As detailed below, this draft Environmental Assessment (EA) is substantially flawed. It fails to engage in the alternatives analysis required under the National Environmental Policy Act ("NEPA"), ignores key facts and science, and only cursorily reviews the information it does gather in assessing the impacts of an unprecedented 6,500 swine concentrated animal feeding operation ("CAFO") operating on karst terrain in the watershed of the iconic Buffalo National River. In the sections below, the Buffalo River Watershed Alliance identifies numerous inaccuracies and flaws in the draft EA.

In general:

- C&H Hog Farms (C&H) will have impacts that affect public health
- C&H is located on a tributary to a national park unit and extraordinary resource water
- C&H’s effects are highly controversial
- as the first Large CAFO in the Buffalo River watershed, C&H establishes a precedent for future actions by the federal agencies and the state
- it is reasonable to anticipate that C&H will have a cumulatively significant impact
- C&H poses a risk to federally protected species, including the endangered Indiana and Gray bats (see attachment 1, Bat Survey August 19-20, 2015)
- The study by Big Creek Research and Extension Team (BCRET), upon which this the scientific data in this draft EA is almost entirely based, is flawed, inadequate and non-representative. Other more extensive studies by National Park Service (NPS) and Karst Hydrogeology of Buffalo National River (KHBNR) were not considered.

Therefore, this draft EA is inadequate and does not conform to the requirements of NEPA and the Alliance urges the agencies to prepare an Environmental Impact Statement taking into consideration all relevant scientific studies.

More specifically:

1) The analysis of alternatives is inadequate

The EA effectively fails to analyze any alternatives other than the proposed action, defying NEPA’s mandate to “[r]igorously explore and objectively evaluate all reasonable alternatives.” To comply with NEPA, the agencies must assess a No Action Alternative in which C&H is no longer in operation as well as action alternatives apart from the Proposed Action.
2) The assessment of soils and geology ignores critical facts and science

A glaring error that pervades the draft EA’s assessment is its unfounded conclusion that “there are no karst features within the C&H Hog Farms parcel.” According to experts in hydrogeology, and ERI data provided by OSU, C&H is undoubtedly located on karst. This fact is of central importance to an accurate assessment of C&H’s impacts because karst is characterized by rapid underground drainage and groundwater flow to surface waters. The EA’s willful blindness to the geologic context of the C&H facility and the significance of this context for impacts on water resources is the antithesis of the hard look required under NEPA.

3) The Assessment of Water Resource Impacts Is Cursory and Flawed

The draft EA’s assessment of water resources relies heavily on data obtained from a flawed ongoing study by the Big Creek Research and Extension Team (BCRET) while simultaneously ignoring data that is suggestive of contamination from the C&H facility. The draft EA essentially “cherry-picks” data which supports its no-impact conclusion while ignoring data which challenges it. Most notably, rising E. coli levels in the 325 feet deep house well, the interceptor trenches and ephemeral stream are ignored, as is any interpretation of rising nitrate levels in Big Creek downstream of C&H.

4) National Park Service Data Suggesting Potential Impacts to Water Resources ignored

NPS/BNR monitoring at the confluence of Big Creek and Buffalo National River indicate that Big Creek is contributing to low dissolved oxygen (DO) levels in the Buffalo as well as increased E. coli levels. Low DO is an indicator of nutrient loading, and excessive algae growth and can negatively impact aquatic life, including endangered and threatened species. E.coli bacteria pose a threat to human health, particularly in recreational waters such as the Buffalo. Continued increases could result in warnings against human contact, which would have a chilling effect on the tourism economy on which this region depends.

5) The Draft EA Fails to Consider Odor and Air Quality Impacts on Public Health and the Local Community

The Draft EA’s scant discussion of potential air quality and odor impacts from C&H is woefully inadequate. Research has shown that the odors and air pollutants emitted by hog CAFOs have deleterious effects on the health and wellbeing of surrounding communities. ADEQ has received numerous citizen complaints about emissions and odors emanating from C&H. These citizen complaints seriously call into question the draft EA’s assumption that compliance with the Permit and related documents, by itself, would prevent significant odor and air impacts from C&H operations. These complaints even cast doubt on the underlying premise that C&H is currently complying and will continue to comply with all terms of the Permit.

6) Socioeconomics

This section of the draft EA focuses only on the limited economic benefits from C&H operations but completely fails to discuss the numerous negative socioeconomic effects that C&H operations may have on the surrounding community and wider area. At no point does the Draft EA discuss the negative effects that a polluting and odorous hog CAFO may have on the local economy. Operations at C&H already have started to depress surrounding property values, and plummeting property values adversely affect not only the homeowners who are trapped with property next to the foul-smelling facility, but also the public revenue of Newton County. Nor does the Draft EA discuss the socioeconomic impacts of many other aspects of C&H’s operations within the surrounding community, such as increases in healthcare costs of residents who may see their health and wellbeing suffer from pollution and odor from the facility, increased costs to residents who can no longer use spring water for drinking and personal use, or
costs of potential mitigation and clean-up activities. But perhaps most significantly, the Draft EA fails to consider any socioeconomic impacts on the Buffalo National River, which is a major economic engine for the county, region and state.

