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August 14, 2023

Cesar Zapata, Acting Director  
Water Division  
U.S. EPA Region 4  
Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303-8960

Re: Submittal of Advance Restoration Plan

Dear Mr. Zapata,

EPA’s Long-Term Vision for Assessment, Restoration and Protection under the Clean Water Act Section 303(d) Program recognizes that there may be cases where an alternative restoration approach can provide a more immediate path to water quality improvement than a Total Maximum Daily Load (TMDL). The Kentucky Division of Water (DOW) identified the Sulphur Creek watershed (Anderson, Mercer, and Washington Counties) as being a candidate for such an approach and included the listings in that watershed in Kentucky’s 2016-2022 Long Term Vision priorities, with final completion of a plan slated as a goal within the 2023-2024 Vision bridge period commitments. DOW requests acceptance of the “Sulphur Creek Watershed Implementation Plan Supplement and TMDL Alternative Plan” as an Advance Restoration Plan (ARP) under the Long Term Vision priorities, meeting this commitment.

The following pollutant-waterbody combinations, current as of Kentucky’s 2022 303(d) list, are addressed by this plan:

Waterbody Name	Waterbody ID	Impaired Use <sup>1</sup>	Listed Parameter	Suspected Sources
Brush Creek 0.0 to 5.15	KY-335	PCR	<i>E. coli</i>	Grazing in Riparian or Shoreline Zones, Livestock, Non-Point Source, On-site Treatment Systems
Cheese Lick 1.45 to 5.2	KY-467	PCR	<i>E. coli</i>	Livestock, Non-Point Source, On-site Treatment Systems
Cheese Lick 5.2 to 8.2	KY-468	PCR	<i>E. coli</i>	Grazing in Riparian or Shoreline Zones, Livestock, Non-Point Source, On-site Treatment Systems

Waterbody Name	Waterbody ID	Impaired Use <sup>1</sup>	Listed Parameter	Suspected Sources
Cheese Lick UT 0.0 to 1.55	KY-469	PCR, WAH	<i>E. coli</i> , Nutrient/Eutrophication Biological Indicators, Sedimentation/Siltation	Grazing in Riparian or Shoreline Zones, Livestock, Non-Point Source, On-site Treatment Systems, Loss of Riparian Habitat, Streambank Modifications/Destabilization
Log Lick 0.0 to 4.20	KY-1177	PCR	<i>E. coli</i>	Grazing in Riparian or Shoreline Zones, Livestock, Non-Point Source, On-site Treatment Systems
Sulphur Creek 0.0 to 6.8	KY-1856	PCR	<i>E. coli</i>	Livestock, Non-Point Source, On-site Treatment Systems
Sulphur Creek 6.8 to 10.0	KY-1857	PCR, WAH, OSRW	<i>E. coli</i> , Nutrient/Eutrophication Biological Indicators, Sedimentation/Siltation	Livestock, Non-Point Source, On-site Treatment Systems, Loss of Riparian Habitat, Streambank Modifications/Destabilization
Sulphur Creek UT 0.0 to 1.2	KY-1859	PCR	<i>E. coli</i>	Livestock, Non-Point Source, On-site Treatment Systems
(1) PCR – Primary Contact Recreation; WAH – Warm Water Aquatic Habitat; OSRW – Outstanding State Resource Water				

The foundation of this planning effort began with the Sulphur Creek Watershed Implementation Plan (SCWIP), which was completed in 2015 and was accepted by EPA in 2019 as meeting the required nine watershed plan elements for 319(h) nonpoint source implementation funding eligibility. Subsequently, several 319(h) implementation projects were completed and more were planned. The Sulphur Creek Watershed Implementation Plan Supplement and TMDL Alternative Plan provides a summary and update of the SCWIP and formalizes an ARP by including a plan for success monitoring and tracking progress. The primary focus of the plan is the implementation of agricultural best management practices, as well as onsite wastewater improvement and maintenance projects. There are currently no point sources within the Sulphur Creek watershed. Suspected non-point source pollution contributing to the impaired waterbodies include livestock, loss of riparian habitat, stream bank modifications/destabilization, habitat modification, and on-site treatment systems.

