

To: Lexington-Fayette Urban County Government, Kentucky Division of Water, Environmental Protection Agency, and consultants for the “Coldstream Park Stream Corridor Restoration and Preservation Supplemental Environmental Project.” From: Julian Campbell, Jan 18, 2014.

Thank you for previous responses to my inquiries about basic goals for this project: “bank stabilization, habitat restoration and greenway creation” (Appendix J-1 of Consent Decree). However, some critically important questions remain. Please provide a response—for all citizens who are concerned about environmental quality, conservation of natural resources and fiscal responsibility. Extended comments on the plans, with suggested modifications are posted at my website (http://bluegrasswoodland.com/Cane_Run_Coldstream_Park.html).

All of the evidence from geology, topography, soils, vegetation and historical materials indicates that the natural condition of this project’s hydrology is well-drained, sinking for most of the year, with direct connection of streamflow into swallets and conduits of the karst, and with little or no regular floodplain outside the current banks. Indeed, much of the information in project plans supports this conclusion: for example, “The preponderance of residual soil, the existence of historic Bur Oaks and the lack of obvious alluvial gravel in the test pits lead us to believe that the stream has not meandered appreciably within the recent geological past” (Appendix F, page 6). Moreover, the Risk Analysis (Appendix E, pages 1-2) states that there is a “high probability” of “complete diversion... into underground conduits.” The current channel appears to be in a largely natural position and condition, except for the section around the old concrete bridge and a few other artificial impacts. Although it is likely that urban runoff has increased the ‘flashiness’ of this stream, there are few places along the stream where erosion appears to have significantly increased.

DESIGN OF WELL-DRAINED VERSUS POORLY-DRAINED CONDITIONS

1. What evidence do you have for the basic premise of this project?—“This plan is to include restoration of a section of Cane Run, which has been degraded due to straightening, stream bank erosion, and downcutting of the stream channel resulting in disconnection from the floodplain.” (Executive Summary, page 1).
2. Would the project likely increase wet (hydric or subhydric) conditions in the restored remnant of ancient well-drained woodland (with bur oaks, rue-anemone, cane), and would it even lead to increased flooding along the Legacy Trail (as indicated in maps of Appendix H)?

DESIGN OF BANK-STABILIZATION VERSUS STORMWATER-TREATMENT

3. Given the overall assessment of “stable” banks in this Catchment 9 by UK (Table 20 in their 2011 Watershed Plan), how can it be claimed that bank erosion within this stream section is a sufficiently significant problem for “bank stabilization” to be the primary goal, and that there is evidence to support the few relevant statements in project plans?—For example: “The primary sediment source to the project area is believed to be bank erosion” (Appendix E, p. 13). Has there been any direct measurement or even estimation of erosion along banks within this stream section (other than the two photos in Appendix F)?
4. Given several places in the project plans where “treatment” of stormwater is mentioned as a goal, how can it be claimed that this goal is less important than “bank stabilization”?—For example, “This alternative [the preferred No. 1] would reconnect the floodplain to the stream, increase habitat, treat the “first flush”, reduce shear stress on the bank and reduce erosion, reduce the flooding frequency of legacy Trail, reduce the potential for floods overtopping the sewer line, increase the frequency of stormwater treatment” (Appendix E, p. 16).