



Information FLOW™

Friends of the Lower Olentangy Watershed

FALL 2008

Above: Volunteers make a difference in restoring our streams. *Photo by Cyane Gresham.*

Fifth Avenue Dam Update

Many sections of the Olentangy River boast clean water, natural beauty, and abundant fish and wildlife. Unfortunately, that is not the case for a two-mile stretch near the OSU campus between Dodridge St. and Fifth Avenue.

In that area, the Fifth Avenue Dam impedes the natural flow of water, creating a stagnant pool that lacks sufficient oxygen to support many fish and insects. The dam also represents a safety hazard, as shown by the recent drowning of a young man who was sucked into the currents at the base of the dam. For those reasons, the Lower Olentangy Watershed Action Plan strongly recommends removal of the Fifth Avenue Dam.

Until recently, plans to remove the dam seemed to be

moving ahead. The City of Columbus had committed \$640,000 in EPA fine money to the project, and it appeared that the U.S. Congress would approve an additional \$1.18 million for the U.S. Army Corps of Engineers to remove the dam. Unfortunately, the Army Corps funding did not make the final cut, putting the project indefinitely on hold until funding can be obtained.

Because funding remains uncertain, it will be important to let the City of Columbus and our U.S. Congressional candidates know that removing the Fifth Avenue Dam is a high priority for making the Olentangy River clean and safe! Please visit our website at www.olentangywatershed.org or call 614-267-3386 for suggestions on how to make your voice heard on this important issue.

Stopping Sewer Overflows

The City of Columbus has taken a major step toward cleaner rivers for Central Ohio. Currently, in a typical year, the Columbus sewer system discharges about 1.65 billion gallons of untreated human and industrial waste into our rivers and streams, including the Olentangy. To address this problem and clean up our rivers, the City of Columbus has created a Wet Weather Management Plan to eliminate sewer overflows.

The City presented the plan to Ohio EPA in accordance with two separate consent orders from the Franklin County Court of Common Pleas. The 40-year, \$2.5 billion plan calls for improvements to wastewater treatment plants and the creation of 14-foot diameter tunnels along the Olentangy River and Alum Creek. Ohio EPA recently issued a draft approval of the plan and is accepting public comments through August 25. A public hearing is also expected.

Although the City's plan focuses primarily on hard infrastructure improvements, FLOW's Watershed Action Plan also calls for using "green infrastructure" to help reduce sewer overflows. Green infrastructure includes rain gardens, rain barrels, pervious pavement, and green roofs that allow rainwater to soak into the ground rather than running off into storm drains. Green infrastructure can be a cost-competitive way to lessen pollution in our streams and decrease flows in storm water and wastewater systems. For more details about the Wet Weather Management Plan and about green infrastructure, please visit the FLOW website at www.olentangywatershed.org.

EXPLORE

Porous Pavement for Cleaner Rivers

By Greg Hostetler

In cities, the hard pavement of sidewalks, driveways and roads does not allow rain water to naturally soak into the ground. Instead, the water rushes into storm drains and eventually to our rivers, where it contributes to pollution and causes stream banks to erode.

In recent years, engineers have sought to answer the question: How can we create surfaces that can hold the weight of people and vehicles while also allowing water to infiltrate naturally into the soil rather than running off into our rivers?

Here are some successfully tested options:

- **Soft porous surfacing:**
Organic materials like bark and wood chips or recycled materials like granulated rubber tires. Used for paths, playgrounds, and low-traffic parking areas.
- **Porous turf:**
Grass that is grown in a thick layer of sand or structural soil (soil designed to bear the load of vehicles). Used for pedestrian and parking areas.
- **Plastic geocells:**
A 1-2 inch thick open plastic lattice filled with aggregate (large pieces of gravel) or turf.
- **Open-joined paving block:**
Concrete or clay blocks designed with open spaces that can be filled with aggregate or soil. Offers good traction and can hold up to snowplows and freeze/thaw cycles. Commonly used for roads and parking lots.
- **Open-celled paving grids:**
Concrete or brick slabs with large spaces within each piece. Gaps are commonly filled with aggregate or vegetation. Larger gaps allow more permeability, but the smaller area for traction makes this option more suitable for parking areas than roads.
- **Porous aggregate:**
Gravel with small particles removed. Ranks high in permeability and affordability. Can be left loose like in gravel driveways or fixed in place with binders. Used for parking and pedestrian areas.
- **Porous concrete:**
Concrete with the small particles removed. Highly

permeable, with good durability and traction. Used for roads since the 1970s in Florida and on the west coast, but concerns over its freeze/thaw stability have prevented use in cold climates.

- **Porous asphalt:**

Asphalt with the small particles removed. Highly permeable and suitable for roads and airport runways. Installations in Pennsylvania and New York show that it is stable to freezing and thawing.