Due to its well understood sources, ongoing implementation, and continued community involvement, DOW supports this plan as an alternative to be pursued in advance of TMDL development. DOW will re-evaluate the priority level for TMDL development with each Integrated Reporting Cycle. Attainment of water quality standards is projected to be achieved by the 2032 Integrated Reporting Cycle. DOW will work closely with partners in the Sulphur Creek Watershed to track progress and initiate adaptive management strategies if needed to ensure a successful outcome of this plan.

To assist in EPA’s review, a summary page is attached. The summary lists key elements of the Advance Restoration Plan and outlines their locations within the SCWIP and TMDL Alternative documents.

This plan has been entered into the ATTAINS system under the Action KYACT\_3.

If you have questions or concerns regarding this matter, please contact Lara Panayotoff, the TMDL and Program Support Supervisor, at (502) 782-7033 or by email at [lara.panayotoff@ky.gov](mailto:lara.panayotoff@ky.gov).

Sincerely,

A handwritten signature in black ink, appearing to be 'C. Johnson', written in a cursive style.

Carey Johnson, Director  
Division of Water  
300 Sower Blvd.  
Frankfort, KY 40601

<b>TMDL Alternative Plan Summary</b>	
<b>Plan Name:</b> Sulphur Creek Watershed Implementation Plan Supplement and TMDL Alternative Plan	
<b>Location:</b> The Sulphur Creek watershed is located primarily within Anderson and Mercer Counties, with a small portion in Washington County. HUC 051401030105.	
<b>Waterbodies:</b> Brush Creek 0.0 to 5.15, Cheese Lick 1.45 to 5.2, Cheese Lick 5.2 to 8.2, Cheese Lick UT 0.0 to 1.55, Log Lick 0.0 to 4.20, Sulphur Creek 0.0 to 6.8, Sulphur Creek 6.8 to 10.0, Sulphur Creek UT 0.0 to 1.2	
<b>Pollutants Addressed:</b> Pathogens, Nutrient/Eutrophication Biological Indicators, Sedimentation/Siltation	
<b>Identified Sources:</b> Grazing in Riparian or Shoreline Zones, Livestock, Non-Point Source, On-site Treatment Systems, Loss of Riparian Habitat, Streambank Modifications/Destabilization	
<b>Actions to be Taken:</b> Agriculture and Septic Best Management Practices	
<b>Estimate for Water Quality Standards to be Met:</b> 2032	
<b>Primary Responsible Party:</b> Kentucky Division of Water	
<b>Monitoring Lead Organization:</b> Kentucky Division of Water	
<b>Key Partners:</b> Mercer & Anderson County Conservation Districts, Mercer County Health Department, Natural Resources Conservation Service, Sulphur Creek Watershed Oversight Committee, Kentucky Division of Conservation	
<b>Funding:</b> US EPA Section 319 (h) grants, Division of Conservation State Cost Share Program	
<b>Key Elements</b>	<b>Document Locations</b>
Impaired water segments, pollutants, and contributing sources.	TMDL Alternative Plan – Section 2.0 SCWIP – Sections 3.1 & 4.0
Implementation plan that addresses all point and nonpoint sources, an analysis or explanation as to why those actions are expected to achieve water quality standards, and clear milestones and dates to achieve those actions.	TMDL Alternative Plan – Section 3.0 & Appendix A SCWIP – Section 6.0, 7.0, & 8.0
Identification of available funding opportunities for implementation.	TMDL Alternative Plan – Section 3.0 SCWIP – Section 8.1
Identification of all parties committed (and needed) to achieve implementation and meet water quality standards.	TMDL Alternative Plan – Section 3.0 SCWIP – Section 8.2
Estimate of when water quality standards will be met.	TMDL Alternative Plan – Section 4.0
Plans for effectiveness monitoring following implementation to demonstrate progress and identify where adaptive management is needed.	TMDL Alternative Plan – Section 4.0
Commitment to periodically evaluate whether the plan is on track for achieving water quality standards more quickly than a TMDL.	TMDL Alternative Plan – Section 4.0