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June 18, 2010

## **By Certified Mail and Email**

Lisa P. Jackson, Administrator  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Washington, D.C. 20460

Re: Friends of the Kaw's Notice of Intent to File Suit Regarding Alleged Non-Discretionary Duty Violation on Nutrient Criteria Adoption; Notice of Intent To File Suit on EPA Mandatory Duty Violations on Development of New Nutrient Criteria Derivation Methods

Dear Ms. Jackson:

We represent the League of Kansas Municipalities, Kansas Corn Growers Association, Kansas Cooperative Council, Kansas Livestock Association, and Kansas Agribusiness Retailers Association regarding the above referenced matter. All of these entities have a direct social, monetary and environmental interest in the adoption of cost-effective, scientifically-based nutrient management approaches in the State of Kansas. These parties are concerned that EPA will use the Friends of Kaw's ("FOK") Notice of Intent ("NOI") as the basis to undertake imposition of extremely restrictive and scientifically unjustified nutrient objectives as EPA did in the State of Florida. EPA's action in that state (triggered by a similar NOI) has caused great controversy and is widely opposed by both state and local interests. See attached letter from the Florida Department of Environmental Protection. In Florida, to simplify the process of imposing stringent nutrient limitations, EPA has proposed to adopt standards that (1) are admitted to *lack any "cause and effect" relationship*; (2) are *directly at odds* with recommendations on proper criteria derivation issued in April 2010 by EPA's Science Advisory Board; and (3) will *impose restrictive requirements* even where it is acknowledged that nutrients are *not* causing adverse impacts. The unnecessary cost impact in Florida will be in the *billions of dollars*. The citizens and agribusinesses (large and small) of Kansas cannot and will not allow similar arbitrary agency action to be imposed in Kansas. These groups cannot afford to have their resources (public and private) expended in such a cavalier manner.

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The purpose of this letter is to:

- (1) intervene in the NOI action and to request that our firm, on behalf of the above parties, be included in any “settlement” discussions and/or correspondence between the parties on this issue;
- (2) object to any EPA action that is premised on the unsupported position that the Kansas program is in any way insufficient to address nutrient impacts in a sound and scientific manner; and,
- (3) place the agency on notice, pursuant to CWA Section 505(a)(2), that if EPA seeks to usurp the authority to set standards from the Kansas Department of Health and Environment (“KDHE”), we will file a citizen suit action to prevent abuse of authority.

The basis for this request and our notice of intent to file suit is discussed briefly below.

### Evaluation of FOK Claims

Our firm, with over thirty years experience in addressing complex Clean Water Act (“CWA”) issues, has reviewed the NOI and we find it to be without merit. Contrary to the claims asserted in the NOI, EPA has never issued a CWA Section 303(c)(3) deficiency notice to Kansas which is a factual prerequisite to any possible finding that a state’s water quality standard program is deficient under the CWA. The issuance of generic reports (1998 and 2008) that generally discuss how EPA would like states to address the adoption of nutrient objectives is not a specific finding that triggers mandatory duties under Section 303 (c)(4)(B) of the Act. Those general EPA statements do not provide sufficient notice to the public or KDHE regarding the ability of the current state program to meet CWA objectives or the specific deficiencies that must be cured to achieve compliance with the Act.<sup>1</sup>

Water quality standards, including those for nutrients, are supposed to be adopted at the level “necessary to protect beneficial uses.” Such criteria must be based on “scientifically defensible” methodologies. See, generally 40 CFR Part 131. In this instance, Kansas has not adopted stream nutrient standards because, as EPA’s own SAB has concluded, the methods promoted by EPA to generate stream standards were not scientifically defensible. KDHE has concluded that stream impacts from nutrients are infrequent and are best addressed on a site-specific basis. EPA lacks any data or analysis showing that this approach to streams is not reasonable or appropriate. Precisely because of these uncertainties, KDHE has implemented a state policy to upgrade facilities to

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<sup>1</sup> EPA acknowledged in Florida that, under 303(c)(4)(B), only a specific Agency determination and notification to the state of an insufficient or deficient WQS triggered EPA’s mandatory duty to promulgate standards. In that case, it wasn’t until EPA had formally notified Florida of such a determination, that an actionable mandatory duty was created under which a citizen suit could be filed. No such determination has been rendered in Kansas.

