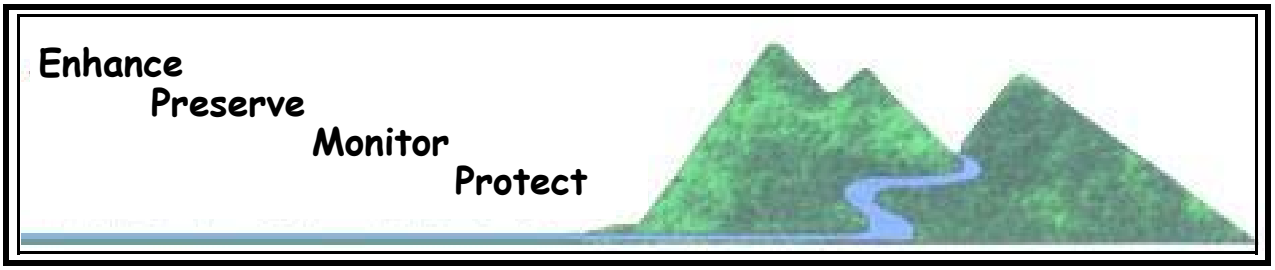
Kettle Creek Watershed Association News



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$100,000 Awarded by National Fish & Wildlife Foundation

Trout Unlimited and the KCWA were awarded a $100,000 Community Legacy Grant for the *Kettle Creek Watershed Restoration Program: Phase III* through the National Fish and Wildlife Foundation (NFWF) Chesapeake Bay Small Watersheds Grant Program. The deliverables for this grant award include the following:

1) Watershed Planning – At the present time, three separate plans or reports exist (Lower Kettle Creek AMD Restoration Plan, Upper Kettle Creek Fish Habitat Conservation Plan, Kettle Creek Watershed Stewardship Report). The goal is to condense and combine these reports to one useful document to effectively guide and promote future conservation and restoration efforts throughout the Kettle Creek watershed. This also includes a separate report that will take a look at the ongoing AMD remediation activities beyond Kettle Creek in the larger West Branch of the Susquehanna River watershed and explore possible opportunities to expand the Kettle Creek AMD program into neighboring watersheds of the West Branch.

2) Lower Kettle Creek Airborne Remote Sensing Study– A public presentation will be coordinated to discuss the results of this exciting study, the Department of Energy National Energy Technology Lab will provide training on the use of this technology to the TU/KCWA watershed director, and a fact sheet will be written and distributed.

3) Lower Kettle Creek AMD Project Coordination and Monitoring – This deliverable includes all project coordination and monitoring for the Middle Branch passive treatment system, Robbins Hollow treatment systems, Twomile Run surface reclamation, and West-side Kettle Creek AMD. A final report will summarize the condition of the lower watershed as a result of these AMD remediation projects.

4) Channel and Fish Habitat Restoration Project– This deliverable supports the planning, coordination, and oversight for the Cross Fork natural stream channel restoration project which

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Growing Greener Awards $25,235 for Middle Branch

Beginning in November 2000, the Middle Branch passive treatment system has been treating mine drainage from an abandoned deep mine, a poorly reclaimed surface mine and clay mine that impacts the Middle Branch, a major tributary to Twomile Run. Until recently the passive treatment system has been quite effective in treating the AMD and the water quality in Middle Branch has shown marked improvement. However, water sample data reflects a decreasing trend in the efficiency of the two vertical flow ponds to produce net alkalinity and reduce metal concentrations of aluminum and iron.

Since adequate treatment is not occurring in these vertical flow ponds (the first step to a series of treatments in this system) it is only a matter of time before the entire treatment system is completely overwhelmed and ceases to provide any improvement to the water quality.

This Growing Greener award will fund the operational improvements such as the replacement or addition of limestone and compost, and addition of baffles in the limestone treatment beds. This spring, an “autopsy” will be performed on the vertical flow ponds and limestone treatment beds to see what is happening beneath the surface. The specific actions to be taken to return the system to its optimal performance will depend upon what is observed and learned from the “autopsy”.

