

Wolf Creek

Stream Team

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Looking for a "Coalition of the Willing"!

Just in case any of you are feeling a bit intimidated by the rigorousness of our stream monitoring techniques, join the club! I need just as much practice as everyone else...So I'm going to throw out some dates, and we can go out and practice, practice, practice. My apologies to those whose jobs won't allow you to schedule during business hours – a Saturday here and there might be possible. Anyway, here's the dates: May 2nd, and May 9th. Contact me if you're able to help out.

Tour of Martin-Marietta

Jim Henderson has made arrangements for members of our group to tour the Martin-Marietta Aggregates plant, a gravel mining operation near Phillipsburg. Operations there impact the North Branch of Wolf Creek. The date is Friday, May 23rd, at 1pm. I hope you will all try to attend - this will be a great opportunity to demonstrate to industry executives that well-informed citizens are keeping a watchful eye on stream impacting businesses. Please RSVP soon!

Super Wal-Mart Planned

One of our newest members, Wendy Boucuvaes, brought this to my attention, as her home borders the property of the planned development. Neighbors were notified because it is required by the Army Corps of Engineers anytime a stream or wetland will be impacted. The parcel is bordered on the east by Hoke Rd., and on the south by Interstate 70. The area is essentially a type of wetland (don't ask me what type), and drains into Branch Run, a tributary of Wolf Creek behind the Miami Valley CTC.

Since we're all bound together by concern for our natural environment, I thought I'd pass on some basic information about development that you might find helpful for future reference. For starters, development is part of our economy. Economic development provides jobs. So it doesn't make sense to oppose all development. But (you knew that word was coming...) traditionally, development has happened in way that has been very wasteful of open space, wildlife habitat, aesthetic beauty, good air and water quality, and efficient use of transportation infrastructure, and municipal sewer and water service.

The key to development that is sensitive to the aforementioned resources is good planning on the part of local governments. This means that we either need to get good environmental stewards elected to our local governments, or educate the ones who are there. That's where a group like the Wolf Creek Stream Team can really make a difference (see the term "rapidly developing watershed" in the next piece). What are needed are strategic plans for conservation development, aka "Smart Growth".

For example, redevelopment of abandoned facilities near city centers preserves open space on the outer edges of the city. Pedestrian friendly neighborhoods that include nearby amenities such as grocery stores, restaurants etc., reduce the need to drive a car. The list goes on and on. Other examples of Smart Growth involve what is known as urban Best Management Practices, or BMPs. These include such things as grass swales and wetlands instead of culverts and storm sewers to manage runoff from parking lots and roads. I have even heard of such a thing as porous pavement. Of course these measures cost more, and developers are unlikely to undertake extra expenses unless the local ordinances mandate it or at least provide some sort of incentive.

What I'm advocating is that we educate ourselves on the methods and practices of Smart Growth, and then stay involved with our local governments to help them mitigate the negative impacts of traditional development. Whether you live in Trotwood, Brookville, Clayton, Englewood, or Dayton, these are the local governments that we need to be involved in to protect the Wolf Creek Watershed. It's democracy in action !!

Wolf Creek Watershed Communities to Comply with Phase II of Clean Water Act

(Watershed Protection 101)

I briefly mentioned this topic in the March newsletter; that cities of a certain size are required by the EPA to implement a Storm Water Management Plan (SWMP) aimed at reducing polluted storm water runoff to streams and rivers. This means that the cities of Trotwood, Clayton, and Englewood must comply with the six Minimum Control Measures (refer to March edition) within five years. The Miami Conservancy District has been working with many municipalities to help them write their SWMPs. Oh, just for kicks and grins, here's yet another acronym: MS4 – Municipal Separate Storm Sewer System. This refers to the regulated cities, meaning they don't run their sanitary and storm sewers together, flowing to the river untreated. Just the storm water is untreated.

As you may recall, our stream monitoring can become a part of a city's SWMP by listing our activities under Minimum Control Measure #2, Public Participation. Specifically, site #s 3-7 can be used in the SWMPs of Trotwood (3-6) and Clayton (7). Toot your horn, people!! Contact your City Council members and let them know what you're doing. That would dovetail very nicely with the idea mentioned previously, about educating local officials on Smart Growth initiatives.

Remember Best Management Practices? Well, it just so happens that the same ones we mentioned in the Wal-Mart article above can also be listed as part of the SWMPs of Trotwood and Clayton. Essentially, some Smart Growth methods can be used to satisfy EPA requirements for how cities can protect water quality. EPA details how these BMPs must be put into action: they must be identified, scheduled, and measured. Additionally, specific city officials are held accountable for coordinating the Best Management Practices with the Storm Water Management Plan.

