

## **FFY 2010 Project Abstract**

### **319(h) Kentucky Nonpoint Source Pollution Control Program**

This project will create an integrated green infrastructure using Low Impact Development (LID) techniques to manage stormwater as part of a planned Habitat for Humanity medium density green affordable housing community. The site is a 16-acre parcel owned by Habitat for Humanity Bowling Green-Warren County (HFH BG-WC) and is within the Jennings Creek watershed and Bowling Green city limits. The project will promote enhanced water quality and public awareness through Best Management Practices (BMPs), professional and community education and outreach, and cooperation among agencies, citizens, and government. Over a period of years, site development will eventually comprise up to fifty single- and multi-dwelling housing units, a community center with shared uses (e.g., laundry room, computer room, classroom, meeting rooms), and other shared functions (e.g., outdoor amphitheater, walking trails, mass transit stop) with an emphasis on community building and green building techniques in addition to the planned integrated stormwater management approach.

A strength of this project is its committed partnerships. Principle partners include Western Kentucky University (WKU) and WKYU-Public Broadcasting Service (PBS), HFH BG-WC and KyHFH. Additional partners include the Mayor's office and Bowling Green Department of Public Works, Bowling Green City Schools, BGGreen Partnership for a Sustainable Community, Bluegrass PRIDE, Arnold Consulting and Engineering Service (A-CES), and Warren County Division of Stormwater Management. The project will work closely with the River Basin Coordinator and River Basin Team in the project area. An Advisory Board will be formed and include representation from each of the principle partners; it will meet three times per year.

In addition to reducing stormwater runoff and NPS pollution, an important goal for this project is to build public understanding of NPS pollution and effective approaches to managing stormwater and why this is important. The construction of residences and paved areas will be concentrated at the perimeter of the property and the core area used to create a park-like outdoor learning and recreational environment that encourages residents to spend time interacting and outside. Key features of this will include an outdoor amphitheater, walking trails, community gardens, rain gardens, edible landscaping, native species plantings, and increased tree cover. Visitor and community tours as well as homeowner and community involvement in hands-on aspects of planting and building will give residents and community a sense of pride and ownership in the project, and a sense of shared responsibility and interconnectedness to each other and the environment. This will contribute to the project's success and help further the HFH mission. A homeowner association will be formed for site maintenance. Education and outreach are integral to this project. Professional development trainings will be held with city professionals and local HFH builders. Education and site tours for educators, school groups and others will be held. Project results will be broadly disseminated through media, social networking and conferences.

The proposed concept map has been developed by Arnold Consulting and Engineering Services. THFH BG-WC will host onsite trainings for state affiliate chapters, local builders, and city employees plus educational outreach for teachers, school groups, residents, and the community. KyHFH will sponsor training for the state affiliate chapters, offer direct consultation on project design, and seek to make changes to existing building policies to incorporate LID stormwater techniques. The Bowling Green Division of Stormwater Management will provide training for personnel and maintenance services. Trained and licensed personnel from WKU Landscaping will participate in landscaping and design. Students, community volunteers, and residents will be involved with construction and plantings plus students will conduct project related action-based research. Roundstone Native Seed will administer the native plantings. The WKU Center for Environmental Education and Sustainability (CEES) will coordinate the education and media outreach, and administer the project with assistance from the Office of Sponsored Programs (OSP) and Grants Accounting Office (GAO.)