

Minutes of the Bonne Femme Watershed Project Technical Advisory Team Meeting

July 29, 2016

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

The meeting began with a presentation by Dave Michaelson, Unit Chief of the Aquatic Bioassessment Unit of the Missouri Department of Natural Resources. Dave talked about the evolution of the biological integrity monitoring program used by the Aquatic Bioassessment Unit from the adoption of the Clean Water Act in 1972 to the present. The presence of various aquatic macroinvertebrates in a stream (as compared to a reference stream or reach within the same ecological drainage unit) is one method used by the MDNR to determine whether a stream is meeting the designated use of protection of aquatic life. In addition to collecting macroinvertebrate samples from streams across Missouri, Dave's field crew also collects chemistry data and physical habitat data from the sampling sites. Dave concluded his presentation with information about sampling that he has done in Bonne Femme Creek noting a decline in water quality in recent years. The powerpoint slides from Dave's presentation are available on the cavewatershed.org website.

The next topic for discussion was the research that Bob Lerch will be starting up again. Lynne indicated that the hold-up on starting up the water quality sampling has been finding a lab to perform *E. coli* analysis. Lynne has been communicating with Boone County Regional Sewer District and they have agreed to allow her to use their lab and provide training for conducting the *E. coli* analyses there. It is also likely that the consumables (items used during the analyses that are not re-usable) will be donated from another source so that there will not be an actual cost for the *E. coli* analysis. Once we finalize the details for the *E. coli* portion of the water quality analyses, we will start the monitoring process.

Lynne next mentioned that she is considering offering free well water testing to residents of the Greater Bonne Femme Watershed in an effort to engage community members with the project. This could be a way to connect with people who otherwise would not have an interest in water quality in the watershed. The State Health Department could analyze the well water samples for *E. coli* (they do not test surface water samples). Bob Lerch could have his lab analyze the water samples for the presence of nutrients and herbicides.

Lynne has meetings next week with Bob Lerch and David Alvarez with USGS to discuss analyzing water samples (surface and / or well water) for other chemical constituents including estrogen. Stay tuned for further details on the outcome of these meetings.

Friends of Rock Bridge will be having their fall Rock Bridge Renewal event on October 22, 2016. In the past the Renewal event has consisted of a clean-up in Rock Bridge Park and environs, but starting with the fall event a water quality monitoring "blitz" will occur in the morning before the clean-ups. The thought is to gather a group of trained Stream Team volunteers to be responsible for the data set at each sampling site (one per site) and then pair those folks with new volunteers interested in water quality monitoring. A number of streams in the watershed that are not currently being monitored by Stream Team volunteers could be

monitored twice per year in this way. The data collected could be the beginning of long-term datasets tracking water quality on streams in the watershed. Lynne plans to host an event with Roxie Campbell and Amy Meier to bring in potential volunteers prior to the Rock Bridge Renewal event. Lynne also hopes to recruit involvement by Missouri Master Naturalists as a possible source of trained Stream Team volunteers. Having regularly scheduled events twice per year as part of the Rock Bridge Renewal should help volunteers stay on track and commit to the monitoring events.

David O'Brien brought up the topic of how to find out what level of knowledge that citizens of the watershed have with respect to contaminants in the water. We are still hoping to develop a survey for watershed residents to address this question and many others.

The next item for discussion was breaking the Technical Advisory Team into work groups. One work group will be for developing a 9-point plan strategy. Members of that group will be Bill Florea, Nicki Fuemmeler and Mike Powell. The 9-point plan group may consider inviting stakeholders from the previous Chapter 319 grant stakeholder committee to join in plan development. Another work group will be education and outreach. The members of that group will be Roxie Campbell, Amy Meier, Lynne Hooper and David O'Brien. The science work group will have Bob Lerch, Lynne Hooper and Cathy Richter as members. We may develop other work groups later and team members not in attendance at today's meeting can join the work groups above if desired.

Roxie mentioned that it would be great to have a watershed emergency response plan / team / coordination set up as a potential project in the watershed.

The meeting was adjourned.