REPORT TO PATAGONIA FOUNDATION, SUBMITTED SEPTEMBER 18, 2016

Please summarize any progress toward meeting your specific project goals; include an update on the 3-5 measurables mentioned in your proposal.

The Karst Hydrology of the Buffalo National River project, supported by Patagonia, elevates the credibility and public profile of Buffalo River Watershed Alliance efforts to protect our country's first National River.

Regulatory agencies are responding:

The Arkansas Pollution Control and Ecology Commission requested KHBNR data after a BRWA FOIA revealed third-party data indicating the possibility of a major fracture with movement of waste underneath the hog waste pits.

Arkansas Department of Environmental Quality (ADEQ) indicated they would consider KHBNR data once it had passed peer review.

BRWA hosted four outreach events with over 400 in attendance, focusing on the KHBNR field work and results to date. At three of these events, internationally acclaimed local folk duo Still on the Hill presented a sneak preview of their "Still a River" project that promotes awareness of the Buffalo River. "Still a River" is fiscally sponsored by BRWA and includes 1000 CDs to be given away at ten concerts in 2016. An additional 10 concerts will occur in 2017, sponsored by the National Park Service.

BRWA developed two tri-fold informational brochures for distribution at these events and others, including weekly tabling at the local farmers' market through October.

A 5-minute video about KHBNR is in progress.

KHBNR samples analyzed to date:

98 E. coli

96 major constituent

44 trace constituent

12 Fecal coliform

5 nitrate

- 1 sulfate
- 1 fluoride
- 1 chloride

Dye trace studies show water traveling up to 2500 feet per day through karst in immediate proximity of C&H CAFO; most groundwater moves only 10-15 feet per year.

What strategies worked for you? What strategies didn't work? Were you forced to adapt or shift direction?

Highly successful public outreach events hosted by KHBNR and BRWA increased awareness of threats to the Buffalo National River and attracted community funding for additional "Still a River" events. They also attracted general support for BRWA and generated essential communications by the public to the Arkansas Governor requesting more stringent protection of the Buffalo River. Local newsprint and radio news coverage of the CAFO controversy also increased dramatically and shifted tone from being dismissive of BRWA's concerns toward more balanced reporting. Austin, TX-based documentary film maker Andy Sarjihani attended one of these events to film footage for his ½ hour film about the CAFO on the Buffalo, titled "Downstream People," for which he launched an Indiegogo page (link is included in Index of uploaded documents), and that he expects to release in 2017.

In addition to the three outreach events in our proposal, Dr. Van Brahana hosted an educational field trip about karst on location in the Buffalo River watershed, and was invited to speak at a continuing education program titled "Pork Chops or Pollution" presented by local editorial journalist Mike Masterson, that was held at the University of Arkansas Osher Lifelong Learning Institute in downtown Fayetteville. Members of the KHBNR team also presented a paper to the Arkansas Academy of Sciences (see uploaded documents).

To enhance public outreach, volunteer resources were redirected from production of radio show to creating two tri-fold brochures; print services were donated. Fayetteville Community Radio (KPSQ at 97.3 LPFM and kpsq.org) supports BRWA mission and will broadcast and stream our program(s) when we produce them.

Increased water quality testing (including dye tracing) and the public outreach events made possible by Patagonia's support caused an uptick in media coverage of the C&H swine CAFO controversy and forced regulatory agencies to acknowledge the presence of karst in the Buffalo River watershed, a fact

heretofore brushed aside. Two egregious Environmental Assessments denied that spreading swine waste above karst could lead to degradation of surface and groundwater in the watershed, and the 5-year state-funded study appears poised to return a "no impact" assessment of the hog operation. But KHBNR data show that impacts to the Buffalo National River are likely if not inevitable if the operation continues, and public officials are now talking about karst.

When ADEQ indicated it would consider KHBNR results once they were peer reviewed, (see April 12 Ozarks at Large radio program) BRWA redirected funds to cover the unforeseen page charges for pre-publication peer review. Peer-reviewed data will be crucial in legal hearings.

Our grants program is a company-wide commitment. Therefore, we would like to share your success stories with all of our employees and customers. If you have had a success or "win" with your project that you can sum up in a short sentence, please include it here.

Responding to citizen outcry and direct actions, state and federal agencies are beginning to acknowledge mounting evidence that C&H swine CAFO, the first of its size to be permitted in the Buffalo River watershed, could contaminate our country's first National River. Continued work is needed to close this CAFO and to ensure that the temporary moratorium on additional swine CAFOs in the Buffalo National River watershed becomes permanent.

Uploads are listed separately, in document index.