A watershed is an area of land that distributes water so it flows into different bodies of water (ex. rivers basins or seas).In class we visited the Bronx River Watershed to collect data to find if the watershed was polluted. We found a variety of macroinvertebrates and we found data about the ph levels and conductivity levels on the bronx river research website. After looking at this data I have concluded that that the Bronx river watershed is polluted.

One thing that proves that the bronx river is polluted is the types of macromolecules it has. While we were at the river our class collected many macromolecules, we mostly collected scuds. Scuds are tolerant to pollution and they are an indicator of pollution in the bronx river. We found 60 scuds in our class data and Mrs.Bastone's class found 44. Also in October neither class found any aquatic snails, even though some were found in leaf packs over the summer. Aquatic snails are not tolerant to low oxygen levels, with this information we can conclude that the oxygen levels in the bronx river are falling, therefore making it more polluted.

Another way to prove the bronx river is polluted is by looking at the pH levels. pH measures how acidic or basic a solution is. Normal water is neutral, and ranked 7 (on a 1-14 scale), lower numbers being acidic and higher numbers being basic. From the information found in the website the pH levels of the water are not neutral like pure water is but acidic. The readings from different days and places in the bronx river variety but they are mostly under 7 and some under 5. This makes the pH levels in the bronx river relate more (in acidic levels) to human urine than pure water. This is a clear indicator of pollution in the river because the pH levels are mostly acidic.

Finally the bronx river is polluted because its conductivity levels are so high. According to the Bronx River website, normal conductivity levels for streams that support a diversity of species are between 150 to 500 µS/cm, anything higher or lower indicates that the stream

may not be suitable for certain types of aquatic life.The majority of the data collected in the bronx river has conductivity levels that are above 500 µS/cm. This proves that the bronx river is polluted because it has conductivity levels so high it is unable to sustain some forms of life.

Overall, the Bronx River Watershed is polluted because it has high conductivity levels and pH levels the effect of that is shown when certain macroinvertebrates can no longer sustain life in the Bronx River.

Citation:

Core Bio, Teachers. "Bronx River Watershed." Bronxville School, n.d. Web. <https://sites.google.com/bronxvilleschool.org/bronxrivercorebio16/home>.