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nutrient removal when plant expansions are planned. This has resulted in many facilities installing biological nutrient reduction technology that has reduced nutrient loadings to the local environment as well as downstream waters. Regarding lakes and reservoirs, KDHE has been in the process of identifying which waters are impaired and developing, as necessary, TMDLs to limit nutrient levels to protect the environment. All federal reservoirs have been assessed as well as over 100 lakes. Approximately eighty stream nutrient-related TMDLs have been completed and more are scheduled. These state actions have achieved concrete progress in addressing nutrient issues, when and where they occur, consistent with EPA's previous instructions. See, Memorandum from Geoffrey Grubbs, (Director, USEPA, Office of Science and Technology) to all Regions and State Water Program Directors, November 14, 2001, at 15. ("EPA recognizes that states and authorized tribes have several options available to them and recommends the following approaches, in order of preference: (1) Wherever possible, develop nutrient criteria that fully reflect localized conditions and protect specific designated uses using the process described in EPA's Technical Guidance Manuals for nutrient criteria development. Such criteria may be expressed either as numeric criteria or as procedures to translate a state or tribal narrative criterion into a quantified endpoint in state or tribal water quality standards...") Therefore, EPA should not conclude that KDHE actions with respect to streams or reservoirs have been, in any way, deficient.

In contrast, KDHE's efforts to adopt numeric chlorophyll 'a' objectives for reservoirs have been hampered by EPA Region VII. An objective, in-lake chlorophyll 'a' level is necessary so the state can distinguish between impaired and unimpaired waters. Apparently, EPA is insisting that KDHE also select specific TP and TN criteria that would accompany the chlorophyll 'a' level. However, it is widely recognized in the scientific community that there is no single, correct nutrient level for lakes and reservoirs and that the reservoir response, in particular, is unique to its physical characteristics. In fact, EPA approved Minnesota's nutrient standards that only require nutrient reduction where chlorophyll 'a' levels are exceeded. EPA should not be preventing KDHE from making progress on identifying an appropriate measure of acceptable plant growth simply because KDHE does not wish to be forced to select an arbitrary nutrient level to accompany the response variable. EPA's actions in this regard violate EPA's responsibilities under Section 303(c) to ensure scientifically defensible criteria and the state's right to establish appropriate criteria for ensuring protection of state waters.

### **EPA Mandatory Duty Violation**

EPA has violated CWA non-discretionary duties by imposing new criteria development methods that fail to address the serious technical deficiencies associated with EPA's prior guidance to the states. EPA now claims that a state may have an approvable nutrient criteria approach simply by asserting that the method is based on "weight of evidence," even if the derivation methodology lacks a "cause and effect" demonstration. Nowhere, however, does any published Section 304(a) criteria derivation method describe what "weight of evidence" is or what constitutes an acceptable "weight of evidence" such that the derived criteria will meet the requirements of the Act. Moreover, all prior published

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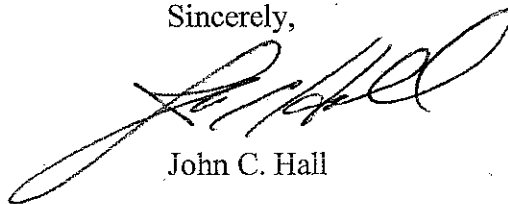
EPA criteria methods mandate that "cause and effect" *must* be demonstrated. See, for example, *Nutrient Criteria Technical Guidance Manual - Rivers and Streams*, EPA-822-B-00-002, July 2000, at 13. ("When evaluating the relationships among nutrients and algal response within stream systems, it is important to first understand which nutrient is limiting. Once the limiting nutrient is defined, critical nutrient concentrations can be specified and nutrient and algal biomass relationships can be examined to identify potential criteria to avoid nuisance algal levels.")

Section 304(a)(3) of the Act directs EPA to issue such criteria revisions to the states and to subject the proposed criteria approach to Federal Register notice and comment. EPA has not undertaken these activities but is insisting that states, nonetheless, use unproven and speculative criteria derivation approaches when setting nutrient criteria. EPA took such action in setting the Florida nutrient standards and that situation should not be repeated in Kansas. These actions are violations of CWA mandatory duties and, as such, this approach must undergo open peer review and public notice/comment *before* they are imposed in a regulatory setting.

In closing, we hope that EPA does not use the FOK NOI as the basis to conclude that the KDHE program is somehow in violation of the Act or that the ongoing KDHE nutrient limitation methods are deficient. The state is committed to making progress on this issue but does not believe that some type of one-size-fits-all nutrient criteria is defensible or appropriate. Such approaches will squander limited state and local resources and defer other more important habitat restoration/BMP efforts that are more cost-effective, sustainable and environmentally beneficial.

We look forward to your response to this letter. Please inform us if the Agency intends on scheduling any type of settlement negotiations with FOK as our clients have a right to be part of that process.

