

Fresh from the Kettle

Newsletter of the Kettle Creek Watershed Association

August 1999

The Kettle Creek Watershed Association

Holds Public AMD Meetings for 1999

The Kettle Creek Watershed Association held a public meeting on June 30 at the Chapman Township Fire Hall, located in North Bend, Pa. The meeting focused on the acid mine drainage (AMD) problem that plagues the lower portion of the Kettle Creek Watershed. The goal of the meeting was to inform the public about the AMD in the watershed; how it is formed and how it makes its way into the streams, how it affects Kettle Creek and its tributaries, and what is being done to mitigate its effects.

There were several speakers who contributed their expertise to the meeting and helped those in attendance understand the many facets of the mine drainage issue. KCWA Watershed Coordinator Amy Gottesfeld spoke about how coal is formed and how it can cause AMD, and Watershed Coordinator Jamie Sheridan discussed how the AMD affects Kettle Creek.

Michael Klimkos, from the DEP Bureau of Abandoned Mines and Reclamation (BAMR), spoke about the mining activities and the mine discharges in the region north of the West Branch of the Susquehanna River. Klimkos is compiling all the necessary information on the abandoned mines and discharges in the region and assessing their impact on the environment. He is constructing a Geographical Information System of the region to use as a tool for data storage, data analysis, and map making. Klimkos is beginning to work closely with the KCWA and is looking forward to future cooperation.

Pam Milevic, also with BAMR, was on hand to discuss the Twomile Run Watershed and the Department's plans for remediation. Milevic was

responsible for the study and assessment of the Twomile Run watershed by BAMR that led to the current status of the Middle Branch project. Milevic characterized the Twomile Run area and discussed the Department's steps for AMD remediation of the Middle Branch.

Mary Ann Bower, Manager for the Clinton County Conservation District, discussed the potential funding of further work on the AMD impacted areas of the watershed through the National Resource Conservation Service's (NRCS) PL-556 Grant. The grant requires a comprehensive assessment of the impacted area and an analysis to determine the economic benefits derived from redevelopment. The assessment work and a feasibility of treatment will be taken on by George Watzlaf, a leading authority in AMD characterization and treatment. It is hopeful that the PL-556 grant will be awarded because each and every remediation effort is significant in increasing water quality of the West Branch of the Susquehanna River.

Jeff Fliss of the Western Pennsylvania Coalition for Abandoned Mine Reclamation (WPCAMR) was on hand to discuss the Coalition's involvement in the KCWA's AMD projects. The Coalition provided the necessary funds for KCWA to produce an AMD fact sheet on the Kettle Creek Watershed, to distribute a newsletter showcasing the AMD topics, and to host the public meeting addressing the abandoned mine issues. WPCAMR has been very active throughout Western Pennsylvania in addressing the abandoned mine problems and will continue to assist the KCWA in their efforts on Kettle Creek.

AMD Committee at

Hawk Run

The KCWA AMD Committee, through the efforts of Chairman Bill Sabatose, held a meeting on July 7th at the DEP Hawk Run District Mining Office in Hawk Run, Pa. The meeting was well attended by representatives from KCWA, DEP, Bureau of Abandoned Mines and Reclamation, Clinton County Conservation District, Senator Corman's office, Congressman Peterson's office, Bureau of Forestry, Western Pa. Coalition for Abandoned Mine Reclamation, National Resource Conservation Service, Trout Unlimited, and the Two Mile Rod and Gun Club. The topics discussed at the meeting were the construction of the SAPS (successive alkalinity producing system) on the Middle Branch of Twomile Run, the status of the NRCS PL-556 Grant and how it may be used, the potential for financial assistance for future AMD treatment through the Heinz Foundation, and the establishment of an AMD monitoring program. The committee also discussed the status of the DEP's contract with George Watzlaf from the U.S. Dept. of Energy. Watzlaf reviewed his assessment protocols and stated that he has already started to review historical data on the area. The meeting was very productive and the committee tentatively agreed to meet again on Wednesday, September 22 at 9 a.m. at the Hawk Run office to report on the status of the AMD treatment system and Watzlaf's assessment.

