United States Department of the Interior
NATIONAL PARK SERVICE
Buffalo National River
402 N. Walnut, Suite 136
Harrison, AR 72601

IN REPLY REFER TO
1.A.2

October 6, 2015

Becky Keogh
Director
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, AR 72118-5317

Dear Director Keogh:

The National Park Service (NPS) has been collecting water samples at Mill Creek (ADEQ site - BUFT04) throughout the summer, and have found that Mill Creek has exceeded the geometric mean (126 colonies/100 mL of 5 samples within 30 day period) allowed for Escherichia coli (E. coli) for July, August, and September of this year. Mill Creek has also exceeded the one time grab sample limit in Regulation 2.507 six times (40% of samples) within the same time period. This appears to make Mill Creek impaired for the parameter of E. coli (See Figure 1).

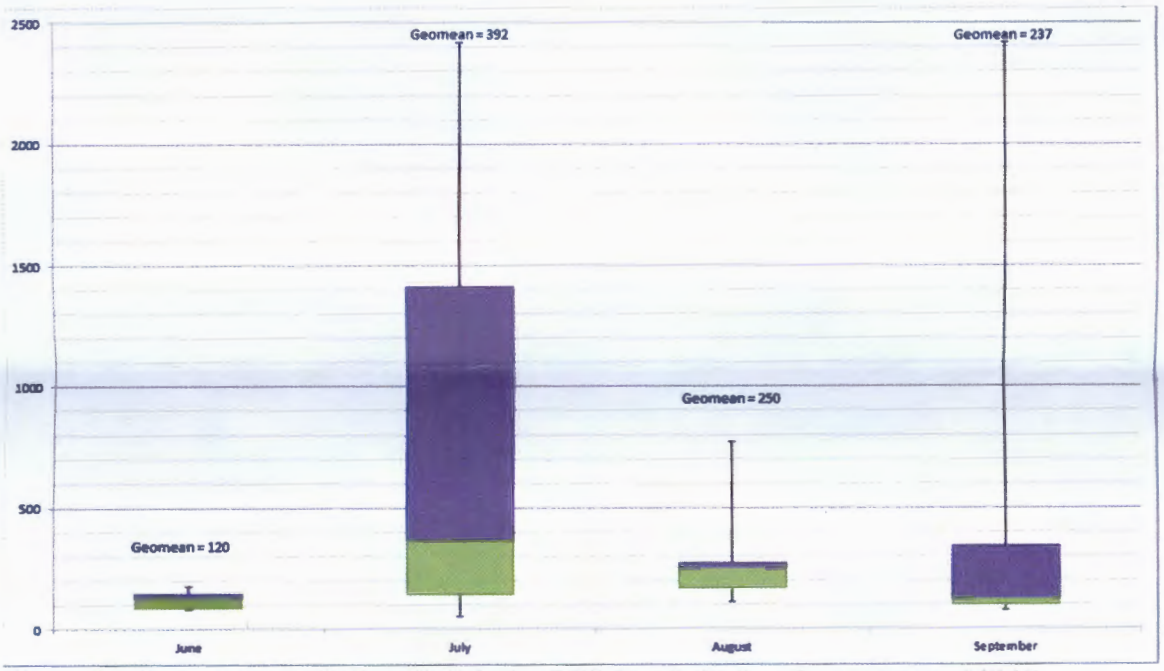

Figure 1: Escherichia coli (E. coli) data for Mill Creek during the summer of 2015

Mill Creek is a major tributary to the Buffalo River, coming in just downstream of Pruitt. High E coli concentrations in this tributary are likely placing the Buffalo River out of compliance for primary contact recreation. The law establishing Buffalo National River (Public Law 92-237) makes

it the policy of the United States to conserve the scenic and scientific features of the Buffalo River as well as maintaining its free-flowing condition for *the benefit and enjoyment of present and future generations*. Enjoyment of the river includes to a large degree primary contact recreation such as canoeing, kayaking, wade fishing and swimming. As a partner in the management of the river, the National Park Service needs the assistance of ADEQ in determining the source(s) of the fecal contamination in Mill Creek, and their reduction or elimination. Until such time as the contamination can be eliminated or reduced to tolerable levels, we feel the stream needs to be placed on the "Impaired Waterbodies" list pursuant to Section 303(d) of the Clean Water Act.

