

27 March 2018

## Verbal Comments

Arkansas Department of Environmental Quality  
5301 Northshore Drive  
North Little Rock, AR 72118

### Re: Regulation 37 – Arkansas Nutrient Water Quality Trading Regulation

Since taking on this role as a Waterkeeper, I have had several opportunities to talk to many people at various civic organization meetings or outreach events. After a few failed attempts at making a meaningful impact when it came to topics of water quality regulations – a topic which, apparently most people don’t find as exciting as me – one very helpful attendee gave me a few pointers to help to more effectively convey my message. One of those tips was to start with telling people *why* water quality was important. And it blew my mind. Protecting water quality had been my world for so long. Because I was so submerged in it, it never even crossed my mind that maybe everyone didn’t know the true gravity of the pollution concerns I was discussing. So when we talk about this regulation – especially the capstone benefit of creating a market for voluntary NPS reduction that wouldn’t happen otherwise and providing PS dischargers with a cheaper alternative – it’s important to remember that we aren’t talking about any of this for the sake of simply going through the motions of adhering to some laws and regulations.

It’s important to remember that excessive nutrient loading to waterbodies can lead to excessive plant and algal growth and result in a range of adverse economic effects. To give a few examples:

- A report shows that a persistent algal bloom in an Ohio lake caused \$37-\$47 million in lost local tourism revenue over two years.<sup>1</sup>
- A study in New England noted that a 1-meter difference in water clarity at one lake is associated with property values decreasing greater than 78%!<sup>2</sup> AND

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<sup>1</sup> U.S. Environmental Protection Agency. A Compilation of Cost Data Associated with the Impacts and Control of Nutrient Pollution. EPA 820-F-15-096. <https://www.epa.gov/sites/production/files/2015-04/documents/nutrient-economics-report-2015.pdf>

<sup>2</sup> Boyle, K. J., S. R. Lawson, H. J. Michael, and R. Bouchard. (1998). “Lakefront Property Owners’ Economic Demand for Water Clarity in Maine Lakes.” Misc. Report No. 410, Maine Agricultural and Forest Experiment Station, University of Maine, Orono.

<http://www.moosepondassociation.org/Articles/General/Demand%20For%20Water%20Clarity.pdf>



- Drinking water treatment costs can drastically increase with excess nutrients in source water. In Ohio, a study documents expenditures of over \$13 million in two years to treat drinking water from a lake affected by algal blooms.<sup>3</sup>

And I could certainly go on for a while discussing the adverse impacts to aquatic life, our fisheries, recreation potential, and of course human health effects. So when I try to convey all the reasons why Arkansas is not ready for a nutrient trading program, and especially one that is devoid of all pertinent details, and puts the burden of making all the *tough* decisions of granting credit exchanges on *one agency* while requiring that *another* be responsible for ensuring compliance for a portion of those – when I convey those reasons, I **hope** what is at stake is well understood when I continue to harp on the *need* for additional details and specifics to be included.

Speaking from the perspective of someone who has worked for ADEQ and has firsthand experience in trying to interpret poorly constructed water quality regulations – it didn't matter that I was a Senior Ecologist, in the Water Quality Planning Section, advocating for the *more* protective requirements based on my knowledge of a sensitive ecosystem – it was *extremely rare* when I could convince a bunch of engineers – *no offense* - just the people in charge of making the final call – that more protective measures should be required. Despite the fact that our laws and regulations allow for discretion on behalf of the Department to protect the environment for the well-being of all Arkansans – it was *extremely rare* when the default was not always the less restrictive option possible.

And I wouldn't say that was because those in charge were apathetic or because they couldn't recognize those concerns, because sometimes I truly believed they actually *wanted* to do something about it – it was because **appeals exhaust resources** and they halt all other productivity – **and** if you know anything about the requirement that our lawmakers have put on ADEQ in terms of required turn around time on permit applications – *then you know* that the primary focus of this agency, in the government's eye, is to be a permitting machine. So no, requiring that ADEQ be responsible for deciding how best to protect public health and the environment when so easily the legislature can interfere with their ability to provide adequate considerations and protections – No. That is not acceptable. **Vague, arbitrary, and subjective regulations do not work.**

Until Arkansas adopts numeric nutrient criteria to set a baseline for nutrient pollution, we don't even have a way to discuss how ADEQ *or* ANRC will ensure “that use of the nutrient credits as an offset will not result in an unacceptable localized adverse effect on water quality.” ADEQ does not have a scientifically defensible measure of assessing the impact of nutrient enrichment on any designated use. Already there is no attempt to even take a best professional judgment stab at whether nutrients are impairing Extraordinary Resource Waters, Natural and Scenic Waterways, or Ecologically Sensitive Waterbodies. These are supposed to be our most protected streams and rivers, such as the Buffalo, Kings, Spring, Strawberry, and Eleven Point Rivers –

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<sup>3</sup> Davenport, T. and W. Drake. 2011. EPA Commentary: Grand Lake St. Marys, Ohio – The Case for Source Water Protection: Nutrients and Algae Blooms. Lakeline, Fall 2011: 41-46.

and our state has refused to adopt criteria that would protect some of the biggest assets we have in this state.

One *has* to recognize that this is putting the cart before the horse. Advocating for the adoption of a nutrient trading regulation **BEFORE** this or any other water quality regulation adopted by the state specifically and objectively defines how we will determine what level of nutrient enrichment constitutes an **adverse effect** on water quality is a blatant disregard for the protection of the drinkable, fishable, and swimmable uses of our waterbodies.

Thank you.



Jessie J. Green  
Executive Director & Waterkeeper