

## Minutes of the Bonne Femme Watershed Project Technical Advisory Team Meeting

March 25, 2016

In attendance: Lynne Hooper, John Rustige, Roxie Campbell, Shauna Marquardt, Cathy Richter, Mike Parks, Patty Herman, Steven Sapp, John George, Ann Koenig, Mike Powell, Dave O'Brien, Tom Ratermann, Bill Florea, Amy Meier, Bob Lerch

Introductions were made by all participants.

Bill Florea presented a brief history of watershed management activities in the Greater Bonne Femme Watershed. He began by reading an article by Roxie Campbell about Eugene Hargrove's career in environmental ethics and how his environmental work began with a project to protect the Devil's Icebox cave from water pollution in the 1970's. A brief discussion of grant awards for the study of water quality in the watershed followed. A grant to Show-Me Stream Teams (Jim Davis) awarded funds for educational outreach in the Greater Bonne Femme Watershed from 1998 to 2002. During this same time period, a karst team was formed by various state environmental agencies to explore ways to protect the water quality flowing through the karst formations in southern Boone County. Bob Lerch wrote a Chapter 319 grant proposal as a result of these karst team meetings that led to the Bonne Femme Watershed Management Plan project from 2003 through 2007. The Chapter 319 grant also funded water quality monitoring in the watershed and public outreach and education during the same time period. Bill Florea reviewed the objectives of the grant award and discussed the participants, the process and various activities that culminated in the plan approval by Boone County and the City of Columbia in 2007. Bill noted the success of the cost-share septic pump-out offer and how attempts to coordinate low impact development projects with local developers did not succeed. Information about the latter project and a copy of the watershed management plan are available at [www.cavewatershed.org](http://www.cavewatershed.org).

Lynne Hooper then began to work through the remaining items on the agenda for the meeting, suggesting that sub-committees may be the best way to manage discussions moving forward as the technical advisory team is a large group and getting everyone together may be difficult. One objective of the technical advisory team will be to create a 9-point plan from the existing watershed management plan so that funding opportunities with EPA or MDNR may be pursued. Lynne also asked team members to consider what resources they or their agency could bring to the table for development of an updated watershed resource inventory. A new land use / land cover map and a map showing building permits in Boone County and the surrounding areas were presented to the group. The maps should be available on the project website in the near future.

Visual assessments of the physical habitat in each of the five impaired streams in the watershed should start soon, weather permitting.

We may want to consider pushing a regulatory agenda with the City of Columbia so that they adopt regulations to protect karst features from development in a manner consistent with the County regulations. Similarly, the team may want to approach County officials about creating enforcement mechanisms for breach of karst, land disturbance and stream buffer regulations to further protect natural resources in the watershed. Mike Powell suggested that the Courts could be used to enforce the regulations under the current scheme. Bill Florea suggested that education of the public is a large component in ensuring that landowners continue to comply with zoning

regulations after the permit process has been completed. Another upcoming regulatory issue will be how to approach total maximum daily loads (TMDLs) for the impaired streams once these are issued by MDNR. John Rustige will explore existing urban TMDLs for bacteria to see if there are models that we can look at to prepare for TMDLs in this watershed.

Potential contributions by citizens in the watershed to watershed projects were briefly discussed.

Dave O'Brien spoke briefly about how rural sociology may be beneficial to engaging landowners in the watershed in meaningful dialogue about water quality and natural resource protection. He mentioned that it is important to identify sources of information disseminated in a community in order to effectively communicate with that community. It is also important to identify motivations (in addition to economic incentives) in order to find better ways to communicate. A good place to start may be to identify areas of conflict with local landowners in previous watershed management efforts or to conduct surveys to analyze how residents identify with streams and other natural resource features. Roxie Campbell noted that the survey approach could also help to identify areas where outreach and education could be beneficial. Dave mentioned that this was particularly important where we are trying to communicate science to lay people. Shauna Marquardt mentioned that messages that are simpler and connect a person to the resource have a better chance of making an impact. The trick is to find that "something" to which everyone can relate.

Steven Sapp was asked what his take was on the "something" that might connect landowners to the natural resources. He indicated that he was very mistrustful of other team members because they worked for the government either directly or indirectly. Steve feels that landowners in the watershed may resent government (i.e. outsiders who don't own the land) telling them what to do. Steven mentioned that for him, having clean well water is a priority so this connects him to water quality issues in the watershed. He favors a balance between regulation necessary to achieve high water quality and the rights of the landowners to use their property as they see fit. To counteract aggressive regulatory action, landowners like Steven may push far to the property rights side in order to maintain this balance. Patty Herman summarized some of her research showing that endocrine disrupters in surface waters have led to the growth of female tissue in male fish. Patty said that regulators need to be able to communicate with landowners before we can even start to address these kinds of issues. Dave O'Brien spoke briefly on how communication can often be a matter of framing issues so that everyone understands and feels that their position is relevant to the discussion. Bob Lerch reminded the group that the stakeholders wrote the watershed management plan not the government, so that the stakeholders had a strong voice in the recommendations as approved. Bob suggested that looking at the recommendations from the previous effort could give a good starting point for the relevant issues and how to frame them. He also cautioned against making changes to the existing plan without renewing a stakeholder process. A survey of current attitudes in the watershed may also be a useful starting point as we begin the implementation process. Dave O'Brien mentioned that citizen engagement will also be essential in order to obtain funding for potential projects in the watershed. John George pointed out that we have been slow to implement watershed or other land management plans in Missouri because people don't want government telling them what to do. He noted that voluntary participation does not guarantee continued protection of natural resources.

