## Malcolm Cleaveland

First, a little about my qualifications. I have bachelor and master degrees in forestry from Clemson U. and a PhD in geosciences from the U. of Arizona, with a concentration in watershed management. I have spent my academic career teaching in the environmental sciences and doing research on paleoclimate and climate change through dendrochronology. I am an associate of the members of the Geosciences Dept. who are closely involved with watershed management such as Dr. Van Brahana.

In my training in forestry, I was taught that many valuable things could be gotten from a forest. Often the most valued but least valuable thing was timber. Often the most valuable but least valued "product" of a forested watershed was clean, abundant water delivered in a controlled manner (without flooding).

The decision to put a CAFO in the Buffalo R. watershed on karst terrain was criminal, quite literally. The original plan did not call for impermeable liners for the waste ponds, but specified that there would be a certain amount of leakage from the holding ponds. Spraying waste on a few fields is inadequate. It guarantees continuing pollution of groundwater. So this CAFO has been polluting the watershed from day one. How do you explain the decision to allow that? Perhaps it was a product of corruption?

It will take a long time for the pollution already introduced into the groundwater to clear, even if the pollution were stopped today. But it is continuing. What is the first maxim of policy-making? "When you are in a hole, stop digging." Wastes should be trucked out of the watershed, beginning immediately, and the CAFO should be shut down. That would require the state to make the owners whole, but since it was the state that blundered in permitting the operation in the first place, the state should do the right thing. The continuing losses from impaired recreation in the National River when the NPS has to shut down access to the river because of contaminant loads will cost the state far more than getting rid of this CAFO.

I urge the ADEQ to contact the Attorney General to start an investigation of the way the permitting process was conducted. I strongly suspect that there was collusion between private interests, ADEQ personnel and federal employees to sneak the initial permit in under the radar. An NPS employee stated publicly that he inquired if something were going on, but was kept in the dark.

Sincerely,

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