UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MA 02109-3912

May 8, 2014

David K. Mears, Commissioner
Vermont Department of Environmental Conservation
1 National Life Drive, Main 2
Montpelier, VT 05620
Re: Draft Phase One Plan: Lake Champlain Total Maximum Daily Load

Dear Commissioner Mears:

Thank you for submitting the "Draft Phase One Plan" for the Lake Champlain Total Maximum Daily Load (TMDL). EPA appreciates all the effort that multiple Vermont agencies made to develop the draft and deliver it by the date we had requested. We are encouraged to see that the scope of programs and measures contained in the proposal issued last fall has been expanded and more fully fleshed out. The draft marks another significant step forward in the development of the new TMDL.

The purpose of this letter is to provide comments on the areas of the draft plan that EPA believes need to be strengthened in the revised Phase One Plan. Our overarching and general comments are provided below. More detailed comments on specific sections of the plan are contained in an enclosure.

Funding

As many others have noted, turning a good plan into reality hinges on getting more staff and more money for the core work of this plan. However, the additional staffing needs are not identified, and there is no clear commitment to or indication of how the state plans to secure the funding that will be needed to launch new programs and expand existing ones. While we understand that there will need to be many sources of implementation funding – local, state, federal, public-private – over time, Vermont will need to commit state resources to get these programs up and running. EPA was encouraged to read the April 20 commentary in the VTDigger by Secretaries Markowitz, Searles, Ross, and Miller regarding their determination to work with the General Assembly to deploy the resources needed to implement the plan. The revised Phase One Plan needs to include details on the steps and timetable the Administration plans to take in fiscal year 2015 to identify staffing and funding needs and secure those resources.

This funding plan is needed to ensure that the Phase One Plan will be implemented – an important element for demonstrating adequate reasonable assurance that necessary nonpoint source phosphorus reductions will occur. We understand that there can be uncertainty associated with securing resources. However, this should not preclude the State from committing to take measured steps towards securing these resources. Therefore, we request that all statements that are conditioned on receipt of adequate resources, such as, "…if provided additional staffing resources…" (p. 72, 3rd paragraph), be revised to include a commitment detailing the steps to secure these resources. We ask that you address these and more specific comments on funding and staffing in the enclosure as you work within the State in the coming months to develop a resource strategy in support of the Phase One Plan.

Implementation Milestones

The draft plan leaves the impression that nearly everything starts in 2016. Through intervening conversation we now understand that the years referenced in the plan are state fiscal years. Thus the year listed as 2016 in the draft actually starts on July 1, 2015. Still, the plan should more clearly indicate the elements of the plan that are already getting started or will be started between now and 2016 (e.g., AAP revision, AMP revisions, Stormwater Manual revisions). These elements should also be clearly indicated in the Gantt chart in Appendix E.

There is significant variability in the level of milestone detail in Chapter Five. In the revised Phase One Plan we would like to see year-by-year detail, particularly in fiscal years 2015-17 so that there are clear yardsticks for assessing progress. For instance, there are key steps (e.g., issuing a draft permit for public comment) and significant time increments before the state issues the new transportation TS4 general permit. Seeing such milestone steps will allow EPA and other interested parties to know that the State is on the path to actually issue the permit in 2016.

Accountability Framework

In Chapter Seven, the draft plan requests a 20 year implementation schedule to allow for communities to plan and stage needed improvements into long-term capital planning. Although we consider this a topic that does not need to be settled before the revised Phase One plan is completed, we are providing our preliminary thoughts on the request.

While EPA is prepared to consider that some of the implementation work will extend 20 years into the future, we will require a clearer commitment to implement the higher benefit programs in the early and middle phases of implementation. We would hope that no more than the last 10% of the planned reductions would occur between years 16 to 20. We understand that the finer detail on timing within each sub-watershed would be worked out in the Tactical Basin Planning process.

We continue to believe that progress reporting will need to be more frequent than every five years, especially until the Tactical Basin Planning process is completed for all the watersheds. Working from the proposed schedule in the Tactical Basin Planning section in Chapter 5, that would suggest the first reporting and evaluation phase would run through December 2017.