A brief discussion of the positive effects of successful public education followed. Roxie pointed out that informed public support or opposition to an issue can be a very powerful force in shaping government actions. Continuing public education may also involve more specifically defining some of the recommendations from the watershed management plan so that people really understand what certain items mean.

Science was the next category for discussion. Lynne asked for people to think about what projects might be useful and informative for the implementation phase. Bob suggested that we will want to follow the same sampling protocol and parameters as in the previous study for the sake of consistency. He also is in favor of microbial source tracking so that we can get information about the source of the *E. coli* in the impaired streams. Mike Powell emphasized that we want to make sure our scientific results are intelligible by the local landowners. Amy Meier suggested that when we present our “after” results, we are going to want to connect that for landowners with what is being done correctly or incorrectly on the landscape that has led to the current condition (cause / effect).

The next topic for discussion was the volunteer component to the project. Lynne is hoping that the volunteers for the project can fill various roles including fundraising and outreach and education. The kick-off for the volunteer component of the project will be a cleanup at Rock Bridge State Park on April 9<sup>th</sup> from 9:00 a.m. until Noon. Lynne will be speaking about the project and the cleanup event on the weekly Missouri Department of Conservation radio show on KFRU at 7:00 a.m. on March 26<sup>th</sup>. All of these activities are geared toward increasing volunteer participation and landowner engagement. The project website will soon have a Listserve for interested folks to sign up to receive updates about current events and project status. Volunteers will also soon be able to sign up on the website to join one of the various volunteer committees depending upon their area of interest. Additionally, interpretive hikes will be offered along the Spring Brook Trail in Rock Bridge Memorial Park on April 22<sup>nd</sup> and May 6<sup>th</sup>. Roxie mentioned that there will be a Watershed Festival at Rock Bridge Memorial State Park on July 16<sup>th</sup> that will be geared toward participation by families and children.

Steven wanted to know what authority would allow for someone walking down a stream, even where it passes through private lands, to take photographs. Lynne responded that stream access would be limited to public bridges with rights-of-way and that travel along a streambed would be governed by *Elder v. Delcour*, a 1954 Missouri Supreme Court case that determined that navigable streams were similar to public highways and that members of the public could travel in the navigable streams. A brief discussion followed as to what streams would be considered navigable.

The next meeting will be held on May 6<sup>th</sup>. It was decided that the meeting time should be 10:00 a.m. until Noon.

Lynne asked what everyone thought about the sub-committees idea. Roxie indicated that she thought it was a good idea as people tend to be more productive in small groups. The sub-committee tasks would be defined by the Technical Advisory Team as a whole. Discussion of possible sub-committees was table until the next meeting. Bob suggested that he would want to do something related to science in the watershed and that it would be useful to combine the science somehow with rural sociology to see what the views of residents in the watershed toward this project are now as opposed to the time of the last effort that ended around 2008. Amy

suggested that outreach and education are going to be very important for the project and that this would be one of the sub-committees. Lynne suggested that another sub-committee could research bacterial TMDLs so that we could have some idea of what to expect from the upcoming TMDLs in the Greater Bonne Femme Watershed.

A brief discussion of what led to the revival of the watershed project followed. Lynne explained that she wanted to be proactive in getting the project up and running again before the TMDLs are issued. She explained that the County stormwater team hopes to start a movement among residents in the watershed and that government can back away after the citizens start their own watershed coalition to protect the natural resources. Roxie expressed her disagreement with this position, saying that we need increased education and continued government regulation and influence in order to protect water quality and natural resources in the watershed. She mentioned that the City of Columbia adopted the Bonne Femme Watershed Management Plan but still does not have regulations in place to protect karst features on the landscape. This was one example of how we still need to implement the plan. She also noted that we really need to define what it means to implement the watershed management plan. It was suggested that we should remind the City of their support of the plan and the need to help protect natural resources in the watershed. Roxie believes that we need a sub-committee to deal with these issues.

To conclude, Lynne asked for team members to send emails with sub-committee suggestions before the next meeting. Dave asked if we could have nametags for the next meeting, and we shall.