



# **Missouri Department of Natural Resources**

## **Water Quality Coordinating Committee Water Protection Program**

### **Minutes**

**April 15, 2008**

## **WATER QUALITY COORDINATING COMMITTEE**

U.S. Geological Survey Columbia Environmental Research Center  
4200 New Haven Road  
Columbia, Missouri

April 15, 2008  
10 a.m.

### **MEETING AGENDA**

Development of Best Management Practices for Forestry Biomass Harvesting, Dennis Meinert, Department of Natural Resources, Soil and Water Conservation Program

The Missouri Comprehensive Wildlife Strategy Helps Identify Priority Areas for Conservation Action, Dennis Figg, Missouri Department of Conservation

Other

Update on Nonpoint Source Management Plan Revisions

Agency Activities

Meetings & Conferences

# MISSOURI WATER QUALITY COORDINATING COMMITTEE

April 15, 2008

USGS Columbia Environmental Research Center  
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Columbia, Missouri

## MINUTES

### Attendees:

Sarah Fast	DNR, Water Protection Program	Cindy DiStefano	MO Dept. of Conservation
Darlene Schaben	DNR, Water Protection Program	Buffy Santel	Metropolitan St. Louis Sewer District
Priscilla Stotts	DNR, Water Protection Program	Al Fandrey	Barr Engineering Co.
Susan Higgins	DNR, Water Protection Program	Bob Ball	USDA – NRCS
Terri Brink	EPA Region 7	Angel Kruzen	Water Sentinel
Jason Hubbart	UMC Dept. of Forestry	Dennis Figg	MO Dept. of Conservation
Wyn Kelly	DNR, Soil & Water Conservation	Dennis Meinert	DNR, Soil & Water Conservation
Georganne Bowman	DNR, Water Protection Program		

Introductions were made.

### **Development of BMPs for Woody Biomass Harvesting, Dennis Meinert, DNR, SWCP PowerPoint Presentation**

Dennis said six months ago, before he knew what it was, John Tuttle asked him to be on a committee to address biomass harvesting. There are 15 members on the committee. Through the expertise of each member, they plan to develop best management practices (BMPs). At a stakeholder meeting, they came up with a list of several issues of concern: forest sustainability, wildlife habitat management, soil fertility and erosion, water quality, and riparian management. Three other meetings have been held. There is no document that addresses timber harvesting in Missouri, nor any regulations. Dennis passed around a pamphlet called “Missouri Watershed Protection Practice, 2006 Management Guidelines for Maintaining Forested Watersheds to Protect Streams” published by Missouri Dept. of Conservation that includes BMPs that deal with forestry. Other states take their BMPs and attach them to their forestry practices as an addendum. The plan for Missouri’s BMPs is to stand alone. This will be made available for loggers and anyone working in that industry. Nine small sub-groups have started working on developing BMPs.

Woody biomass is small diameter trees, branches and anything that is generated as a result of timber-related activities in forests. Biomass harvesting is any process used in removing the biomass from the forested sites. Biomass harvesting needs to be done in a manner that will protect the soil, water, and forests. It’s better to be proactive than reactive. There are three bioenergy plants that are planning to build in Missouri with at least one other one rumored to come. These plants will be looking for materials to use in development of bioenergy. Bioenergy is energy in the form of electricity, heat, or liquid fuels that is produced from biomass. Biomass is anything that can be changed into fuel. Currently in Missouri, there is ethanol, bio-oil, bio-diesel, charcoal plants, wood pellets, and boilers. Dennis talked about the three companies and what they are looking to use and produce. Showme Energy Cooperative, owned by farmers, plans to use grass instead of wood. They plan to produce pellet fuels (the energy equivalent of 300,000 barrels of crude oil), gasifier converting feedstock to cellulosic ethanol (6-8 million gallons per year); and electricity. Dynamotive Energy Systems plans to build in Willow Springs. They plan to convert 200 tons per day of wood by-products and residues from nearby sawmills into 34,000 gallons per day of bio-oil. Missouri Hardwood Ethanol plans to build a demo-plant. It will be built in two phases. The first will use 150 tons of hardwood slabs/day to produce 5 million gallons of mixed alcohols per year. The second, when completed, will produce about 10 million gallons per year out of 300 tons of biowaste. If this demonstration works, the goal is to build four

additional plants and produce 50 million gallons per year of fuel. Other biomass companies currently operating in the state are pellet plants, 40 wood burning boilers, and 5-6 charcoal companies. Even though these companies are using almost all sawmill residues currently being produced in Missouri, there are still a little more than seven dry tons unused and 16 million cubic feet of logging residue. Douglas, Howell, Oregon, Ozark, Shannon, and Wright counties have the majority of forested land and the largest number of sawmills. Other sources of biomass are timber harvesting residues, timber stand improvements, low value species, sanitation and salvage, short-rotation woody crops, and construction waste. Dennis talked about the cost and advantages or disadvantages. Recovering woody biomass is a similar process to the timber harvesting technology. He explained the two types of harvesting systems (mechanical and conventional small-scale) and the factors affecting harvesting costs.

The committee information and minutes can be found on their Web page: <http://mdc.mo.gov/forest/management/>. They plan to allow an area for comments when they get closer to completion.

Randy Miles, UMC, is looking at lab analysis on how much time to allow for nutrient cycling.

Angel expressed there is concern in their area that this may escalate to the same issues as chip mills. Dennis said these are only suggestions; discussions are being held regarding setting up an incentive program.

Dennis said these guidelines will tie into NRCS standard practices. Doug Wallace, NRCS, is on the committee. Bob said there is a similar program in Ohio.

#### **Initial Statewide Soil Survey, Wyn Kelly, SWCP** PowerPoint Presentation

Wyn thought the soil survey could be used as a standard or an environmental quality indicator for a lot of the forest biomass areas.