Sincerely,



John C. Hall

Enclosure

cc: Eric Holder, U.S. Attorney General, Certified Mail  
Karl Brooks, Regional Administrator, EPA Region VII, Certified Mail  
Roderick L. Bremby, Kansas Department of Health and Environment, Certified Mail



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
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Charlie Crist  
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Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## MEMORANDUM

Date: April 28, 2010

Subject: Department Comments on the Environmental Protection Agency's (EPA)  
Proposed Numeric Nutrient Criteria for Florida Lakes and Flowing Waters,  
January 26, 2010

To: Docket ID No. EPA-HQ-OW-2009-0596

From: Jerry Brooks, Director  
Division of Environmental Assessment and Restoration

The Florida Department of Environmental Protection (Department) respectfully submits our comments on the January 26, 2010 Environmental Protection Agency (EPA) proposed numeric nutrient water quality criteria for the State of Florida's Lakes and Flowing Waters. Attached to this cover letter are numerous documents containing the Department's technical, legal, and policy evaluations of the proposed EPA action.

The Department evaluated the science behind the criteria and how that science was utilized in the expression of the criteria, including any implementation provisions. With that in mind, we evaluated the proposal to determine whether the criteria were established at levels necessary to protect the designated use of Florida's lakes and flowing waters. It is critically important that the criteria are correct. Criteria values that are more stringent than necessary result in forced investment of limited public (and private) dollars to develop site-specific alternative criteria, an activity that has no environmental benefit. In the absence of site specific criteria, overly stringent criteria forces significant investments for remediation with no associated environmental benefit. Criteria less stringent than necessary can result in failure to prevent environmental harm. Furthermore, the Department reviewed the science underlying the criteria to determine whether it was suitable to support adoption of the water quality standards, including whether appropriate regulatory provisions were included that recognize uncertainty in the analysis. The Department provided recommendations where improvements could be made based on our review.

### 1) Criteria for the Protection of Streams

The overarching issue related to the protection of streams is EPA's failure to account for natural features in the State that affect nutrient concentrations. The influence of the

geologic Hawthorne formation on total phosphorus concentrations and the contributions of high levels of organic nitrogen to streams from wetlands are not accounted for in the EPA proposal. In evaluating unimpacted, largely natural streams in Florida against the proposed criteria thresholds, those that exceeded the criteria were either located proximal to the Hawthorne formation (a natural phosphorus bearing geologic feature) or dominated by the influence of wetlands as evidenced by the high water color and low dissolved oxygen content. It is illogical to establish criteria that are violated by natural features, and EPA should account for this in their final promulgated criteria to avoid implication of these features as pollutant sources.

The Department would also like to caution EPA against viewing occasional nonattainment of the currently adopted dissolved oxygen (DO) standard in Florida waterbodies as an indication of nutrient enrichment or biological harm. Most of our biologically healthy streams and lakes will exhibit low DO events during the course of the year. The Department has collected one years' worth of detailed biological and DO information and is continuing that collection effort with the intent of revising the currently adopted DO criteria to one that is more indicative of what is necessary to protect Florida's aquatic biology. Our attached comments contain some preliminary analysis of that data. Florida's DO criterion is based upon the EPA recommended 304(a) criteria and has not been adjusted to account for all the natural features that define Florida's unique diversity. Alternatively Florida has implemented the criterion, both in a regulatory context and assessment context, to recognize the influence of Florida's wetlands on dissolved oxygen. Our laws and regulations are structured to ensure that our programs do not force actions to correct natural conditions. With that in mind, we encourage EPA to focus more on the designated use attainment of streams as an indication of stream health rather than the DO condition of the stream.

It must also be acknowledged that the derivation of stream criteria was not based on a cause effect relationship. This is important as you move towards implementation of the criteria. EPA should acknowledge that attainment of the criteria would provide protection, but at the same time acknowledge that nonattainment of the criteria may not be an indication of designated use impairment. Given that uncertainty, EPA should include in its proposal an allowance for the evaluation of response variables, like chlorophyll *a* or biological monitoring.

## 2) Criteria for the Protection of Lakes

The Department appreciates the EPA's willingness to build your criteria proposal from the procedures proposed by FDEP, including the use of modified criteria. We think this is critically important when implementing criteria derived from a correlated relationship between nutrient concentrations and chlorophyll *a*. While the correlation was strong, there is still enough variability to demand the need for adjustments to the nitrogen and phosphorus variables in instances where they are not exhibiting an undesirable algal response.

