

"Is the Bronx River Watershed healthy?"

A watershed is an area of land that can be of many different sizes which descends into lower elevations and valleys. It carries water from land after rain into soils, creeks, and streams which makes its way to larger rivers and seas. One important thing about watersheds is that how we treat land affects the water quality for people and animals living downstream.

According to various sources the Bronx River watershed is currently being contaminated by surface water, sewer overflows, and human use. For example, surface water that becomes polluted may seep into the river, which causes the quality of the water in the watershed to deteriorate. Another cause of contamination comes from the fact that sewer systems use the same pipes to collect sanitary and storm wastewater and during a heavy storm the excess of water flows into local rivers and streams. Human use is one of the most common issues that causes the Bronx River watershed to be polluted. Thus, fresh water often comes from local watersheds and then is wasted by people's careless actions. In fact, people in New York City use 100 gallons of water each day!

While at the Bronx River Watershed, we collected leaf packs and counted the number and amount of organisms found in the river. Although these are organisms that lack a backbone and are very small, they can be seen with the naked eye. According to the data we collected this year, we saw more scuds than any other organisms. We also saw equal amounts of caddisflies, finger clams, and water beetles in the Bronx River Watershed. Looking at past data, the amount of scuds seen has decreased but kept being the most common organism seen in the river. Also,

while at the Bronx River watershed, we collected enterococcus data. Enterococcus is a bacteria that can be found in high levels in human feces. Scientists use enterococcus data as an indicator that fecal contamination including disease like bacteria may be present. According to our enterococcus data collected by past students there were very high levels last year, but enterococcus levels dropped drastically and are now very low. Our class also collected dissolved oxygen data. We collected dissolved oxygen data because it is measured to show the “health” of lakes and streams. According to our dissolved oxygen data, in some areas it had increased, decreased, and stayed the same. Currently dissolved oxygen is very low in many areas. Overall, according to our class data and past data, the Bronx River Watershed is not healthy because there are not many organisms besides scuds, finger clams, and water beetles.

Bibliography

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