



December 28, 2012

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Sent via electronic mail to: kari.dolan@state.vt.us

Dear Kari:

The Vermont Natural Resources Council (VNRC) would like to commend the efforts that went into creating the December 14, 2012 draft *Water Quality Remediation, Implementation, and Funding Report* ("draft report") prepared in accordance with Act 138 (2012) for the Vermont General Assembly. This document is the most recent compilation detailing the many impacts on Vermont's water quality and – coupled with other Agency of Natural Resources ("ANR" or "Agency") data required by Clean Water Act §303 and §305 reports – documents that Vermont's waters are in trouble. If there is any reason to be hopeful about the status of Vermont's waters it is the growing public awareness of the costs and implications of dirty water. The draft report provides a comprehensive list of the threats to Vermont's waters, and identifies strategies for achieving our collective goal of fishable, swimmable waters. The final version will serve as a foundational document for future efforts to maintain, restore and enhance our waters. It is clear that the Agency gave broad consideration to the many needs and funding sources that might be available.

Summary

A major component of our comments relates to the costs of inaction and the equity necessary to clean up and prevent degradation of our waters. Another major focus of our comments is the ever-increasing urgency for an anti-degradation rule to be adopted to avoid the ongoing need for expensive clean-up plans as additional waters become impaired. The economic and societal value of preventing waters from becoming impaired is immense. We urge the Agency to reflect on what we have learned about how we manage our waters and how to move forward by making fundamental changes to our permitting, education and enforcement efforts. This report is about opportunity – to have clean waters and the economic benefits of good jobs and costs averted to get us there. Our comments provide our perspective on the value of a statewide water utility and our vision for how it could be implemented. We then provide broad recommendations for the draft report that we hope will be incorporated into the final version. Lastly, we reiterate our desire to provide our recommendations on priorities that we believe will get us to our shared goal of clean water for all of Vermont.

Recommendations in the Draft Report

Despite the plethora of good information contained in the draft report, the Agency misses a rare opportunity to provide leadership for our environment by failing to include specific recommendations as required by Act 138. In this regard, it fails to recognize the economic benefits of clean water – and the high costs of failing to keep our waters clean.

Among other actions, Act 138 requested recommendations from the Agency on how to remediate or improve the water quality of the state's surface waters, how to implement remediation or improvement of water quality, and how to fund the remediation or improvement of water quality.

Act 138 required a report to include recommendations for funding ongoing water quality efforts, consideration of whether a statewide mechanism for this purpose should be implemented and how such a program would be administered. It required recommendations for a priority system for allocating such funds – including consideration of whether those funds should be used to restore impaired¹ waters or protect waters from becoming impaired. It required recommendations on agricultural water quality including whether the Acceptable Agricultural Practices (AAPs) should be revised or expanded. The legislation also contained a requirement for the report to address urban water quality (stormwater), lake shoreland protection, critical source areas including those in the Lake Champlain basin and a response and implementation plan for all of these considerations.

Given the far reach of ANR's programs and the vast experience and expertise in the Department of Environmental Conservation on water quality issues specifically, it is disappointing that the Agency did not take advantage of the opportunity presented by Act 138 and fully meet its charge. Instead of making recommendations the report contains a menu of options that the legislature could choose to act upon. This decision by the Agency casts aside an opportunity to be bold; to prevent costs from escalating while the legislature considers the various options presented; to create jobs related to the restoration and protection of our waters; and puts Vermont's waters at further risk from the impacts of future development.

Regardless of the Agency's decision, VNRC is committed to continuing to engage, advocate and educate to protect, restore and enhance Vermont's waters. We have participated in ongoing discussions related to cleaning up our impaired waters for over a decade, and many of the comments reflected in the draft report are also reflected in *A Framework for Remediation of Vermont's Stormwater-Impaired Waters*

¹ Impaired waters are those waters that fail to meet basic Vermont Water Quality Standards for numeric and qualitative metrics such as temperature, sediment, or aesthetic criteria.

dated January 2010 that summarizes previous discussions around this topic. That report “discusses the Department’s creation of an overall framework for remediation of these seventeen stormwater-impaired waters and the permits that have been issued to require implementation activities” The 2010 document provided a similar framework for Vermont related to impaired waters – a major focus of the Act 138 report. That no further course of action is considered two years later given the opportunity to do so in this draft report is disappointing.