The important thing to remember about Phase II regulations is that these cities have until 2008 to actually put their Storm Water Management Plans into action – after which they can theoretically be fined for non-compliance. Wolf Creek Watershed has been designated "Rapidly Developing", which means the jurisdictions therein have less time to implement their SWMPs.

But because of limited staff, EPA can't possibly enforce every SWMP. That's why public education/outreach and public participation/involvement (Minimum Control Measure #s 1 & 2) are integral to making this system work. We as concerned citizens, knowledgeable of the regulations to protect water quality, will be able to report possible violations of the Phase II Clean Water Act to EPA.

Since we're stream stewards, it's good to know how our local elected officials are playing an important and complimentary role to what our group is doing.

Training + Observation = Good Local Stewardship

Do you know what the most prevalent kind of water pollution is? I'll give you a hint: It's not trash, or toxic chemicals, just plain ole' dirt. Simply note the color of a stream's water after a lot of rain. There are three basic sources of sedimentation: construction, conventional farm tillage (on sloping ground), and stream bank erosion.

Hats off to Larry Bell and Jim Henderson. Both of them made note of construction in their neighborhoods without any apparent sediment and erosion control measures in place. Both sites are located near the banks of Wolf Creek.

Bringing this matter to the attention of city officials (which they did) serves several purposes. First of all, you can find out whether or not your local jurisdiction has any ordinances that require the use of sediment and erosion control measures on construction sites. If there are such ordinances, then a call from a concerned citizen puts pressure on city officials to enforce them. If there aren't any ordinances regarding sediment and erosion control, you can ask why not. This situation is actually referred to in the Phase II Minimum Control Measure #4, Construction Site Runoff Control.

Right now, there is a range of local ordinances throughout Montgomery County, some more stringent than others, regarding environmental protection from the impacts of development, both during and after construction. The Miami Valley Regional Planning Commission is working on a "Model Ordinance" that if adopted by all of the local governments, would provide some consistency in protecting our soils and waters county-wide.

In the meantime, without a local ordinance, it's difficult to hold accountable any contractor or city official for not protecting local waters from sedimentation resulting from construction site erosion. The two available options are to register a complaint with the EPA, or persuade the landowner to take the necessary measures. Working with the landowner directly is usually the best approach. Many people are simply unaware of the problems we're discussing here. Installation of silt fence isn't that expensive. Greene SWCD has a silt-fencing machine that can be borrowed free of charge.

Soil and Water Districts have never been in the business of enforcing regulations. Traditionally, we try to work with landowners - appropriately termed 'Cooperators' - to educate them to make good stewardship decisions. They can then use our technical services to achieve their conservation goals.

Getting The Word Out

You've heard of the sound bite, but how about the 'sign bite'. The challenge: How do you reach a large number of people with your conservation message? We have to think like marketers here – road signs! Granted, your message has to be short and to-the-point.

Imagine yourself flying down the road when suddenly your eye catches an attractively colored sign: it has a blue river and a wolf silhouette, emblazoned with the words "ENTERING WOLF CREEK WATERSHED" What the heck is a watershed? You ask yourself. Bingo. That's the reaction we're hoping for. We're slowly but surely getting permission to install the signs in road right-of-ways in the various jurisdictions whose parts comprise Wolf Creek Watershed.

After working out some insurance details with the City of Trotwood, we will have the go-ahead to install ten – count 'em – ten signs! I think we could make it a fun outing, maybe even have a cookout to wrap up the day? I'm thinking of some Saturday in late May or early June. It would be helpful if each of you would contact me with some dates around that time which will work for you, and then I can coordinate a date that will work for the most members of our group.

Wolf Creek Stream Team Getting Bigger

The weather on March 22nd wasn't good, but the turnout sure was! Although there were 23 registered, 35 showed up at Wegerzyn Garden Center on the banks of the Stillwater River, just off Siebenthaler Avenue. The food was excellent (breakfast and lunch!), courtesy of Five Rivers Metroparks, and Sarah Hippensteel of the Miami Conservancy was her usual witty self, keeping us all on the learning curve.

Mike Enright, wildlife biologist with the Metroparks, did a fish-shocking demonstration in the afternoon, and we practiced some identification skills. The water was too cold and fast to sample for macroinvertebrates.

Although many of the participants were there to join the Five Rivers Metroparks teams, we did pick up eight possible new members, four of which have contacted me. I would like to welcome to our team the following new members: Joshua Roark, Wendy Boucuvaes, Steve Krieg, and Rich Barksdale. I look forward to working with all of you during this monitoring season.

Primary Headwater Stream Workshop - "Going Back to the Source"

By Steve Krieg

On April 1, 2003, the Ohio EPA held the first of a series of workshops on the assessment and management of primary headwater streams in Ohio. The first-ever

session was held at Germantown MetroPark, and was very well attended. Wolf Creek Stream Team members there included Judy Royer, Chris Royer, Anne Royer, and myself. Other area watershed volunteers were there, too, as well as a number of government officials.

