

BUFFALO RIVER WATERSHED ALLIANCE
DRAFT POSITION PAPER ON BIG CREEK RESEARCH
AND EXTENSION TEAM
May, 2015

The Buffalo River Watershed Alliance (BRWA) is concerned that the study currently underway by the University of Arkansas Big Creek Research and Extension Team (BCRET) is being relied upon by many, including the legislature, the Governor and others, to provide a sound measure of the impact of C&H Hog Farms on the Mt Judea community, Big Creek and the Buffalo National River. Of particular concern is the statement by Governor Hutchinson linking the BCRET study with the pending effort to establish a permanent ban on swine CAFOs in the Buffalo watershed. The Governor stated that he will rely on the University study to determine “*any impact of current feeding operations on the watershed.*” BRWA believes that the BCRET research is too limited in scope, and provides an inadequate and unrepresentative picture of the true impact of this industrial-scale swine facility on the community, the fragile local ecosystem and the extraordinary resource waters of the Buffalo River. - Numerous other studies are being conducted and these studies must be taken into account when determining the impact of C&H.

Further, BCRET has exceeded its original mandate to “*monitor for potential water quality impacts within the Buffalo River watershed.*”, and is now committing considerable resources towards assisting C&H to become “sustainable” and is facilitating its continued operation on this inappropriate site. This deviation from its mandate by assisting a private corporation to this degree is an improper use of state taxpayer funds.

Following is information to substantiate our position.

BACKGROUND

In July, 2013, then-Governor Mike Beebe requested an expenditure of \$250,000 from his “Rainy Day Funds” to be used by the University of Arkansas – Division of Agriculture for *“environmental studies and water quality monitoring related to swine farming operations within the Buffalo River watershed.”*

On September 5, 2013, in a Memorandum of Agreement (MOA) between the University and ADEQ, the University agreed to “*Undertake and complete a study of the potential for water quality impacts within the Buffalo River watershed from animal wastes produced by the permitted CAFO, C&H Hog Farm and its operations within the watershed.*” ADEQ agreed to “*Assist University with obtaining access to conduct the study if access is denied by any property owner.*” Both parties agreed, “*This agreement shall become effective as soon as signed by both parties and shall remain in force until June 30, 2019 until terminated earlier in accordance with other provisions herein*”.

The final proposed work plan was approved in September, 2013 with funding provided by the legislature on October 1, 2013 at a cost of \$340,510 for one year. This represented an increase of \$90,510 over the Governor’s original request. During the 2015 Legislative Session, under Act 369, an additional \$100,000 per year for 4 years was approved for continued support of the BCRET, bringing the total taxpayer expenditure for monitoring this privately owned facility to \$740,510, with a current team of twenty-one University personnel. [Is there precedent for this level of support for a private operation?]

WORK PLAN DEVIATIONS

The University formed the Big Creek Research Team (BCRT),

which later became the Big Creek Research and Extension Team (BCRET) to implement the Governor's mandate. BCRT developed several draft work plans including the following, listed in chronological order:

- **Microbial Source Tracking In A Stream Draining A Rural Watershed, Northern Arkansas.** Objective: To Identify the fate and transport of bacterial and fecal indicators in Big Creek, Arkansas.
- **Assessing the Potential For Nutrient Utilization And Loss.** Objective: to monitor nutrient fate and transport on C & H Farm on a minimum of two representative, high use fields.
- **Assessing the Potential For Nutrient Utilization And Loss.** Objective: to monitor nutrient fate and transport on C & H Farm by focusing on at least two high-use and representative fields permitted to receive manure.
- **Demonstrating and Monitoring the Sustainable Management of Nutrients on C&H Farm in Big Creek Watershed.** Objective: to evaluate the sustainable management of nutrients from C&H Farm by focusing on three fields that will be used to land apply manure. This final plan was ultimately submitted and approved for funding.

As can be seen, the plans gradually morphed from a focus on bacterial and nutrient *monitoring* to sustainable *management* of nutrients. Along the way, BCRT became BCRET with the addition of the Cooperative *Extension Service* to the team. In our opinion this addition further reinforces the intent of BCRET to facilitate the success of C&H, and, along with the noted work plan changes, represents a significant deviation from the original intent to monitor impact.

FIELD ACCESS ISSUES

The C&H Nutrient Management Plan (NMP) includes 17 waste application fields totaling over 630 acres. As noted above, an early version of the BCRET work plan is entitled: “*Assessing the Potential for Nutrient Utilization and Loss from the C&H Farm*”, which states the project will “*focus on a minimum of two representative, high-use fields that have been permitted to receive manure.*” One of the most representative, high-use fields identified in this early draft work plan was Field 7, the largest field and which is adjacent to Big Creek and near the Mt Judea school. Field 7 is approved in the NMP to receive over 6 million gallons of waste per year. However, BCRET was denied access to Field 7 by the landowner. According to the MOA, ADEQ was required to assist if access to any field was denied. They did not do so and this highly representative field was removed from consideration under the study.

The work plan changed once again and now focused on “*three fields, which give a range in landscape position and soil fertility levels representative of the overall operation.*” These were Fields 1, 5, and 12. According to the NMP, of these three fields only Field 5 is a representative, high-use field. However, once implementation of the work plan began, it was discovered that the land use contracts provided by C&H incorrectly identified the owners of Field 5 and the true owners of Field 5 in fact denied both C&H and BCRET access to their land. As a result, BCRET now only has access to Fields 1 and 12. In addition, they are conducting tests on a “new” Field 5a, which is not included in the NMP and is not permitted to receive any waste at all.

According to the MOA, ADEQ agreed to “*Assist the University with obtaining access to conduct the study if access is denied by any property owner.*” BCRET agreed to study “*three fields, which give a range in landscape position and soil fertility levels representative of the overall operation*”. Both of these agreements have been violated. ADEQ failed to facilitate access to Field 7, Field 5 was unavailable due to an inaccurate land use contract, and

BCRET is studying only two application fields, neither of which is high-use or representative. Lack of access to representative fields means that the data collected from these fields is not representative of the overall impacts of this operation and brings into question the validity of the BCRET study.

LIMITED SCOPE

The original intent of the MOA was to fund “*a study of the potential for water quality impacts within the Buffalo River watershed from animal wastes produced by the permitted CAFO, C&H Hog Farm*” Concern for impacts on the Buffalo National River are clear. However, the BCRET study is focused on the “footprint” of C&H and nearby sections of Big Creek. As noted, only two application fields are included and study directly related to the Buffalo is limited to historical data analysis. Future work plans include, with the help of USGS, to develop a “*data base of nutrient and bacteria concentrations in sub-watersheds of the Buffalo River watershed*”. However, there are no plans to directly monitor the impacts of C&H on the Buffalo.

BCRET research has focused on surface runoff of waste. With the exception of a monitoring trench down-gradient from the waste storage ponds to detect pond leakage, there have been no efforts to monitor the potential for subsurface flow connecting C&H application fields to the Buffalo. Independent dye trace studies have shown multiple, rapid, subsurface flow paths from the vicinity of the application fields, emerging many miles away in the Buffalo River, both upstream and downstream of the mouth of Big Creek. BCRET has given little consideration to the karst nature of the area and the potential for subsurface flow of waste.