

Yard Waste and Chemicals

Did you know that dumping yard waste in the creek is bad for its ecosystem? It's a simple mistake to make. The problem with dumping yard waste is that the decomposing plants take dissolved oxygen out of the water and add sediment to the water. Sediment can clog up the gills of aquatic animals. Animals with gills depend on dissolved oxygen in order to survive.



Riparian Buffers

Riparian Buffers are vegetated areas next to water resources that protect water resources from nonpoint source pollution and provide bank stabilization and aquatic and wildlife habitat. Riparian buffers filter runoff, sediment, and debris.



They help keep pollutants out and provide a nice habitat for wildlife.

Stream Monitoring

Monitoring streams is important because from the tests we take, we can learn about the condition of the stream. We measure the abiotic factors to know about the water quality at that moment, using both digital probes and chemical tests. We test for: PH, Coliform, Phosphate, Dissolved Oxygen, Turbidity, Nitrate, and Flow Rate.

Perhaps even more important is the biotic assessment we do to find out which organisms are living in the creek. It takes time for organisms to establish themselves in a location. Class 1 organisms such as the Mayfly, Stonefly, and Water Penny cannot tolerate pollution. Class 3 organisms such as leeches can tolerate pollution. Healthy streams have a high biotic index, indicating many Class 1 organisms are present.



Stream Results: For several years, our middle school students have monitored the section of the Licking Run Creek that runs through Quakertown Memorial Park. We have mapped its flow as part of the Tohickon Creek watershed. Although our chemical tests are usually within a normal range, the creek's biotic index is consistently low. Leeches and other pollution tolerant organisms are the most prevalent species in this section of the creek. Out of our concern for the creek and our desire to increase public environmental awareness, UFS students proposed an ordinance that became Quakertown Ordinance 1177.



Caring For The Stream In Your Backyard



Since United Friends School first opened its doors in 1984, students have frequently visited the Quakertown Memorial Park and appreciated the small creek that flows through it. Alarmed by the quantity of leeches, yard debris, and trash that we observed in the stream, we decided to “adopt” the Licking Run Creek. We received a DEP grant to purchase stream monitoring equipment, which our middle school students have been using to assess the creek for the past several years. Working with the Upper Tohickon Watershed Association and the Bucks County Conservation District, our goal for this project is to teach people how important it is to keep this stream and other streams safe and healthy. We believe that **kids can make a difference.**

DO	DON'T
<ul style="list-style-type: none"> • Establish a riparian buffer along your stream bank. • Clean up any trash or objects that fall into the creek. • Use a silt fence to prevent soil from washing into the creek during digging projects. • Put up nest boxes and bird feeders to attract wildlife. 	<ul style="list-style-type: none"> • Don't dump your yard waste into or along the stream. • Don't use fertilizers or herbicides near the creek. • Don't mow along the stream bank. • Don't burn refuse near the creek. • Don't dump animal waste near the creek.

On March 2, 2011, Quakertown Borough Council Ordained and Enacted Ordinance 1177, based on the Ordinance Proposal Presented by United Friends School Students

Chapter 20, Section 103(10) of the Code of Ordinances of the Borough of Quakertown is amended to read as follows:

10. No person shall permit or place yard waste in any alley, street, or stream.

11. No person shall permit the storage of *yard waste or any other object that can be displaced by moving water within the Riparian Buffer zone of the stream.

*Yard Waste: the part of solid waste composed of grass clippings, leaves, twigs, branches, and other garden refuse.



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UFS is committed to serving our community and helping students improve the environment.