Cobbs Creek: Cleaning Up and Improving the Cobbs

By

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Cobbs Creek is the focus of many programs that monitor and plan to improve its water and habitat quality. Some improvements that would improve the Creek include: stabilizing eroding stream banks to decrease erosion/sediment, constructing wetlands and larger scale stormwater control measures where there is space, and encouraging citizens to install rain gardens and rain barrels. Stabilized banks can then be planted with trees and other riparian vegetation and with more normalized channel flows the natural meanders can be put back into the straightened/channelized reaches. Very important to this focus are the programs (see below) that have been developed to educate municipal officials, students, and residents about better management of their stormwater.

The Delaware River Watersheds Initiative (DRWI) funded by the William Penn Foundation (WPF), has provided funds to monitor Cobbs Creek, as a sub watershed section of the Upstream Suburban Philadelphia Cluster. Lower Merion Conservancy (LMC) has partnered with Darby Creek Valley Association (DCVA), Eastern Delaware County Storm Water Collaborative (EDCSC), Villanova and St Joseph's Universities, and Friends Central School to monitor Cobbs Creek upstream from Philadelphia. The Partners, together monitor 11 sites along main stem Cobbs Creek, Naylor's Run, and the east and west branches of Indian Creek. The monitoring of stream/habitat health are to monitor for improvements tied to the implementation of on-the-ground projects that facilitate working towards achieving the above stated goals.

Monitoring: DCVA volunteers led by Derron LaBrake collect macroinvertebrates annually and measure pH, dissolved oxygen, conductivity, salinity, total dissolved solids, temperature and turbidity) quarterly at sites in Naylor's Run at Naylor's Run Park, Bailey Park, and Llanerch Country Club; and at sites in Cobbs Creek at Township Line (Rte #1), Hathaway Lane and McCalls Golf Center. Volunteers from LMC and DCVA use HACH and LaMotte test kits measure water quality (dissolved oxygen, chloride, pH, nitrate, phosphate, alkalinity and temperature) monthly at about 10 of the 11 sites. Please contact Derron LaBrake at dlabrake@wetlansandecology.com or Kate Goddard Doms at kgoddard@ursinus.edu if you would like to participate in this scientific monitoring work.

Macroinvertebrates collected in 2014 and 2015 are in process of being sorted, counted and identified. The 2016 sampling is scheduled for March 5/6, 2016. Monitoring results will provide baseline and ongoing data that measures the health of Cobbs Creek and will provide the very important "before" water quality data to which water quality data after projects are completed can be compared.

Restoration and Educational Activities:

• LMC has been awarded a WPF/NFWF grant for monitoring work and two projects on the east branch of Indian Creek in Narbrook Park. Riparian restoration using coir blankets and logs, live stakes, boulders, riparian buffer plantings, trees and ground cover will be used to stabilize eroding stream banks, reduce erosion/sediment/stormwater run off (www.lmconservancy.org).

- Diana Andrejczak from the Pennsylvania Resources Council (PRC) and Eastern Delaware County Stormwater Collaborative (EDCSC) Coordinator Jamie Anderson have been busy in the Cobbs watershed (The Valley, Summer,2015). They conducted hands on workshops for all the 7th graders in the Upper Darby School district and all 9th graders in the William Penn School district. Students learned the sources and effects of stormwater runoff. They collected and identified macroinvertebrates and measured water chemistries for Naylor's Run at Drexel Gardens Park and Naylor's Run Park; and for Ridley Creek (a cleaner stream for comparison) at Ridley Creek State Park".
- Jamie, Diana and Kate Goddard (from DCVA) ran several macroinvertebrate identification workshops for Upper Darby High School Environmental Club members and environmental science students.

PPRC and EDCSC Implemented and conducted Back Yard Buffer and Rain Barrel Workshops throughout the Darby-Cobbs Watersheds.

PRC and EDSC implemented the construction of demonstration rain gardens in public places in Haverford, Yeadon, Sharon Hill.

Haverford EAC rain garden task force with PRC and EDCSC have created a frame work for the construction of rain gardens on residents' properties. Seven rain gardens were completed in Spring, 2015 with a goal of 100 over 10 years (*The Valley*, Summer,2015). It is estimated that about 50% of these will be in the Cobbs Creek Watershed.

- In Fall, 2014 about 230 large trees and small shrubs were planted in the Naylor's Run flood plain in Drexel Gardens Park.
- And of course-there is THE DARBYCREEK/COBBS CREEK WATERSHED WIDE CLEAN-UP!!

With all of this attention one would think that the Cobbs must be pristine. But, alas, not quite yet! In "The Valley", Spring 2015, Kate Goddard reported that water quality scores determined by the PA DEP based on macroinvertebrates were 11-28 out of 100 in the middle and lower Cobbs and results from all testing sites showed the Cobbs to be moderately or severely impaired (See the PA DEP report entitled: Aquatic Life Use Assessments in Pennsylvania's Southeast Region.pdf on the DCVA homepage by clicking on Educational Resources and Other Documents at www.dcva.org).

In 2012 the US Army Corp of Engineers prioritized the following sites at highest or high risk for flooding and low water quality: the Cobbs in Montgomery County, Haverford and East Lansdowne; the east branch of Indian Creek in Narberth; and the west branch of Indian Creek.

Do not despair. In 2014 the Philadelphia Water Department Scientists noticed a :slight up-tick" in finger net spinning caddisfly larvae from the 2000 levels in various watersheds. Unfortunately they also speculated that this increase could just be a return to normal after the intense storms of 2004 and 2005. (www.philllywatersheds.org). SO KEEP WORKING!!!