Collaborative Adaptive Management Implementation Schedule and Agreement for Hinkson Creek TMDL ("CAM")

Hinkson Creek TMDL

- Established by EPA on January 28, 2011
- The TMDL is a "phased and adaptive plan to restore water quality conditions in the Hinkson Creek watershed."
- The goal of the TMDL is to restore the *Protection of Warm Water Aquatic Life* designated beneficial use of Hinkson Creek.
- MDNR is responsible for implementation of the Hinkson Creek TMDL pursuant to Section 303 of the CWA and its implementing regulations at 40 C.F.R. Part 130.
- Any modification of the TMDL must be pursuant to the process outlined in Section 303 of the CWA and 40 C.F.R. Part 130, including EPA review and approval.

Background and Definitions

- Parties to the CAM: MDNR, EPA, and collectively the "Permittees", Boone County, University of Missouri, and City of Columbia
- CAM creates an operation framework and schedule for the implementation of the phased approach outlined in the Hinkson Creek TMDL
- CAM is appropriate because there is a need for action within a system of scientific complexity and uncertainty and stakeholders have committed to the process
- Definitions, see pages 2-3

General Provisions

- Goals and Objectives of the CAM: To implement the Hinkson Creek TMDL and improve Hinkson Creek by 1) identifying primary pollutants of concern,
 - 2) improving diversity of key indicator species,
 - 3) improving the ecosystem health and water quality, 4) establishing a stakeholder process to ensure actions are taken in a reasonable timeframe, and
 - 5) <u>achieving the ultimate goal of meeting the applicable</u> water quality standards.
- This CAM does not address future TMDLs for other impairments of Hinkson Creek, i.e. bacteria (The Parties may agree to include future TMDLs by supplemental agreement.)

Creation of Committee and Teams

- Stakeholder Committee: Stakeholders identified by the Parties and appointed by Permittees. Stakeholders make written recommendations to the Parties regarding various actions
- Action Team: Non-elected representatives appointed by Permittees to act as a liaison between the Stakeholder Committee with the Parties and Science Team
- Science Team: Appointed by the Parties to "identify, evaluate and advance the necessary scientific studies needed to support the CAM process" including coordination of monitoring and modeling, see Section 5.3 for specific responsibilities
- Each committee and team will develop procedures with respect to frequency of meetings, making recommendations, and explanation of dissenting viewpoints

Monitoring

- The Science Team, in cooperation with MDNR and EPA, will design sampling and analysis plans for Hinkson Creek, including identifying responsible parties to conduct sampling and analysis and a schedule with interim milestones and completion date
- The sampling and analysis plans will meet an EPA and MDNR approved Sampling and Analysis Plan and Quality Assurance Project Plan
- The sampling and analysis plans must take into consideration sample locations to determine the characteristics of the significant tributaries
- If samples are collected during non-representative flow, the Parties agree to take such conditions into account when reviewing such data

Implementation of CAM Process

Action proposed by Action Team based on information from Science Team to meet goals of the CAM

Action revisions based on monitoring and effectiveness, if additional actions needed, begin the process again

Evaluative monitoring by Permittees to determine the effectiveness of the action

> Process may continue until action is agreed upon and implemented and/or Parties may invoke Dispute Resolution upon significant delay or at any time within 30 days of action being selected or rejected by the Permittees or Stakeholders

> > Permittees Options (within 60 days): Same as Permittees Option 1 and Option 2 above

Stakeholders (with consultation of Action and Science Teams) within 120 days of proposed action, recommend to Permittees actions, including a budget and timeframe

Permittees Options (within 90 days):

Option 1- Implement action and incorporate into Stormwater Management Program and Plan

Option 2- Send proposal back to Stakeholders to modify, reject, or request additional time

Stakeholders upon Option 2 (within 6odays) accept Permittees modification, rejection or request for more time and/or further modify the proposed action

Determining Success/ Completion and Termination

• Meet water quality standards for the protection of aquatic life

Attainment may be demonstrated as set forth in the EPAapproved method and/or Alternative Method (Attainment is subject to the Dispute Resolution provision)

Procedures for demonstrating attainment is set forth in the CAM, page 8-9

- Identify a specific pollutant and modify the TMDL as appropriate
- Termination by any Party upon unresolved dispute
- Termination by Parties agreement in writing

Effect of CAM on TMDL and Permit

- The CAM is designed to implement the Hinkson Creek TMDL as it was established January 28, 2011.
- The CAM established the framework to determine what actions are necessary to meet the objectives of the CAM, including the ultimate goal to meet the water quality standards as applicable to the Hinkson Creek TMDL
- The CAM is not a permit or modification to the permit. The permit is to be revised as agreed to in Attachment 5.

Early Action Best Management Practices "BMPs"

- Within 120 days of April 26, 2012, the "effective date", the Action Team will provide recommendations to the Stakeholder Committee for specific early action projects to address risks to the narrative water quality criteria considering the use of ordinances, policies and improved use of BMPs within the Hinkson Creek watershed.
- These early action projects should be consistent with the goals and objectives of the CAM.

Public Participation

- Process shall be collaborative, interactive and conducted consistent with the Sunshine Law.
- The Stakeholder Committee, Action Team and Science Team shall operate in compliance with the Sunshine Law.
- Major decisions shall be publicly announced through the website and news releases.

Committed Actions of Parties

- MDNR: provide biomonitoring as described, provide a participant to the Stakeholder Committee, Science Team and Action Team (optional)
- EPA: provide a participant for the Science Team and a Facilitator for the Stakeholder Committee
- Permittees: provide reasonable levels of funding to implement the recommended actions and monitoring activities and provide a participant for each to the Stakeholder Committee and Action Team