NPS has also been monitoring the United States Geological Survey (USGS) sites collecting dissolved oxygen data on tributaries to the Buffalo River. Two of these sites have chronically been below the allowable limits in Regulation 2.505. These are Bear Creek near Silver Hill (USGS Site 07056515) (ADEQ site - BUFT12) (Figure 2) and Big Creek at Carver (USGS Site 07055814) (ADEQ site - BUFT06) (Figure 3). These streams have had minimum dissolved oxygen values of 3.9 and 4.5 mg/L, respectively, well below the standards.

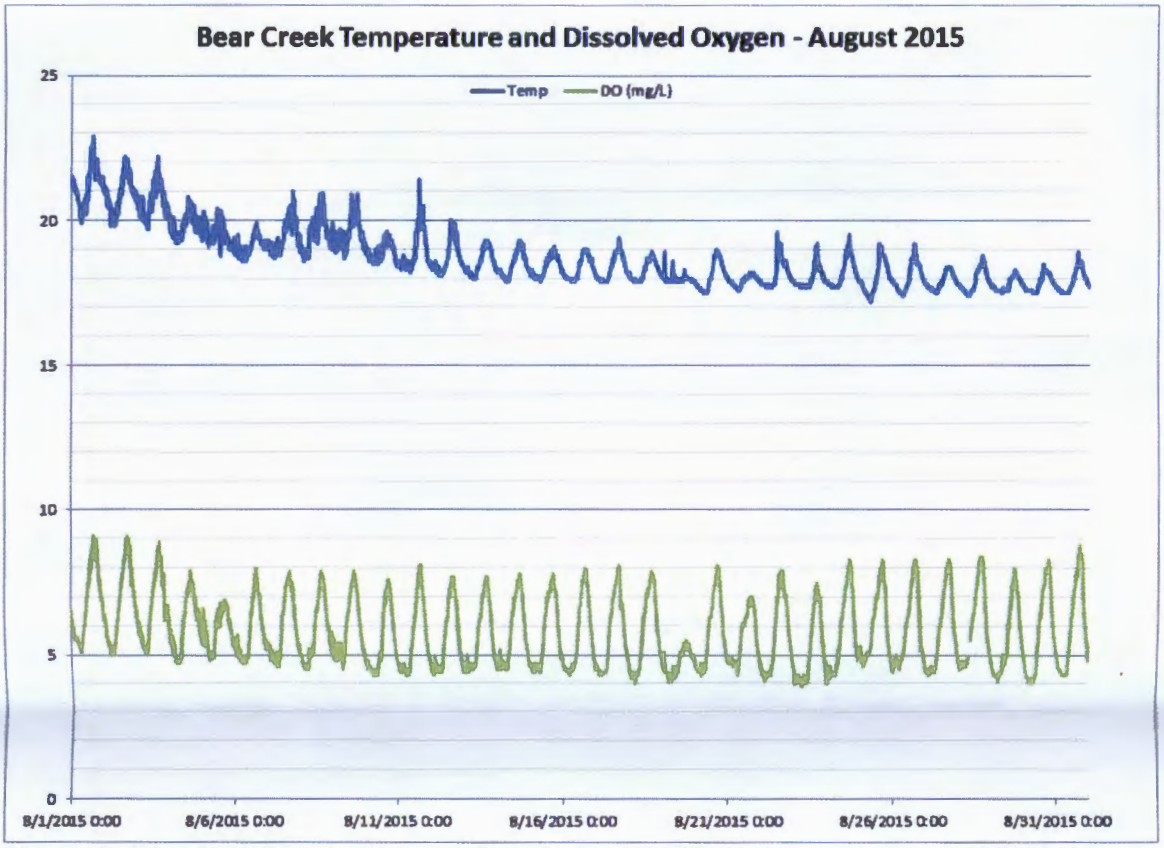

Figure 2: Dissolved Oxygen data for Bear Creek (BUFT12) during August of 2015. (Source USGS)

