

## It's All in a Name

You may have noticed new signs naming streams throughout Franklin County. This was a partnership effort involving local governments and the Greenways program at MORPC to bring greater awareness to the number and quality of streams in Franklin County. A Greenways Steering Committee subcommittee organized the effort, the city of Columbus sign shop made the signs, and the Franklin County Engineers and local governments volunteered to erect the signs. The first step in valuing a resource is awareness, therefore, naming streams was a great place to start.

There is also an effort to name unnamed tributaries in Franklin County. If you are interested in getting involved contact Andrea Gorzitze at 614-233-4124 or agorzitze@morpc.org.



## Our Newsletter is Available by Email

Franklin SWCD will make our newsletter available electronically to those who would like to reduce paper. This will help save paper and reduce our costs. We realize that many of our readers do not have access to computers, and rest assured, we will continue sending your newsletter via the U.S. Postal Service.

If half of our newsletter recipients began receiving their newsletter by email, we estimate a savings to the District of 33% on printing and 50% on mailing. If you're willing and able to receive newsletter by email, please contact the office to add your name to the list. You may contact us by phone (614-486-9613), fax (614-486-9614), or email (melissa-little@franklinswcd.org).

District programs and services are offered on a non-discriminatory basis.

THE FRANKLIN SOIL AND WATER CONSERVATION DISTRICT — A Federal/State/Local partnership with funding from: Franklin County Commissioners; State of Ohio; Canal Winchester; Columbus; Gahanna; Hilliard; Reynoldsburg; Village of New Albany; Westerville; Worthington; Brown, Hamilton, Jefferson, Madison, Norwich, Pleasant, and Prairie Townships; The Nature Conservancy; Columbus and Franklin County Metro Parks; Darby Creek Association; Franklin County Board of Health; Ohio EPA; County Engineers; and resource assistance from the Natural Resources Conservation Service and the Ohio Department of Natural Resources.



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FRANKLIN SOIL AND WATER CONSERVATION DISTRICT

Frankly Speaking

## Getting Conservation on the Land!

Educating adults and children about environmental topics is a crucial component of the District's mission. Did you know that we also promote responsible land use decisions through direct application of conservation practices on land?

Providing tools, resources and assistance to establish conservation practices on the land is an important tradition of soil and water districts. It imparts educational and visible benefits to the local community. The USDA Natural Resources Conservation Service (NRCS) is an essential partner for cost share programs and technical resources. Ohio Department of Natural Resources, Division of Soil and Water Conservation provides additional support on urban lands. Landowners who want to voluntarily manage their property for conservation can receive technical advice in developing a conservation plan for their property and explore potential cost share or incentive programs available to them. Landowners with properties as small as 0.25 acre can participate in the Backyard Conservation program, which focuses on landscaping and water management to conserve natural resources. The NRCS works primarily with the landowners and managers of agricultural properties greater than 8 acres.

The primary landowner programs the district and NRCS focus on are:

- Purchase or donation of conservation easements along streams.
- Restoration or creation of wetlands.
- Establishment of vegetated buffers along streams.
- Various backyard conservation practices.

The above programs and additional ones involve establishment of wildlife habitat, pasture management, and alternative drainage solutions. The District's urban conservation program focuses on construction activities related to

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development in the county. They monitor construction sites to ensure that the required sediment and erosion control practices are being applied, and they help train developers on the latest conservation practices for construction sites. The urban conservation team continuously searches for viable conservation-minded alternatives for developers, such as rain gardens and green roofs, which can be economically feasible and meet EPA requirements and local conservation goals.

FSWCD has also been conducting a countywide drainage mapping project over the past 10 years. An ArcView compatible drainage layer for the entire county and outlet layers of the Big Darby, Little Darby, Hellbranch, Rocky Fork and Blacklick watersheds have been completed. Mapping in the Big Walnut, Little Walnut, Alum Creek, and Scioto watersheds is underway. Data from the project will be made available to local governments with support from the Franklin County Auditor's office. We are exploring options to make the data more accessible to the public after the initial layers for Franklin County are developed. When completed, the information from these digital layers will be invaluable to communities for pollution prevention, drainage management and construction plan reviews, and possibly for use in models to reduce erosion and flooding problems.

Contact the Franklin SWCD and NRCS office at 614-486-9613 or visit [www.franklinswcd.org](http://www.franklinswcd.org) for more information on our programs or for technical assistance on a variety of natural resource issues.

## Bioretention Areas

Franklin County is experiencing widespread development that involves the construction of roads, driveways, parking lots, and buildings, which are all impervious to water. While this infrastructure represents an essential component of urbanizing communities, it also creates significant challenges for maintaining and managing our water resources. The increased impervious area causes increased surface water runoff, decreased groundwater recharge, and decreased filtering of pollutants, which can lead to flooding and water quality problems.