If the Tactical Basin Plans are as detailed as we expect, providing an accountability framework at the sub-watershed level, then we would be prepared to discuss extending the progress reporting cycle, perhaps to mirror the Tactical Basin Planning cycle.

With regard to accountability and progress reporting, we strongly encourage Vermont to include some state backstops or contingencies in the revised plan for the significant new actions and programs. For example, if some of the voluntary or incentive programs (or the funding for those programs) fall short, what additional actions will the State take? EPA is happy to discuss this further.

Nonpoint Source Reductions

As noted at the outset, we are very encouraged to see that the scope of the nonpoint source phosphorus control measures includes all the program areas in your initial proposal last fall and that there is far more detail in the draft Phase One Plan. The Tactical Basin Planning and Internal Phosphorus Loading in St. Albans Bay sections are good examples of this improvement. As also noted above, there is significant variability in the level of detail in the "Implementation Steps and Timeframe" sections which we believe need to be brought to a more consistent level of detail in the revised Phase One Plan. There is also inconsistent information on the intended extent of implementation for individual control practices. Some practices, such as those proposed for inclusion in the revised Accepted Agricultural Practices, are clearly expected to be implemented in all applicable areas throughout the basin. Other practices, such as cover cropping for example, are proposed to be implemented as recommended in nutrient management plans, with no indication of the ultimate level of anticipated implementation. The expected level of implementation resulting from the various components of the Phase One Plan is important to EPA's effort (using the scenario tool) to confirm that the State has provided sufficient assurance that needed nonpoint source phosphorus reductions will be achieved.

We were encouraged to see that a section addressing additional efforts needed in the so called "gap watersheds" (i.e., Missisquoi Bay, St. Albans Bay and South Lake) is included among the Agricultural Programs. However, it raises further questions. One is whether these efforts are in addition to the commitments in the prior sections, or do they reflect geographic targeting of those overall resources to the Gap Watersheds, thus potentially diminishing efforts in other watersheds. It is also unclear whether there are additional nonpoint measures beyond Agriculture that are being considered in these watersheds. We remain concerned that there is not a clear plan with actions that meet the preliminary reduction targets in Missisquoi Bay and South Lake. In addition to clarifying these issues, the revised Phase One Plan should include more detailed actions in these watersheds along with estimates of the extent of application of these practices across these watersheds.

Point Source Reductions

EPA's January 17, 2014 letter was focused on securing commitments to nonpoint source reductions such that flexibility could be considered in future discussions about the point source portion of the TMDL equation. As such, EPA did not require, nor were we expecting, a point source chapter in the draft Phase One Plan. We still consider this an area for further discussion.

However, in response to the proposal in Chapter Three, EPA believes it is highly unlikely that the final TMDL would allocate no reductions to wastewater treatment plants in any of the lake segments. There are some lake segments (i.e., Main Lake, Shelburne Bay, Burlington Bay and St. Albans Bay) where the wastewater treatment contribution is well above the smaller lake-wide average contribution from this sector. In addition, the Missisquoi Bay and South Lake segments still will not meet the reduction targets with the nonpoint measures identified to date. Furthermore, as described in more detail below, final adjustments to the predictive model may result in changes to specific segment allocations. As such, EPA believes it is likely that some point source reductions will be needed. We encourage VT DEC to engage on this issue and share ideas. As you know, EPA sets the wasteload allocations as part of the TMDL. More detailed discussions on the various point sources will be useful to EPA in setting the wasteload allocations. Lastly, with regard to the regulated stormwater portion of the wasteload allocations, we have not yet discussed VT DEC's plans to expand its stormwater permitting program, and the draft plan is unclear as to whether VT DEC intends to extend NPDES permitting coverage to additional stormwater sources (both municipal and non-municipal) through the exercise of its residual designation authority. We request that VT DEC clarify its intent in more detail in the revised plan.

Climate Change and Resilience

We appreciate the thoughtful consideration in Chapter Six of the effects of climate change on the suite of nonpoint controls contained in the plan. In general, we agree that the best strategies to minimize the undesirable impacts from climate change are already known to Vermont's resource managers, and that the statewide drive towards greater climate resiliency and its effort to reduce phosphorus loads to Lake Champlain are mutually reinforcing.