While the list of priority needs and revenue sources is valuable because it compiles disparate information, the lack of recommendations to provide direction puts the draft report at risk of being nothing other than a long list. Lost is the opportunity to address our collective shortcomings in failing to protect our waters from becoming impaired and from failing to clean up those waters that are impaired. For this reason, except where specifically noted, our comments generally do not reflect positions or comments on the individual needs, costs and actions listed by the Agency. We are interested in providing these comments once recommendations are included. The comments below offer our broader perspective until such time that priorities and recommendations have been established.

Economics of Clean Water

The overall tenor of the report is rightly about the dire condition of, and threats to, Vermont’s waters and the massive funding required to clean them up. VNRC has advocated for 50 years to highlight this issue to Vermonters and the attention given to this issue in the report is indicative that Vermont’s environmental realities are being thoughtfully considered. The benefits of clean streams and lakes have incredible value to Vermonters for recreation, tourism, and quality of life. Cleaning up, and keeping clean, our waters also provides an economic opportunity that contribute to Vermont’s water quality rather than add to its degradation. In addition, unlike other important projects with massive costs (e.g. transportation

infrastructure), future costs can be avoided if we prevent waters from becoming impaired. Because restoration of impaired waters is a requirement of the Clean Water Act via a Total Maximum Daily Load (TMDL), various tactics may delay costs but they cannot be avoided. Preventing waters from becoming impaired results in economic benefits to avoiding the massive costs of cleaning up an impaired water: “To date, the [Vermont] Department [of Environmental Conservation] has estimated that it will cost over \$65 million to remediate five urban watersheds (Potash, Centennial, Englesby, Morehouse, and Bartlett Brooks) which, adjusted for the rate of inflation, could be as much as \$75 million by the year 2013”². While the actual estimates are very much in dispute, what is not in dispute is that the costs will be high and that money spent cleaning up impaired waters is money that cannot be used for other purposes – such as preventing waters from becoming impaired or on other priorities. Simply, the sooner we clean up impaired waters, the less expensive these costs will be. We recommend including an analysis of what the final price will be as these costs are delayed and competition for funds becomes fiercer. We recommend that the opportunity for job creation and quantification of costs that are avoided be researched and included in the final report, presenting the full menu of economic realities of the work that is required to restore, maintain and enhance our water quality.

Vermont must shift its gaze from the mandatory near-term and shortsighted discussion around current conditions of waters to a more long-term vision of preventing our waters from becoming impaired in the first place. A powerful anti-degradation rule that considers long-term and cumulative impacts from multiple small discharges, for example, is the most obvious mechanism to prevent waters from becoming impaired. As you know, Vermont is one of the few states yet to implement an anti-degradation rule.

² *A Framework for Remediation of Vermont's Stormwater-Impaired Waters*, Vermont Department of Environmental Conservation, January 2010.

Section 305(b) of the Clean Water Act requires each State to prepare a biennial report on the quality of its waters. This assessment is a report on the state of our surface and ground waters - which waters are in good health and which are approaching impairment. The 305(b) report also identifies what is threatening our surface and ground waters (e.g. stormwater runoff, wastewater treatment plants, acid rain). This biennial report serves as an invaluable tool that summarizes the quality of our waters (in conjunction with Section 303 (d) Part C – Surface Waters in Need of Further Assessment) of the Clean Water Act). Using this report in conjunction with an anti-degradation rule will to help prioritize actions for those waters that are approaching or threatened by impairment.

