



January 16, 2014

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Sent via electronic mail to: Kari.Dolan@state.vt.us

Dear Kari:

Thank you for your efforts to date to move Vermont in a positive direction with regard to the protection and restoration of Lake Champlain – and ultimately all of our waters – for the good of all. To this end, please consider these comments on the draft State of Vermont Proposal (“proposal”) for a Clean Lake Champlain.

In general, the proposal has envisioned a number of creative mechanisms to influence water quality for the better and reflects a tremendous amount of thought and effort. It does, however, fall short in a number of instances. It also fails to provide quantifiable reasonable assurances that Lake Champlain’s phosphorus impairment will be rectified. Because many of the programs and strategies within the proposal rely on existing programs that are ineffective, it falls short of laying out an aggressive, proactive plan.

General Comments on the Proposal

The proposal presents several ideas in different sectors that have been swirling around for some time. This document puts them in one place, under one framework, to meet one goal: clean up Lake Champlain. Aside from such an

approach being required, there is value in presenting a focused, coordinated effort in one place. The Agency's intent to implement the measures in this document statewide make sense both in terms of attempting to remediate impaired streams throughout Vermont and preventing more of the state's waters from becoming impaired.

Our primary concern with the proposal is that it fails to present a picture in which reasonable assurance is given that Lake Champlain will be restored. Many of the provisions in the proposal require layer upon layer of conditions to be met in the future (i.e. "conditions subsequent") that rely on actions by others who are under no obligation to implement them. For example, many sections rely on rulemaking, legislative approval, funding, and other mechanisms that may or may not come to fruition. Taken as a whole package and implemented quickly, there could be enough assurance that we are on a meaningful path. Implemented in a piecemeal manner, over an undefined timeframe, with no funding, coordination or assurance that these measures will be executed as a package paints a scenario that is far less likely to meet that goal.

In addition, we remain concerned about the Agency of Natural Resources and the Agency of Agriculture Food and Market's poor past performance with regard to enforcing existing programs. Adding to this burden by including new programs elevates that concern. We suggest that the Agencies provide additional information on anticipated enforcement plans and associated performance measures.

Section 2.0 Agricultural Programs

Riparian (meaning both stream and lake) buffers are one of the single best tools we have for protecting water quality. But water quality treatment is not their only function. Riparian buffers perform many functions and have many values. Both

the Agency of Agriculture, Food and Markets (AAFM) and the Agency of Natural Resources (ANR) should be very familiar with these functions. This section of the proposal, however, ignores all other functions of buffers solely to focus on water quality. The proposal calls for allowing grass buffers along perennial streams and ditches. Grass has been shown to have little effect on protection of streams and is inconsistent with the Agency of Natural Resources' *Guidance for Agency Act 250 and Section 248 Comments Regarding Riparian Buffers* (which is based upon science that applies to all projects) that calls for buffers to be undisturbed and naturally vegetated in order to be considered a buffer. To call a ten-foot grass strip a buffer is not only misleading, it enables credit for providing the multitude of positive benefits to waters without actually providing any.

The width of 25 feet for streams and 10 feet for ditches again ignores the many functions and values of riparian buffers and instead focuses only on minimal and questionable water quality protection. If the goal of this provision is to also provide any of the other functions and values of buffers, it fails to do so.

Throughout this section there is an apparent preference to react to eroding streambanks rather than to prevent them from eroding. In several locations (e.g. 2.2, 2.3), it states that action will be taken only once erosion has occurred and the damage has been done. If the goal is to prevent additional sediment (phosphorus) inputs, this action will, by definition, fail to do so.

Regarding soil loss tolerance, an aggressive plan would call for a fraction of "T" as a requirement, not just "T". Why not 1/2T for those areas that are known to be discharging (which should be evident once every farm has been inspected), critical source areas, or areas that are currently eroding?

This section is noticeably lacking in a discussion about floodplain protection. While conversations abound across state government in other departments and agencies about how to protect these areas, the TMDL proposes no such thing in the agricultural sections. It must: the opportunity to prevent crop loss due to flooding and to provide further flood resilience and reduce phosphorus discharge concurrently is too great to pass over.

Revision of the Accepted Agricultural Practices must also be included in this proposal. Despite being “the foundation of Vermont’s Agricultural Nonpoint Source Water Quality Program” (per the AAFM website), and despite being mandated by statute to be technically feasible as well as cost effective, it is undisputed that many farms do not implement the basic requirements. While new standards can and should be required, revision of the AAPs and robust enforcement of them are critical. Limiting that revision to livestock exclusion *where erosion is present*, fails to provide the protection needed.

As noted in other sections of the procedure, it is impossible to quantify what phosphorus reductions may result from, for example, a revision to the AAPs as the reduction should be commensurate with the aggressiveness of the revised AAPs.

