

Group 3

College Creek Near Ash Avenue

Fireflies

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Ensci 203x

Introduction

Over the past six months, we have tested the water of College Creek as it flows out from under Lincoln Way. Our objective was to discover the impact ISU has on its waterways, specifically those which flow from Lake Laverne. With this information combined with past tests, we hope to see changes in the way ISU handles its environmental impact.

Results

The average pH for Iowa is 8.2, and our site stayed between 7-9. The phosphate at our site stayed at mostly normal levels. The Nitrate and Nitrite levels were consistently low, which is good for Iowa rivers. The only abnormal data we found was Chloride. Our site had a very high jump in Chloride in March 2014. This could indicate human and animal waste or fertilizer. We think that it is most likely due to salt washing off the roads at the end of winter.



Site Description

At our transect, College Creek is a run with a largely mud/silt and sand streambed. Its microhabitats are silt/muck, junk, sand, leaf packs, rocks, and overhanging vegetation. The left and right stream banks are both sloping. The canopy cover at this time is 25-50%. The width of the creek is 5 meters. Both banks are mostly covered with trees, leaves, and rocks. The adjacent land use includes an urban area, steep slopes, a walkway, a parking garage, a residential area, and Lincoln way. There is also a culvert where the creek comes out from under Lincoln Way (pictured to the left). The only human use we determined is wading. Human use was evident because the large amount of trash in and around the transect as well as the nearby walkway and road.

References

Iowa DNR. October 2013. Iowater Introductory Workshop Manual, Iowa Dept. Of Natural Resources.