Although I wasn't sure just what this workshop was about beforehand, I attended in hopes that it would add to my overall watershed knowledge. I came away with much more than that. This is new and exciting stuff that has serious grass roots usefulness.

The purpose of the workshop was to allow interested people, especially SWCD's and watershed groups, to learn about Ohio EPA's recently concluded two-year study of the biological and physical features of primary headwater streams. While most of the information was delivered indoors using slide shows, we also went to two example stream sites in the park that the biologists had assessed. This brought the concept and methodology to life in a way that I otherwise could not have appreciated. I will do my best here to give you the lowdown in layperson's terms, illustrated with some photos that I took both during and after the session.

Simply put, primary headwaters are those little streams that form the bigger ones like Wolf Creek. Although they can have small fish numbers, they are generally smaller than what we think of as fishing streams. They are the sources of the fishing streams, and so are the ones that drain your local area, your neighborhood, your back yard, even. Their importance is all too easy to overlook, as in: "don't worry about that little stream; it's too small to matter". On the other hand, they are the perfect place to "act local". You can have an impact here that you can see, watch, and learn about as you go.

So which drainages are we talking about here? They are streams which at normal flow have pools less than waist deep; less than knee deep, mostly. Only about one square mile or less in drainage area. They can be from, say, 10-15 feet wide at normal flow, down to only a foot wide. Note that they are not the temporary runoff places in farm fields, etc. after a good rain. We're talking about something with a defined bed and bank here. Bigger than field swales but smaller than Wolf Creek gives you a good picture. If you follow Wolf Creek and its branches way up to their upper reaches, you will be into their primary headwater watersheds.

What Ohio EPA has been working on is a "rapid survey" method to take some relatively quick measurements at any point on a stream and document it as being Class III (the biggest and most important), Class II, or Class I Primary Headwater Streams. Unlike our lower-down stream quality monitoring, the primary headwaters survey takes only about 15-20 minutes at each spot, measuring and sampling only physical and biological (aquatic "bugs") stuff. No water sampling here.

It's meant to be used as an upper watershed inventory method. For instance, find the areas that have the most potential for impact, such as undeveloped land, and document which primary headwater drainages are Class III, which are the most important ones. Once you have a drainage documented, you have solid information that you can do something with.

After we had been shown real examples of Class III and Class II streams (lower and upper Fossil Creek, in the park), local officials from two Ohio SWCD's told us how they

had taken this information and run with it. This was the icing on the workshop cake: real grassroots experiences.

In the first instance, a SWCD in Lake County, on the shore of Lake Erie east of Cleveland, is seeing their rural land gobbled up by high-priced subdivisions (sound familiar?). They worked with the county officials, surveyed the headwaters streams, and only a year later their hard work and public outreach has resulted in having the developers coming to them...before they plan the development. Why? Because the SWCD can now show them where the Class III streams are, so they can stay far enough away from them, and also help them plan the lots around the Class II and Class I streams in ways that not only protect the streams, but also the homeowners' property values. Smart.

In the other instance, the Sugar Creek watershed in rural northeastern Ohio, has had the dubious honor of having the second most impacted water quality in the state. This kind of steamed the farmers there (country living is supposed to be clean living, right?), who seemed to have no real idea of how much their livestock poop was fouling up the area. They suspected that the federal EPA's water quality data was wrong. You know: big government trying to force farmers out of business. So they asked their SWCD to do stream sampling at about 20 sites, twice a week. The SWCD said, well, (gulp) that's an awful lot of sampling for us to do every two weeks, but if you want it you got it. And they did.

It turned out the EPA's data was correct, but the real story is that each farmer became really interested in what their own impact was, and how to turn it around. When the most conservative and influential farmer in the county was the first to plant grass buffer strips along his streams, it indicated just how effective knowledge, communication, and caring can be.

As I was writing this article on Easter Sunday evening, the first thunderstorms in a long while passed through. How nice to have rain again. This spring hasn't been too dry yet, but on the other hand it seems to have been flirting with slipping back into the drought of last year. Anyway, on the trailing edge of the storms was an incredible double rainbow that lasted over twenty minutes. I ran out into the meadow with my camera, in shorts and bare feet. Even with my wide angle lens I could only get about a third of the rainbow in the photo. The evening sun was low and golden, the far field freshly cultivated and planted, spiffed up in its spring finery, so to speak. Soil and rain and sky. Sweet.

Since the Headwaters workshop, I've not been able to drive to and from work, shopping, etc. without looking at each little stream and drainage I pass by in a new way. Now I find myself thinking, "...probably a Class II, but could be a Class III. I wonder what I would find if I rooted around in there with a dip net..."

More information on the Primary Headwaters program is available at Ohio EPA's website at:

www.web.epa.state.oh.us/dsw/wqs/headwaters