7) Environmental Justice
The Draft EA’s terse section on environmental justice neither seriously considers the impacts that C&H may have on surrounding low-income communities nor meets the requirements for NEPA analyses of the Council for Environmental Quality. The USDA Economic Research Service (“ERS”) designates Newton County as one of only 355 “persistent poverty” counties in the nation and one of only 708 “persistent child poverty” counties in the nation. Indeed, Newton County has had high poverty rates since records began to be counted in the 1960s. Mt. Judea and Newton County show many of the qualities of a community that would be least resistant to the siting of a major undesirable facility. The environmental justice analysis of the Draft EA is lacking and does not meet the required standards.

8) Protected Species
Threatened and endangered species within the scope of this draft EA include:
- the endangered Gray bat
- the endangered Indiana bat
- the threatened Northern Long-eared bat
- the threatened rabbitsfoot mussel, which has designated critical habitat in the Buffalo River downstream of C&H
- the endangered Snuffbox mussel

A recent bat survey conducted on August 19-20, 2015 by researchers at Arkansas State University, Department of Biology, identified three Indiana bats, several hundred Grey bats, and several Northern Long-eared bats in the immediate vicinity of the C&H application fields (see attachment 1)

Cindy Dohner, the U.S. Fish and Wildlife Service’s Southeast Regional Director in recent testimony said, “The presence of abundant, diverse and reproducing populations of mussels indicates clean water and a healthy aquatic system, which means good fishing and good water quality for migratory birds, other wildlife and people. Rabbitsfoot populations are declining because river habitats across their range have been lost or degraded over the years,” Federal agencies including the National Park Service must manage for protecting the critical habitat of threatened and endangered species. Rabbitsfoot mussels are monitors of the health of our waters. They are natural filters and serve as a food source for numerous species of wildlife. How can the Park Service manage for this species if nutrient loads from C&H continue to imbalance their range? Their critical habitat includes 70 river miles beginning around Cove Creek at Erbie and continuing past Carver where Big Creek joins the BNR. Although the Gray bat species may travel up to 35 kilometers between prime feeding areas over lakes or rivers and occupied caves (LaVal et al.1977; Tuttle and Kennedy 2005), most maternity colonies are usually located between 1-4 kilometers from foraging locations (Tuttle 1976b). Tuttle (1976b) noted that the home range of one colony of gray bats included five caves and covered an area approximately 50 kilometers long by 5 kilometers wide. Newly volant gray bats travel 0.0-6.6 kilometers between roost caves and foraging areas (Tuttle 1976a; Tuttle 1976b). At foraging sites, Tuttle (1976b) estimated that gray bats forage within roughly three meters of the water’s surface. Gray bats are
highly dependent on aquatic insects, especially mayflies, caddisflies, and stoneflies. (Harvey 1994; Tuttle. The Buffalo River watershed is host to the Gray bat which uses its caves and streams and the river itself for habitat. The aquatic insects it is highly dependent upon are the key macroinvertebrate indicators of the highest quality waters. They can not live in polluted waters.

This flawed EA has done no real research nor has data has been cited to show that the critical habitat of the threatened Rabbitsfoot mussels, and the endangered Gray bats that dwell in the Buffalo River watershed won't be disturbed by two and three quarter million gallons of swine waste applied every year in their home.

9) Mitigation

The draft EA identifies no measures in the “Mitigations” section for each resource assessed. The EA simply claims there are no significant impacts anticipated and hence no mitigation measures are required. NEPA requires consideration of “[m]eans to mitigate adverse environmental impacts,” not just significant adverse impacts. The EA actually relies on C&H’s state permit, which includes its nutrient management plan, to mitigate any potential impacts. Data and facts on the ground show that C&H is having a detrimental effect on water resources, air quality, and the quality of life of nearby residents. To pass muster under NEPA, the final environmental review must address these facts.

10) Conclusion

The Alliance respectfully requests that the agencies undertake the review required by NEPA.

The draft EA cannot rationally support a Finding of No Significant Impact.

The impacts of this swine CAFO—on water resources and air quality, for instance—are ones that are being and will continue to be felt by neighboring residents, students of the nearby Mount Judea school, the local community, and the more than 1.3 million people who visit the Buffalo National River each year. All indicators are that these impacts will be significant. The Alliance therefore urges the agencies to undertake the environmental review process on remand carefully and to prepare an Environmental Impact Statement.

The Buffalo River Watershed Alliance is a 501(c)(3), non profit organization representing over 1,000 supporters who value the Buffalo National River. Please address any questions regarding this document to Gordon Watkins, President, 870-446-5783, gwatkins@ritternet.com