Senator J. Corman Helps the KCWA

The Kettle Creek Watershed Association received a \$10,000 grant for a stream project in the Clinton County section of Kettle Creek. Senator Corman, accompanied by Jim Eckert, presented the check to the KCWA Board of Directors on Friday, July 9 at Kettle Creek State Park. Representing the Watershed Association were John Larson, President; Jude Richardson, Chairman of the Board; Karen Labant, Secretary; Amy Gottesfeld, Watershed Coordinator; and Jamie Sheridan, Watershed Coordinator. The Senator's grant monies are allocated to the KCWA through a Community and Economic Development Grant and will be used towards improving Kettle Creek as a recreational resource. The grant, along with funds from Trout Unlimited and DEP Educational grants, will fund a model stream improvement project in a section of Kettle Creek that is popular with many sportsmen. The Pa. Fish & Boat Commission, the Clinton County Conservation Service, the National Resource Conservation Service, and the Army Core of Engineers are currently reviewing the stream project. Construction will likely begin this fall. To learn more about the project see "Kettle Creek Stream Projects".

(See Photo on Page Four at Bottom)

Twomile Run AMD Project Is A Go!

The Kettle Creek Watershed Association is proud to announce that the construction of an Acid Mine Drainage treatment system will begin later this summer. Thanks to the relentless efforts of the KCWA AMD Committee, chaired by Bill Sabatose, the DEP Bureau of Abandoned Mines and Reclamation is to erect a Successive Alkalinity Producing System (SAPS) on a deep mine discharge in the headwaters of the Middle Branch, a tributary to Twomile Run. Twomile Run is heavily impacted by AMD from both deep mines and surface mines. It is also the major tributary that impairs Kettle Creek, which in turn impacts the West Branch of the Susquehanna River. Although the system is not expected to completely "cure" the AMD problem on Twomile Run and Kettle Creek, it is the starting point for major remediation efforts and will have a positive impact on the streams.

SAPS incorporate chemical and biological processes to treat AMD with high acidity and elevated metal concentrations. SAPS are basically designed to allow acid mine discharge to run through a series of aerated vertical flow systems, settling ponds containing limestone, and specially constructed wetlands in order to raise the pH and essentially remove the metals from solution. The limestone used in the SAPS becomes coated with aluminum that precipitates out of solution and poses a problem in the treatment process. To alleviate this problem, the DEP has contracted Dr. W. J. Vail and Dr.

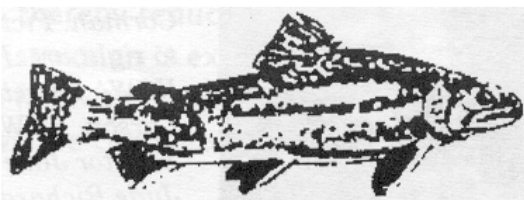
Assessment Project on Little Kettle Creek and the Upper Reaches of Kettle Creek

(Continued from page 2)

Robert Riley from Frostburg State University in Maryland to inoculate the limestone beds with a natural microorganism that thrives in AMD waters and effectively breaks down the aluminum. The Middle Branch project will be used to study just how effective the microorganisms can be in increasing the lifespan and effectiveness of such a system. Two nearly identical systems are to be constructed, except one will contain the microorganisms while the other will function without them.

Although this technology is on the leading edge of treatment systems, it is not without its problems. Pam Milevic, with the Bureau of Abandoned Mines and Reclamation, has been heavily involved in the assessment work and design process in the Twomile Run Watershed. Milevic states, "These devices will need some maintenance. The metals and minerals will accumulate and therefore the system will need to be flushed periodically." Flushing of this system could be as frequent as once a month, due to the high levels of aluminum present, according to Milevic. Monitoring of the system and the discharges will be critical in determining how effective the system will be, and how often it has to be flushed. Milevic states that "we are relying on the Watershed Association or the Bureau of Forestry to perform the monitoring for us", which will take place monthly for the first year, and quarterly thereafter. The question still stands as to how long this device will be an effective tool for treating the mine discharges. According to Milevic, these systems are designed to have a lifespan of approximately 25 years. The DEP has been maintaining one system for the past ten years without any major problems. The SAPS that is to be installed on the Middle Branch is also projected to have a lifespan of 25 years.

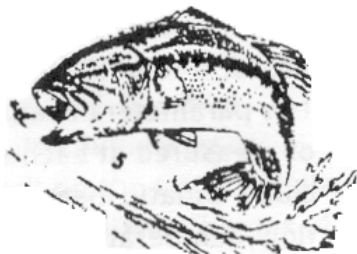
The SAPS installation on the Middle Branch is a landmark event for the Kettle Creek Watershed Association. All the hard work and time dedicated to the remediation of Kettle Creek's AMD problems by Bill Sabatose, Chairman of the AMD Committee, and all others involved, is greatly appreciated.



