

South Branch Miller's Run Stream Investigation (Wednesday, June 21, 2006)

(Stream Watch Committee Team: Kit Valentine, Steve Schreiner & Bob Garner-photos later taken on 7.3.06 by Betsy McMillion)

On Wednesday, June 21, 2006, the FPVHG stream team made a recon of the Miller Run stream. We began this recon at the parking lot behind the Petsmart/Office Depot Shopping Center. This stream drains from this area of Catonsville into the Patapsco River, essentially running parallel to Route 40 from Rolling Road to the Patapsco River, emptying just downstream of the Route 40 bridge. We were all surprised by the accessibility to most of the stream, which is in a relatively open flood plain. There are numerous trails and abandoned dirt roads in the area helping to make walking along extensive stretches of the stream bank easier. The stream banks are steep in two areas: behind the Antwerpen car dealership and along Route 40 where the stream runs down into the Patapsco River. There is considerable trash that has accumulated off of the Route 40 corridor, which has made its way into intermittent tributaries leading into Miller's Run. Unfortunately, the high speeds along Route 40 make this a dangerous area for stream cleanup volunteers. In the attached map, we have marked site locations for your information. Overall, we believe that Miller Run is in pretty good shape, however, our team noted that there were no common minnows visible, which are usually common for this type of stream and there needs to be storm water controls on the parking lot areas mentioned below.

We divided the stream bank sections that were observed into four areas: (A) behind the Petsmart/Office Depot Shopping Center, (B) the Nuwood Road stream crossing, (C) Nuwood Road Pond on GFBNSC property, and (D) Bedding Barn/Sweetwater Pool & Spa Center. Specific observations and recommendations for improvement are below.

(A) Behind the PetsMart/Office Depot Shopping Center. (ADC Map 40 K1)

We discovered a large amount of down-cutting in this part of the stream. There was approximately 6 feet of active erosion down into the stream bed, particularly on the outside bends (especially near the shopping center parking lots). The most visible bulk items of trash were several abandoned tires and shopping carts in this area; however, removal of the embedded tires would require some digging. We observed many crayfish in the stream but no fish. On the stream bank side opposite from the shopping center there are some homes that are cutting the grass too close to the stream edge. There is generally 50 -100 feet of stream buffer on both sides of the stream in this area, until the Woodlawn Motor Coach, Inc. Company and an auto repair facility, which both come right up to the stream edge. There is some debris to be cleaned up, particularly just upstream of Woodlawn Motor Coach, Inc. (school bus depot). There is a fence across the stream at Woodlawn Motor Coach, which prevents access through that area unless it could be gained through their parking lot. There is plenty of space behind the PetsMart/Office Depot Shopping Center for parking and to place debris for pickup.

Recommendations:

- 1. Baltimore County DEPRM to investigate the parking lot and roof storm water runoff of this area. Also, investigate the possibility of installation of storm water retrofits to mitigate parking lot runoff and roof drain runoff (i.e., storm water management pond or other facility). Note: it appears to be all private land in this area.**
- 2. FPVHG to educate residents in the nearby community on providing a vegetation buffer close to the stream edge, rather than cutting grass to the edge**
- 3. FPVHG to schedule a clean up upstream of the Woodlawn Motor Coach bus depot.**
- 4. FPVHG to schedule a clean up to remove embedded tires and shopping carts.**

(B) Nuwood Road Stream Crossing. (ADC Map 32 K13 & ADC Map 40 J1 K1)

Located behind the shopping center parking lots, there are 2 culverts (approximately 5 foot diameter) just downstream of the auto repair and Woodlawn Motor Coach, with some blockage due to logs and other debris, which may cause future road flooding. Further downstream at approximately 100 yards is the old Save-Our-Streams monitoring site (one of our members, Steve Schreiner, sampled the stream from approximately 1999-2001). There is significant debris in this area, including shopping carts, tires and other trash (which could be removed to the road edge for pickup). The stream buffer is good along most of the stream from here downstream, except for the steep areas behind the Antwerpen car dealer and other commercial facilities.