There are 16 staff throughout the state working on soil survey updates. The initial soil survey was completed Jan. 1, 2002. Wyn thought that the digital soil survey information was being used more than the paper copy. Updates are being done by major land resource areas instead of county-by-county. Updates are also project based. About one-half of staff time is spent assisting NRCS on soil survey updates; the other half is spent providing soils assistance activities. Soils assistance is primarily on agricultural lands, higher intensity soil surveys, soils training for staff, and soils education activities. Wyn showed a map of the boundaries of the six soil science offices. He said they are currently accepting proposals for projects. If anyone has projects that might benefit from soils information, let Wyn or one of the soil scientists know. They can assist with developing a project to address that need. The deadline is May 31, 2008. All projects received will go through a ranking process. Approvals are generally received one month after the deadline date.

#### **The Missouri Comprehensive Wildlife Strategy Helps Identify Priority Areas for Conservation Action,** Dennis Figg, MDC PowerPoint Presentation; Handouts: Missouri Comprehensive Wildlife Strategy; Conserving all Wildlife in Missouri

Dennis has been working on this strategy for the last few years. It's an important resource to bring additional dollars to Missouri to deal with several wildlife-related issues including water quality. In the last 7-8 years, approx. \$700 million have been available to deal with wildlife diversity issues. Missouri has received approx. \$9 million. Dennis submitted three success stories for a recent report.

Wildlife resources are different in different parts of the state. There is no "plan" but a "strategy." The strategy is a process for conservation planning and implementation that makes habitat a support species of

greatest conservation need a high priority. The process identifies priority geographies, integrates conservation initiatives, and promotes conservation partnerships to increase conservation action. The strategy is the process; these are the marketing tools for the partnerships. Bryant Creek, one of 36 places, is a prime example of a priority place for conservation actions. The primary reason for state wildlife grants is to provide dollars to prevent the need to list species in the future. The primary habitat categories that represent the strategy are forests, woodlands, savannas, prairies, glades, wetlands, caves, and rivers and streams. The species of greatest need are associated with each of these habitat categories. Rivers and streams are the greatest need in terms of primary habitat type. With the limited funding, Dennis' job is to bring in additional dollars and shift them to the primary habitat that needs the most attention. Forests have the least number of species of conservation concern. The state is broken down into primary geographies: Mississippi Alluvial basin, Ozark Highlands, Osage Plains, Central Dissected Till Plains. Land type associations (LTA) provide a framework for identifying and integrating conservation priorities for multiple values. Using the different assessments from the partners, they developed the framework of Conservation Opportunity Areas (COAs). They decided on 33 different project areas as the first priority areas. These are project areas with stakeholder teams who are working on conservation together. Last year, in addition to the money made available by state wildlife grants, over \$5 million of additional dollars were brought into these COAs. Dennis displayed a map with different overlays where the various partners' interests determined areas of priority. In terms of stakeholders' interest, the area around Cole Camp is the highest scoring biodiversity area around the state.

The Missouri Comprehensive Wildlife Strategy (CWS) is a powerful resource to guide the conservation of species of greatest conservation need and their habitats. The Missouri CWS identifies the highest priority places. Once the highest stakeholder places are identified, then stakeholder groups, agencies, partners, and interested individuals can direct their dollars. The Perry County Karst area is a COA that has 319 funding for water quality issues. Only about 22 states selected priority geographies.

Dennis went on to explain some of the priority areas, the target species, and conservation goals. He explained that the number of acres available determined the species population. Bird conservation is listed as a partner priority and is bringing in funding. If you do the right thing with birds now, all kinds of wildlife will benefit.

Sarah mentioned she hoped to get The Nature Conservancy to do talk about how they use this and developed it into some watershed targeting.

## **Other**

### **Update on Nonpoint Source Management Plan Revisions, Sarah Fast**

The Nonpoint Source Management Plan Advisory Group is updating the plan. The next meeting is scheduled for May 1. A draft updated list of Goals & Objectives were discussed at the last meeting. These are going to be more watershed based. If anyone is interested in being a stakeholder or attending the meetings, let Sarah know.

## **Agency Activities**

Angel Kruzen mentioned a Jack's Fork River cleanup is scheduled for the first weekend in June. The second weekend in June will be the Current River cleanup. This is the 10<sup>th</sup> Anniversary for the Jack's Fork.

Bob Ball said NRCS is partnering in the Middle Mississippi Basin Partnership. There is other representation from DNR, MDC, US Fish & Wildlife Service and others. It is driven by the southwestern Illinois RC&D. Bob is representing NRCS at the meetings. (The brochure, Middle Mississippi River Partnership: 2007 A Year in Review, was routed around the table.)

Georganne Bowman said the Lakes of Missouri Volunteer Program event will be held in Jefferson City this weekend, April 19, to congratulate them for all their hard work. They have been operating since 1992 and have over 200 volunteers sampling 50 lakes throughout the state.

Wyn Kelly said they have a lot of projects going on with other agencies, particularly work with ELT, development with MDC; natural communities; sites with Missouri Division of State Parks; subsurface drainage issues with Southeast Missouri State; plus others. Their work is not limited to just district staff.

Priscilla Stotts said they are in the middle of their workshop season teaching volunteers how to do biomonitoring and visual survey. The workshops are full so they are adding more. If anyone would like to become a volunteer water quality monitor, contact Priscilla or [www.mostreamteam.org](http://www.mostreamteam.org) for classes.

Sarah Fast said the topics for the May 20 meeting include EPA Green Infrastructure, DNR Drinking Water Abandoned Wells Program, and The Nature Conservancy has been invited.

Meeting adjourned.