Hinkson Creek CAM Science Team
Notes of the April 25, 2013 meeting

Team Members Present: Bob Angelo, Paul Blanchard, Joe Engeln, John Holmes, Robb Jacobson, Dave Michaelson, Dan Obrecht; Barry Poulton

The minutes from the February 2013 meeting were approved.

Joe brought the rest of the team up to date on the current funding situation for the habitat assessment field component. The USGS has notified Jason that there will not be funding available and thus the three local partners will pay for this work. Jason is concerned about his ability to recruit students at this late stage.

Ronnie Lee provided an update on the GIS work. The sand bar, top of bank and valley definition work is proceeding, thanks to help from Robb. Next steps will include the land cover and assigning attributes to points. The next project review will be scheduled in the next couple of weeks.

The team then discussed some of the science needs. Team members requested a review of the DNR chemical data and any other materials available. They then discussed strategies including nested sampling approaches, the use of Semi-Permeable Membrane Devices (SPMD's) and the conditions for sampling (e.g. first flush) and the difficulties of some approaches.

The discussion then shifted to available macroinvertebrate data or samples that are available at MU. MDC files show a period of collection in 1967 at "mile 24" of the Hinkson. In 1973, MDC conducted multiple days of sampling in July and August at miles 6 and 9. One challenge is that MU sorted and stored samples by taxon, not location. Joe will contact Charlie and see if he can join us at our next meeting. Possible approaches

a. Can we look only at the jars labeled "Boone County" and then sort to EPT. (Question: are all the jars labeled?)
b. Should we look only for taxa that are now absent in order to understand the baseline better?
c. Can we search for theses completed on Hinkson Creek and search those for information? George Harp, 1948 pollution study and 1910's found by Robb in MU on-line library search during this discussion.
d. Can we find most likely species to search for?

Result: Absence and presence of species; what has been lost.

Other Potential sources of information Geological Survey data, Ken McCarty (State Parks), IL Natural History Survey, Land Survey records(?). Jim Harlan at MU GRC has the GLO data.

May 9 will be the field trip for stakeholders all science team members are invited.

Two Hot Spot projects appear to be next on the list that the stakeholders want to have examined. One is a detention basin near Home Depot and the other is a drainage project on the East Side of

Hinkson south of I-70. The discussion centered on the need and ability to monitor or model efficacy. Any modeling would need some validation. The team discussed costs for some sampling equipment, YSI – 4-port probe systems are about $1300 with individual sensors running $300-400. The most valuable data would be tied to discharge and include turbidity, conductivity, Cl-, temperature and Dissolved Oxygen. Ziegler has shown that these data can be used to help form bacterial models. SPMD's would help determine Polyaromatic Hydrocarbon (APH) levels. These could be collocated with Jason's sties, DNR sites and/or the USGS gauge.

One of the challenges is to deploy these instruments in such a way as to protect them at high flows.

The Team approved the minutes of the March meeting.

Next meeting topics: GIS; physical habitat assessment; our list for science; Charlie Rabeni; DNR and Hubbart project data mining. Possible review of DNR chemical data.