What are currents?



A current is the flow of water in a river. Because tides influence the Hudson estuary, its flow changes direction about every six hours. The current moving towards the ocean is called the ebb; current coming in from the ocean is called the flood. "Slack water"- a period of little or no water movement - occurs when the current is about to switch direction.

Why we measure the current...

Currents can affect water chemistry, boats, fish, and plants. By comparing data from sites we should be able to show the current moving up and down the River. We measure current speed by tossing an object into the water and then measuring how far it travels in a period of time. Would salinity be more likely to increase on a flood current or ebb?

How to measure the River's current...



Measure
out 25 feet
along the
shore or
dock. *
Place one
person at
each end of
the tape
measure.



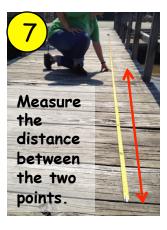
Person 1 tosses an orange into the river so that the current carries it past the tape measure.



Person 2 starts the stop watch when the orange reaches the tape measure.









Convert feet to cms.
Calculate distance in cm
per second. See chart on
reverse side. Record
direction of flow.

NOTE: If the current is moving fast, and the orange goes over 25 feet before 30 seconds, do over for 10 seconds.

*If using meter tape use 10 m

CURRENT

Time	Ft.	Cm	Cm/30 sec	Cm/sec	North/South	Ebb/Flood/Still

1ft. = 30.48 cm

25ft. = 762 cm (25 x 30.48)