The westernmost road shown on the map leading back to Miller's Run off Route 40 East has been fenced off. This road evidently went back into the Baltimore City George F. Bragg Nature Study Center (GFBNSC -- the old Bragg Farm). This center can only be accessed from the more eastern road that serves GFBNSC and Woodlawn Motor Coach. We spoke with the GFBNSC caretaker who is willing to work with us to allow access for clean ups. GFBNSC owns a lot of the property in this area downstream of Nuwood Rd, on the river-left side of the stream. (This ownership may continue most of the way until the Patapsco State Park boundary). There is an old trailer with old salt bags in it in this area, which should be removed if there is a way to get this out and disposed.

Recommendations:

- 1. Baltimore County DEPRM to remove logs and other debris to prevent future road flooding.**
- 2. Baltimore County DEPRM to remove old salt bags.**
- 3. FPVHG to schedule a cleanup for removal of tires, shopping carts and other trash.**

(C) Nuwood Road Pond on GFBNSC property. (ADC Map 32 K13)

Further downstream is a concrete pave-over in the stream, probably covering a sewer line, in the vicinity of an old pond on GFBNSC property. There is a small stream of water entering Miller Run at this location. Since it has been relatively dry here, we would not expect to see surface runoff.

Recommendations:

- 1. Baltimore County DEPRM to check for possible septic or sewage leakage.**

(D) Bedding Barn/Sweetwater Pool & Spa Center (ADC Map 32 J13)

There is a stream junction, just downstream of the Bedding Barn. There is a blocked culvert under an old roadbed running behind the Bedding Barn and the Sweetwater Pool and Spa Center.

Just a little further downstream of this area is a sanitary sewer manhole in Miller Run with a possible sewage leak. Just downstream of the manhole area is what we believe appears to be iron bacteria flocculent. Approximately 100 yards downstream there is relatively new rip-rap construction, which partially covers a sewer line next to the stream channel, with some sewer brickwork laying in the stream. We presume this was work done by the County. There is also an 18" outfall behind the last building on Route 40 East in this area, with a number of tires and other debris on the hillside in this area. This

would be difficult to remove but may be possible if access can be gained from above and tires pulled out by ropes.

Behind the Antwerpen car dealership dirt was pushed toward the stream (we believe this was a result of the creation of their parking lot).

Recommendations:

- 1. Baltimore County DEPRM to unblock culvert under roadbed.**
- 2. Baltimore County DEPRM to check for sewage leak downstream for possible iron bacteria flocculent.**
- 3. Baltimore County DEPRM to confirm rip-rap construction and brickwork as part of a county project to cover the sewer line in the stream channel.**
- 4. FPVHG to schedule a clean up to remove tires and other debris.**

Miller Run continues on for some distance until it goes under Route 40 East close to the Patapsco River, near a sign on the right side of the highway (toward Catonsville), which reads "Trucks Use Right Lane." A cleanup sponsored by the Friends of the Patapsco Valley & Heritage Greenway was conducted on Friday, August 4, 2006 as a direct result of our inspection, which cleaned up the tunnel under Rt. 40 for trash of various kinds (plastic bags, bottles).

However, there are still several tires, 1-2 old structures, abandoned metal farm implements, steel drums and a plastic drum, which need to be removed. A significant effort will be required to remove these heavy and embedded items from the watershed.

(more information on South Branch on next page)

North Branch Miller's Run Stream Investigation (Different days during June 2006)

(Stream Watch Committee Team: Kit Valentine & Jim Apgar)

A significant amount of the North Branch of Miller's Run Stream is located in Patapsco State Park's Hollifield Section, located off Route 40. The north branch's headwaters are in the vicinity of Oak Shadows Court (ADC Map 32 J-12). There is a rather large storm water detention pond downstream from this residential neighborhood with four large culverts. All the culverts are clear. From the detention pond downstream is a small pristine stream with numerous large rocks/boulders. The best way to get downstream is by walking in the stream because of heavy forest on both sides of the stream. The North Branch joins the South Branch within 25 yards of where the South Branch crosses under Route 40 in a tunnel. Both streams then cross back under Route 40 in another tunnel before emptying into the Patapsco River. The tunnels are within approximately 50 yards of each other, and both are free of any debris. The North Branch has less water volume than the south branch and seems to have less aquatic life as well.

Recommendations:

FPVHG to schedule a cleanup to remove trash.