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Public Outreach and Assistance Division  
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**Comments re: The Ozark Society and the Arkansas Public Policy Panel** Petition to initiate Third-Party Rulemaking to amend Arkansas Pollution Control and Ecology Commission Regulations 5 and 6 to ban new medium and large confined animal feeding operations (CAFOs) in the Buffalo National River watershed.

I, enthusiastically, support the petition to ban medium and large size CAFOs in the Buffalo National River Watershed. Existing swine operations and small hog farms will not be affected by the ban. Reasons:

The Buffalo River was designated by the U.S. Congress as the first National River, in 1972. The purpose was to protect its free-flowing status, to preserve/conservate and interpret this Arkansas ecological treasure with its abundant scenic and scientific features. The Buffalo River has the highest category of designated use as an "Extraordinary Resource Water" and Tier III anti-degradation protection from APC&E Regulation 2.

The Buffalo is so uniquely beautiful with its clear water, its towering bluffs, limestone features and caves, its flora and fauna – that it is treasured by Arkansas' outdoor-loving public. It is a significant part of our culture and our tourism economy. In 2012, The Buffalo National River drew in more than a million visitors who spent \$43.8 million in communities near the river. The numbers continue to climb as families spend more vacation time close to home in difficult economic times. Another economic benefit is jobs; more than 600 people were employed in businesses involved with the Buffalo in 2012. Banning large and medium CAFOs in the Buffalo River Watershed will help assure that those folks who run river-dependent businesses such as restaurants, canoe concessioners, cabin and lodge rentals, gas stations, private campgrounds, etc., will not see property values decline or business suffer because of a polluted river, from such CAFOs.

The proposed changes will ban new CAFOs which have 750 or more swine weighing 55 pounds or more or 3000 or more swine weighing less than 55 pounds. Conservation organizations, scientists and the media have been educating the general public for more than a year now about the amount of waste produced per year by medium and large swine operations. Operations of this size produce millions of gallons of waste (feces and urine combined) per year.

Typically, this waste is spread on fields as fertilizer. Waste is pumped out of storage lagoons and land applied. Because the Buffalo River floods 2-3 times per year following heavy rain events, the risk of the lagoons overflowing into surrounding areas and local streams (tributaries) flowing into the Buffalo, there is the strong possibility of swine waste polluting the Buffalo National River.

In addition to this threat, the geology of the Buffalo River Watershed is porous and fractured limestone, better known as “karst” which can allow rapid flow of waste nutrients through underground cracks, sinkholes and caves to subsurface waterways – polluting springs, drinking water wells and streams. This situation threatens the high water quality of the Buffalo River. I have read that current regulations allow approximately 3000 to 5000 gallons per acre per day, to leak from storage lagoons. This leakage plus the spraying of waste onto fields in the watershed of the Buffalo is too great a risk to the water quality and the aquatic life of the Buffalo.

**One of the most important reasons for banning large and medium CAFOS from the Buffalo River Watershed is the public health threats from said CAFOS.** The intolerable odors from these factory farms are caused by the gases produced – ammonia and hydrogen sulfide are dangerous neurotoxins; methane is a powerful greenhouse gas. Literature indicates that children, and even adults, living within a mile of large or medium CAFOs are at risk for pulmonary diseases and neurological health problems. Large swine barns have huge ventilators blowing fumes out of the barns and into the atmosphere – a particular risk when schools and communities are in the windshed of such CAFOs. Pathogenic bacteria can be carried by the wind, not only from the barns but also from the spray fields and waste lagoons. Microbes of concern in swine waste include E. coli, fecal coliforms and cryptosporidium. In 1995, heavy rains caused a North Carolina swine CAFO storage pond to overflow, spilling millions of gallons of hog waste into the New River. Millions of fish were killed and shell fishing was shut down on more than 360,000 acres of coastal wetlands. An outbreak of Pfiesteria (a genus of heterotrophic dinoflagellates associated with harmful algal blooms and fish kills) caused fatal lesions on many thousands of fish and infected private and commercial fishermen fishing in rivers and along the coast of No. Carolina. A catastrophic overflow of swine waste lagoons or heavy rains flooding fields where hog waste has been applied could make the Buffalo River unsafe for body contact.

In the event of waste lagoon failures, leaking waste flowing through karst topography, heavy rain causing overflow of lagoons or fields being flooded - swine waste products of phosphorus, nitrates, bacteria and other nutrients will flow into water bodies, becoming embedded in sand and gravel. As these products continue to deteriorate, they cause algae blooms and low dissolved oxygen. Fish and shellfish die including at least two threatened species of mussels, identified by USF&WS.

Therefore, because of the public health risks, the critical risk of pollution of the magnificent Buffalo National River, the tourism industry and Arkansas’ reputation as the natural state, I ask for your support in banning medium and large CAFOs in the Buffalo River Watershed.

Respectfully submitted,

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