

Snapshot Day 10/18/11 Data
(Salt Front RM 35.7)
RIVER MILE 18
Groundwork Hudson Valley
Science Barge Educator Jeremy Teperman
Alethea Lynch, Fox Meadow School, 25 third graders



Location: Hudson River @ the Science Barge, Yonkers waterfront south of Beczak

Area: Urban housing and waterfront redevelopment

Surrounding Land Use: In order of use: Industrial/Commerical (1); Urban/Residential (2); Park/picnic (3)

Sampling Site: Docks/pier, bulkheaded concrete, banks changed by people

Plants in area: > 50% of total area has: grass, deciduous trees, coniferous trees, deciduous trees, coniferous shrubs, cultivated flowers

Water depth:

River Bottom

<i>ITEM</i>	<i>Time</i>	<i>Reading 1</i>	<i>Reading 2</i>	<i>Comments</i>
<i>Physical</i>				
Air Temperature * *edited the C #s in posting since they did not match the F degrees.	10:45 AM	60°F-15.5°C	11:03 AM 11:25 AM	60°F – 15.5°C 62°F - 17°C
	11:58 AM shade	68°F - 20°C 68°F - 20°C	11:58 AM sun	81°F – 27.2°C 73°F – 22.8°C
	12:30 PM shade	64°F-17.8°C 65°F-18.3°C	12:30 PM sun	77°F – 25°C 71°F – 21.7°C
Wind Speed	10:45 AM	Beaufort 1	1-3 kts	South
	11:25 AM	Beaufort 2	4-6 kts	South
	11:58 AM	Beaufort 1	1-3 kts	South

	1:00 PM	Beaufort 1	1-3 kts	South
Cloud Cover	Mostly – partly cloudy			
Weather today	No rain			
Weather recently	Wet fall but not too much rain in last 3 days			
Water	calm			
Water Temperature	10:10 AM	16.3°C		
	10:58 AM	15.8°C		
	12:08 PM	17.4°C		
Turbidity (secchi)	10:36 AM	49 cm 69 54 55		54.5 cm average
	11:20 AM	65 cm 70 68 65		67 cm average
	12:21 PM	45 cm 35 45 47		43 cm average
	12:44 PM	40 cm 50 52 50		55 cm average
Chlorophyll	11:43 AM	0.5	1:31 PM	0.0
Chemical				
DO (drop count kit)	10:40 AM	6 ppm	16.3 °C	60% saturation
	10:58 AM	7 ppm	15.8°C	70% saturation
	12:00 Noon	8 ppm	17.4°C	80% saturation
	12:35 PM	5 ppm	18°C	60% saturated
pH – color match test kit	10:10 AM	8		
	11:10 AM	7.5		
	12:15 PM	8		
	12:45 PM	7		
Salinity - hydrometer	10:36 AM	2 ppt 2 ppt 3 ppt		Average 2.33 ppt

Hydrometer and refractometer	11:20 AM	2 ppt (R) 0 ppt (H) 3 ppt (H)		Average 1.66 ppt
hydrometer	12:15 PM	0 ppt 2 3		Average 1.66 ppt
Hydrometer	12:45 PM	3 ppt 2 ppt		Average 2.5 ppt
Nitrates	5:06 PM	2.5 ppm 0 ppm 0 ppm		0.83 ppm
Tides	Start Time	End Time	Change	
	10:15 AM	10:45 AM	Rising tide	
	10:54 AM	11:23 AM	7 cm rise	
	11:54 AM	12:21 PM	7 cm rise	
	12:28 PM	12:59 PM	7 cm rise	
Current	Time	Ebb/Flood/Still	Notes	
	10:15 AM	Flood	Current moving east closer to shoreline. Maybe pushed by boats or wind	
	11:10 AM	Flood	Current near shore is slower	
	12:13 AM	Flood		
	12:46 AM	Flood	Little flow by the shore	
Shipping – All Commercial	10:25 AM	Bouchard	Black & Red	Southbound/empty
	10:25 AM		Grey ship	Anchored/Empty
	11:07 AM		White /red & yellow	Northbound/empty
	12:08 PM	Blue Jay	Blue	Southbound/full
	12:08 PM		Grey	Still/ Full
Recreational Boats	10:45 AM	Speed boat	White	Gas - south
	10:45 AM	Fishing Boat	White	Gas South
	11:33 AM	Speed Boat	White	Gas South
What we saw!	People	Fishing (1)	Boating (3)	Walking (15)
		In Airplane (4)	Train (1)	Bike (1)
		Helicopter (2)		
	Birds	Pigeons (2)	Ducks (3)	Geese (15)
		Sparrow (7)	Seagull (11)	