Amy Gottesfeld, along with Jamie Sheridan (both KCWA Watershed Coordinators), and KCWA interns Rebecca Dunlap and Greg Miller, with help from DEP interns Eric Beaver and Jamie Ruane, have been working to complete a comprehensive stream survey on both Little Kettle Creek and Kettle Creek above their confluence at Oleona. The primary objective of this assessment is to compare the biological, chemical, and physical parameters between these streams. Fifteen sites were randomly selected for sampling on each Little Kettle and the "Upper" Kettle, for a total of thirty sites. The parameters evaluated and/or measured at each site include aquatic insects, fish, flow, temperature, pH, dissolved oxygen, alkalinity, and habitat assessments. Population estimates will be determined from the trout and other fish species found at the sample sites. The overall biological quality of the stream sections will be derived from the biotic index scores of the aquatic insects collected at the sites. Once all the field work and additional data analyses have been completed, a report will be generated in order to summarize the significance of the findings in the study.

The KCWA Undergoes Officer Changes

The KCWA recently underwent a change in officers and board members. Jim Dubisz resigned as President of KCWA and was elected to retain the office of Membership Chairman and to continue his work as the principal project manager assigned to the grant writing. In his place, John Larson was elected as the new President of KCWA. Replacing John as Chairman of the Board was Jude Richardson, a member of the KCWA who has been very active in the association since its inception. Also, Mark Chambers has been elected as the new Treasurer of the Board and David Flak was elected to the board as well.



DEP Contracts George Watzlaf for AMD Assessment of Kettle Creek

The Department of Environmental Protection has contracted George Watzlaf, an Environmental Engineer with the Federal Department of Energy, to assess the AMD problems in the lower portion of Kettle Creek for potential remediation. Watzlaf has extensive experience in evaluating mine drainage and developing methods of treatment. Beginning in mid-August, Watzlaf will be taking field measurements and performing analyses on the impacted areas in the lower portion of the watershed. His primary focus will be to identify the areas that have the most adverse effect on the water quality of Kettle Creek and to characterize their impact. Watzlaf will then use the data collected to evaluate the sites for potential treatment methods and make recommendations as to the specific remediation systems that can be used to treat each site.

The DEP realizes that there are numerous identified mine discharges and acid seeps affecting Kettle Creek; however, little is known about their exact impact on the fishery. Before plans can begin to correct the mine pollution, these sites must be characterized as to their severity and the direct effects they have on the fishery. This will enable DEP to focus on those sites and areas that have the most adverse effect on Kettle Creek, following the theory that remediation of the most severe sites will have exponential results restoring the water quality. Watzlaf will submit his findings and recommendations for remediation in a comprehensive report that is expected to be completed this winter.



Senator Corman Helps KCWA

(From Page Two)

KCWA accepts \$10,000 grant from Senator Jake Corman. Pictured from left to right are: Karen Labant, KCWA Secretary; John Larson, KCWA President; Senator Jake Corman; and Jude Richardson, KCWA Chairman of the Board.

Kettle Creek Stream Projects

The KCWA has teamed up with its partnering agencies to install a stream improvement device on Kettle Creek in Clinton County. The work will be funded by a Community and Economic Development Grant made possible by Senator Corman, an Educational Grant issued by the DEP, and monies from Trout Unlimited. Preliminary assessments and survey work were recently completed on three sites by Dave Kellar of the Pa. Fish and Boat Commission, Tom Bittner of the Clinton County Conservation District, and Scott Heckmen of the National Resource Conservation Service. The goal of the in-stream device is to improve stream habitat for fish while relieving the pressure that the stream exerts on its banks, thereby reducing erosion. The cooperating agencies are working on the project designs and preparing a cost estimate. The contract for the construction of the device will be open for bidding later this summer after the necessary paperwork is complete. The initial plan is to construct an in-stream device in Kettle Creek upstream from the Leidy Bridge that extends the width of the stream. The device will cause the water to be intensified into the channel by using an inverted "V" or "W". The device will improve habitat for fish and reduce the pressure that the stream exerts on its banks, thereby reducing erosion. Construction is expected to begin this fall with hopes that the project will be completed by next year.

U.S. Fish & Wildlife Projects

The U.S. Fish and Wildlife Service (USFWS) has completed the surveying and design of two projects on Kettle Creek. The projects were surveyed by Dave Putnam and are designed to stabilize the stream banks while improving fish habitat. The first project is located in Oleona, just upstream from the Pa. Route 144 Bridge on the property of Alex McArthur. The project is in cooperation with the National Resource Conservation Service and is funded by a grant from the NRCS to the property owner. The objective of the in-stream device is to relieve the pressure that the stream exerts on the south bank where excessive erosion is occurring. The necessary permits have been filed for the stream work, with construction expected to begin in August. This particular project is under a private agreement between the landowner and the cooperating agencies. The Kettle Creek Watershed Association initiated the connection between the landowner and the cooperating agencies for the designs, grant, and construction of the device.