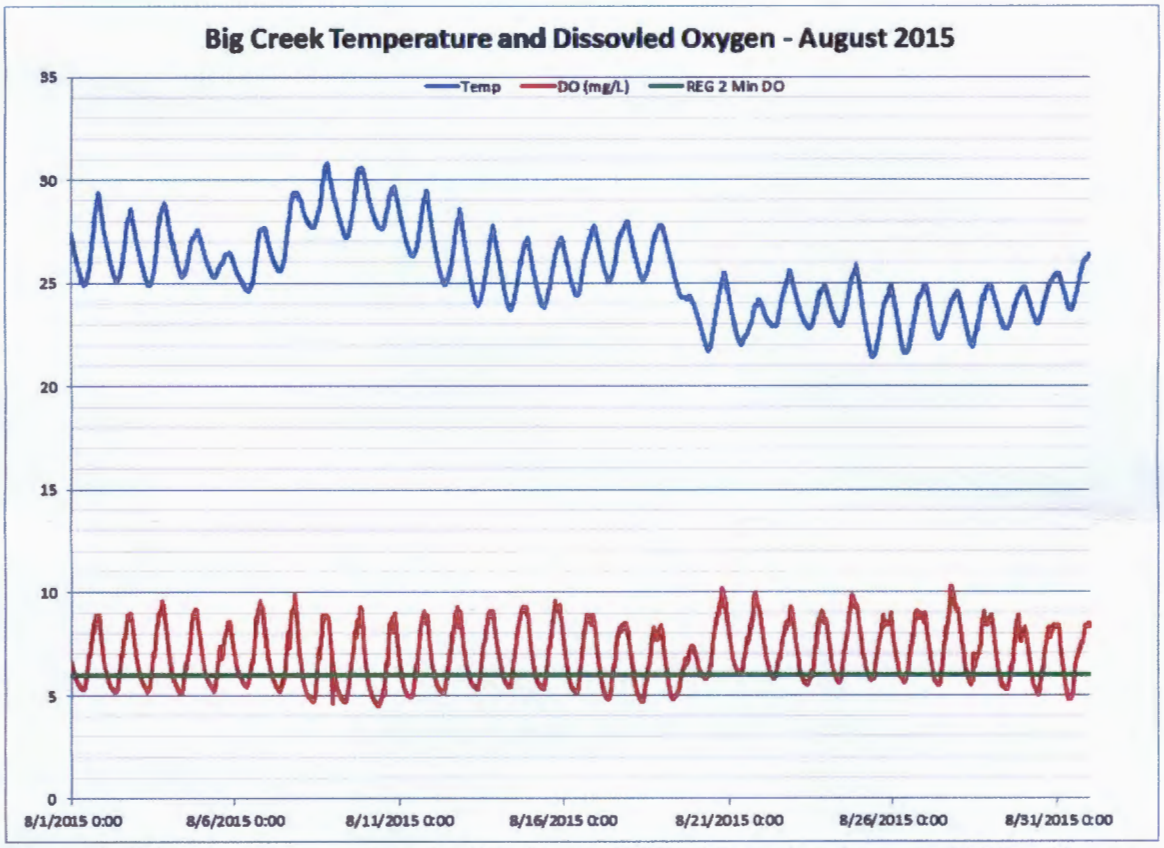

Figure 3: Dissolved Oxygen data for Big Creek (BUFT06) during August of 2015. (Source USGS)

As dissolved oxygen is very important for aquatic life, particularly for species such as freshwater mussels, and such species are part of the suite of scenic and scientific resources Congress expected to be conserved when the Buffalo National River was established, NPS needs the assistance of ADEQ in determining the sources of low dissolved oxygen and reducing or eliminating these sources. We feel that both of these streams should be placed on the "Impaired Waterbodies" list pursuant to Section 303(d) of the Clean Water Act.

We would like to schedule a meeting to discuss these findings with your staff, and the need to get the stream segments listed. If you have any questions, please feel free to contact Aquatic Ecologist Faron Usrey at 870-365-2764 or at Faron_Usrey@nps.gov.

Sincerely,

Kevin G. Cheri

Kevin G. Cheri
Superintendent

Cc: Arkansas Department of Health
Environmental Protection Agency, Region 6
USFWS Arkansas Ecological Services Field Office
Arkansas Department of Parks and Tourism