Two concepts that are central to all storm water management



programs are reducing the amount of storm water initially running off a site (water detention/retention) and reducing the amount of pollutants in storm water. The construction of bioretention areas at suitable sites is one technique that addresses both concepts and can be used to fulfill some USEPA Clean Water Act requirements. Bioretention areas, also called rain gardens, utilize the filtering and water absorption capabilities of plants and soil to retain and treat surface runoff before it leaves a site. Furthermore, they provide the visual appeal of traditional landscaped islands, as they are designed using basic landscaping concepts (e.g., mulched areas with plant arrangements). Key differences between bioretention areas and traditional landscape beds are the species that are used and their placement in the landscape. Rain gardens are planted with water tolerant species, and they are constructed below the surrounding grade to accept runoff, not above grade, as in most landscape beds.

Bioretention areas can be constructed on commercial properties or residential sites.

They can be installed within or adjacent to parking lots to detain and filter their runoff. Because they are designed to detain water, their size and design are dependent on the area draining into them, as well as soils and hydrology (e.g., existing drainage and outlets). Bioretention areas generally hold between 6 and 12 inches of water above the surface, but they are designed to drain within several hours after a storm event, unlike ponds and most wetlands. When constructed in soils where water infiltrates slowly, drainage pipes are installed in the bioretention area to prevent extended ponding. In addition, raised outlets can be installed to convey overflow water during major storm events. The end goal is to provide water quality benefits to storm water retention.

For additional information on rain gardens and their application for EPA compliance, contact Franklin SWCD or go to:

<http://nemo.osu.edu/factsheets/npsfa/ct/CL1000.pdf>

or

[http://www.bae.ncsu.edu/cont\\_ed/bioretention/lecture/design\\_rain.pdf](http://www.bae.ncsu.edu/cont_ed/bioretention/lecture/design_rain.pdf)

## Upcoming Summer Events

- |  |            |
|--|------------|
| • National Wetlands Month                  | May        |
| • Riverfest '05, North Bank Park           | May 21     |
| • National Environmental Day               | June 5     |
| • Rose Festival, Whetstone Park of Roses   | June 11-12 |
| • Clean Rivers Week                        | June 13-17 |
| • Creekside Blues & Jazz Festival, Gahanna | June 17-19 |
| • Teachers' Workshops, MetroParks          | Summer     |

Remember to visit our website for District information, programs, and services, and more upcoming events:

[www.franklinswcd.org](http://www.franklinswcd.org)

## Rain Garden Featured at Erosion and Sediment Control Expo

District Urban Conservationist Martha Gilson decided to put the bioretention concept into practice at the 3<sup>rd</sup> Annual Central Ohio Erosion and Sediment Control Expo on April 22<sup>nd</sup> held at The Ohio State University Waterman Agricultural and Natural Resources Laboratory. This bioretention area was designed to allow storm water to slowly filter into the ground and drain to the nearest waterway over a 24 to 48 hour period.

The rain garden was installed to collect storm water from the parking lot. Plans began several months ago with assistance from ODNR. A survey was conducted to determine the size and amount of materials to be used based on the drainage area. Specifications for the materials were as follows:

**Corrugated Polyethylene Pipe:** Shall meet ASTM-405 for corrugated polyethylene tubing and fittings, 3-6 inch.

**PVC Pipe and Fittings:** Shall meet ASTM-D 1785 or AASHTO 278, 6 inch rigid schedule 40 PVC.

**Pea Gravel:** Shall be ODOT No. 8 "rounds" or equal gradation river wash gravel. Pea gravel shall meet ASTM-D 448.

**Geotextile Fabric:** Shall be non-woven, class "C" with an apparent opening size meeting ASTM-D 4751, a grab tensile strength meeting ASTM-D 4632, and a burst strength meeting ASTM-D 4833. Minimum overlap shall be 12 inches.

**Planting Soil:** Soil shall be USDA Class, Sandy Loam, Loamy Sand, or Loam. Soil shall be 35%-60% Sand, 30%-55% Silt, 10%-25% Clay, and 1.4%-4% by weight organic matter.



**Mulch:** Shall be double hardwood, aged a minimum of 6 months. Pine mulch and wood chips shall NOT be used.

**Plant Material:** All plant material shall be facultative (plants likely to occur in wetland or non-wetland areas; 34-66% chance) non-invasive.

After the survey materials were gathered construction of the bioretention area or rain garden began. A pit was dug four (4) feet deep, 10 feet across, and 22 feet wide with a channel extending to the nearest waterway. Corrugated piping was laid at the bottom of the rain garden exiting at the ditch. River wash gravel was layered on top of the piping. A sheet of geotextile fabric then lined the top of the river wash and piping. Planting soil filled in the hole. Plants were planted and mulch was applied. A dike was also created between the edge of the rain garden and the ditch to allow for ponding in the rain garden during a quick, heavy storm.

FSWCD would like to thank the following donors for supplying materials: Alpine Stormwater Solutions, Keller Farms, Kurtz Brothers, Site Solutions Excavating, and The Ohio State University.

It was raining the day of the Expo, the first day of rain since the rain garden was installed, which allowed participants and visitors to see the drainage pattern of the area and to watch the rain garden soak in its first precipitation. Visitors are