The second project that the USFWS is working on is located on the Pa. Fish and Boat Commission property on the delayed harvest project waters on Kettle Creek, downstream from Ole Bull State Park. The USFWS has designed a device that will reduce stream bank erosion in the upper section of the Fly-Fishing Only area of Kettle Creek. The PFBC has assisted the USFWS and has allocated a grant of \$5,000 for the project, in lieu of funding proposed for coldwater wells. Project construction is expected to begin later this year.

KCWA Partnering Businesses

- ◆ Waldheim Bar & Grill, Ed & Barbara Mongeau - Proprietors (814) 435-8815
- ◆ Carter Camp Lodge and Store, Sam & Linda Long - Proprietors (814) 435-1192
- ◆ Kettle Creek Lodge, Steve & Laura Benna - Proprietors (814) 435-1019
- ◆ Godra's Oleona Country Store, Martin & Ruth Godra - Proprietors (814) 435-2622
- ◆ Cross Fork Inn, Daryl and Patty Friese - Proprietors (570) 923-1258
- ◆ Cross Fork Motel, Joyce & Denny Barner - Proprietors (814) 923-0602
- ◆ Cross Fork Tackle Shop, Mike and Deb Stone - Proprietors (570) 923-1960
- ◆ Deb's Inn, Deb Ruth - Proprietor (570) 923-1619
- ◆ Kettle Creek Tackle Shop, Phil Baldacchino - Proprietor (570) 923-0176

Please patronize all our local businesses in the KCW!

Federation of Fly

Fishers Chipping In

On July 14, John Larson, President of the KCWA, met with Bill Simms, President of the Mid Atlantic Council (MAC) of the Federation of Fly Fishers (FFF), to receive a check for \$2,000 to assist the KCWA in their conservation efforts. The money was allotted to the KCWA through a national conservation program that the National FFF has initiated to fund conservation projects that approach preservation from the ground up. A request for the grant was submitted to the National FFF through the MAC and was selected by the Federation earlier this year. Simms stated that the Federation is making an effort to help conserve natural resources and educate for future preservation. Simms went on to say that the Council felt very strong about the efforts and goals of the KCWA, and wanted to assist the association in attaining its goals. The MAC has also helped the Little Juniata Association with work on the Little Juniata River, the Dame Juliana Chapter of French Creek, and has assisted the Rapidan Chapter of Trout Unlimited with an education outreach program for kids, just to name a few of their on-going projects. The Mid Atlantic Council of the National FFF includes members from chapters in the five states of Delaware, Maryland, Pennsylvania, Virginia, and West Virginia. The focus of the Council is to assist the chapters in educational programming and conservation projects. The MAC hopes that this grant is only the beginning of a prosperous partnership between the KCWA and the FFF.

Watershed Coordinator Bios

In May the Kettle Creek Watershed Association, through Trout Unlimited, hired the services of Amy Gottesfeld and Jamie Sheridan as Watershed Co-ordinators. Amy has been busy coordinating the stream surveys on Little Kettle Creek and Kettle Creek and the re-sampling of sites established last year by the KCWA, among other odds and ends. Jamie has been working hard on gathering information and establishing a database using Geographical Information Systems (GIS), as well as assisting in getting the stream improvement projects off the ground. Both are working closely with partnering agencies and landowners and are involved with the AMD remediation projects of Kettle Creek. Amy and Jamie are very passionate about their work and are striving to understand the intricate dynamics of the Kettle Creek Watershed. They both have submitted a short autobiography so you can learn a little about them.

Jamie: Hello everyone! As most of you already know I have been hired as a Co-Coordinator for the KCWA this past May and have been very busy ever since. I am merely 23 years old and am originally from Troy, Pa. which is located in Bradford County. This past May I graduated from Mansfield University with a B.S. in Geography, an emphasis in Environmental Science, and minors in Geology, Regional Planning, and a couple of other subjects that shouldn't be mentioned. I enjoy all sports, most importantly Notre Dame football, and have a variety of hobbies, but my deepest passion is for catching trout on a fly, which may be a good reason why I haven't a significant other! Anyway, I have followed the efforts of the KCWA since its inception and was very interested in their activities. This past fall I contacted Jim Dubisz on a whim to offer my help to the association. Through Jim, I completed an internship with the Bureau of Forestry this past spring and helped the KCWA with some minor activities. So far my experience working for the KCWA has been very rewarding and I am constantly learning new things. I have grand hopes for the future of the Watershed Association and Kettle Creek, and would like to continue my work for the preservation of the entire watershed. If you are ever in Cross Fork, and would like to play some basketball or go fishing, give me a ring!

