

Minutes of the Bonne Femme Watershed Project Technical Advisory Team Meeting

September 23, 2016

In attendance: Lynne Hooper, Steven Sapp, Roxie Campbell, Cathy Richter, Ann Koenig, Mike Powell, David O'Brien, Tom Ratermann, Bill Florea, Amy Meier, Nicki Fuemmeler, Tom Wellman

Lynne opened the meeting with a request for updates from team members about management activities that may affect the Greater Bonne Femme Watershed.

Mike Powell talked about the grand opening of the Big Sky Nature Preserve in Easley, Missouri within the Little Bonne Femme Creek – Lower Missouri watershed. The property is over 14 acres in size and includes the former Easley Mine. The previous landowners worked to complete extensive oak-savannah habitat restoration on the bluff overlooking the Missouri River valley. Greenbelt Land Trust is planning additional habitat restoration on the property over the next year. Additional information on the nature preserve is available at www.greenbelmissouri.org. The preserve is now a part of the 120 acres that Greenbelt conserves in Boone County.

Ann Koenig next provided an update on Three Creeks Conservation Area. There is a new area manager. MDC has been working on an area plan for Three Creeks based upon information including public comments. A frequent comment MDC received was that the conservation area should not be closed during every deer season for all uses except deer hunting (the number / length of deer seasons has been expanding during recent years). Based upon these comments, MDC decided to keep Three Creeks open for other uses during all but the regular 9-day deer season. Ann next discussed that there will be mandatory testing of deer during the opening weekend of the next hunting season to check for chronic wasting disease. Lymph nodes of deer taken by hunters will be removed and analyzed for presence of the disease. If folks indicate that they intend to mount the head of the deer, special care will be taken to reduce disturbance as the lymph nodes are removed. Ann has also been working with Bill Florea in partnership with the Columbia Tree Task Force.

Lynne provided an update on activities in Rock Bridge Memorial State Park as Roxie Campbell was unable to attend the meeting. A project is current underway to improve trail blazing and add mile markers in the park after a couple of incidents recently where folks got lost in the park and emergency personnel were unable to locate them because people did not know where they were. Updated maps of park features and the cave system will be developed and provided to emergency personnel. Fall tram rides for senior citizens are being offered on the MKT trail. Park personnel have been working on burn plans for the fall and fire line preparation.

The next topics of discussion were updates on projects in the watershed. Bob Lerch will soon be ready to start the water quality sampling. Lynne met with Virgil at Boone County Regional Sewer District and learned how to perform the *E. coli* testing. Once Lynne has determined the necessary dilution ratios of the stream water samples (the *E. coli* tests can only measure up to a certain number of colony forming units so water samples that are expected to be in excess of that

limit need to be diluted before they are processed) the sampling can begin. It will take about an hour and a half to process each set of water samples for *E. coli*.

Lynne announced that she had met with David Alvarez from USGS and that they would be deploying POCIS units in several streams in the watershed. The POCIS units will be left in the water for several weeks where they pick up polarized organic molecules in the water. The POCIS membranes will be screened for a number of chemicals that indicate the presence of human wastewater in the streams – substances such as fragrances and plasticizers. Five POCIS units will be deployed next week. This is a new type of water quality sampling in this watershed which is very exciting. Cathy Richter explained that a POCIS is supposed to mimic a fish living in the water and pick up chemicals that would be absorbed into the fish tissues. Bob Lerch will be bringing along his field tech on the POCIS deployment mission and show him where the 10 water quality sampling sites are so that he is ready to begin collecting water quality samples. Depending upon what substances are found in the water, we may want to pursue funding for additional testing. The County has budgeted some funds that could be used for a matching grant.

The County's stage monitoring equipment will soon be deployed at three locations in the watershed. One site will be maintained inside a streamside enclosure, and the other two will be directly mounted to County bridges. Lynne is also planning on collecting grab samples from these sites from bridges after precipitation events. The grab samples will be analyzed for a variety of constituents including heavy metals.

