



Springs Branch Stormwater Improvement Project at Clays Mill Elementary

Lexington, KY
 Project Design: completed October 2013
 Project Construction: August 2013 - March 2014

Springs Branch is a headwater tributary to Wolf Run that starts on the Clays Mill Elementary School and LFUCG Southland Park properties. This stream is in a developed, urban watershed that has several water quality issues such as sanitary sewer overflows, chlorine and cleaning chemical discharges from the LFUCG Southland Pool, as well as the typical runoff from parking lots, roads, and residential areas. There are also long-standing downstream road and structure flooding problems on Cardinal Lane, Longview Drive, and further downstream on the main stem of Wolf Run.

EcoGro, Fayette County Public Schools, and several project partners submitted a grant application for the LFUCG Stormwater Quality Incentive Grant Program. The city of Lexington recognized the same potential gains for education and habitat as they approved this project for funding. The University of Louisville developed a model of stream flows to evaluate how the new channel design would hold up to the 100 year storm event. This allowed designers and stakeholders to address any predicted problems prior to construction.

The goal of this project is to improve water quality and aquatic habitat in Wolf Run, as well as to reduce downstream flooding of roads and homes. In addition, this project will help educate the local community, park users, students at the nearby schools, and water professionals about stormwater quality. This project involved the design and construction of five types of stormwater Best Management Practices (BMPs): stream restoration with riparian buffer, a constructed ephemeral wetland, two rain gardens, a bioswale and permeable pavement to replace an existing walking path.

Project Partners: Ridgewater, Vision Engineering, LFUCG, Univ. of Louisville, Univ. of Kentucky, KY Division of Water, US Army Corps of Engineers, KY Transportation Cabinet.

This project was funded by the LFUCG Water Quality Management Fee through the Stormwater Quality Projects Incentive Grant Program.



Above: Project sign, hydrodynamic model, built channel.

- Key Features:**
- Design/Build
 - Hydrodynamic model
 - Water education