Status of EPA's Development of Allocations

Most of our efforts to date have been based on predicted segment specific allocations and reductions that were evaluated last fall using EPA's Scenario Tool and the modeling it rests upon. As you know, work is continuing between DEC and EPA technical staff and EPA's contractor to make some technical adjustments to the inputs to the model. As such, it is possible that there will be changes to some of the segment specific targets. While we do not expect that changes will render any of the proposed nonpoint source measures unnecessary, changes may influence the outcome of the point source allocation discussion. Rest assured that if changes in the modeling substantially impact the proposed nonpoint measures included in the revised plan, EPA will provide the state with the opportunity to modify the plan accordingly.

Conclusion

We greatly appreciate the effort undertaken to date to develop a comprehensive and wide-ranging approach to nonpoint source reductions of phosphorus to Lake Champlain. We hope Vermont will make an effort to revise the Phase One Plan by May 30th along with a commitment letter from the Governor. A revised Phase 1 Plan with more details on the nonpoint source elements will allow us to turn to the point source allocation with greater precision.

We value the truly collaborative nature of our efforts over the past three years and look forward to working in that same spirit to bring the TMDL process to closure and to focus on those important next steps to restore and protect Lake Champlain.

Sincerely,

Lynne A. Harrison
for
Stephen S. Perkins
Office of Ecosystem Protection

Enclosure

ENCLOSURE
EPA'S COMMENTS ON VERMONTS' DRAFT PHASE ONE PLAN FOR THE LAKE CHAMPLAIN TMDL

CHAPTER 3: STRATEGY TO ADDRESS POINT SOURCE POLLUTION

Please refer to EPA's comments in the Point Source section of the cover letter. EPA and VT DEC need to have more discussions on the point source portion of the TMDL.

In addition, EPA has the following comments:
On pages 35 and 36 for Urban Stormwater - MS4s and Residual Designation Authority Discharges (RDA) – There is not a clear indication of how/whether to expand use of MS4 and RDA authorities which would result in more items in the wasteload allocation side of the equation. Although the RDA section of Chapter 3 says "…DEC plans on expanding the RDA permit to the remaining urban stormwater impaired waters in the near future…" (last sentence on page 36), there is no mention of expanding these programs in Chapter 5. Comment 7 of EPA's January 17, 2014 letter regarding existing MS4s is largely unaddressed. A paragraph on page 81 does discuss the phosphorus reduction benefits of the flow restoration plans required for most MS4s in stormwater impaired waters. But some MS4s are minimally affected by flow restoration plans, so the Phase One Plan should go beyond the flow restoration plans and also discuss whether additional phosphorus reduction measures will be required and whether additional areas for residual designation are proposed.

CHAPTER 5: VERMONT'S COMMITMENT TO FURTHER REDUCE NONPOINT SOURCES

Agricultural Programs (pp. 68-70)

The Phase One Plan should provide clarity on the timing of implementation and milestones for the small farm certification program, small farm nutrient management plans, and changes to the livestock exclusion regulations.

Water Quality Permitting Programs: LFOs, MFOs, and CAFOs (pp. 68-70)

The Draft Phase One Plan states that the CAFO program manager inspects a minimum of 12 farms annually per agreements with EPA, but consistently achieves a higher rate (p 70). Under the Implementation Steps and Timeframe (p 70) for LFOs, MFOs and CAFOs, item number 1 states that a minimum of 75 CAFO inspections will be conducted annually, which is a notable increase from the current 12 annual inspections. Please provide the interim steps between items 1A and 1B (p 70) that will be taken. Further, we assume that additional staff and funding will be necessary to accommodate the proposed increased inspection level. Please identify the number of staff, and funding needs required to increase the annual inspections in the State's resource plan that will be developed in support of the Phase One Plan.