Nutrient Management Plans (NMPs) have been touted as a powerful tool to protect waters and better manage farms. Planning is an important foundation of an NMP, but the implementation of the NMP is just as, or more, important. Instead of increasing the value of NMPs, Section 2.4 instead seeks “waivers” for certain farms. It’s difficult to take seriously the legitimate AAFM concerns of being understaffed when they are at the same time advocating for permit programs that provide waivers involving additional resources to be spent to crafting exemptions from already weak water quality protections. The waiver

provisions both weaken water protection and deplete already limited staff resources: they are misplaced in any proposal to clean up any lake since they result in no improvements to water quality. These waivers also present immense enforcement challenges – challenges that are already difficult for AAFM to handle. The winter spreading ban proposal and field specific buffers (which again focus only on water quality and not on bank stability, flood attenuation etc.) provisions should be struck and meaningful, protective proposals incorporated. The fact that these waivers require a certified NMP provides no comfort. Instead, the waivers lack accountability of the Agency, provide no assurance that the policies will not be abused, are impossible to enforce, and are wasteful of AAFM time and expertise – all the while resulting in zero improvements to water quality.

It is not universally agreed that livestock exclusion is "extremely costly and may not be cost-effective....", as noted in Section 2.4. When considering the universe of actions to reduce phosphorus inputs, livestock exclusion could be a very cost-effective measure, especially when compared to stormwater retrofits in urban areas, or wastewater treatment facility upgrades. When compared to other on-farm activities this statement may be valid in some circumstances, but when compared to the activities within a watershed that will need to occur (as this proposal can and should do), livestock exclusion might actually be a relatively inexpensive method to achieve significant pollutant reductions.

The proposal further states, "(a) farm prioritizes the environmental impacts of their operation, targeting the highest ranking concerns". Imagine if such an approach was considered when the Clean Water Act was passed: clean up what you choose to and the rest will have to wait until you're able to address it. Would we have made the painful and expensive yet successful strides in cleaning up our waters if so? If we extrapolated this approach out to its logical conclusion, we would never reach our goal of the clean Lake Champlain, or any other water.

Self-certification, as discussed in Section 2.5 has proven to fail in a regulatory scheme. A 2007 VNRC report entitled *Unchecked and Illegal* outlines how poorly self-certification was working for ANR stormwater programs: almost all projects inspected were out of compliance with their permit. This proposal seeks to replicate that failed model. If farmers are unaware of the AAPS and what is called for, then how reliable are these self-certifications? What meaningful reductions of phosphorus will result?

Instead of voluntary measures, self-certification, flexibility with no resulting improvement in water quality, VNRC suggests that the Agencies propose to remove existing exemptions from water quality protections in statute for agriculture. Reversing the long-standing trend of exemptions for agriculture would go farther to increasing protections of our waters and would be the kind of bold action that Vermont needs.

Lastly, as has been frequently noted by VNRC, voluntary measures to comply with the AAPs, plant buffers, fence out livestock, etc. have failed to result in meaningful reductions of phosphorus and other pollutants. The time to focus on increasing participation in voluntary measures has long passed. This section proposes redundancy with existing programs, flexibility that provides no environmental benefit, increased confusion for enforcement efforts, and is based on future conditions that are in no way assured to happen. This section fails to provide meaningful changes that will result in measurable decreases in phosphorus in Lake Champlain. VNRC expresses its explicit disappointment in this section.

Section 3.0 Stormwater Management

Stormwater management, especially with regard to the Lake Champlain TMDL, has always been a challenge. ANR appears to have the authority that it needs

under the Clean Water Act to compel action on the part of polluters. Whether it has the political will to do so remains to be seen. This section indicates that it may and we support aggressive measures that rightly direct the costs of cleanup and protection to the polluters (in many cases that is all of us) and away from the taxpayers of Vermont.

The creation of a TS4 Permit is a meaningful step in the right direction as long as ANR retains the authority over this permit. AOT has made great strides in recent years to provide better stormwater management, but it is important that the accountability still lie with ANR. The proposal fails to address, however, the timeframe for the drafting and adoption of a TS4, as the proposal calls for actions that lack a definitive timeline or appropriate quantification of reductions.

The contribution of phosphorus and other pollutants from gravel roads has recently been quantified in Vermont (http://www.lcbp.org/wp-content/uploads/2013/07/74_Road-Study_revised_June2013.pdf). It is encouraging that the proposal attempts to transform that information into action by requiring all municipalities to address their contributions. This requirement would result in cost savings for municipalities (as a result of better standards leading to lower maintenance costs) and to Vermonters who are currently paying the bill for these contributions. Towns with more gravel roads that contribute a larger amount of phosphorus would rightly pay more to address these contributions. However, the Town Road and Bridge standards being proposed as a minimum for Best Management Practices (BMPs) under a general permit fail to require meaningful action. They are not protective and miss opportunities to avoid even more future costs. (See VNRC comments to AOT, attached). We support the provision in Section 3.2 as a critical component of meeting our phosphorus goal (with other benefits) but reiterate that it must be made stronger.