Twomile Run Surface Reclamation is Underway

Earthmoving activities finally began in late September for the Twomile Run surface reclamation project. Funded by the Growing Greener Grants Program and the Office of Surface Mining Appalachian Clean Streams Initiative, this project will reclaim 57 acres of abandoned surface mine lands that contribute the first major AMD pollution to Twomile Run. The total cost for the project is $626,712.

This surface reclamation project will be accomplished in 3 stages: 1) Regrading to approximate pre-mining topography, 2) Bio-capping with WesTan soils for the soil amendment, and 3) Establishing vegetation which will be an elk food seed mix as specified by the DCNR Bureau of Forestry, the landowner. The DEP Bureau of Abandoned Mine Reclamation provided the original design plans and Gannett Fleming, Inc. is the contracted engineering firm that provided the bio-capping design and specs, as well as additional project coordination and oversight.

Project completion is planned for next summer 2004. While the surface reclamation and establishment of vegetation should significantly reduce AMD production from this location, it is expected that there will still be some flow of AMD. Thus, a collection system will be constructed down gradient from the reclamation site for the purpose of monitoring the remaining AMD flow. A passive treatment system is on the drawing board for the near future to treat this remaining flow of AMD.

E.M. Brown, Inc., the construction company contracted for the project, is using a D11 to move the large amounts of earth necessary for restoring the 57 acres to approximate pre-mining topography.

Robbins Hollow AMD Remediation Moves to the Headwaters

Originally, a passive treatment system located in the middle of the Robbins Hollow watershed was thought to be adequate for treating all of Robbins Hollow's AMD problems. However, collection and subsequent monitoring of the known AMD seeps yielded data that indicated a significant portion of the mine drainage was not accounted for. This prompted an assessment of the Robbins Hollow headwaters area for KCWA/TU by Hedin Environmental that was funded through a PA Technical Assistance Grant (TAG).

(Left to right) Bob Fitterling of the DCNR Bureau of Forestry Sproul District, and Ted Weaver and Kim Weaver both of Hedin Environmental, discuss treatment for Robbins Hollow AMD during a field meeting.

Numerous discharges were located in the headwaters area and routinely sampled for a period of eleven months during the TAG project. The data was presented at an AMD meeting in April 2003, and it was decided that the logical approach to Robbins Hollow AMD remediation would begin with treatment of the headwaters mine drainage, thereby postponing design of the original passive treatment system until upstream mine drainage was addressed.

The headwaters discharges are conveniently divided between the East Branch and North Branch of Robbins Hollow. The existing grants from the Growing Greener Grants Program and the Office of Surface Mining Appalachian Clean Streams Initiative have been amended to fund three small treatment systems on the East Branch. A new grant proposal was recently submitted to the Office of Surface Mining requesting $129,175 to construct a passive treatment system to address several North Branch discharges and is awaiting the final signatures as of this newsletter.

E.M. Brown, Inc. has been awarded the contract for construction of these Robbins Hollow treatment systems. Construction is expected to be well underway this coming spring.

A Special Letter from KCWA Chairman of the Board

A Look at our Progress and a Request for Your Help

It's hard to believe that the KCWA will celebrate its seventh birthday at the end of this month! It's even harder to believe how much we have accomplished in that time! What began as a grass-roots effort by a diverse bunch of fishermen has become a well-organized scientific approach to watershed management. Our focus has been channeled into two important directions. The AMD Committee is making amazing progress in assessing the acid mine drainage pollution that has plagued nearly fifteen miles of streams in our lower watershed. To date we have spent over one million dollars on the AMD issues and although much more is needed, I truly believe that we can say that it is now possible that we will be able to remediate this devastating pollution.

At the same time, the Fish Habitat Committee has been very active. This group is dedicated to assessing, monitoring and protecting the fantastic fishery that makes up the majority of the watershed. We have completed a comprehensive, scientific assessment of the watershed and have mapped a clear strategy to improve the habitat. We have constructed five major stream improvement projects on the main stem of Kettle Creek including the recently constructed "Headgate" project, which by itself cost more than $150,000. Although we expect to do additional projects on the main stem, we are very excited about our next phase, which will concentrate on improving habitat in the tributaries. To that end we are currently planning and seeking funding for a significant project on Cross Fork with a goal towards enhancing this wonderful wild fishery. Add a number of education projects ranging from this newsletter to landowner's handbooks to public meetings and workshops, and it easy to see that your watershed association has been very busy, and if we may so, very successful!

