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## Trace Metals and Inorganic Nurtrients in the East River and Long Island Sound: Possible Biological Impacts

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Poster Presentation 24

**TRACE METALS AND INORGANIC NUTRIENTS IN THE EAST RIVER  
AND LONG ISLAND SOUND: POSSIBLE BIOLOGICAL IMPACTS**

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The East River receives a large volume of treated sewage and industrial effluent as a result of the heavy urbanization of the region. A suite of inorganic nutrients, trace metals, and chlorophyll a was measured along a 55 mile transect of the East River and Long Island Sound to determine relative levels of contamination from sewage and possible biological impact of this sewage. Anthropogenically influenced factors such as silver, nitrate/nitrite and phosphate were highest in the East River, while non-anthropogenically influenced factors such as copper and silicate were relatively constant throughout the transect, indicating a high level of sewage impact in the East River. Chlorophyll a concentrations, used as an indicator of total biomass, were low in the East River. These low chlorophyll concentrations could not be explained by nutrient limitation, water column stratification, or light limitation in the East River, suggesting a possible toxic effect of sewage on biomass in the East River.