One way to accomplish this is to mandate the adoption of the minimal Town Road and Bridge Standards

Section 3.3 appropriately addresses existing developed lands as a pollutant source, but fails to address existing impervious surfaces that have no stormwater treatment. This creates a basic inequity between existing and new development when both are contributors to the impairment. Three acres is a large area of development, especially when compared to the current permit threshold of one acre of impervious surface. Why the proposal fails to use the one-acre threshold for exercising Residual Designation Authority (if that is indeed the tool that is proposed to be used) is not clear. While any parcel size is arbitrary, aligning this threshold with the existing permitting threshold would not only increase water quality protections above existing levels, it would also provide a baseline of equity (and regulatory clarity) that is lacking under the proposal.

The non-regulatory requirements for stormwater management for municipalities appears to be completely voluntary, calling into question (again) the quantification of reductions and efficacy of the program. The section contains good ideas, but only if they are implemented – and required – statewide. Stormwater master planning is not defined and should be, especially if pollutant reductions are expected from it.

The proposal states that “VTDEC will require greater pollutant removal requirements” as a result of the revision to the Vermont Stormwater Management Manual. To date, increased pollutant removal has not been an explicit focus of the manual discussions. The Green Infrastructure Initiative, while a worthwhile effort, fails to require implementation and provide measureable quantification of reductions of pollutants. How will these implementation steps be required and pollutant loads quantified?

Section 4.0 River Channel Stability

This section leaves VNRC with two questions: when and what will be the result? The measures called forth in the implementation steps are positive ones, but again we reiterate that the lack of meaningful quantification or a timeline that has funding and commitment in it leaves no assurance that these steps will be actually implemented.

This section states that DEC will “promote the municipal adoption of the [Road and Bridge Standards]” and thus is in conflict with Section 3.2 that will create a general permit with BMPs that are at least as protective as the standards. Municipalities should be required to adopt these minimal standards.

Section 5.0 Forest Management

It is noted in the proposal that the “A[ccceptable] M[anagement] P[ractice]s or equivalent requirements are mandatory on nearly 60 percent of the 4.6 million acres of forest land in the state, and a similar percentage applies to forest land within the Lake Champlain Basin in Vermont”. Strict reliance on the implementation of AMPs will not translate into the results that are desired because the rate of compliance with the AMPs is less than 100%. Through our involvement with the ANR Timber Harvest Assessment Report we are aware that the rate of compliance with AMPs varies, and there is certainly room for improvement. Even though the AMPs are mandatory, it does not mean the state is achieving the full benefit of AMP compliance.

The proposal highlights modifications to the AMPs underway related to stream crossings. In itself, this is not problematic, but ANR must consider the comprehensive effectiveness of the AMPs to understand if they are meeting the goals that are outlined in the proposal. For example, it is important to look at provisions such as buffer requirements to understand if they are adequate,

especially compared to those recommended or required in other ANR programs. According to the Draft Timber Harvest Assessment only 38% of operations met the AMP buffer width requirements 100% of the time, and only 44% of operations had no machine entries that disturbed the soil within 25 feet of streams and other waterbodies. The proposal needs to address the fact that only a certain of percentage of harvesting operations are fulfilling the goals of the AMPs. Therefore, we need to either strengthen the enforcement and implementation of the existing requirements, or we need to add complimentary, stronger provisions to help us to reach our water quality goals and associated pollutant reductions.

The Proposal states that the AMPs would be able to “*prevent any* mud, petroleum products and woody debris...from entering waters of the state”. They simply are not powerful enough to prevent these discharges (few things are, that’s why we have discharge permits). Instead, it is more accurate to state that the AMPs would *reduce* these discharges. Lastly and again, quantifiable reductions in pollutants are difficult to envision with a proposal that seeks to simply codify existing practices and claim a pollutant reduction from the status quo.

Section 6.0 Watershed Protection and Restoration Programs

This section calls for efforts that will take a significant amount of funding. It must be tied to existing sources of pollution – remediation of this pollution is currently being funded by Vermont tax dollars instead of being linked to the pollution source, as it should be. The Clean Water Improvement Fund especially calls into question the timeframe and political will required to reach yet another unquantified goal. Implementation of such a fund could take a decade – or more - with no assurance that it would end up happening. How, then, would this

provision help to reach the goal of a clean Lake Champlain within a reasonable timeframe?

Tactical Basin Plans have been touted as critical tools, and they are. But it's important to remember that they have no authority on their own. In that regard, the function as a prioritized list, should some entity decide to implement them; there is no assurance that they will actually be implemented. In this regard, the actions within are to be considered voluntary and dependent on the actions of undefined entities. Measureable reductions, then, are impossible to estimate.

Lastly, phosphorus detergent and fertilizer use appear to have been dealt with in a regulatory sense, but they have not. The ban on fertilizer use is, indeed, not a ban. Rather, it is a requirement that signs be posted at the point of sale and that homeowners not apply fertilizer without a soil test. To our knowledge there has been no enforcement of this legislation, nor any follow-up to show if it is working to reduce phosphorus. We have personally witnessed the sale of phosphorus fertilizer that lacks the appropriate signage in several locations. Including this provision and indicating that no additional action is necessary is an illusion.

We thank you for your consideration of these comments and hope that the critical nature reflects our shared urgency to clean up Lake Champlain. Please be in touch if we can answer any questions about them.

Sincerely,

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

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