

Hinkson Creek
Collaborative Adaptive Management
Stakeholder Committee
December 2, 2015

Attending: Shawn Grindstaff, Jeanine Pagan, Jonathan Sessions, Commissioner Karen Miller, Paul Land, Diane Oerly, Paul Mehrle, Jay Turner, Hank Ottinger, Councilman Karl Skala, Gary Ward

Absent: Frank Gordon, Jim Loveless, Joe Engeln, Ben Londeree

Guests: Ken Midkiff, Jason Hubbart, Bill Florea, Erin Keys, Ted Houts, Lynne Hooper, Robb Jacobson, John Glascock, Dave Michaelson, Barry Poulton, Dan Obrecht

1. The meeting was opened by Shawn with Welcome and Introductions.

As we were awaiting a quorum, Shawn reminded the committee that April 2016 will be the 4th Anniversary of the Collaborative Adaptive Management Stakeholder Committee. Karen remarked that Dr. Jason Hubbart was in attendance, and that he could present a synopsis of his recent report. He agreed to do so. (Note that the written report is attached).

Dr. Hubbart noted that in during his tenure, there have been 17 publications in peer reviewed journals and 11 graduate student theses and dissertations have focused on the Hinkson watershed. He noted that the primary funders of this research include the Environmental Protection Agency, the Missouri Department of Natural Resources, the Missouri Department of Conservation, the University of Missouri, Boone County Public Works, and the City of Columbia. He went on to outline some of the conclusions from that research. When asked if he could zero in on any one cause the Hinkson impairment, he replied, "People." Jason will be relocating to the University of West Virginia, but will be available to help with the experimental watershed study

Following the arrival of two members, a quorum was gathered and business was conducted.

The Minutes of the June 2, 2015 were approved on an Ottinger/Sessions motion
The Minutes of the July 9, 2015 meeting were approved on an Ottinger/Ward motion.

2. Columbia Energy and Environment Committee request – Ken Midkiff Member, Environment and Energy Commission of the City of Columbia and Boone County:

Handouts were distributed by Mr. Midkiff of the Stream Index (Water Quality Rating), Data, and Concerns.

Mr. Midkiff stated that the stream quality data is collected by the Volunteer Water Quality Monitors of the Hinkson. These stream teams are a collaboration between DNR/MDC and The Conservation Federation. There are various levels of volunteer water quality monitors, Level One the lowest level requires eight to 16 hours of training; Level Two members (which Ken is) are required to have 24 hours of training including Quality Assurance. They get retested every two years and their instruments are frequently recalibrated; Level Three requires 24 hours of training plus Quality Assurance/Quality Control and its very rigorous. Midkiff contends that stream team data are equivalent to that collected by DNR and EPA water quality staff since the former group must go through the proper procedures for water quality monitoring. Mr. Midkiff said the water quality rating is pretty much cut and dried; for instance his area is from Stadium Blvd. down to the confluence of Hinkson and Flat Branch.

Midkiff elaborated on his experiences, noting that from his testing, the water quality above Flat Branch is actually improving; where Flat Branch enters the Hinkson, water quality is declining.

He concluded by asking, “Why does MDNR and MDC spend a lot of time and money training, assessing and equipping Volunteer Water Quality Monitors and then not take their data into consideration?” He was hoping Joe Engeln would be at the meeting to help address this question.

It was suggested that perhaps the Science Team could review the Volunteer data and the MDNR data to show it is either consistent or inconsistent and suggest an idea of how we use that data to our benefit.

3. Collaborative Adaptive Management Deliberations

- New Homework Assignments- tabled
- Community Activities additions to the CAM list
- Action items for 2016

The Action Team reported on the Trash BMP retrofit at the detention basins near Green Meadows Road. These basins are near an apartment complex just north of Green Meadows Road very close to Wal-Mart on Grindstone Parkway. There are two potential basins that were built by the Army Corps of Engineers and turned over to the City as flood protection for a nearby neighborhood. At that time, the Corps

studied the possibility of increasing water quality, and part of that was retrofitting the trash BMP's so trash could be more easily removed.

The second project is a bio- retention cell at 10th Street and Walnut near Stephens College Stables. In 2014 the city partnered with the college to build one bio- retention cell alongside of Ann Street. Maintained some volunteer groups, it is performing well. Improvements to it would include the clearing of honeysuckle from an open channel, some pipe connections, and a soil filtration matrix followed by some native plantings which would improve water quality (and habitat) before flowing into the Hinkson.

CAM – Dec. 2, 2015

Stream Index (Water Quality Rating):

Above 23 points – Excellent
18-23 - Good
12-17 -Fair
Below 12 - Poor

The Index (Rating) is based on 3 “netsets” and counting and categorizing macroinvertebrates, Index is based on number and type of macroinvertebrates. For instance, some species are “pollution tolerant” such as bloodworms; others, such as Mayfly larva, are “pollution sensitive”. There is a chart, compiled by DNR and MDC, which determines the score.

Level One Volunteer Water Quality Monitor – 8-16 hours of training

Level Two – 24 hours of training and QA

Level Three – 24 hours of training; rigorous QA/QC on site; data same as that collected by DNR/EPA water staffers.

Data:

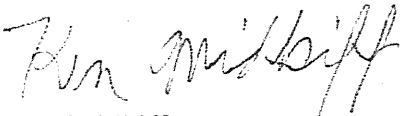
Above Flat Branch: 20-22 (Good). There were six datasets in total; there were three 20s which were assessed by Level One volunteers; the three 22s were those of Level Three. The 20s were on Aug. 21, 2014; the 22s were on Sept. 17, 2014

Below Flat Branch: 13 (Fair). There were three datasets, all collected by Level Three volunteers. All were done on November 17, 2014.

Concerns:

1. While the stream above Flat Branch show marked improvement – at the time of the TMDL the rating was 16, the stream below Flat Branch shows a decline in water quality.
2. DNR/MDC spends much time and money on training, assessing and equipping VWQMs, why is it that their data is not used?

Submitted by:



Ken Midkiff

Member, Environment and Energy Commission of the City of Columbia and Boone County.