It is unclear what is meant by DEC's commitment to inspect CAFOs, since there are no currently permitted CAFOs in Vermont. Please clarify if the intent is to inspect all LFOs and MFOs that could be potentially identified as CAFOs (i.e., if found to be discharging). Presumably the minimum of 75 CAFO inspections includes SFOs, as well as MFOs and LFOs, but the draft Plan

does not state this explicitly, nor does it clearly state in 1B that these farms would in the Lake Champlain Basin. Please clarify whether SFOs are included in the stated 75 CAFO inspections, and whether 75 CAFO inspections identified in 1B will be in the Lake Champlain Basin. We understand that AAFM currently inspects all LFOs throughout Vermont and in the Lake Champlain Basin (p 69), and that AAFM will continue to inspect LFOs in the Basin annually (Item 2A, p 70).

Although we understand that work completed in recent years could potentially be applicable to reasonable assurance demonstrations, especially when accounting for the lag time between when a practice is implemented and when the water quality benefit is realized, AAFM should explain this in the revised Plan. Otherwise, it unintentionally appears that credit for reasonable assurance is being sought for practices already being done. Finally, for the remaining Implementation Steps, numbers 3 – 5 (p 70), please clarify when they will, or did commence.

Accepted Agricultural Practice Rule Updates and Compliance Section (pp. 71 – 78)
We understand there can be uncertainty associated with securing resources. However, this should not preclude the State from committing to take measured steps towards securing these resources. We request that all statements that are conditioned on receipt of adequate resources, such as those appearing on pages 71 and 72, be revised to include a commitment to developing a plan that includes the steps to secure these resources.

It is EPA's understanding that the AAP revision process will begin in the fall of 2014 (p 72). Although 2016 appears at 1F, it is unclear when the implementation steps 1A – F and 2A (p 73 – 74, respectively) will actually begin. Please clarify, and provide timeframes for all steps, and any that will be taken in 2015.

On page 71, AAFM indicates the small farm inspection program will be expanded. Please provide the number of inspections that will likely result from expanding this program versus the existing inspections (approximately 120 annually) done on a complaint-driven basis.

We understand that one small farm inspector was hired in 2013, and that AAFM is proposing to use existing staff to accomplish small farm inspections (p 71). This only partially addresses the request in Item 4 of the Attachment to our January 17, 2014 letter. In the State's resource plan, please provide the number of existing (and any new) staff that will be dedicated to these inspections, whether additional funding is needed and how it will be sought.

Update AAPs to Require Changes in Buffers, Gullies, and Erosion (p. 72)
Please explain why the proposed revision to the AAPs for SFOs (and presumably the existing AAP for MFOs and LFOs) related to stream buffers only requires buffers on perennial streams even though seasonal and intermittent streams also transport phosphorus loads, especially during high flows. Similarly, we would like to understand the basis for requiring 10' buffers on ditches rather than wider buffers.

Update AAPs to Require Changes in Livestock Exclusion Regulations (p. 73)
The update to the AAPs requiring changes to the Livestock Exclusion Regulations is clearly an effective approach to help prevent erosion and eliminate additional pollutants from livestock

wastes. The draft Plan states that livestock exclusion would "significantly" reduce phosphorus loads from pasture. Please explain the basis for this statement and the approximate amount of phosphorus reduction expected (or at least the percentage of this phosphorus source that will be controlled). The plan should clarify the meaning of the term "significant" livestock Operations in 2B, p. 74. Lastly, the plan should clarify that new additions to the AAPs apply to all farms and not just small farms.

Nutrient Management Plans (p. 74)
It is unclear how AAFM is going to enhance nutrient management plan activities with existing staff. The State's resource plan should explain what steps will be taken (including the additional staff that will be needed and how they will be acquired) to ensure that nutrient management plans are properly implemented on farms.

As an overall comment related to agricultural BMPs (particularly structural practices) please include in the revised plan information on the size and extent of storms on which BMP design and implementation will be based and how that relates to the kinds of changes in precipitation frequency and duration observed most recently.

Partner Assistance (p. 77)
In the Implementation Steps and Timeframe section, Item 1F includes a mandate for certification of manure applicators. Detail is needed, however, especially regarding milestones. For example, please provide those milestones needed for the certification program. In the State's resource plan, please include whether, and how additional staff and funding resources will be sought.