Amy: Originally hailing from a small country town in Bucks County, PA, my avid love for all things wild and therefore beautiful has led me to pursue a career in wildlife/fisheries biology (particularly from spending a great deal of time in the mountains of northcentral PA). Along with a Bachelor of Science in Environ-

Leidy Township Landowner

Association Holds Annual Picnic

On July 3, the Leidy Township Landowner Association held its annual picnic at McKenna Camp in Leidy Township. The Landowner Association graciously invited the KCWA Board of Directors to attend the picnic and to inform the Association of their efforts and goals. Jim Dubisz, KCWA Chairman of the Membership Committee spoke briefly of how the association formed, what its mission is, and how to get involved. Dick Sodergren, Vice President and Chairman of the Habitat Improvement Committee, discussed the stream projects that are underway and future projects to come. Jamie Sheridan, Watershed Coordinator for the KCWA, discussed the stream monitoring program that is currently underway and the importance of a scientific-based approach. The Landowner Association was very interested in what the KCWA has done and what the monitoring team has found so far. The KCWA would like to thank the Leidy Township Landowner Association for their time and their wonderful hospitality!

Kettle Creek Watershed Assoc.

Conservation First
Restore, Preserve, Monitor and Protect



(Bios continued from page 6)

mental Biology and Ecology from Lock Haven University, . have also accomplished graduate level work towards my Master's Degree in Fisheries Biology through the Appalachian Laboratory at Frostburg State University, MD. Additionally, I have gained considerable experience in my field from working with the PA Department of Environmental Protection, Maryland Biological Stream Survey, PA Fish and Boat Commission, and PA Department of Conservation and Natural Resources through seasonal jobs and internships. As for my initial interest in the Kettle Creek Watershed, I was interested in volunteering in any way that I possibly could because I believe that it is of utmost importance to preserve relatively pristine areas such as this, as well as to work on improving the quality of specific areas needing remediation (i.e. acid mine drainage impaired locales). Now as a Watershed Coordinator for the KCWA, my goals are to obtain the biological, physical, and chemical data necessary for implementing a comprehensive watershed plan for purposes of conserving and improving not only the aquatic resources, but the Kettle Creek watershed as a whole. It is important to know exactly what you have in order to protect it.

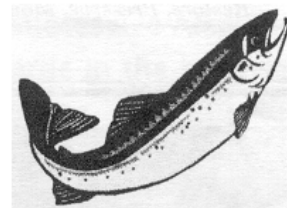
Pictured at left are Amy Gottesfeld and Jamie Sheridan, KCWA Watershed Coordinators.

Kettle Creek Watershed Association

Kettle Creek Watershed Association
Att: Karen Labant, Secretary
P.O. Box 317
Cross Fork, PA 17729

Kettle Creek Watershed Association

The goal of the Kettle Creek Watershed Association (KCWA) is to conserve and restore the Kettle Creek watershed and trout fishery through a public/private partnership that serves as a catalyst for long-term watershed conservation. Project objectives are to: 1) develop a watershed assessment and conservation plan; 2) reclaim the lower Kettle Creek through treatment of acid mine drainage; 3) prevent polluted runoff and restore river geomorphology in the upper and middle Kettle Creek watershed; and 4) implement a community information and education program that will strengthen the existing watershed association and sustain conservation efforts in the future.



Yes, sign me up as a KCWA member:

I choose to make a membership contribution as indicated (please check one):

- REGULAR \$5.00
- CONTRIBUTOR \$10.00
(receive a KCWA patch)
- STEWARDSHIP \$20.00
(receive a KCWA patch & hat)
- CONSERVATIONIST \$100.00
(receive a KCWA patch, hat and T-shirt)
- Please specify size of T-shirt: _____L _____XL _____XXL

In fact, I'd like to make an additional contribution to help fund specific project related expenses as designated below:

	% designated
Biophysical Assessments	_____
Watershed Education	_____
Model Projects	_____
Acid Mine Drainage Project	_____
General Fund KCWA	_____
Total Project Contribution	\$_____

Name _____

Address _____

Telephone _____

Fax _____