

Hinkson Creek CAM Science Team
Notes of the November 1, 2013 meeting

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

The minutes from the August 2013 meeting were approved.

Jason and Lynn Hooper reported on their progress on the physical habitat assessment. Roughly 9.8 miles or 20% (from sites 190-384 of the MoRAP data) have been completed. This corresponds to the stretch near MU. They can complete 5-8 sites on a good day. They plan to work on the lowest reaches during the low flow winter months and expect to finish the field component in late summer 2014. The system appears to be working well and no changes to the protocol are expected.

Lynn Milberg, from DNR, presented a summary of the chemical data collected from 2003 – 2006 on Hinkson Creek. They used a combination of aquatic community, aquatic toxicity and chemical analyses to assess the creek. While only 3% (2/68) of the mainstem samples showed toxicity, 37% (19/52) of the stormwater drainage samples showed toxicity. At baseflow conditions, conductivity was 55% higher than that of the reference stream. Chloride was 40% higher, but nutrients were roughly equal. They found *E. coli* episodically.

Examination during stormwater events showed elevated levels of metals, *E. coli*, conductivity, chloride and turbidity after a rain of 0.5". Sediment cover increased downstream and turbidity was higher downstream of the 63 connector at low or base flows.

When asked about her highest concerns and suggestions for further attention, Lynn cited chloride, sediments and dissolved oxygen. There is a pending *E. coli* report that will be shared with the team when completed.

The team discussed their opportunity to comment on the proposed 305 (b) list from DNR. The proposed 2014 list does not change the categorization of the creek. The team discussed the propriety of their evaluating the science, but not the listing itself as multiple team members raised concerns about making statements on the list itself.

Barry noted that a Pathways student (MU biology) was interested in working on Hinkson Creek. This program provides a two-semester experience. He noted that having a student work on fisheries using the MDC RAM procedures would complement some of the other work underway. It was also noted that Amanda Rosenberg has an interest in working on the fish community. One potential study that could be self-contained would be to compare Flat Branch with areas of the Hinkson above and below its confluence.

Joe reported on the field trip for stakeholders that focused on BMP's in place in the watershed, including stops at Battle High School, Fire Station #8, the Crossings, and two sites on campus.

Robb commented that our team process seemed quite ad hoc rather than ordered. After discussion we agreed to focus on proposals for funding for the next year at our December meeting and then plan for an annual calendar for subsequent years. Because of the nature of this agreement with three local entities, the process will have to reflect their funding cycles in order to provide the City, County and University to follow their procurement rules.

Potential research and projects for next year were briefly discussed. Jason pointed out the wealth of suspended sediment and chloride data that his group had collected, but not yet analyzed. The Team mentioned the need to consider the case for intense data sampling tied to specific science questions. Jason also mentioned the usefulness of a bed load study.

Jason inquired as to the defined end point and whether there has been a time component to the end point. While the end point (and alternatives) is defined in the agreement, no time line was specified.

Jason raised the possibility of having a one-day symposium next year at which the scientists could present their findings to a more general audience. He noted that he had proposed an abstract to the Missouri Natural Resources Conference. Rob noted that the abstract would have to go through USGS review if he were included as an author. Joe has proposed to do a more process-oriented presentation, but did not include others as co-authors.

Next meeting will focus on potential requests for funding in order to get into an annual cycle that matches the local funding schedules.