From: <u>Marti Olesen</u>
To: <u>Reg-Comment</u>

Subject: IN SUPPORT OF A PERMANENT MORATORIUM ON DEVELOPMENT OF SWINE CAFOS IN THE BUFFALO RIVER

WATERSHED

Date: Monday, September 23, 2019 9:19:43 AM

Director Keogh,

We support a permanent moratorium on swine CAFOs in the Buffalo National /River watershed. It is crucial to take the topography and underlying hydrogeology into account when considering anti-degradation of the waters of the Buffalo National River, not only for the benefit of the small businesses and families that rely upon tourism that is depends on its water quality, but also for the life of the river itself.

The geology of the watershed, with such thin soils and limestone subsurface, produces extreme channeling of surface liquids through fractures, sinkholes and epikarst into shallow aquifers, streams and the Buffalo River main channel (as evidenced in Dr. Van Brahana's KHBNR dye trace and continuing water monitoring research). BCRET, BNR, GAme and Fish, and USGS monitoring corroborates the cumulative degradation of the waters. The karst geology in the Buffalo National River area makes it an unsuitable location for concentrated animal feeding operations due to its many caves, springs and underground streams.

In addition, the soils in the Buffalo watershed are thin and cannot contain the large amounts of animal waste that are produced by even a single CAFO, with its quantities of waste equal to two or three times that produced by the city of Harrison with its 12,000 residents. Rapidly changing weather patterns no longer indicate that 25 or 100 year flood measures are reliable. With increasing volumes and frequencies of heavy rain fall, groundwater flow direction and volumes are unpredictable, and unprecented erosion is carrying topsoil deposits of legacy phosphorus and nitrates from application fields and shallow catchment ponds and aquifers into the Buffalo River channel itself. Record high counts of phosphorus are lodging and accumulating in gravel bars downstream from the only swine CAFO in the watershed. These deposits will release phosphorus that upends the natural habitat for endangered and threatened aquatic species, as well as triggering proliferation of unsightly and harmful algal blooms into the waters of the Buffalo for years, if not decades, to come.

To assure that such a permitting mistake as the C&H swine CAFO never occurs again, a ban on this type of facility will ensure it will not repeated in the future. People may forget this episode of river history in years to come, but the Buffalo River will carry its effects for the foreseeable future. Let this ban introduce a healing of the waters and the families of the watershed, so that our children and their children will benefit from the actions that the ADEQ and the governor, and the legislature of Arkansas have taken to preserve this Arkansas wilderness treasure that belongs to us all.

We include the comments of the Buffalo River Watershed alliance in our comments. We support the changes proposed by ADEQ to Rule 5 and Rule 6 that would institute a permanent moratorium on issuance of permits for medium and large swine CAFOs in the Buffalo National River watershed.

Thank you, Marti and Larry Olesen P.O. 104, Ponca, AR 72670