Learning from Past Decisions

The draft report rightly focuses on how we might move forward to address current threats. But prior to tackling that issue, we must look back and examine how we got to a place where Vermont's waters are imperiled by multiple threats. A reflection and consideration of what structural, institutional, societal and financial systems have led us to this point in time should be added to the draft report. In other words: how did we get here? How did we wake up one day to have such a vast bill come due? How and for how long have we been failing to adequately protect our waters? If we fail to consider – and change – these structures, we fail to prevent additional impaired waters and the associated expenses of cleaning them up. Instead, the clean waters of today will become the impaired waters of tomorrow. The price tag presented in the draft report addresses how we clean up those waters that are threatened or impaired. It does not focus on how we protect our high quality waters and those that are cleaner than Vermont Water Quality Standards now but face impairment with increased development pressure for multiple, sub-jurisdictional discharges. For that matter, it also fails to address those waters that will continue to become impaired from increased pressure from regulated discharges, recognizing that every discharge permit issued is a permit to pollute. The cumulative impacts

from all of these discharges – regulated, unregulated, point source, non-point source – could put at risk every single body of water if we fail to examine what existing structures contribute to such a future.

The final report is required to contain consideration of how Vermont will protect its waters that are not yet impaired and what priority should be placed on keeping those waters “forever clean”. This consideration is not explicitly included in the draft and it is vital that it is.

One source of runoff that is currently not regulated is runoff from unpaved (“gravel”) roads or conveyance structures such as ditches along gravel or paved roads. These roads are a lifeline to many Vermonters but are often located along streams and rivers, creating a quick conduit for discharges – a fact highlighted during Tropical Storm Irene. Many of these roads contribute sediment storm after storm via ditches that are constructed for that very purpose. The Vermont Town Road and Bridge Standards (last revised via Act 110 of the 2009-2010 session) are currently on public notice for revision to ensure the standards are protective of water quality. These standards are voluntarily adopted by municipalities in exchange for a 10% reduction in the local match for the state Town Bridge and Roadway funding programs for municipalities that choose to adopt them. For various reasons, many municipalities have failed to adopt even these bare minimum, voluntary standards. These roadway sources are contributing to impaired and imperiled waters yet are subject to virtually no regulation regarding degradation of water quality. Regulations need not be unduly burdensome and basic requirements (e.g. re-vegetation of bare ditches and bans on cleaning out ditches outside of the growing season) should be considered for all municipalities or gravel roads that discharge to waters of the state. VNRC has been engaged in several conversations related to these standards and a Transportation Separate Storm Sewer System permit (similar to that recently issued by ANR for a Municipal Separate Storm Sewer System (MS4) for municipalities) and will continue to advocate for stronger, more

meaningful and more effective controls for stormwater runoff from traveled surfaces.

Needs (Costs) and Financing Tools (Sources) Estimates

An extensive listing of the “priority needs” (estimated costs) to implement various measures as well as the “financing tools” (potential revenue sources) are contained in the draft report. While these lists are broad and coarse, they consider a large number of sources, leaving few stones unturned and are helpful for framing the extent of the costs and the potential sources of revenue to cover those costs. Based on our brief analysis of the information provided, it appears that the costs could be overestimated and the revenues may have been underestimated. If true, this is good news. For this reason, it would be helpful to see additional analysis of the costs and the revenue projections, including information about how both sets of estimates were derived including the Agency’s data sources and references. This will help to provide baseline information and, absent recommendations from ANR, allow others to create their own, better-informed prioritization.

The priority needs sections of the draft report list many voluntary or incentive measures – especially in the agricultural section. VNRC participates in ongoing discussions around many of these voluntary measures related to the implementation of the Lake Champlain TMDL and other forums. It is our opinion that the support for these voluntary measures is disproportionate to their effectiveness in restoring or enhancing water quality. Because we believe that there is a lengthy track record of these voluntary measures failing to result in measurable improvements in water quality, now is the time to examine whether continuing to fund these efforts is the most cost-effective route to cleaning up our waters. Removing these priority needs from the list in favor of more effective measures could result in a lowering of the “costs” and allow a more accurate prioritization of

the needs. Agricultural discharges must finally be addressed with measures that are equal to or commensurate with those required for industrial discharges.

