

A Day in the Life of the Hudson and Harbor 2021: Can you solve the salinity puzzle in New York City?

When we looked closed closely at Day in the Life salinity samples from around New York City we were puzzled by what we saw! Here is salinity (parts per thousand, ppt) at a few sampling sites. Can you help us solve the puzzle?



Site	Time of sample	Salinity (parts per thousand)
63 rd Street, East River	10:45 AM	25 ppt
Pier 45, Hudson River	10:45 AM	13 ppt
Shirley Chisholm Park, Jamaica Bay	2:25 PM	30 ppt

1. Why is the East River saltier than the Hudson River, even though the samples were taken at the same time and the sites are just across Manhattan from each other? (Hint: Where does the water come from at both sites?)

2. Why was the salinity in Jamaica Bay the highest of the three readings? (Hint: There is more than one thing going on here, so be sure to check the tide charts!)