Hinkson Creek CAM Science Team
FIRST DRAFT Notes of the September 26, 2012 Meeting

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

1. The Team approved the notes from the May 29, June 18 and July 25 Science Team Meetings.
2. The team discussed the roles of individual team members in helping to design and potentially conduct monitoring activities. They agreed that full transparency should govern any of these discussions since those on this team represent the local experts on many of the actions being contemplated and those likely to be considered in the future. Any team member should feel free to recuse himself from discussion and/or voting without prejudice should the desire arise.
3. Engeln provided a brief summary of the decisions made during the last Stakeholder Committee. The team then discussed many of the actions that had been approved in concept by the stakeholders.
   A. Habitat Assessment – Jacobson outlined a 3-tiered approach that increased in focus on specific hypotheses and likely costs as one moved from the first to the third tier. The goal of the first tier is to provide the data and basin-wide analyses to classify parts of the stream system, to identify candidate stressors and potential response variables, to provide spatial constraints and to support more detailed investigation. The second tier would provide a statistically defensible examination of discharge-independent and hypothesis driven reach-scale questions. The third tier focuses more on discharge-dependent measures and models operating on the reach scale.
      i. Because the first tier of "reconnaissance" examination based on existing data would create a good, GIS-based tool for future analyses, the team agreed to focus on that effort first. Tom Wellman agreed to talk to Action Committee members about potential support for this effort while Engeln agreed to contact CARES, MoRAP and the GRC to determine their interest and ability to do this in the coming months. The goal is to have this compilation and at least preliminary analyses done by the end of the calendar year or early in 2013 to support part 2 of this tier.
      ii. The second part of tier 1 would be a field-based examination of the Hinkson Creek stream network that follows a protocol to be created by the science team in consultation with others. Using the data compilation and analyses of part1, this effort would create a holistic set of observations in the watershed that would inform future scientific questions and actions pertaining to the improvement of Hinkson Creek water quality. This effort would ideally be conducted in the summer of 2013 during times of low flow. Engeln agreed to bring this concept forward to those on the MU campus who might have students interested in a field-based experiential learning project.
      iii. The goals of this project are to provide a good basin-scale habitat assessment and to form a sound basis of understanding of habitat distribution to guide reach-scale assessments and actions.

iv. Jacobson, Hubbart, Blanchard, Angelo and Engeln volunteered to help coordinate this effort, work with students to prepare them for this project and to provide scientific and logistical advice for their efforts during the project.

B. Forum Nature Area – Tom Wellman described the plan for easternmost portion of this area.
   i. The city would install a flow splitter near the outlet of the lower pond and then a level spreader below that to move water over a larger area during times of high flow in this ~100 acre drainage. The city would reforest the bottomlands not currently forested in this area as well. The team discussed potential monitoring for water quality, but decided that this project was best assessed using other methods based on the on-going work of Hubbart.
   ii. The goals for this project are to reduce peak flows, keep more of the existing drainage moist for more time, to protect the existing channel and to move more water into the area to be reforested during times of high flow.
   iii. Hubbart agreed to help the city staff develop a monitoring plan for the project.

C. Oak Forest detention basins
   i. This project will provide the basis for a pseudo-paired basin study. The city will do a survey of the basins and determine whether the existing dams will support this project without increasing risk. One of the existing 48" outlets will be converted to an automated adjustable vale system.
   ii. The goals of this project are to determine which release strategies provide the greatest water quality benefits, to examine the impact of water management strategies on the erosion and stability of the area immediately downstream of the outlets, and to provide guidance on potential future implementation of additional valve systems. Chris Zell noted the potential for monitoring and modeling of this system as part of the implementation.
   iii. Tom Wellman agreed to provide the team with photographs of the channels immediately below the basin outlets to guide further discussion. Blanchard and Holmes agreed to help city staff devise some operational parameters for presentation to the team and Stakeholder Committee.

D. The team then discussed some other topics of interest.
   i. Many team members expressed an interest in visiting key sites along the Hinkson to help them in their deliberations. Holmes agreed to send out a Doodle poll for potential dates. Sites on the list include, the reach extending from Hubbart's field site downstream to the Twin Lakes/Conservation property area, including the Forum site.
   ii. Poulton suggested a Fish assessment/fish health assessment of the creeks in the Hinkson Watershed. Hubbart noted that he has received funding to support a study of nematodes in the watershed, had at least some funding to assess mussels and was seeking funding for an assessment of the fish community. This led to a discussion of the team submitting a letter in support of this proposal. Engeln agreed to ask counsel about this and noted similar, past letter from the department.

iii. Holmes agreed to send out a doodle poll to help schedule the next team meeting in about a month.