

Day in the Life of the Hudson River 10/22/19
ENGLEWOOD BOAT BASIN, ENGLEWOOD NJ
Bergen County, NJ
RIVER MILE: 14

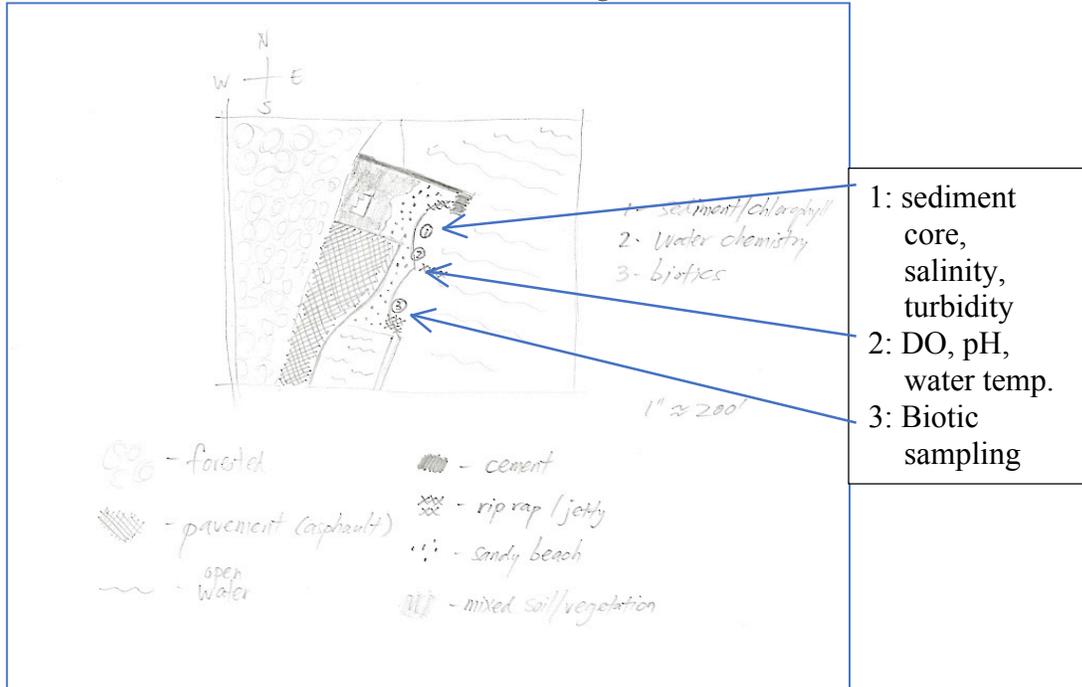
Salt Front: RM 52 (West Point)

Paterson Academy for the Gifted and Talented-
50 students 6th grade, 5+ adults

Maureen Bruins, Paterson Academy

Kirk Weber, Meadowlands Environmental Center

Latitude 40.880581 N & Longitude - 73.944525 W



- 1: sediment core, salinity, turbidity
- 2: DO, pH, water temp.
- 3: Biotic sampling

Location: Bloomers Beach (North end), Englewood Boat Basin, NJ

Area: Sandy beach, banks altered, pier with riprap sections, wood bulkhead, debris in area. Piping ~30 ft located at sampling site. 2 concrete bulkheads and stone breakwaters on shoreline.

Surrounding Land Use: 40% Forested; 20% Beach; 20% Industrial/Commercial; 20% Urban/Residential

Shoreline: Loamy sand- sand and mud, a little weedy and rocky

Water: Choppy, 50 cm

River Bottom: Muddy

ITEM	Time	Reading		Comments
Physical				
Air Temperature	10:05 AM	11 ° C	51 ° F	
Wind Speed: anemometer	10:05 AM	2-5.5 mph	4.8 knots	Beaufort: 1-2 Direction: East
Weather today	Overcast, estimated <1 inch of rain/drizzle at 10:00 AM for 45 minutes.			
Tides-	Time	Rising, Falling, Unchanged	Height (cm)	Rate of Tidal Change (cm/min)
	10:00 AM	Falling	50 cm	-
	11:30 AM	Rising	80 cm	.33 cm/min
Current-	cm/second	Knots	North/South	Ebb/Flood/Still
10:55 AM	12.29 cm/sec	.24 knots	South	Ebb
Water Temperature	10:15 AM	11 ° C	51 ° F	
		16 ° C	60 ° F	
		13 ° C	55 ° F	
		Avg: 13.3 ° C	Avg: 55.3 ° F	
	11:40 AM	13.4 ° C	56 ° F	

		12.8 °C 13.9 °C Avg: 13.4 °C	55 °F 57 °F Avg: 56 °F	
Turbidity - long sight tube	10:45 AM	37 cm, 40 cm, 38 cm, Avg: 38.3 cm		
Chemical				
Salinity- Hydrometer	Time	Chloride	Total Salinity	
	10:30 AM	- - - -	5 ppt 6 ppt 6 ppt Avg: 5.7 ppt	
DO – ampules	Time	Temp	ppm DO	% saturation
	10:30 AM	15.6 °C	6 ppm	60%
pH – Indicator solution	10:30 AM	8, 8, 7, Avg: 7.7		
Fish	Number	Name	Length of longest	Comments
Seine #2 10:15 AM	2	Atlantic Silverside	7.5 cm	Seine Net: 252” x 43 “ mesh size: ¼”
Seine #5	2	Atlantic Silverside	7 cm	
Seine #7 11:30 AM	3	Atlantic Silverside	8 cm	
Seine #10	2	Atlantic Silverside	6 cm	
Fish Totals	TOTAL: 9	Diversity: 1		
Macroinvertebrates	Number	Name	Length of longest	
	18 2 1	Blue Crab Sand Shrimp Moon Jelly		Seine and Dip net
Macroinvertebrate Totals	TOAL: 21	Diversity: 3		
Boats: Time	Name	Color	North/South	Loaded/Light
10:00 AM Recreational	Circle Line		South	Light
10:00 AM	Tugboat		South	
Observations	Also observed some small private recreational vessels, both sail and motor driven.			