



ARKANSAS
Department of Environmental Quality

September 13, 2010

Claudia Hosch (6WQ-P)
Associate Director
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, TX 75202-2733

Re: Comments on the Preliminary Data Review and Analysis for Water Quality Modeling and TMDL Development for the Illinois River Watershed (WA #3-36 and WA #4-36)

Dear Ms. Hosch:

The Arkansas Department of Environmental Quality (ADEQ) would like to thank Region 6 Environmental Protection Agency (EPA) for allowing us to review and provide comments on the Preliminary Data Review and Analysis for Water Quality Modeling and TMDL Development for the Illinois River Watershed (the Report). ADEQ has the following comments for consideration in regards to the draft Report. In addition, Tyson Foods, Inc., Rogers Water Utility, and comments by Marty Matlock submitted by the City of Springdale have been attached for your consideration.

The ADEQ in a good faith effort with Oklahoma, the municipalities and the agricultural community in NW Arkansas, through the Statement of Joint Principles and Action (2003) has made considerable reductions in total phosphorus (TP) from point source dischargers and loading from non-point sources. A review of the monitoring data shows that tremendous gains have been made in the reduction of TP in the Illinois River Watershed (IRW). Based on these efforts, the ADEQ is continuing monitoring the IRW to demonstrate water quality standards are being met.

In an overall review of the Report it appears some data are still not being considered nor accounted for; these are indicated in the comments below. In addition, the ADEQ expresses serious concerns on using national or regional data to support the model setup. The IRW is a unique ecoregion that supports a diverse community of indigenous species of fish that would be impossible to replicate through a model. Every effort should be made to gather any missing data within the watershed. The ADEQ understands this process may take more than the 18 month timetable to complete the TMDL, but ADEQ considers it more important to obtain accurate data than meeting self imposed timelines.

- In all of the figures showing the major discharges in Arkansas (except Figure 3.2 on page 34) Fayetteville's West Plant is located outside the Illinois River watershed.
- On page i in the executive summary the first paragraph and repeated on page 1 in the first paragraph it states "Ultimately, the intent is development of a tool that can lead to

scientifically sound TMDLs and a basin wide water quality restoration plan.” The Department continues to state that all standards are being met in Arkansas and questions what is being restored with this plan?

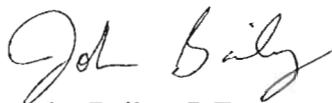
- On page ii in the executive summary under Locations of know karst formations; Aqua Terra states that “current information is in pdf files, whereas GIS-based data (i.e. shape files) would more easily facilitate incorporation into the modeling effort. We are continuing to search for this information to allow development of an approach to including karst impacts within the watershed model.” The ADEQ is concerned that if a “more easily” approach is not developed the information will not be taken into consideration. Every effort should be made to extrapolate the information into a usable format.
- In the 3rd paragraph on page 1 it states “The upper section of the Illinois River in Oklahoma is a designated scenic river and home to many native species of bass with spring runs of white bass.” It should be noted the Arkansas portion is also designated as an Ecologically Sensitive Waterway (Neosho Mucket) and is a perennial fishery supporting a diverse community of indigenous species of fish including smallmouth bass.
- The fourth paragraph on page 1 states, “tributaries to the Illinois River in Arkansas (e.g. Osage Creek, Muddy Fork, and Spring Creek) are designated as Phosphorus-impaired and included in the State’s Clean Water Act 303(d) list.” As previously stated by ADEQ all narrative water quality standards for TP are currently being met and is designated by EPA, not Arkansas, as impaired.
- Third paragraph on page 5 states “The above mentioned studies appear to be the primary modeling efforts that have covered the entire IRW, and include simulation of both flow and water quality, and thus provide the best opportunities for acquisition of data relevant to our current study.” To the Department’s knowledge the previous Lake Tenkiller model did not use Arkansas data or studies, therefore the “entire IRW” could not have been covered.
- On page 7 the asterisk is used to note “Not all applicable sites will have all listed data items available, so extensions from other nearby sites, and/or regional or national data may be used to estimate site values:” As stated earlier the use of regional or national data is inappropriate and cannot accurately replicate the conditions of the IRW.
- In Table 2.6 on page 24 the Arkansas station data does not appear to account for all “counts” for several parameters (NH₃, NO₂+NO₃, Total P, PO₄-P, and TSS). All of the stations listed for Arkansas are ambient stations and data is collected on a monthly basis. If only post 1999 data is used a minimum of 120 “counts” for each pollutant listed above should be indicated for the Arkansas stations. If there are any issues with the data on STORET ADEQ would be willing to provide EPA with any of the missing “counts.”
- In the first paragraph on page 27 “ODEQ developed and provided spreadsheets of monthly loads for the OK dischargers at the time of the BASINS/HSPF effort (A. Fang, personal communication, approximately January 2008). These were based on data from

NPDES Discharge Monitoring Reports (DMR) and various assumptions on organic fractions of the TN and TP. These data-derived estimates cover the period from 1990 through 2007, and ODEQ has agreed to update these values through 2009 for the current effort. A similar effort is needed to develop the needed timeseries data for the AR dischargers.” ADEQ is willing to supply EPA with a spreadsheet for all dischargers in Arkansas as necessary.

- The 3rd paragraph on page 27 states “Effluent data, derived, in part, from a national inventory of wastewater NPDES records (Tetra Tech, 1999), has been used to develop a table of typical effluent concentrations (see Table 2.10) for the different levels of municipal wastewater treatment (e.g., secondary, advanced waste treatment) (Stoddard et al., 2002; Tetra Tech and Stoddard, 2000). The values in Table 2.10 can be used to estimate missing effluent constituents, if needed. Although point source data is not a current data deficiency, it is a task that needs to be performed with accepted procedures in order to accurately represent point source contributions within the modeling effort.” Sufficient data exists so that estimated values are not used and as stated in a previous comment the ADEQ is willing to provide effluent loads, in any format. In addition, adequate pre-treatment data exists and ADEQ is willing to provide that information as well.
- Figure 2.7 on page 30 indicates all point sources as well as stormwater dischargers; however no stormwater permits are shown on the Oklahoma side of the IRW. Please confirm this information is accurate.
- Appendix A did not list the most recent Integrated Water Quality Monitoring and Assessment Report (305(b) Report) for Arkansas. The 305(b) report provides site specific information for the IRW and the data provided should be taken into consideration when establishing data requirements for watershed and waterbody modeling.

If you have any questions you contact my by phone at (501) 682-0629 or by email at the following address: bailey@adeq.state.ar.us

Sincerely,



John Bailey, P.E.
Permits Branch Manager, Water Division

Attachments: Rogers Water Utilities' comments
Tyson Foods, Inc. comments
Marty Matlock comments submitted by the City of Springdale

cc: Teresa Marks, Director, ADEQ
Ryan Benefield, Deputy Director, ADEQ

Steve Drown, Water Division Chief, ADEQ
Sarah Clem, Water Quality Planning Branch Manager, ADEQ
Robert George, V.P. & Associate General Counsel, Tyson Foods, Inc.
Tom McAlister, Director, Rogers Water Utilities