Additional Efforts in Gap Watersheds (Missisquoi Bay, St. Albans Bay and South Lake (p. 78).
It appears that AAFM is targeting resources to the Gap Watersheds and critical source areas (CSAs), thus potentially diminishing efforts needed in other watersheds. In this Gap Watershed section, please clarify if the targeted CAFO and SFO inspections are in addition to the inspection efforts described in the Permitting Program section, or merely a refocusing of those resources. Since the scenario tool estimates that about a 70% reduction from agricultural land could be achieved if a robust suite of practices were implemented nearly everywhere, focusing only on CSAs will probably not be enough to achieve the needed higher reduction percentage. Instead, it will likely require a combination of attention to CSAs along with applying additional practices (beyond what were simulated in the scenario tool) to Gap Watershed areas. The revised plan should include a timetable for obtaining additional resources to support this effort, and the State's resource plan should identify the additional staff resources and increased targeted funding needed to accomplish the objectives. Also, the revised Plan needs to provide a clear explanation regarding the basis for focusing efforts and resources on CSAs, and clarify how the practices in the CSAs will equate to phosphorus reductions.

Two additional practices which EPA staff discussed with state staff recently, are prescribed grazing for pasture and manure incorporation for hay fields. These practices were not simulated in the scenario tool, and at least the latter practice could achieve significant additional phosphorus reductions. There is mention of the practice under the nutrient management category, but no clear commitment to widespread implementation. Another additional practice

that could have significant phosphorus reduction benefits (even though they are difficult to quantify at present) is controlled tile drainage. This topic is mentioned on p. 76, but there is no strong commitment to implementing this practice. These are examples of opportunities for additional phosphorus reductions in the Gap Watersheds. Given how difficult it will be to achieve necessary reductions in these watersheds, consideration should be given to making these practices requirements, and whether or not the four additional BMP practices identified in Item 5 in the implementation plan should be considered as well (pp. 78-79).

EPA is concerned about establishing a clear plan for the Gap watersheds. Given recent discussions regarding forestland and forestry practices, there are likely limited opportunities for phosphorus reductions from this sector. In addition to concerns stated previously, there is not a clear set of actions that add up to the required phosphorus reductions in these watersheds to meet the TMDL targets. Thus, EPA would like to discuss this issue more thoroughly with DEC prior to the submittal of the revised Phase One Plan.

STORMWATER MANAGEMENT (pp. 79 – 85)

Stormwater Runoff from State Roads (p. 79)

A TS4 stormwater general permit for the entire state-operated system is an effective way to ensure controls of phosphorus. In order for this to be an NPDES permit, DEC will need to exercise its residual designation authority to designate those portions of the system that are not within urbanized areas. The process and schedule for doing so should be incorporated into the Implementation Steps and Timeframe for this element, including major milestones leading up to the issuance of this general permit (e.g., draft permit out for public comment, etc.). Also, the State's resource plan needs to identify the additional staff that will be needed to develop and manage the new permit.

Stormwater Runoff from Municipal Roads (p. 80)

The extent to which BMPs beyond the existing "Town Road and Bridge Standards" will be required by the contemplated new roads permit is unclear. Therefore, it is unclear how much phosphorus reduction is likely to be achieved by this program. Please provide an estimate of the expected phosphorus reductions to be achieved. Considering both the permitting and implementation timeframes are quite long, please include the major milestones leading up the issuance of this General Permit (e.g., draft permit out for public comment), including the year of expected issuance, and schedule for implementation. Also, please clarify if the Municipal Road General Permit will be a State or NPDES permit. Finally, the State's resource plan needs to identify the additional staff that will be needed to develop and manage the new permit and a plan to obtain additional staffing resources.

Stormwater Runoff from Existing Developed Lands (p. 81)

Similar to the Municipal Road General Permit, please clarify if the Developed Lands General Permit will be a State or NPDES permit. In order to estimate the reductions from this existing developed lands permit, in the revised Phase One Plan please include DEC's analysis of the percentage of additional existing impervious area expected to become subject to stormwater

permits using the impervious cover criteria thresholds indicated in the Plan (p 81). The revised plan should also provide an estimate of the expected phosphorus reductions.