Statewide Water Quality Trust Fund / Clean Water Utility

A requirement of the report of Section 19 of Act 138 is the consideration of a statewide clean water utility, or water quality trust fund. Such a utility would be an attractive option for several reasons. First, a utility could - if properly implemented - rightly put the highest financial costs on those contributing the greatest amount of pollution, providing an equitable and appropriate mechanism to clean up and prevent degradation of Vermont's waters. This mechanism could also provide a financial incentive for each polluter (i.e. virtually all Vermonters) to reduce his or her pollution contribution, resulting in lower or avoided clean-up costs for all Vermont taxpayers. The draft report does a thorough job at presenting other pros and cons of such a utility.

The idea of some sort of clean water utility has been considered for years in Vermont. In 2004 ANR convened the Stormwater Advisory Group (SWAG) and, while the prospect of a stormwater utility did not enjoy unanimous support, it was one option put forth by the group. Some of the history of that discussion can be found at: http://www.vtwaterquality.org/stormwater/htm/sw_swag.htm

VNRC believes consideration of such a utility is prudent, provided that its primary goal is to reduce pollution inputs, rather than allowing a "pay to pollute" structure or uses funds to "offset" unabated pollution that is best prevented from occurring in the first place. Examination of the successes and failures of Vermont and national existing stormwater utilities must be included in any consideration of such a utility. A clean water utility that simply assumes ownership of private stormwater basins, for example, is not preventative nor would it help to meet the goals of Act 138. After such consideration, VNRC would then be ready to offer perspective for

consideration on where such a utility is best housed and by whom best administered.

It is important to keep in mind that because both construction site stormwater and impervious surface (or operational) stormwater permits are permits to pollute, even regulated projects generally result in an increase in pollution over existing conditions. These permits are, after all, discharge permits. For example, the Vermont Stormwater Management Manual regulates stormwater runoff from post-development impervious surfaces such as parking lots. A permit issued under those standards assumes a removal of only 40% of total phosphorus and 80% of total suspended solids. Therefore, for each permit issued, an *increase* in pollution over existing conditions may occur.

Currently, the costs for these regulated discharges (and from unregulated discharges) are passed from the discharger/landowner to the Vermont taxpayer when a critical mass of pollution is discharged into a stream. At some point (which is different for every water body and for every pollutant), the water is unable assimilate additional pollution and a TMDL is required to clean up these impaired waters. These costs are increasingly being passed onto municipalities – for example via the recently issued Municipal Separate Storm Sewer System MS4 permit. Rather than preventing an impairment from occurring with meaningful regulation or requirements to prevent discharges, our current system allows polluters to pass the cost of cumulative pollution onto the rest of Vermont.

Our vision of such a program would result in greater requirements to reduce pollution from occurring by, for example, requiring infiltration of stormwater runoff and other pollution on site. This approach differs significantly from the current regime where only a very small percentage of stormwater runoff pollution is regulated or controlled: ANR estimates that only “6% of the impervious surfaces in the Lake Champlain Basin are subject to regulation under a state operational permit,

and only 11% of the impervious surfaces are contained within designed Municipal Separate Storm Sewer System areas”.³ That means that no more than 10% - 15% of new impervious surfaces built in Vermont have requirements to treat for impacts to streams or to incorporate any stormwater control. When considering this number coupled with a finite capacity of water to assimilate new pollutants, it’s easy to see why streams become impaired or unable to meet basic Vermont Water Quality Standards.

VNRC Recommendations

Absent of ANR recommendations, VNRC wishes to present a small number of our own. Others will be presented in the various forums that accompany the draft report as well as various other discussion forums with which we are engaged with the Agency. Those specific recommendations that have already been listed are again reiterated in this section.