There are many hard workers behind this success and while no one person or group is responsible, we must appreciate that our partnership with Trout Unlimited and specifically our designation in 1999 as one of TU's Home Rivers Projects has been invaluable. This partnership has had many benefits but two require special mention. First, it is through TU we are lucky enough to have the benefit of Amy Wolfe's guidance and dedicated work provided at no cost to us. Second, there is no question that our association with TU has opened the door to numerous funding sources that simply would not have been otherwise available.

Like all good things, however, they must, at some point, come to an end. TU's Home River's Project is not a permanent benefit. While we have been assured that TU is with us for at least the next year, we must prepare for our eventual life without this day-to-day support. We have learned much and I am confident that we are ready and able to be self-sufficient. But here is where we need your help! We will need to significantly increase our financial support from our members to continue our plans. While we continue to have success in qualifying for grants for assessments and projects, we must begin to be a position to support our operating costs (i.e. employee salaries, etc.) from our members and other "non-project specific" sources of financing.

So, lets work together to make the next several years as successful as the last. Please consider adding to your tax-deducible donation when you renew your membership this year. Also, Please share this with your friends and neighbors and actively help us recruit new members! WE NEED YOUR HELP!

Thanks and Happy Holidays,
Rick Rose, Chairman

KCWA Partners and Volunteers in Action

Boy Scout Troop #22 from Cleveland, Ohio, spent a day in the watershed after a canoe trip on the West Branch of the Susquehanna River. The troop helped erect an AMD interpretive sign in the Huling Branch parking lot and planted several hundred willows along Kettle Creek.

A workshop event was held to celebrate completion of the Headgate Project. Representatives from the U.S. Fish & Wildlife Service, DEP, PA Fish & Boat Commission, PA Department of Transportation, Congressman Peterson's office, Senator Scarnati's office, and other supporters from near and far attended this event.

More than fifty volunteers participated in planting over 1500 native trees and shrubs at the Headgate Project site.

A Special Thank You to the Volunteer Monitors of the Kettle Creek Partners Program who have been recording stream temperatures and water quality at designated locations throughout the watershed! Your continued efforts are greatly appreciated!

The Kettle Creek Watershed Association News is written by Amy Wolfe.

Field Work Completed on Six Kettle Creek Tributaries

Stream channel geomorphology and habitat assessments have been completed for six main tributaries to Kettle Creek – Little Kettle Creek, "Upper" Kettle Creek (Kettle Creek above its confluence with Little Kettle), Cross Fork, Hammersley Fork, Trout Run, and Beaverdam Run. Larson Design Group, the same consulting firm that completed the Upper Kettle Creek Fish Habitat Conservation Plan for the main stem, conducted the assessments.

All the new data on these tributaries will result in an expanded Upper Kettle Creek Fish Habitat Conservation Plan and a more comprehensive plan for fish habitat conservation in the watershed.

Funding for this project is provided by the Growing Greener Grants Program, Coldwater Heritage Partnership Grant Program, and the National Fish and Wildlife Foundation. The Growing Greener grant is also funding the design and permitting for the 3.5-mile natural stream channel restoration project on Cross Fork discussed below.

Cross Fork Stream Restoration Project in Planning Phase

Currently, Larson Design Group is analyzing data collected from the Cross Fork assessment for the design of a 3.5-mile natural stream channel restoration project. The watershed wide joint permit application is being completed by the KCWA/TU Watershed Director, Amy Wolfe. Amy anticipates submitting a grant proposal to the next round of the Growing Greener Grants Program in March 2003, in addition to other funding sources, to request the funds needed for project construction.

