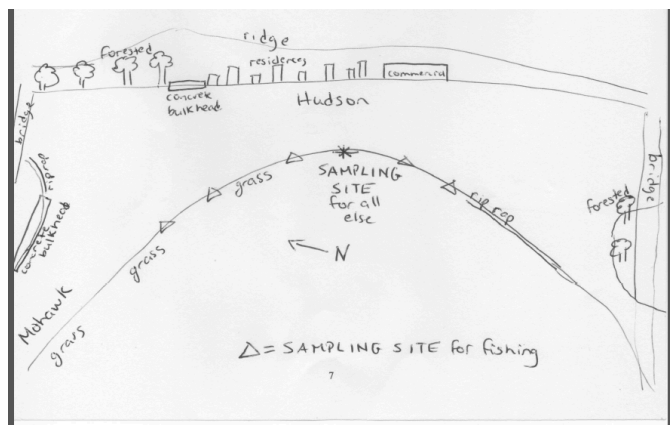
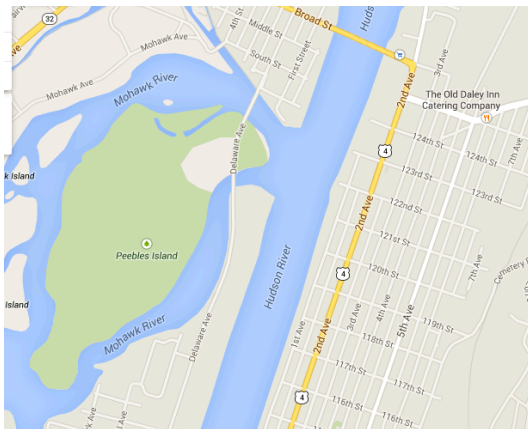


**Day in the Life of the Hudson River 10/20/15 Data
(Above the Troy Dam and the Head of Tide)
RIVER MILE 154**

**Peebles Island State Park, Waterford, NY
Becky Zimmerman, Angela Jones and Raquel Santiago-Parker
Pine Hills Elementary School
50 students – 4th grade, 10 adults total
42°47.051'N and 73°40.706 W**



Peebles Sampling Area



Location: Pavilion at Pebbles Island Park at the confluence of the Hudson River and the Mohawk River, Waterford, NY

Area: park just north of the Troy dam at the pavilion, grassy embankment, rip rap

Surrounding Land Use: 75% grassy, 25% riprap

Sampling Site: Park area

Shoreline: riprap

Plants in area: none

Water depth: 12 - 36 inches

River Bottom description: muddy

	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
Physical				
Air Temperature	9:40AM 10:40 AM 12:00 PM 12:45 PM	50°F 50°F 55°F 63°F	10°C 10°C 12.8°C 17°C	
Wind Speed	10:00 AM	Beaufort #4	Anenometer kts.	Direction: SE
Cloud Cover	Mostly cloudy to start then clear			
Weather today	Drizzle at 9:40 and 10:40 AM but then stopped			
Weather recently	Cool and fall like			
Water surface	Calm			
Water Temperature	9:35 AM 10:13 AM 12:07 PM 12:45 PM	11°C 11 11 11	52°F 52 52 52	
Turbidity – long site tube averages & standard deviation	9:30 AM 10:15 AM 11:45 AM 12:30 PM	39.8 cm 93.8 cm 48.5 cm 17.2 cm	±12 ±14 ±5 ±2	Each group had a new sample, not all from same place
Chemical	Time	Water Temp	ppm	saturation
DO - drop count	Unable to test			
pH – indicator solution	12:40 PM	7.0 7.2 7.2		Average 7.1
Fish Catch – 10 ft. net	Number	Species	Size largest	
10ft - 1 cm mesh- 10m pull	39	Banded killifish	seined	
~ 4 seines	20	Spottail shiner	seined	
9:40 AM – 1:00 PM	5	Darter	seined	
	4	Sunfish	seined	
	Totals 68	Diversity 4		
<i>Trapped by Fisheries group in a trap set the night</i>	1	Gizzard Shad	larger	
	1	Striped	larger	

<i>before</i>		Bass		
Macroinvertebrates		Freshwater scud		
		Green Caddisfly		
<i>Water Level</i>	Time	Height	Change	Change Rate
<i>This is above the head of tide. Water level changes have to do with releases that occur from hydro plant that empties into the river below Cohoes Falls.</i>	9:40 AM	22.9 cm		
	10:40 AM	27.9 cm	5 cm/60 mins	0.083 cm/min
	12:00 PM	29.2 cm	1.3 cm/60 min	0.013 cm/min
	12:45 PM	25.4 cm	-3.8 cm/60 min	-0.084 cm/min
<i>Water Flow Velocity</i>	Time	Rate of flow	Direction	
<i>This is not a tidal current just flow. At the confluence of two waterways the water direction can change.</i>	9:40 AM	8.1 cm/sec	North	
	10:40 AM	No movement	Still	
	12:00 PM	2.1 cm/sec	South	
	12:45 PM	2.4 cm/sec	South	
<i>Boat Traffic</i>	9:40 AM		North	recreational
	10:40 AM		South	recreational
<i>Other</i>	1 bald eagle	Seagulls		