

Cooper's Branch Sub-Watershed Investigation (Saturday, February 28, 2009)

(Participating Stream Watch Committee Team members: Steve Schreiner, Teddy Betts, Cam MacLachlan, Tom Schueler and Betsy McMillion).

On Saturday, February 28, 2009, FPVHG stream team members conducted a reconnaissance of Cooper's Branch, which runs through Oella and Catonsville, Maryland. In addition to the FPVHG stream members, 3 stream watchers who regularly monitor and clean up sections of Cooper's Branch met with Betsy McMillion on Friday, February 27, showing some key areas that required immediate action. These three individuals have signed up as stream watchers for different sections of the area of stream that we have investigated, and all have participated in past stream cleanups in the Oella/Catonsville areas.

Sections of Cooper's Branch run parallel to the Number 9 Trolley Trail, converted from the old Trolley tracks into a paved trail, mostly within the Baltimore County-owned Benjamin Bennekar Park. This is a popular trail used by local residents for walking, hiking and biking. It runs from the end of Edmondson Avenue through the town of Oella (a historic mill town near the Patapsco River) to the historic district of Ellicott City. For history of this area, visit the website at <http://www.oellacompany.com/history.html>. Public water and sewer services were not installed in this area until 1984. There are little if any storm water management structures in place to control storm water runoff.

In a previous meeting, JP directed Betsy McMillion to an area just off the Trolley Trail near Westchester Community Center, which has two areas in a smaller connecting stream where there are several large junk items that need to be moved away from the stream banks (2513 Westchester Avenue). After consultation with the joint owner, he would not allow us to remove the large amount of junk that has accumulated near the stream. We were, however, able to conduct a cleanup along a nearby section of the stream with the assistance of Baltimore County public school students and teachers on March 18, removing an estimated 500 pounds of trash and junk from the stream and stream banks. (ADC Map 40 G-3)

Our recon began at the entrance of the Trolley Trail Number 9, which is located at the dead end of Edmondson Avenue and Chalfonte Drive (ADC Map 40 J-2). The headwaters begin at outfalls along Chalfonte Drive and Edmondson Avenue. There are two streams that come together to form one stream near the entrance of the Number 9 Trolley Trail. Ground water flow is evident from both outfalls. This particular area along Cooper's Branch has been a targeted area for cleanups during Project Clean Stream for the past 4 years. Currently, there is some evidence of "floatables" – which have appeared as a result of litter and other trash being washed down nearby storm drains from this neighborhood. There is also evidence of dog feces left along the trail and near the water from owners not picking up after their dogs, a reoccurring problem in many trails throughout the Patapsco Valley. (ADC Map 40 J-2)

Tall Pines Court (ADC Map 40 H-2) and the Westchester Woods community (ADC 40 F-3) are the only places that we have observed that have storm water management ponds along Cooper's Branch, due to the requirements of new housing developments. In addition, there is one storm water pond upstream of the Coopers Run outfall, at the Catonsville Middle School. (ADC Map 40 J-3)

Observations include a very eroded outfall out in the stream as a result of a washed out stream bank, with erosion approximately 2 feet in height. There is high-energy flow due to the stream bank slope, which is creating deeper pools because the banks are eroding, trying to adjust to high flows (the stream is receiving more flow than in its original state so it has to adjust).

The predominant invasive species in this area include multi-flora rose, bittersweet and Japanese honeysuckle.

We observed two sewers exposed in the streambed.

We also discovered remnants of the old Trolley Bridge. This photo and other photos to document this recon can be viewed at <http://patapscofriend.myphotoalbum.com>, under the album titled "2.29.09 Cooper's Branch Recon with PHG Stream Team."

The business adjacent to a section of stream flowing into Cooper's Branch may be a potential source of pollution with manure spills (odors have been observed on summer days by one of our stream team members).

The property located at 411 Oella Avenue has been a constant problem for approximately 26 years. A condemned, abandoned house is located along this property and is a hangout for the homeless during mild weather months. A large amount of construction debris has been dumped on this property along the stream banks and some have been placed in the stream. In addition, a large amount of trash and debris is located on this property, along with a tent. There are no indoor plumbing facilities, and as a result, a strong smell of urine is obvious along this entire area. This particular area has been reported to county officials many times as a potential health hazard, problem along the stream due to the large

quantity of trash, which eventually flows into the stream. Local residents continually clean up this area, but have not been able to stop the pollution. (ADC Map 40 H-3)

In a section of Cooper's Branch, a new diversion stream has been created as a result of a significant debris jam (full of large fallen trees). A large Trolley Line bridge acts as a grade control at the upstream location, with subsequent large downstream erosion.

An area that requires immediate action is where a sewer line is crossing the stream and Gabian baskets holding it in place are deteriorating. Downstream of this crossing is an improperly installed outfall from the storm water management pond in the Westchester Woods Community, which has been repeatedly reported to county officials by residents with no action. It has resulted in severe bank erosion at the outfall. (ADC Map 40 F-3).

Another area that requires immediate attention is where the sewer line structure is getting ready to fall into the stream. Access to this structure can be obtained by walking the Trolley Trail #9 trail. The GPS coordinates to locate this structure are at 39.16.6.7 and 76.46.54.3. The closest residence to this location is across the stream at Benway Court. There is also iron-colored seepage observed near the structure. (ADC Map 40 G-4)

Hillside damage has also been observed as a result of deer and ATV usage. Homeless persons are known to inhabit the hillside near the Westchester Avenue bridge and near the power lines.

Along the trolley trail upstream of the power line crossing, there is a wooden structure that appears to have been built to help retain the sloping wall near the stream, however, it is currently damaged and needs repairing.

Log jams along Cooper's Branch are causing severe erosion along the stream.

On a positive note, the stream team uncovered a polypodium, known as *Polypodium virginianum* or Common Polypody in which a patch of this vegetation was found growing along the rock hillside just at the conclusion of our recon, near the junction of Coopers Branch with the Patapsco River just upstream of the Frederick Rd. culvert.

Recommendations

Baltimore County

- Rectify downed trees along Cooper's Branch causing severe erosion downstream.
- Restoration of a retaining wall off path to prevent further erosion, upstream of power line.
- Health department to condemn and remove trash from 411 Oella Avenue.
- Repair sewer line crossing Cooper's Branch in Westchester Woods where Gabian baskets are failing.
- Repair improperly installed storm water management pond outfall from Westchester Woods (Benjamin Way), causing severe bank erosion
- Investigate sewer manhole access within stream channel and likely to fail with further erosion

FPVHG

- Schedule group cleanups in the stream section near 411 Oella Avenue and other areas requiring cleanup.
- Work with GOCA president for other key trash/junk areas to schedule group cleanups; obtain permission for cleanup on condemned property
- Work with current stream watchers to remove floatable trash from stream near Edmondson Avenue.
- Educate residents in the Oella community about the use of rain gardens and/or rain barrels