The structure of EPA's proposed lake criteria results in a process that weakens Florida's surface water protection programs. Using EPA's structure, each time FDEP conducts assessments for lakes under paragraph 303(d) of the Clean Water Act, FDEP would become obligated to define the modified lakes criteria. This would happen every year for numerous lakes and would shift resources into assessment and reporting and away from monitoring, TMDL production, restoration activities, permitting, or other environmental programs. EPA should embrace the structure proposed by FDEP that acknowledges the variability of TN and TP from year to year and controls against an unacceptable number of annual excursions from the criteria. This structure is similar to many of our currently approved metals criteria that are based on hardness and does not impose a burdensome process for implementation.

The proposed rule for the protection of downstream lakes is inaccurate and unnecessary. The error associated with the total phosphorus loading results provided by the Vollenweider formula is too large to use as a water quality standard. The Vollenweider formula was derived using northern, deep lakes that do not exist in Florida, and a one size fits all formula does not work for the varying dynamics of the 7,000 lakes in Florida. The water quality models referred to in EPA's Technical Support Document would produce much fewer errors. Additionally, the assumption that zero phosphorus is attenuated in streams (i.e., that 100% of phosphorus in the headwaters reaches the lake) is not correct. This may occur over geologic timeframes considering geologic procedures, but it is not the intent of the Clean Water Act to govern natural geologic processes. Fortunately, the in-stream protection values offered by the Department provide inherent protection of downstream lakes making additional downstream protection values for lakes unnecessary. The Department requests that EPA reconsider their proposal to adopt a single formula to represent all lake conditions in Florida, acknowledge that the combination of lake and stream criteria meets the intent of the law, and let the other programs authorized by the Clean Water Act serve to ensure protection of both streams and downstream waters. Adoption of the proposed formula will result in excessive process for the establishment of site specific criteria because the formula does not reflect true lake water quality processes.

### 3) Criteria for the Protection of Estuaries

The Department is pleased that EPA recognizes the benefit of delaying these provisions until the necessary water quality targets for estuaries are known. We will continue to work with local scientists to develop these protective estuary values. However, it must be noted that downstream protection values for total nitrogen for the protection of estuaries are unnecessary because the in-stream protection values proposed by FDEP are inherently protective of the downstream estuaries. Additionally, the use of the SPARROW model in Florida does not produce accurate downstream protection values even if correct estuary loads are used. The SPARROW model is built upon a delineated stream network that is coarse and does not reflect the true hydrology of Florida. This results in significant error when projecting necessary nitrogen values upstream. The

SPARROW model also does not account for the influence of wetlands on total nitrogen values, which underestimates true nitrogen conditions of Florida streams. These types of errors produce faulty criteria that should not be adopted into federal regulations. Again the promulgation of criteria that does not reflect the true water quality dynamics of streams, rivers, lakes, and wetlands as water flows from them towards estuaries will demand unnecessary process that overall weakens the protection of Florida's surface waters.

#### 4) Economic Cost Estimates

The cost estimates provided by EPA for the implementation of the criteria appear to significantly underestimate the costs to wastewater facilities, municipal separate storm sewer systems (MS4s), and agricultural sources. The Department has compiled the cost estimates from various parties and interests into one attached document for your use and consideration. It is possible that the EPA estimates are significantly less than those compiled by the Department because EPA has made assumptions about implementation. If EPA anticipates implementation actions that moderate the actions to achieve compliance with the proposed criteria, such actions should be clearly articulated.

#### 5) Implementation

Of immediate concern is the effective date of the criteria. Assuming the promulgated criteria address the concerns expressed in our comments, only then can Florida take action to implement those criteria and such actions will take time. The proposed effective date of 60 days from promulgation is untenable. In order to properly implement the criteria after proposal, the Department will need to, at a minimum, adopt regulations for permitting and assessment (Impaired Waters Rule). The Department will also need to adopt the criteria and associated procedures for adoption of site specific criteria into rules. State law prohibits the Department from implementing policies or procedures that are not contained in rule. Given the administrative process for adopting rule changes, this may require two years dependent upon any resulting rule appeal. Without appeal the administrative process would take a minimum of one year. Until that occurs, the Department cannot implement the promulgated criteria in other Clean Water Act programs like permitting, water quality assessment, and total maximum daily loads.

Beyond the effective date issue, it will be very important for EPA to clearly define the Clean Water Act expectations for implementation. The true implications of the proposed criteria can only be established if there is clear understanding of what actions will be demanded upon promulgation. Additionally it will be important to clearly define how the criteria will be applied with regards to duration and frequency, including minimum time frames for long term averages and minimum data requirements.

The Department has made significant investments in the derivation of numeric nutrient criteria and the evaluation of how it should be implemented. We hope that our analysis and expertise is considered as you make decisions about the final promulgation of the criteria for the State.

JB/db/h

Attachments: