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### **Distribution of Macrobenthos in the Quinnipiac River**

Endocrine disruptors are a class of chemicals that can have adverse effects on an organism's endocrine system. Wildlife and humans can come into contact with such chemicals from water sources such as rivers that have been polluted. The Quinnipiac River has been a point of interest for detection of endocrine disruptors due to historical pollution and it being the point of discharge for multiple wastewater treatment plants and industries. Sites along the Quinnipiac River have previously been tested using a bioluminescent yeast bioassay that can detect estrogenic and toxic compounds. The results from the bioassay showed estrogenic compounds in some locations but not all.

Since endocrine disruptors are known to have effects on organisms and their presence has been detected in parts of the river, the research project has expanded to determine if the presence of estrogenic or toxic substances affects the organisms living in the Quinnipiac River. Macrobenthos are insects that live in the sediment at the bottom of the river and are commonly used as an indicator species. It is expected that the more pollution there is there is, the lower the species richness of the macrobenthos. Samples of the macrobenthos have been collected from the same sites where the water was analyzed. More samples are currently being collected and the diversity from those samples are being correlating to the amount of toxic and estrogen-active substances present.