From: <u>Margaret Britain</u>

To: Water Draft Permit Comment
Subject: [BULK] Permit # 5264-W

Date: Thursday, March 09, 2017 12:47:41 PM

Dear ADEQ,

I appreciate your attention to the quality of our Arkansas environment. I moved to Arkansas several years ago—in part because I was drawn to the natural beauty and outdoor opportunities in the state. One of my favorite places to go is the Buffalo National River. I have floated the river many times. Recently I have become aware of the Hog farm and to the very real threat that it poses to our river—and that is what I would like to discuss with you in this letter.

My first concern is the nutrients that are in the watershed. As we all know, we need a certain amount of N and P on the land to grow crops. Fertile land is a good thing. But fertile rivers are not! We do not want our lakes and streams full of excess N and P that will stimulate algal and plant growth. We want our lakes and streams low in nutrients. But I'm sure you recognize that. That brings me to the C&H permit. I believe it should be denied because we already know, for sure, that nitrate levels downstream from C&H are higher than upstream. Although other factors could be involved, there is no doubt in my mind that leaky holding ponds and spreading hog manure on fields that are already rich in N and P are a big part of the problem. We could kill this river. It is up to us to care for it and make sure that our children have it to enjoy, too. Big Creek is already impaired with low oxygen levels—a direct consequence of high nutrient levels.

I teach Biology at NW Arkansas Community College. I make it a point for my students to understand the water cycle, the phosphorous cycle, and the nitrogen cycle. When they understand how important it is for plants to have P and N available and how important it is for waterways to be low in P and N they understand that we must guard our watersheds and make sure that any runoff from the land is as low in nutrients as possible.

In addition to runoff from the hog farm we have the added factor of the hog farm situated on top of karst. For all of us who have enjoyed exploring Arkansas caves—we understand how water is not only going across the land, but with karst we have water traveling very fast through a very porous space. Since we have karst we cannot depend on the underlying soil acting as any kind of water filter. The karst topography therefore greatly amplifies the problem of the nutrient runoff.

We owe it to our country to keep the Buffalo National River in the most pristine state that we possibly can. Please DENY the C&H permit.

regards,

Margaret M. Britain