

Wolf Creek

Stream Team

"Occasional" Newsletter ☺

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*From the office of Montgomery Soil & Water Conservation District
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Our Very Own Web Site!

As always, it's a work in progress, but the Wolf Creek Stream Team now has a (fledgling) web site. Currently, four linked pages are complete: a Home page, "About Us", "Events", and "Newsletters". You can get there from the Montgomery Soil & Water Conservation District web site home page, www.montgomeryswcd.org. There's an icon on the left menu bar that says "Wolf Creek Stream Monitor", which takes you to the Stream Team Home Page.

The About Us page uses some pictures from last year's training at Madison Park to describe the physical/biological/chemical tests, and gives a little bio of our group at the bottom of the page. I'll use the Events page to feature whatever recent activity we're involved in. Right now there's pictures and info from our storm drain marker project with the Boy Scouts in Brookville, taken July 1st. The Newsletter page has back issues from

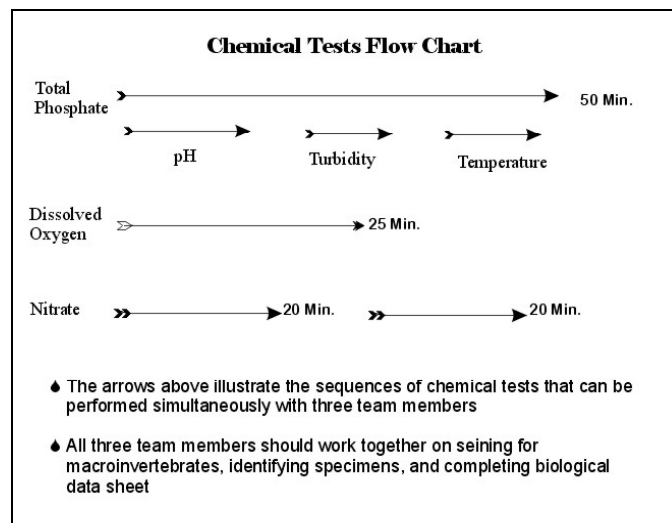
the beginning (first issue was November '02). There have been five issues this year. You need the program Adobe Acrobat to read these. If your computer has this program, it will start automatically when you click on the newsletter link. If not, there's a link on the home page to download/install Adobe Acrobat from the internet. Larry Bell did a wonderful job designing the Stream Team home page. There's an excellent overview of our program, a group picture, watershed map, and a great quote from Margaret Mead. Steve Krieg has been working quietly behind the scenes to enhance my Webmaster abilities, and I really appreciate that he shares his expertise on behalf of the Wolf Creek Stream Team. In the near future, I'll be expanding this web site to include links to water quality information, and related environmental service organizations.

Members Show Dedication at Practice Sessions

I am so very proud of our volunteer group; we have completed two sessions in June and are heading for the second one in July. Two more are scheduled in August (8th & 16th). Attendance has been good; the following team members have participated at one or more sessions: Trish Brechlin, Nancy Powers, Nancy Bain, Jim Henderson, Deb Hull, Rachel Weiland-Burch, Larry Bell, Margaret Flinn, Mary Ann Moore, Rich Barksdale. Folks have been learning a lot and getting more confident in their chemistry skills – it's just like cooking, you know. Simply follow the recipe! We've made progress in our efficiency, completing each of the three main chemical tests (Phosphate, D.O., Nitrate) in 1 ½ hours.

At this point, the best approach seems to be doing one trial for each test, unless the results aren't in the typical range for that test. If the results of two trials are really different, then a third trial would be warranted. However, for nitrate, it's probably a good idea to do two trials. This is because Nitrate has several gaseous and aquatic forms, and can apparently convert easily between them.

Here's the flow chart that will be laminated and included in each kit for reference:



Green Light from Trotwood For Installation of 10 Watershed Signs

This has been a long time coming gang! After taking care of the liability issues, Trotwood officials (Thanks Tom!) have given permission to install our road signs near the following intersections:

- Shiloh Springs Rd. west of Basore
- Turner Rd. west of Wolf
- Denlinger Rd. south of Westbrook
- Miller Rd. north of West Third
- Rt. 49 north of West Third
- Olive Rd. across from Madison Lakes Park
- Snyder Rd. south of Post Town
- Old Dayton Rd. west of Union
- Little Richmond Rd. west of Union
- Fruedenberger Rd. near Midwood Ave.

I am hoping a majority of Stream Team members can get together and have a sign installation party (refreshments provided!). How about August 22nd or 23rd? That's a Friday or a Saturday. I know both of those dates won't work for everyone, but maybe we can get a majority participation for one or the other. Please let me know which date works for you, and we'll go with the one that gets the most participation. Please RSVP by August 7th.

Dayton Daily News Features Inaugural Storm Drain Marker Outing

For those of you who may not know it, our watershed project efforts actually had their start in 1999, with a grant from the Ohio Partnership for Urban Streams (OPUS), on behalf of the program called Non-Point Source Pollution Education for Municipal Officials (NEMO) – acronyms. You gotta love em. Anyway, some of the grant monies were spent to purchase about a thousand storm drain markers and fifty watershed signs.