The objective of this project is to restore natural channel geomorphology that incorporates habitat benefits for native brook trout. Based on the existing Upper Kettle Creek Fish Habitat Conservation Plan, Cross Fork is a high priority tributary for addressing both excessive sediment inputs and high water temperatures – two conditions that place stress upon and limit the natural reproductivity of trout.

(Left to right) Suzanne Hoehne of Larson Design Group, Dave McIntyre of KCWA, Jim MacCartney of TU, and Jon Klotz of Larson Design Group stand on the bank of Cross Fork and discuss plans for the stream restoration project.

The upstream end of the project reach is located at the mouth of Yochum Run and extends downstream to the confluence with Windfall Run. Due to the sensitivity and remote nature of the watershed, the project design will be completed using "soft engineering" techniques associated with natural stream channel design to minimize the amount and size of equipment necessary to complete construction. The project will restore natural channel dimensions and incorporate vegetation and other natural materials for bank stabilization along the reconstructed channel. Ultimately, the result will be a narrower, deeper stream channel with a diversity of habitat features such as pools, plunge-pools, riffles, and runs.

In July 2003, the PA Fish and Boat Commission approved changing management of a 5.4-mile reach of Cross Fork from the Heritage Trout Angling Program to a Catch-and-Release Area. A recommendation by the PA Fish and Boat Commission to stock Cross Fork in 2004 was tabled at its July 2003 meeting, however stocking for the 2005 season is still under consideration. KCWA and TU are concerned about the potential trout stocking in Cross Fork because it will compromise the evaluation of this project in terms of the benefits it provides to existing populations of native brook trout. KCWA/TU still hope to bring the PA Fish and Boat Commission into this project as a partner to pursue this opportunity to see just how much (if any) a stream restoration project can improve habitat and trout populations on Cross Fork.

Kettle Creek TU Chapter Partners with Private Landowner for Habitat Project

The Kettle Creek TU Chapter, in partnership with the private landowner, Doug Heivly, the PA Fish and Boat Commission, and the KCWA, is planning to construct a fish habitat improvement project on a 900-ft reach of Kettle Creek located approximately one mile upstream from the confluence with Hammersley Fork. Geomorphic assessment for the Upper Kettle Creek Fish Habitat Conservation Plan identified this reach as has having severe streambank erosion, lack of canopy, and a high width-to-depth ratio (i.e. wide and shallow).

The project design, completed by David Keller of the PA Fish and Boat Commission Habitat Management Section, calls for construction of nine multi-log vanes, a log deflector, and a log sill, followed by extensive planting of native grasses, shrubs, and trees. This project is similar to the habitat project constructed immediately downstream of the Bunnell Bridge at the lower end of the Delayed Harvest Fly-Fishing Only area.

Partial project funding has already been secured through the generous contribution of Mr. Heivly, the PA Fish and Boat Commission's Adopt-A-Stream Program, Trout Unlimited's Embrace-A-Stream Program, and the KCWA. Pending approval of funding for remaining project costs, construction is expected to begin in late summer or early fall 2004. For additional information, please contact Kettle Creek TU Chapter President (and KCWA Vice-President) Dick Sodergren at ktlcrik@aol.com or (814) 355-9798.

Spring 2004 Activities for You!

Stay tuned for the next Kettle Creek landowners workshop to be held this spring. The focus of this one-day workshop will be private land/forest stewardship.

The next KCWA Annual Membership Meeting is scheduled for Friday, May 28, 2004. The meeting location and time will be announced.

Several volunteer planting days on Kettle Creek will be held. Stay posted!

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is currently in the design and permitting phase.

5) Riparian Buffers and Landowner Stewardship Workshop– This deliverable supports the planning, coordination, and oversight for Kettle Creek watershed riparian buffer projects and associated volunteer activities. It also provides funding for a landowner training workshop to be held in the Kettle Creek watershed.

NFWF's Community Legacy Grant is competitively awarded to five watershed projects within the Chesapeake Bay region that demonstrate "truly innovative projects that either restore vital fish and wildlife habitats, develop locally-supported watershed management plans, or promote environmentally-sensitive management." For more information on the NFWF Chesapeake Bay Small Watersheds Grant Program, see www.nfwf.org.