

## **WATER QUALITY COORDINATING COMMITTEE**

DNR Conference Building  
Bennett Springs Conference Room  
1730 E. Elm  
Jefferson City, Missouri

November 17, 2009  
10:00 a.m.

### **MEETING AGENDA**

Missouri River Public Use Assessment Update, Steve Sheriff, Dept. of Conservation

Case Study of Watershed Planning in Goodwater Creek,  
Bob Broz, UMC Water Quality Extension

Other

Agency Activities

Meetings & Conferences



## MISSOURI WATER QUALITY COORDINATING COMMITTEE

November 17, 2009

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Bennett Springs Conference Room  
1730 E. Elm Street  
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### MINUTES

#### Attendees:

Greg Anderson	DNR, Water Protection Program	Mandy Sappington	DNR, Water Protection Program
Priscilla Stotts	DNR, Water Protection Program	Anne Peery	DNR, Water Protection Program
Amy Meier	MDC, Stream Team	Bob Broz	Univ. of MO, WQ Extension Pgm
Abby Lynn	Environmental Resource Coalition	Paul Andre	MO Dept. of Agriculture, Pesticide
Terri Brink	EPA Region 7	Bob Ball	NRCS
John Johnson	DNR, Water Protection Program	Steve Johnson	MO River Communities Network
Valerie Hentges	DNR, Water Protection Program	Karen Bataille	MO Dept. of Conservation
Trish Rielly	DNR, Water Protection Program	Steve Sheriff	MO Dept. of Conservation
Cindy DiStefano	MDC, Resource Science	Darlene Schaben	DNR, Water Protection Program

Introductions were made.

#### **Missouri River Public Use Assessment Update**, Steve Sheriff, Dept. of Conservation PowerPoint Presentation

Steve said the project actually started in 2003 when they were figuring out the process to use. When Nebraska Game and Parks Commission became a partner, they asked to have the assessment extended to Gavins Point Dam. The goal of the project was to look at the public use of the lower unimpounded portion of the Missouri River and the economic value of these activities during 2004. The objectives were to estimate the number of public users on the river; see what activities the users were doing and how much time they spent on each activity; if they were fishing or hunting, what they were taking; the economic value; and the socio-characteristics of the river users.

The use assessment covered the time frame from Jan. 3, 2004 through Jan. 28, 2005, and ranged from the mouth at St. Louis to Gavins Point Dam near Yankton, South Dakota (approx. 811 river miles). The project was divided into segments - from the mouth to near Jefferson City; from Jefferson City to Miami, MO; from Miami to Atchison, KS; from Atchison to the Iowa state line; from the Iowa line to Sioux City, IA; and from Sioux City to Gavins Point Dam.

They interviewed users at the Lewis and Clark Commemorative events at the Missouri River edge; major public access ramps and marinas; state and government public areas such as conservation areas and national wildlife refuges; private bank accesses; fishing tournaments; and riverboat excursions. Steve talked about the type of questions they asked. He explained how the economic value was determined. Using the travel cost method, results showed approx. \$5.1 million was spent.

At the Lewis & Clark events and public accesses, survey clerks were stationed at exits to count and interview people. Thirty-two events were sampled. Surveys were sent to users of private land for them to fill out and

return. The organizers of the fishing tournaments provided the information needed from the tournaments. Riverboat excursion information was collected from operators at the end of the season.

They examined 406 public accesses and 7 state and government public areas. The 13-month project was divided into 14 monthly intervals.

The preliminary results showed 1.98 million individuals exited the public accesses and state and government areas. Seventy-one different activities were recorded. Steve showed graphs of usages for the summer months. Fishing and sight-seeing were the major activities along with boating, camping, biking, exercising, primary whole-body contact (swimming, floating, waterskiing), and loafing. Other graphs showed the major usages for the winter months as sight-seeing and hunting, along with exercising, nature study, fishing, loafing, and preparing for hunting season. They identified 1,163 private land locations, one fishing club, and one yacht club. They counted 217,400 individual days of use and identified 54 different activities. Of the 26 fishing tournaments identified, information was only provided for 18. There were nearly 47,500 individuals that participated on the river boat excursions.

They estimated a grand total of 2,452,733 individuals exiting from their trip on the lower 811 miles of the Missouri River for the time period of this project. Of the four segments in Missouri, there were 1,286,300 individuals at exits - the larger number being from the Jefferson City to St. Louis segment. They also did estimates for age classes, gender, race/ethnic groups, disability, and total hours spent. There were approx. 322,000 individuals that were fishing, which counted up to approx. 1 million hours.