We've made a dent in the storm drain marker supply, by installing twenty five of them on catch basins at strategic locations around Brookville. They're heavy duty plastic decals that look like this:



That July 1st outing with Mary Ann Moore's Scout Troop was accompanied by Dayton Daily News reporter Mike Garrity, and resulted in a very nice write up in the (Northwest) Neighbors section of the paper that was published on July 10th. I've since been contacted by the Townview Community Development Corporation (Trotwood) and a Scout leader about service opportunities for their youth in regard to applying storm drain markers. Any of you who know of similar groups (in our watershed) that might be interested, have them contact me.

Stream Team Submits Public Comment to EPA on Proposed WalMart

Most of you already know about this, specifically the eleven who were able to make it into the office on a very short notice to read and sign the letter describing our official position on this issue. On behalf of Wendy Boucuvaes (whose house is adjacent to the proposed project) and myself, Thank You Thank You Thank You for taking the time out of your busy schedules to make your voice heard. It was nice to visit with each of you personally.

My apologies for the very short notice. In the process of assisting Wendy with some requests for information and resources, it occurred to me that the Stream Team should state an official position for two reasons. 1) This is a land use issue; as watershed stewards, we all know that land use affects water quality. And 2) It's important for an environmental stewardship group like ours to be involved in the local decision-making processes that impact our natural resources.

Strategic Planning for Wolf Creek Stream Team

The Stream Team Planning Committee consists of representatives from OSU Extension, City of Dayton, City of Trotwood, Miami Conservancy, and the Soil and Water District. At our last meeting in January, the consensus was that we didn't want to move ahead on any sort of formal planning until spring and summer activities could substantiate significant involvement of our volunteers.

In the past six months, we have had two tours (Brookville Wastewater Treatment and Martin-Marietta); a macroinvertebrate workshop; team member attendance at other workshops (Headwaters and Grant Writing Seminars); four practice sessions have been well-attended and two more are planned this summer. The Stream Team web site has emerged with Steve and Larry's help. The solidarity demonstrated in the letter signing against the Super Wal-Mart is further evidence that our group seems ready to take a step toward some organizational work that will enhance our potential to be even better stewards of the Wolf Creek Watershed.

Steve Krieg has suggested and I agree that we need a vision, long and short term goals, and a long range plan for identifying, building relationships with, and securing grant

funding in order to meet whatever goals we decide on. I'm going to make a stab at setting a September date for this, knowing not everyone will be able to attend. At a minimum, we want planning committee members and volunteers well-represented. Again, we'll try a weekday and a Saturday and see what happens. Friday September 12th, or Saturday September 13th. Please RSVP by August 15th with whatever date(S) work for you.

Stream Monitoring FAQs (and other interesting tidbits)

Here's the latest slate of observations, questions, and comments generated from the last couple of outings with team members. I also went to site #s 1 and 2 with Summer Interns working for the City of Dayton. They use electrochemical meters from Hach Company, instead of the chemistry methods we use. Interestingly, we didn't get the same results for the same tests- read on:

1. The interns don't test for total phosphate, just orthophosphate. As you may recall, orthophosphate is some fraction of total phosphate, the part that aquatic plants can absorb. The rest is bound up with suspended solids in the water. Anyway, The interns electrochemical meter measured an orthophosphate value of 0.37 mg/l and our method generated a total phosphate value of 0.06 mg/l. A couple of possible explanations include the following: the electrochemical meter might not have been calibrated correctly, or the glassware they used may have had phosphorus containing residue left from a certain brand of lab glassware detergent.

2. Here's a couple of options to consider that might help us ensure the validity of our tests:

- Standard concentration solutions are available for the nitrate and total phosphate tests; using a known concentration will help us check the accuracy of our methods.
- As a matter of course, the readings from actual tests may be off by plus or minus ten percent. This is because different people interpret colors (on color comparator) differently – as we suspected.
- pH readings less than 6 or greater than 8 will interfere with color development in the phosphate and nitrate tests.

3. The nitrate test at sites 1 and 3 both yielded a yellow-orange color, which made it impossible to compare to the color wheel, which is various shades of red. According to the tech service at Hach Co., there are several possible explanations for this.

- a) Very high nitrate, beyond the range of the test in the kit (0-10 mg./l)
- b) Greater than 100 mg/l of chloride or calcium
- c) High levels of iron
- d) Any number of other pollutants.
- e) a pH greater than 8

4. We have been getting some very high dissolved oxygen readings. The sodium thiosulfate solution that we titrate with, might be the cause if it's near or past the end of its shelf life. I will be checking the Hach web site for information based on the lot #, since the date isn't stamped on the container.

.5 In general, there's no difference between the deionized water provided by Hach, and distilled water that can be bought retail. So washing glassware with it is ok, but we probably want to use the deionized water to replenish the volume of the boiling total phosphate sample, as it is laboratory grade, guaranteed not to have chlorides.

6. There was mention of washing glassware with acid, but we didn't know what kind. Hach says 6 N (reference to concentration) hydrochloric acid is safe for plastic test tubes and other glassware. Also, they don't sell disposable tubes for this test kit.

Until Next Time,

Be well, do good work, and keep in touch

Caroline