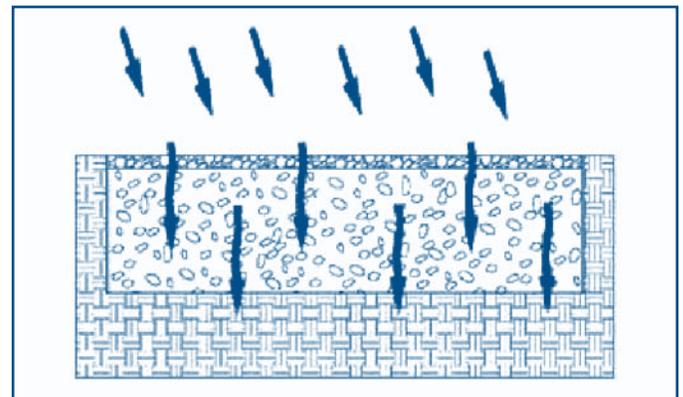
Installation issues and care

Even if we replaced current pavement with a porous alternative, the soil underneath would still be compacted so that it could bear a load. To address this, a thick layer of aggregate is used underneath porous pavements to allow water to infiltrate to the soil below. Where there are street trees, structural soil (aggregate mixed with a small amount of soil) can be used to allow for tree growth. Porous pavement can sometimes clog with sediment, debris or moss, reducing permeability over the years. In that case, vacuuming and pressure washing can restore permeability.

Overall, demonstrations have shown that, with proper care, porous pavement can be an important tool for helping to lessen pollution and protect our urban rivers

Further reading:

Porous Pavements by Bruce Ferguson
Using Porous Asphalt and CU-Structural Soil found at <http://www.hort.cornell.edu/uhi/outreach/>



With porous asphalt and structural soil, water can permeate the pavement and the soil below. Urban Horticulture Institute, Cornell University.

FLOW Calendar of Events, Meetings, and Volunteer Opportunities: Fall 2008

All times and dates are subject to change. Please confirm time, date, and location by calling our office at 614-267-3386 or on our website at www.olentangywatershed.org

AUGUST

Water Trail Committee Meeting

August 26, 4:30 PM, at the Beechwold Panera at 4519 N. High St., Columbus

We will be creating a work plan for improvements to water trail portage and access sites. New volunteers are especially welcome.

SEPTEMBER

Orientation for Science Committee Volunteers

September 4, 6 PM, at 3528 N. High St, Suite F, Columbus

Can you commit to 5-10 volunteer hours in September? The FLOW Science Committee needs help to compile research data on Olentangy tributaries. Volunteers will use existing sources of data to help create a 'Master Table' of all the tributaries in our watershed. We will use this information to prioritize the next 3-5 years' monitoring, restoration and preservation activities. Join us at this orientation to learn how you can help. Some background in science is useful, but not necessary.

Outreach Committee Meeting

September 9, 8 AM, at the Beechwold Panera, 4519 N. High St., Columbus

We'll be creating a calendar and planning for educational events, volunteer activities and recreational opportunities for the coming year. New volunteers are welcome.

FLOW Picnic and Visioning Session

September 9, 5:30 - 8:30 PM, at Highbanks Metropark

Join FLOW's board and staff at for an evening of food and conversation. We'll start off with a picnic at Highbanks' Mansion Shelter House followed by structured brainstorming and discussion to help create a vision for the Olentangy and for FLOW as an organization over the next few years. Bring your own picnic food. Beverages and dessert will be provided. Please call 614-267-3386 to let us know you're coming!

OCT

Painting the Olentangy

October 19, 1-4 PM, call for meeting location

Beginners and experienced students alike are welcome to participate in this workshop led by watercolorist George Acock. Fall foliage along the Olentangy River will serve as our inspiration and subject matter. We will also learn about the history and current status of the river in the OSU/Harrison West area. The event is free, and you may bring your own supplies or purchase a supply kit at the workshop. Participation is limited. Call 614-267-3386 to reserve a space.

DEC

Winter Watershed Hike

December 6, 1-3 PM, at Camp Lazarus in Delaware County

A Preservation Parks Naturalist will lead us on a winter exploration of our watershed. Please call 614-267-3386 to let us know how many to expect.



Above: *My Line is Busy.* Photo by George Anderson.

Understand

FLOW

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Friends of the Lower Olentangy Watershed is a non-profit organization dedicated to keeping the Olentangy River clean and safe for all to enjoy through public education, volunteer activities, and coordination with local decision makers. FLOW is registered with the IRS as a tax-exempt, nonprofit charitable organization under Section 501(c)3 of the Internal Revenue Code. Donations are tax-deductible.

Give to FLOW through regular payroll deductions under Earth Share of Ohio's workplace giving campaign available at numerous private companies, state and municipal government agencies, and Combined Federal Campaigns.

If your employer does not participate in Earth Share, you can give to FLOW through alternate workplace giving campaigns – just ask your employer for a donor-option pledge form! Your employer may even provide a match – which doubles your contribution amount!

For more information about workplace giving, contact the FLOW office.

Friends of the Lower Olentangy Watershed:

A member of **Earth Share OF OHIO**



YES! I want to support FLOW for cleaner water!

Choose a membership:

- Individual \$25
- Family \$40
- Supporting \$50**
- River Steward \$100
- Business Basic \$175
- Bronze \$200
- Silver \$300
- Gold \$500
- Sustaining \$1,000

Please check here if you would like more information about volunteering with FLOW.

Return this form to:

FLOW
 3528 N. High St., Suite F
 Columbus, OH 43214

Or give securely online at:
www.olentangywatershed.org

Fill in the following:

- New Member
- Renewal
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- Name(s):
- Organization/Business:
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By providing your email, you will save resources and stay up-to-date on news and events.

FLOW

Explore. Discover. Understand.

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