



## Greetings from Kentucky

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### Message from the President

It might be cold in Kentucky today, but we are all looking forward to the lovely fall weather that we will be able to share with all of you in October. Kentucky doesn't have a beach, but we should have leaves in fall colors, mild temperatures, good food, coal mining, bourbon and horse racing. We are working on t-shirt design, menus for the banquet and have even been able to round up a couple of guest speakers. If you have any wonderful ideas of topics that we might discuss at the event, please email Lara Panayotoff at [lara.panayotoff@ky.gov](mailto:lara.panayotoff@ky.gov). We hope to have a preliminary agenda by late summer so people can start getting approval for travel as far ahead of time as possible.

Sincerely,  
Paulette Akers  
SWPBA President 2009

## From the Secretary's Desk

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I hope everyone is getting a great start to the New Year. I know there are lots of planning, preparing, and even some sampling already going on. I just wanted to take a minute to let everyone know what is happening with the SWPBA newsletter and website. First of all, for those of you who did not receive my previous e-mail, the membership voted during the 2008 Annual SWPBA Meeting in Asheville to change the format of the newsletter. So instead of every state having to come up with highlights and updates 3 times each year, each state will be responsible for submitting the highlights of their year only once during a designated month. This will keep up-to-date information on the website and pull more traffic in. This is a great thing since Brandon Moody (GA) has worked so hard on it for all of us. Also, we are in the process of changing the look/feel of the website a little. We hope to have pictures of SWPBA members (past and present), updated contact information (please send these to me [Jessica.bevins@ky.gov](mailto:Jessica.bevins@ky.gov) ), and new links on the website this year. It is a work in progress, though, so don't hold us to any deadlines just yet! The Local Arrangements Committee is hard at work making sure that SWPBA 2009 in Frankfort, KY will be a great one. So if anyone has any requests or suggestions please feel free to jump in and let us know. Hope to see everyone in October!

Sincerely,  
Jessica Bevins  
SWPBA Secretary 2009



Dr. John Morse's 2008 EPT class at Whitewater Falls, NC. SWPBA states represented: TN, MS, NC, AL, and KY

2008 Southeastern Water Pollution Biologists Association  
EMPLOYEE NEWSLETTER General Business Meeting Minutes  
September 25, 2008

0955. Meeting called to order by President Trish MacPherson (NC)

0956. Secretary Bill Crouch (NC) read the minutes of the 2007 SWPBA business meeting.

0958. Susan Cohn (KY) called for the minutes to be accepted by the membership. Mike Beiser (MS) seconded the motion. Minutes passed on voice vote.

#### **Old Business**

1000 SWPBA Website: Brandon Moody (GA) will continue to work with the SWPBA website and make necessary updates including changes and modifications that the officers request.

#### **New Business**

1001 President Trish MacPherson (NC) requested that the membership review their contact information on the SWPBA website ([www.swpba.org](http://www.swpba.org)) to ensure it is correct and up to date.

1002 President Trish MacPherson (NC) brought up the issue of newsletters. Some States have found it difficult to get their newsletter updates to the Secretary on time. Trish suggested a system where each State would be assigned a particular month where they could highlight their program on the website. This would result in only having to prepare for that month instead of the current three times per year with the newsletter updates. Also, this would bring in more consistent traffic to the website. Trish also stated that each of these assigned months could be archived on the site similar to how the newsletters are now. A short, but favorable discussion ensued that resulted in Dave Chestnut (SC) calling for a motion to carry out this plan with a second from Susan Cohn (KY). Motion carried on voice vote.

1005 President Trish MacPherson (NC) asked if Kentucky was ready to host the 2009 SWPBA meeting. Susan Cohn (KY) said that they were ready. Joy Jackson (FL) was asked if Florida would host in 2010. She said yes.

1006 President Trish MacPherson (NC) asked for nominations for next year's officers. Susan Cohn (KY) nominated Paulette Akers (KY) for SWPBA President. Bill McDermott seconded the motion. Lisa Hicks (KY) nominated Jessica Bevins for SWPBA Secretary. Mike Beiser (MS) seconded the motion. Dave Chestnut made a motion to close nominations. President Trish MacPherson (NC) seconded the motion. Acceptance of new SWPBA officers passed on voice vote.

1007 President Trish MacPherson (NC) expressed her gratitude to the membership for having her as President the past year and she thanked everyone for making SWPBA the successful organization it has been for so many years [since 1973].

1008 Susan Cohn (KY) accepted The Worm on behalf of Paulette Akers (KY). Susan talked briefly about the site of next year's meeting in the Commonwealth of Kentucky. It will be held at Lake Cumberland State Park around the end of September or early October.

1009 Trish MacPherson (NC) moves to close the meeting. Mike Beiser (MS) and Bill Crouch (NC) second the motion. Meeting is adjourned.

## **305(b) & H<sub>2</sub>O Quality Standards**

Currently, final 305(b) assessments are ongoing of water bodies to be reported to EPA electronically on 1 April. This reporting period assessments cover primarily surface waters in the Big Sandy – Little Sandy – Tygarts BMU; however, updates to water bodies throughout the commonwealth will be made.

The 2008 triennial review of our water quality standards have gone through public comment and response this past August and September. There are many revisions to the water quality standards, notable the adoption of EPA's recommended fish tissue criterion for methylmercury. This is a body-burden concentration that relates back to water column contamination for this biocumulative. The DOW (division of water) has seen but a couple of water column exceedences for the water quality criterion for mercury, but are finding fish tissue residue that exceeds the tissue criterion over a wide extent, with little recognizable pattern to the coverage. Of significance is greater protection of our "exceptional waters." These water bodies are those that support the greatest biological diversity in given bioregions. Two types of waters reside in this category, the reference reach waters that were used to develop biocriteria (multimetric indices for three communities were developed, macroinvertebrates, fishes and algae [diatoms]). Additionally, water bodies that score "excellent" based on one or more of these community indices are designated as "exceptional." Under this package of water quality standards, all exceptional waters are classified as OSRW (outstanding state resource water). This is a recognized designated use in our regulations and provides the added protection of no degradation that would result in loss of that designated use. These are essentially tier "2.5 waters." The commonwealth proposed five new ONRWs (outstanding national resource waters); these water bodies are located primarily within the Daniel Boone National Forest. The surface water in Reelfoot Lake National

Wildlife Refuge in southwest Kentucky is a proposed ONRW; it is so designated by Tennessee for their portion of the refuge.

In September 2008, the U. S. Court of Appeals for the Sixth Circuit handed down their decision concerning implementation procedures of Kentucky's antidegradation policy. This decision remands six exemptions in those procedures to EPA. The DOW formed a workgroup of interested stakeholders in the commonwealth to work through those issues in the court's remand. This process is ongoing and is an iterative process employing a "strawman" of proposed language that addresses the court's remand. The Department for Environmental Protection chose to defer our current amended regulations package to the legislature in an effort to address the court's remand. March has been set as a target for moving this process before legislative committees for approval and then to EPA Region 4.

Field work for the selenium study in east Kentucky coalfield was concluded last summer. This is a cooperative study between the DOW and Kentucky Geological Survey. Data analyses have started and a report of the findings is anticipated by end of April. The study thesis was to determine if significant bioaccumulation of selenium in fishes is occurring in watersheds associated with hollowfills and certain other large geologic disturbances of watersheds. This is a DOW response to issues of selenium bioaccumulation in fishes in the southern West Virginia coalfield. The EPA is working on final development of a selenium criterion based on fish tissue residue, similar to methylmercury.

## **ALA WADR Demonstration**

On October 23, 2008, Kentucky DOW staff joined Alabama DEM, S. Carolina DHEC and Mississippi DEQ in an e pop demonstration and conference call to learn about ADEM's database technology they call ALA WADR. Thanks



to Lisa Huff for bringing a demo to the SWPBA meeting in Asheville. She was able to generate enough interest to put on this event for us. From that day's presentation, Kentucky has decided to investigate implementation of ALA WADR with our programs. Our IT staff is working with ADEM on the system setup and we hope to do a test drive in March or April.

Lisa indicated possible future coordination of database updates and development may have a better chance of regional funding if more than one agency is involved. We are hoping that such a relationship does work out and look forward to more discussions on this. If we have made enough progress, maybe it would be a good workshop item for the Monday before SWPBA in Kentucky this fall.

## **71a Nutrient Study**

The Monitoring Section completed field sampling for a nutrient study in the 71a ecoregion, the Crawford-Mammoth Cave Uplands. The study targeted a group of 20 sites that covered a gradient of nutrients but had similar physical characteristics and habitat quality. Nutrients were sampled monthly (prior to and throughout biological sampling period) by USGS under an interagency agreement with EPA. Samples are being worked up presently. We hope that this study will help to clarify the complex relationship between nutrients and biological community attributes in the Pennyroyal bioregion of Kentucky.

## **H<sub>2</sub>O Quality Branch News**

In June 2008, the Environmental and Public Protection Cabinet was reorganized and renamed the Energy and Environment Cabinet. There was lots of staff shifting among branches as new branches were formed and some old ones lost. Within the Water Quality Branch we lost the Standards and Specifications Section and the old

Environmental Support Section was renamed the Monitoring Section. Staff from other sections, as well as branches, were moved into this section which places several programs under one supervisor, our own John Brumley. Now, the Monitoring Section contains not only Intensive Survey, Fish Tissue, Reference Reach, Watershed Biological Monitoring, and Wild Rivers, but also Lakes, Ambient Monitoring, Probabilistic Monitoring, and Nonpoint Source. Therefore, we now lovingly refer to ourselves as the "Super Section".

After our reorganization, our cabinet was moved across the street into new (to us) office space. Now we are located at 200 Fair Oaks Lane, Frankfort, KY 40601. This also afforded us an opportunity to update spaces such as our Water Quality Laboratory! We are currently in the process of moving our equipment into our new and improved lab space which provides us with much more room and adequate facilities to complete our job duties more efficiently. Also, as 2008 came to a close, we saw several of our long time colleagues retire from state government work. We lost Tom VanArsdall, our Branch Manager; Cliff Schneider, our Lakes Coordinator and bug IDer extraordinaire; Morgan Jones, our Wild Rivers Coordinator; and Gillian Miller, our Ambient Monitoring Coordinator.

## **Mountain Nutrient Study**

During 2008, Probabilistic Monitoring was suspended to gather much needed information from the mountain ecoregions of Kentucky for nutrient criteria development. The project evolved greatly throughout its lifetime as staff found it very difficult to find sites that satisfied the data gap. In the end, there were control sites chosen in each of the 68, 69, & 70 ecoregions and compared to nutrient impacted streams in each ecoregion. After final sites had been chosen, they were turned over to staff from the Kentucky Geological Survey for further physicochemical parameter sampling.

Macroinvertebrate sampling and habitat rapid bioassessments were performed at some sites, with those remaining to be sampled during the 2009 sampling season.

## **Martin County Coal Slurry Spill Revisited**

Staff from the Monitoring Section were also able to revisit the site of the Martin County coal slurry spill from October 2000. Fish community, rapid bioassessment of habitat, and chemical parameters were sampled to compare to the samples taken in 2000 and subsequent years to follow the trend of water quality in this area since this spill. Samples are currently being analyzed by Division of Water staff.

## **Levisa Fork**

Monitoring Section staff also revisited the Levisa Fork of the Big Sandy River in Eastern Kentucky, site of debate between some in Kentucky and Virginia regarding a new discharge allowed by Virginia that then flows into Kentucky waters. Fish community, rapid bioassessment habitat, and chemical parameters were sampled here as well. Samples will be compared to samples taken from this site and others near from dates prior to the new discharge being allowed. Samples are currently being analyzed by Division of Water staff.

## **2009 SWPBA Annual Meeting!**

And finally, Kentucky has been busy making plans for the 2009 SWPBA event and we want to officially tell you to save the week of October 19<sup>th</sup>-22<sup>nd</sup>. We have found a hotel and are making arrangements to have the meeting here in the capital of the Commonwealth. The meeting will be held at the Capital Plaza Hotel in downtown Frankfort. More info about the hotel can be found at [www.capitalplazaky.com](http://www.capitalplazaky.com).

We will try to keep the website [www.swpba.org](http://www.swpba.org) updated with additional information as it becomes available, but we have many things already in the works. We hope to offer a wide variety of agenda topics, as well as things like horse farm tours and bourbon tasting for the evening hours. We know that budgets are tight all across Region 4, so we are trying to keep costs for travel to a minimum. Additionally, the local arrangement committee has been working to try and make this SWPBA conference as Green as possible. If you have any ideas to help us along the way, please let us know.