

November 8, 2007

Ms. Andrea Fredenburg  
Division of Water  
14 Reilly Road  
Frankfort, KY 40601

Dear Ms. Fredenburg

I submit these comments on behalf of the Kentucky Waterways Alliance regarding the Total Maximum Daily Load for 15 Fecal Coliform Impaired Stream Segments in the Upper Green River USGS Hydrologic Unit 05110001. The Kentucky Waterways Alliance, Inc. (KWA) is a statewide nonprofit organization dedicated to protecting and restoring our waterways. The Kentucky Waterways Alliance represents over 500 members and affiliate organizations united to insure high quality water resources in Kentucky for diverse recreational activities such as swimming, boating, and fishing as well as reliable drinking water supplies.

The intent of the Clean Water Act (CWA) regarding total maximum daily loads (TMDL) as described in the subject document is rather extensive and thorough. KWA's overall observation is that the availability of data by which DOW could comply is neither extensive nor thorough. The data presented in the report can be sliced and diced many ways, but the following conclusions remain the same any way that we analyze them:

1. DOW has failed to meet the letter, much less the spirit, of the TMDL requirements of the CWA. It lacks adequate resources to know how polluted the streams of this watershed are, much less the sources of their pollution. Indeed, DOW would have to do significantly more study, monitoring, field reconnaissance, etc, to comply with TMDL requirements.
2. The provided data suggests a significant problem that impacts Mammoth Cave, the world's longest known cave network and a UNESCO World Heritage Site.
3. The most likely sources of pathogenic pollution are under-regulated, at the expense of public health.
4. As presented, 8 of the 15 impaired stream segments in this report have no POTWs, no KPDES-permitted dischargers and no communities within current MS4 jurisdiction. The other seven stream segments host only two major POTWs; the remaining KPDES dischargers have relatively small (4,000 gpd to 780,000 gpd) design flows.
5. The KPDES dischargers have had relatively few reported exceedances for pathogen parameters. (It is unknown whether they actually had more exceedances that went

undetected.) Under the circumstances, it seems impossible that even perfect compliance with all conditions of every KPDES permits and full implementation of every MS4 plan could result in a watershed meeting primary recreation standards.

6. Though DOW's "TMDL Synopsis" lists the "suspected source" of pathogenic impairment as almost universally "unknown," the more extensive commonalities between the stream segments failing to meet standard are on-site septage systems and livestock—two sources seemingly omitted from DOW's waste-load allocations (WLAs).
  - a. By the report's reckoning (using the available data, which necessitates analyses along watershed lines in places and county lines in others), the percentage of households estimated to be connected to sewers in the involved counties ranges from 11% to 65%; the weighted average is just 42%.
  - b. It is unknown what portion of the remaining 58% is on failed on-site systems or straight-shot pipes. DOW apparently has no programs for systematically detecting either likely source.
  - c. State regulations use the number of livestock head to establish regulatory distinctions between "concentrated animal feeding operations" (CAFOs) and "animal feeding operations" (AFOs), and require a general Kentucky No Discharge Operating Permit (KNDOP) permit of only the former—apparently via an honor system. Regardless of permit requirements, this TMDL report assigns no responsibility to either CAFOs or AFOs for contributing toward watershed TMDL goals.
  - d. Regulatory distinctions notwithstanding, great numbers of animals are being raised in the Upper Green River watershed, and conventional wisdom says their wastes contribute pathogens to streams in more cases than not. Indeed, all but 2 of these 15 impaired stream segments host (as many as 52) agricultural KNDOP holders. KWA's anecdotal experience is that DOW provides virtually no enforcement of these permits.
  - e. The three highest 90<sup>th</sup> percentile counts were from segments with no KPDES dischargers or MS4 communities, yet with AFOs.
  - f. Kentucky cannot achieve water quality suitable for swimming unless it effectively regulates on-site systems and feedlots.
7. By all appearances, this report seems to say that—if they exist—DOW will assign to wastewater and stormwater permit holders all responsibility for reducing ambient pathogen counts—even if they're apparently already in compliance with permit limits. And where no such targets exist DOW proscribes no real solution. In short, this report fails to show that DOW has "devise[d] alternative implementation plans to remedy the impairment."
8. KWA appreciates the efforts of the Conservation Reserve Enhancement Program. We encourage DOW to collaborate with state and local regulators to improve regulation of

on-site systems. We see merit in working with the Cooperative Extension Service to encourage farmers to digest manure into methane for space heating, on the thesis that they won't allow to wash off into a stream what they see as a valuable resource. But we also believe that public health will not be protected per the demands of the CWA through voluntary programs alone. Stepped up regulation and enforcement are in order and overdue.

9. KWA understands that DOW ability to regulate is constrained by the regulations and funding provided it by the Governor's Office and General Assembly. However, this report should disabuse legislators of the myth that it can protect both public health and every politically-powerful constituency. This report should pointedly emphasize that complying with the CWA requires that the legislature provide DOW with the following requisite resources:
  - a. Adequate staff and monitoring equipment to accurately determine the true water quality and the sources of pathogenic pollution.
  - b. Regulatory authority and adequate enforcement staff to follow-through on the results of improved monitoring and existing regulations.
  - c. Better dissemination of information on the repair, maintenance and replacement of existing on-site systems, including alternate designs for sites with problematic soils and geology.
  - d. Regulatory authority for precluding new construction in locations inaccessible to sewers and unsuitable for on-site systems.

Thank you for considering our comments.

Respectfully Submitted,

Jason Flickner  
Water Resources Program Director

CC: James D. Giattina, Region 4, USEPA