



August 15, 2014

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Sent electronically to: [Neil.kamman@state.vt.us](mailto:Neil.kamman@state.vt.us)

Dear Neil,

The Vermont Natural Resources Council (VNRC) is filing comments on the proposed changes to the Vermont Water Quality Standards. Specifically, our comments relate to the nutrient criteria of the proposed standards. We support the revised *E. coli* criteria, the toxics criteria in "Appendix C" and the new criteria for chloride and fish-tissue mercury that are proposed.

The agency has clearly struggled with the nutrient criteria – and rightly so. As you know we have participated in the Department's discussions for months, including hosting your presentation on the topic at the VNRC Water Caucus in March.

To narrow the scope of our concerns, the approach considered under the Nutrient Criteria Decision Framework for scenarios "A" and "D" appear to be scientifically defensible. These scenarios are supported by objective, quantifiable criteria. Thus, our concerns are limited to the scenarios "B" and "C" – the so-called "false positive" and "false negative" scenarios.

Generally, we agree that the Department cannot ignore a problem and require no remediation of a waterbody when evidence dictates a 60% likelihood that an impairment exists. We disagree, though, that an error rate of 40% is too high to require treatment to some degree when impairment might not exist. Clearly there is some wrangling to do along that spectrum.

Consideration, then, of at least a few other variables are then warranted: the public's uses of and expectations to clean water and the costs and difficulties associated with remediating a water when compared to preventing an impairment and, of course, the anti-degradation policy of the Vermont Water Quality Standards. Given the Department's mission: "*To preserve, enhance, restore, and conserve Vermont's natural resources, and protect human*

*health for the benefit of this and future generations*”, the balance must fall on the side of protecting - and preventing impairments of - natural resources to the benefit of all as opposed to avoiding costs of remediation to the benefit of a very small few.

In light of the Department’s mission, picking a number at which (to put it simply) half of the streams might be impaired and half might not be impaired is too loose of an approach to that responsibility to protect waters and their uses.

Given the variability of the data, the potential for additional variables to influence the outcome and the expressed uncertainty of the likelihood of false positives and false negatives, it should be expected that the Agency would include a margin of safety on either side of the mid-point. In addition, those “B” and “C” scenarios should include consideration of other variables that help to focus the Agency’s decision. Regardless, the decision making process should be transparent, scientifically rigorous, and wholly immune from political influences.

Given the importance to have these variables better defined before the Agency is granted the authority to exercise a partial approach to implementing the standards, **the nutrient criteria as proposed for these “B” and “C” scenarios should be omitted from the proposed changes to the Vermont Water Quality Standards until a decision framework has been developed with consultation with the Water Quality Advisory Committee and opened for public comment.** The Agency’s March 27, 2013 draft for Water Quality Advisory Committee Review appears to suggest this very approach:

“The Maine Department of Environmental Protection has proposed an approach to nutrient criteria rulemaking that combines nutrient concentration and response variables together in making an impairment assessment...[which] should mitigate against false positive and false negative results...Maine’s approach to nutrient criteria could be adapted for Vermont by combining newly proposed numeric nutrient concentration criteria for inland lakes and wadeable streams with the eutrophication-related response criteria already established in the Vermont Water Quality Standards for pH, turbidity, dissolved oxygen, aquatic biota, and aesthetics. This approach would provide the benefits of having numeric nutrient criteria while dealing appropriately with situations of false positive and false negative impairment determinations”.

As proposed, the criteria for scenarios “B” and “C” are as of yet unclear and provide unbridled discretion to the Department. VNRC cannot support such the nutrient criteria as proposed until the full criteria and documentation of how they will be implemented are developed.

Given our collective experiences with the difficulties and costs of cleaning up impaired waters, the intent of the Clean Water Act, Water Quality Standards and especially anti-degradation policy within, it appears that the Department’s approach is less conservative than is warranted for the protection of our waters and could result in more waters approaching

impairment or becoming impaired at much greater environmental and financial costs than is necessary.

I look forward to discussing these comments with you further prior to the finalization of the proposal and submission to the Legislative Committee on Administrative Rules. Thank you for your consideration of these comments.

Sincerely,

A handwritten signature in cursive script that reads "Kim L. Greenwood". The signature is written in black ink and is positioned below the word "Sincerely,".

Kim L. Greenwood, CPESC  
Water Program Director & Staff Scientist