In answer to a question, Steve said they even interviewed people from other countries. He said they were still working on the final numbers. It has taken 3 years to get data entered and QA/QC'd. The original plan was to get 180 staff to work on this project but was only able to get 138; only 58 of those worked through the entire project. The purpose behind getting all this information was that the fisheries biologists were using data from the early 1980's to make decisions.

### **Case Study of Watershed Planning in Goodwater Creek, Bob Broz, UMC Water Quality Extension Program**

PowerPoint Presentation; handout of presentation

Goodwater Creek is located at the junction of Boone and Audrain counties and has been under study by the Agricultural Research Service (ARS) for the last 25 years. There are nine rain gauges and a weather station. There are three locations where they have been testing water quality over the last 25 years. The watershed covers approx. 19,000 acres. This site was selected by EPA for a CEAP (Conservation Effects Assessment Program) project to look at practices that have been put into place and determine whether or not water quality had been improved. It is a three-year project designed to assess water quality benefits. They wanted to do surveys to understand producers' role and the needs in the watershed and to assist producers in developing a watershed management plan to address areas of the producers' emphasis. Outcomes they hoped to get from the project included a watershed management plan designed by local landowners; develop a list of environmental tools, practices and educational materials to assist with understanding what was being done and why it was important; and environmental impact modeling to estimate watershed level impacts based on the applied BMPs. The main model used will be SWAT (soil and water assessment tool). A different model will be used to determine the amount of pesticide runoff.

To get started they needed to identify all the landowners and producers in the watershed, and then identify who is farming the land and how many acres. They held watershed meetings and discussed what the CEAP project wanted to accomplish and why it was important. Bob said they also talked about the monitoring data they have; the nutrient, pesticide and runoff conditions; and watershed planning. The local concerns and

issues were identified. They talked about the definition of a watershed, watershed management, and watershed management practices. After six months of discussions, they found that Goodwater Creek was selected as one of the representative watersheds for Atrazine Re-registration. An agreement had been developed between EPA and Syngenta to monitor a group of watersheds. Water quality data would be gathered every four days throughout the planting season. There would be target values on amounts of atrazine found in the environment. The producers' emphasis was now focused on atrazine use and BMPs that can affect atrazine transport. Producers had several questions.

Goodwater Creek was selected because it is a significant part of the drainage area for Mark Twain Lake; the farming practices had a direct effect on the nutrient and pesticide loadings in the Lake; there was already several years of monitoring data; and it was an acceptable watershed based on their criteria. Even with the atrazine issue, they still needed to focus on the watershed management plan. Several producer meetings were held to discuss atrazine concerns and to try to understand proper label recommendations. They also realized that farmers had been given different messages, which caused some loss of trust. EPA has not determined an exact consequence if producers were out of compliance.

To get back on track they needed to focus on what the watershed plan could provide for the local producers, identify ways to determine possible water quality changes besides monitoring, and understand the importance of the project. The environmental modeling would demonstrate water quality improvement based on different scenarios in the watershed. They used statistical analysis of field and watershed-scale data to determine trends and water quality changes. They looked at farm-scale environmental and economic impact modeling to identify critical locations for BMPs and the economic impact for the producer.

Watershed management planning needs to be community-based. It was a challenge to get key stakeholders together and get them working together. Not everyone had the same goal or told the same story even though they attended the same meeting. So, they invited the key stakeholders that were interested in the planning process and began educating and informing them of the values of the watershed and what needed to be done. The key stakeholders made management decisions based on a consensus of a broad range of stakeholders. They wanted to focus on improving water quality. To get local participation, key community leaders were identified and meetings were held. Several open meetings were held for all interested watershed residents. They talked about the problem causes and stressors and what needed to be done. Not all farmers followed BMPs that were conducive to reducing pesticide, nutrient and soil runoff. Bob said to keep it from being confrontational, they have to focus on the watershed and not just one issue, have a consistent message from the experts, keep people informed, form relationships, and get local people involved in the process from start to finish. They still have a core group of producers working with them and invited them and interested parties to all the meetings. They sent out notes from all the meetings and presented updated information and sent it out. They still have to find workable solutions that everyone wants to do.

If trigger values of atrazine exceed levels in 2 of 3 years, then the watershed must be treated as a TMDL watershed. They have met with EPA officials but EPA is still not sure how to respond to watersheds that are out of compliance. EPA has asked Bob's group to develop a feasible plan of action to mitigate atrazine concerns. The good news is there have not been any exceedences for the last three years.

They now have a draft watershed management plan in place. The producers are reviewing it. Performance based incentive plans for load reductions have been reviewed. Meetings with EPA are on-going. They have learned that the experts need to tell the same story in order to build credibility and promote cohesive working relationships. It's important to keep producers in the loop. They also learned to continue working toward a common goal and not get sidetracked.

Bob said they will continue working with EPA and local agency personnel to develop a workable plan for the watershed; work with the watershed planning committee to continue work on the plan; help identify

technical, financial, and educational resources needed to implement the plan; continue to monitor for water quality changes; and look at performance-based incentives and possible funding for it.

### **Agency Activities**

Priscilla Stotts said she has been working on getting dates and locations scheduled for the Introductory Workshops for Fall and working on Stream Team data.

Amy Meier has been working on an EPT workshop coming in February for VWQM volunteers.

Abby Lynn has been in meetings regarding atrazine.

Terri Brink mentioned a WQX/STORET training at EPA's Regional Office in Kansas City on Nov. 18. The training will be recorded and available at a later date. It will be taught by Tetra-Tech.

Anne Peery said they are still writing TMDLs for the end of the Consent Decree.

Bob Broz provided dates for several upcoming conferences. They are included in the list below.

Bob Ball said they have been working with the Conservation Technology Information Center (CTIC) for about two years, focusing on the lower St. Francois River basin. An event will be held in Portageville, MO at the Della Center, Nov. 23-24, 2009, where attendees will earn CCA credits. Some topics will include soil and water conservation, nutrient management, Mississippi River basin initiative, etc. Bob said they have seen an official release but no details beyond the basics of the initiative. NRCS is committing \$80 million each year for four years to work in twelve states to deal with hypoxia. Details should be out within the next 2-3 weeks. NRCS has submitted several watersheds from Missouri and hopeful all will be approved. They will be lead by local sponsors and partners. Once the watersheds have been announced, all will be encouraged to sign up for various cost-share opportunities.

There will also be Conservation Innovation Grant funds available to work in those watersheds. An RFP (Request for Proposals) will be sent out to explain that opportunity. A Wetland Reserve Enhancement Program funding opportunity will also be available soon. Bob suggested having a presentation on this to the WQCC group at a later date.

Steve Johnson said the Missouri River Communities Network recently filled all 12 of their Clean Water-AmeriCorps positions. They now have AmeriCorps members with Audubon Society, Coalition for the Environment, Confluence Partnership, Open Space Council, River des Peres Watershed Alliance, JRBP, TRLWQ Inc., Top of the Ozarks RC&D, MRCN, and LOWA. Some have water quality training; some have college degrees; and some have graduate degrees. Steve felt they have a good group so it should be a good year. In Columbia, they are building rain gardens. He is trying to get the city and county to expand that program.

Greg Anderson mentioned that 319 grant applications are due Jan. 15, 2010. There is approx. \$8 million available. Project negotiations have started for the American Reinvestment and Recovery Act 604(b) grant to the regional planning commissions. Greg said they are in the process of trying to increase the award amount for watershed planning grants.

A first draft of the Nonpoint Source Management Plan will be sent within the next three weeks or so to the Technical Committee, then to the full committee for comments. Approvals must be received from the Department, Clean Water Commission and EPA before it becomes final.

Amanda Sappington updated the group on the minigrant program. Starting up again, applications will be accepted two times per year, April 1 and October 1 this year. Maximum award amount is still at \$10,000. She has been reviewing some application ideas and providing comments. An announcement is planned to be sent in January.

### **Meetings & Conferences**

Nov. 19 State NRCS Technical Committee meeting, Columbia  
Nov. 23-24 CTIC Training on Lower St. Francois River basin, Portageville, MO  
Nov. 30-Dec. 2 Soil & Water Training Conference, Tan-Tar-A  
Jan. 8-10, 2010 Governor's Conference on Agriculture, St. Louis  
Feb. 3-5, 2010 Missouri Natural Resources Conference, Tan-Tar-A  
Feb. 22-24, 2010 National Water Quality Conference, Hilton Head Island, SC (best conference offered in the U.S.)  
tentatively last part of March or first part of April, 2010  
Extension's State Watershed Management Plan Training (still in development)  
April 20-22 or 27-29, 2010  
Water Quality Short Course, in coordination with DNR, NRCS, Extension, to be held in Columbia