A discussion followed as to whether signage should be set up near the monitoring equipment to provide information and discourage vandalism and theft. A decision was made to include the signage at sites where folks are likely to travel, so long as the signs do not draw attention to the equipment.

Lynne announced the plans for the Rock Bridge Renew event on October 22nd. Beginning with this fall event, water quality monitoring will occur in the morning before the clean-up in the afternoon. Stream Team volunteers with training (responsible for the data collected) will be partnered with volunteers without training at several sites (starting with five or six sites at this event) in and around the park to start up water quality monitoring at least twice per year (at each Rock Bridge Renew event) at various locations. Historically there was a lot of Stream Team monitoring in the watershed but this has fallen off in recent years. Hopefully we will attract a dedicated core group of water quality volunteers who will continue regularly monitoring at least twice per year in the spring and fall. We also hope to get more people interested in and involved with the Stream Team program. Currently there is no water quality monitoring happening on Gans Creek so it will be great to get data collected there. We will start with macroinvertebrate monitoring this fall, and then add chemical monitoring next year. It is hoped that volunteers from Missouri Master Naturalists and the University Soil and Water Conservation Society will attend and participate.

Lynne mentioned that she is concerned about the quality of the water exiting the cave system this year, as it seems to be particularly sediment-rich. This could be due to the increased amount of rain this year. She will be considering whether to implement a more frequent sampling regime on the Devil's Icebox Cave Branch.

The Spring Brook Trail fall hikes are coming up soon on September 30th and October 7th, from 5:15 to 7:00 p.m. These events will be geared toward educating the public about water quality in the watershed.

Lynne asked whether anyone has had any ideas about projects to implement in the watershed. Mike suggested that a grant available from the Conservation Alliance might be applicable to potential projects. Greenbelt Land Trust may be able to assist the BFWP with management of the grant. Ann mentioned that the Heart of America Marathon happens in the watershed every year and that we might want to get involved with that event in order to connect with folks and spread the message about the project. Amy suggested that we should develop an informational brochure to hand out at watershed festivals and other related events in the area. Several specific venues for brochures were suggested including Earth Day, the Rock Bridge visitor's center, and the Alpine Shop. The County will be working to get watershed education into the local schools. Cathy talked about an event called Rock Bridge Reaches Out that showcases volunteer opportunities – we may want to consider having a booth there. Amy discussed that this event might be a good opportunity to get school kids interested in the Stream Team program. Mike suggested that Caring for Columbia might be another event to attend and the University has a similar event. Tom Ratermann said that the National Honors Society at the local schools has service requirements so we might want to tap into that organization as a source of volunteers. Mike also suggested the Boy Scouts. Tom Wellman mentioned that Rock Bridge has rain gardens near the headwaters of Little Bonne Femme Creek. Bill added that these rain gardens are the product of the first Bonne Femme Watershed Project. We may want to try to tap into the students and other volunteers that work on the rain gardens. Steven Sapp said that there is an outdoor classroom at Rock Bridge Elementary School. Tom Ratermann pointed out that there are not dedicated science teachers in the Columbia Public Schools from kindergarden through 5th grade – science is taught as one of many subjects by a single teacher.

The last item on the agenda was the status of the subcommittees formed at the last meeting. We will try to have subcommittee meetings before the next meeting of the Technical Advisory Team.

Meetings will now be held every two months rather than every six weeks. The next meeting will be scheduled after the Thanksgiving holiday.

Tom Wellman said that the City of Columbia is going to try to have karst rules in effect by next summer. Tom also mentioned that the airport is working on a stormwater management plan that is in the draft phase. Tom is encouraging the airport to hire someone to manage the stormwater permit. Several streams pass through and / or originate on the airport property.

The meeting concluded with a discussion about the nuances of property ownership at the airport (City of Columbia property located in the County adjacent to City of Ashland property) and governance of the airport as a regional entity. Lynne asked Nicki Fuemmeler to clarify the status of stormwater regulations in the City of Ashland. Ashland must comply with state regulations but has not adopted the Boone County regulations. The City of Ashland is expected to upgrade their wastewater treatment plant in the near future.

The meeting was adjourned.