As previously noted, we are troubled by the trend to shift the full costs of development from the polluter to municipalities to individual taxpayers. VNRC recommends the prioritization of any mechanism that ties the cost of pollution to the polluter. For example, rather than requiring a minimal level of treatment that allows cumulative discharge impacts, require greater reductions for both regulated and unregulated discharges to prevent these impacts. To meet this goal, we recommend serious consideration of decreased regulatory thresholds to increase the level of treatment and control prior to discharge to our waters. This would serve to address both existing impairments as well as to prevent additional waters from becoming impaired. We suggest that the draft report consider the full costs of land development – including the additional pollution that is permitted to pass to Vermont’s waters: subsidizing the cost of our land use decisions with our waters is

³ *Lake Champlain Phosphorus TMDL Proposed Accountability Framework for Sub-Jurisdictional Stormwater and Town Road Nonpoint Sources*. Undated. Vermont Agency of Natural Resources.

unsustainable and shortsighted. Those projects that contribute to degradation of our waters must be required to pay the full costs of adding cumulative impacts to our waters.

As required by Act 138, VNRC recommends increasing discussion in the draft report of high quality waters and how those water can be kept from being degraded – alleviating the need for expensive clean-up plans with thoughtful, widespread prevention. VNRC will continue to contribute towards the creation of an effective rule that results in costs savings and prevention of degraded waters.

We suggest consideration of better coordination between the Agency, private consultants and municipalities for how to fund, implement, incentivize and require paying for stormwater retrofits. Coupled with increased requirements for better pollution controls should be an educational component that assists these parties in addressing our current impairments and those waters that are close to becoming impaired.

VNRC has long been concerned with ANR's reticence to enforce existing environmental laws. Our 2007 report entitled "[*Unchecked and Illegal: How ANR is Failing to Protect Vermont's Lakes and Streams*](#)" documents that enforcement has historically been underutilized as a mechanism to increase compliance and to create greater equity between those who comply with permit requirements and those who choose not to. In the draft report, this revenue source appears to be underestimated. We encourage further consideration of this tool as both a priority need as well as a revenue source.

We recommend including an analysis of what the final cost will be for stream restoration as these costs are delayed and competition for funds becomes fiercer.

We recommend that the opportunity for job creation and quantification of costs avoided be researched and included in the final report, presenting the full menu of economic realities of the work that is required to restore, maintain and enhance our water quality.

The draft report contains a large number of voluntary priority needs - especially related to agriculture - that we suggest should be re-examined in terms of effectiveness and, where appropriate, removed as a priority need.

Similarly, we suggest that any project that receives any state funding be required to implement pollution reduction measures, such as the minimal Acceptable Agricultural Practices, riparian buffers, etc. and that these measures be mandatory for lands enrolled in the Use Value Appraisal program, receiving VHCB funds, etc.

We suggest stronger consideration of increasing jurisdictional thresholds for stormwater regulation.

The draft report should consider giving additional priority to those communities or projects that have a sound sewer service area extension policy that does not contribute to or promote sprawl. Similarly, prioritizing state revolving load funds to state designated areas (e.g. growth centers) should be emphasized.

The draft report uses the term “already developed areas” which could have the unintended consequence of providing funding to areas with existing sprawl – patterns that are best to not reinforce. Instead, we suggest using the terms “areas of compact settlement”, “growth center” as defined by the Agency in the guidance document associated with the 2002 municipal wastewater funding rule, or other patterns of settlement as defined by the Agency in efforts to target investment in those areas.

The draft report uses the terms “downtown programs” and “growth center” interchangeably; they’re different. It would be more accurate to say “designated downtowns, village centers, new town centers and growth centers” or “the state’s land use designation programs”. Similarly, “designated areas” are “compact land use development” but the reverse is not always true. Incentives should be focused on state designated areas.

