Department of Environmental Science

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Salinity in the Hudson River

My project involved the measurement of salinity over a tidal cycle in the Hudson River. Conductivity meters were calibrated and then standard, temperature compensated, salinity vs. conductivity curves were produced using KCl solutions. The density of these solutions was also determined using a hydrometer and standard curves of density vs. salinity were also created. Samples were then taken from the Hudson River at hour intervals over a complete 12-hour tidal cycle. Salinity increased by about 4 ppt on the flood tide as compared to ebb tide. A laboratory exercise for use in the introductory environmental science course was then created using these data and equipment.