

# Peer Review Summary Document

(6/28/2012)

## Peer Review Plan

[http://www.usgs.gov/peer\\_review/docs/cyanobacteria\\_sep\\_oct\\_2011\\_kansas-river.pdf](http://www.usgs.gov/peer_review/docs/cyanobacteria_sep_oct_2011_kansas-river.pdf) [18 KB PDF].

## Title and Authorship of Information Product Disseminated

Fate and Transport of Cyanobacteria and Associated Toxins and Taste-and-Odor Compounds from Upstream Reservoir Releases in the Kansas River, Kansas, September and October 2011, By Jennifer L. Graham, Andrew C. Ziegler, Brian L. Loving, and Keith A. Loftin.

## Peer Reviewers Expertise and Credentials

Peer Reviewer #1 – PhD in Environmental Science. USGS Hydrologist and Reports Specialist. Areas of expertise include emerging contaminants, contaminant transport, hydrology, and surface-water and groundwater quality.

Peer Reviewer # 2 – PhD in Limnology. USGS Hydrologist and limnologist. Areas of expertise include watershed hydrology, reservoir limnology, hydrodynamics and water-quality interactions, and nutrient and phytoplankton dynamics.

## Charge Submitted to Peer Reviewers

The reviewers were asked to make an objective evaluation of the research.

## Summary of Peer Reviewers Comments

Reviewer #1 stated that the report was in excellent shape. The reviewer had several editorial suggestions to improve the content and clarity of the report. The reviewer had the following technical questions/suggestions:

- Most analyses were of lysed water samples, which represent total cyanotoxin and taste-and-odor concentrations, rather than dissolved fractions. This feature of the data needs to be explicit.

Reviewer #2 stated that the report was organized and written well, especially given the dynamics of the study and varying results. Reviewer #2 also stated that it was encouraging to see the authors examine different sample methods, document the results, and share their concern about sample methods used and the variability and uncertainty between different methods because the value of these data often gets overlooked. The reviewer had several editorial suggestions to improve the content and clarity of the report. The reviewer did not have any major technical suggestions.

## Summary of USGS Response to Peer Reviewer Comments

Most editorial suggestions provided by Reviewer #1 and Reviewer #2 were incorporated into the report. To be more explicit about total and dissolved analyses a paragraph was

added to the methods section describing the difference in particulate, dissolved, and total concentrations and the rationale for using total concentrations for most analyses in the study. In addition, everywhere that cyanotoxin or taste-and-odor concentrations are discussed in the report they are described as being total concentrations (for example, total microcystin concentrations, total geosmin concentrations).

## **The Dissemination**

The published information product will be released in a USGS Scientific Investigations Report publication series and will be available at <http://pubs.er.usgs.gov/>.