VNRC disagrees that “Act 250 is the main regulatory tool that the state uses to promote compact land use development”. It does not have provisions for compact development nor does it prospectively promote compactness, a shortcoming that VNRC has raised in other forums. We have also been engaged in discussions regarding the “loosening” of Act 250 jurisdiction in designated areas. Since somewhat outside the main purpose of this report, at this time we continue to seek methods to align various permitting processes while maintaining public access and sound environmental protection.

Statewide requirements for unpaved roads and infrastructure such as re-vegetation of cleaned out ditches and bans on cleaning out ditches outside of the growing season should be considered for all municipalities or roads that discharge to waters of the state.

Residual Designation Authority (RDA) is a powerful tool to address water quality impairments. This authority currently rests with the Agency to address existing sources of water quality pollution that contribute to an impairment but are otherwise unregulated under state programs. In other words, RDA is an existing tool that could be more widely used to require cleanup of stormwater discharges in impaired waters. We suggest that the Agency more robustly exercise Residual Designation Authority. This tool creates equity by requiring retrofits and other mitigation measures when an existing project is contributing to a violation of Water Quality Standards. Included in this category could be existing road networks that

are contributing to violations. VNRC is providing additional comments on the Vermont Town Road and Bridge Standards in another forum and we will provide those comments to ANR when they are submitted to the Agency of Transportation.

An area where the report could be improved is in the discussion related to the Acceptable Agricultural Practices. Act 138 requires a discussion of whether ANR believes current regulation to be adequate (among other requirements). It is clear from the myriad recommendations under Chapter 1 that ANR prefers voluntary tools for compliance with agricultural discharges, yet our experience is that more meaningful requirements are necessary and that these voluntary measures are not as effective as necessary to clean up our waters. As discussed in numerous other forums, we suggest that ANR and the Agency of Food, Agriculture and Markets require what is necessary to protect waters *beyond* what is currently required in the minimal AAPs. We suggest that if clean water and agriculture are both priorities then financial support for addressing these existing sources of pollution be included. Suggesting that both are priorities and then not requiring measures to prevent discharges undermines the credibility of ANR and the Agency of Agriculture, Food and Markets. In addition, the draft report contains very few actual mechanisms related to agricultural discharges that are not voluntary. Reconsideration of these priority needs in light of VNRC comments is requested.

Given the time, energy, money and effort dedicated to post-Irene river issues, VNRC believes the time is ripe for consideration of an outright ban of new development in our floodplains. We suggest inclusion and discussion as a priority need.

We strongly support riparian (including lakeshore) setbacks. This tool must be considered as we work to prevent additional degradation of our waters and should be a priority need. We look forward to reading and commenting on the Agency's forthcoming report as required in Act 138.

Lastly, we disagree that increasing stormwater enforcement is more valuable tool than decreasing the stormwater jurisdictional threshold. One of the primary arguments made by ANR in obtaining the authority to issue general permits is that it would free up more staff time to perform compliance and enforcement site visits. We have no evidence to show that this has actually happened; instead it appears that ANR continues to focus the majority of its resources on issuing permits and not on shifting to site inspections and enforcement. Both increasing enforcement and decreasing the stormwater jurisdictional threshold must be included.

VNRC Priority Recommendations

VNRC would like to provide our own priority recommendations. However, until further information is provided related to the economic estimates in the document (as requested above), we are unable to accurately determine those priorities. As the Agency revises its report and as discussions continue, VNRC is anxious to put forth our recommendations to move Vermont towards cleaner waters.

Thank you for the good work that has been done to draft the report. We hope that our recommendations and comments are helpful in producing an even better document that provides clear, specific recommendations and a blueprint for moving forward to a day when Vermonters can accurately assume that their waters are safe for drinking, swimming and fishing. We look forward to providing more detailed comments and in continuing ongoing discussions with the Agency on all of the facets considered within.

Sincerely,

A handwritten signature in cursive script that reads "Kim L. Greenwood".

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