The revised Plan needs to include the major milestones leading up the issuance of this General Permit (e.g., draft permit out for public comment), including the year of expected issuance. Also, the State's resource plan needs to identify the additional staff that will be needed to develop and manage the new permit and provide a plan to obtain additional staffing resources.

Stormwater Runoff from New Development (p. 82)
The description refers to "state-of-the-art" stormwater BMPs that will be included in the upcoming revisions to the Vermont Stormwater Management Manual (VSMM). Also, it states that these practices, along with the State's permit program, will "prevent substantial phosphorus loading." Without more specific information about the new practices to be included, it is not possible to determine the extent of phosphorus loading they will be able to prevent. In addition, the extent to which these practices will reduce existing phosphorus loads when employed at redeveloped and expanded sites, as distinguished from preventing new additional phosphorus, should be estimated, if possible, in the revised Plan.

In the Implementation Steps and Timeframe section, please include interim steps for the revisions to the VSMM, in particular, specifying those sections of the VSMM to be revised in 2015. Also, for steps currently listed (1 – 4)), please provide estimated timeframes.
Please include in the revised plan information on the size and extent of storms on which BMP design and implementation will be based and how that relates to the kinds of changes in precipitation frequency and duration observed most recently.

NON-REGULATORY STORMWATER MANAGEMENT FOR NON-MS4 MUNICIPALITIES (pp. 82 – 85)

River Channel Stability (p. 86)
The Draft Plan does not appear to address comment 9 in EPA's January 17, 2014 letter. It is important for DEC to include a sub-section addressing actions that will restore vegetated buffers where there are currently none (with a cross reference to buffer requirements on Agricultural lands) and actions that will restore floodplain access. As written, the plan still focuses only on preventing further loss of buffers and floodplain access, etc. Also, the Plan should include a discussion of the potential for shorter-term increases in phosphorous loads as some stream segments may need to progress through a more erosive stage before making it to equilibrium conditions.

Forest Management (pp. 90 – 98)
DEC proposes to develop a Vermont Forestry Direct Link Loan Program for qualified logging professionals to provide financial incentives that would increase the use of BMPs and environmentally friendly logging equipment. EPA understands the benefit of this program to help protect and improve water quality during logging operations. The implementation steps includes an augmentation to the VT State Clean Water Revolving Fund by EPA (p. 93) in 2017. The language in the revised plan should be amended on page 94 because EPA cannot predict the budget allocation for this fund in 2017, and whether it will be increased.

Additional actions to reduce phosphorus loadings in the Missisquoi Bay and South Lake Sub-watersheds include focusing the efforts of two foresters, partially funded through NRCS, to assist landowners with forestry cost-share practices to reduce phosphorus contributions from forestlands in these watersheds. Forest, Parks and Recreation proposes to expand this voluntary cost-share program, VT NRCS Forest Trails and Landings Cost-Share Practice 655, throughout the Lake Champlain basin and provide an additional 25% for cost-share practice to make this a no-cost practice for landowners. The State's resource plan should include the interim steps required for the State to provide the funds for the 25% portion of the cost.

As stated earlier, we understand there can be uncertainty associated with securing resources. However, this should not preclude the State from committing to take measured steps to secure these resources. We request that all statements that are conditioned on receipt of adequate resources, such as, "This proposal hinges on continued funding from NRCS." (p. 94) be revised to include a commitment to secure these resources.

WATERSHED PROTECTION AND RESTORATION PROGRAMS (pp. 99 – 109)

The Clean Water Improvement Fund is a conceptual plan that aligns existing programs, and provides a framework for potential new programs, to establish a dedicated funding source to priority water quality improvement projects that would help meet the TMDL targets. Because this is a voluntary program, and does not specify an amount or percentage of annual funding that will be allocated, or estimate additional future funding, it will be difficult to rely upon this program for reasonable assurance. In its plan to secure resources, EPA recommends DEC provide additional information on new resources that will be in place to implement the program, and provide a commitment on the amount of annual funding, or percentage of annual funding from each of the existing programs that can be dedicated to Lake Champlain implementation efforts.

Wetland Protection and Restoration (pp. 110 – 112)

The Description (p. 111) states that, as a result of the transfer of authority from the Natural Resources Board to ANR, ANR is now able to protect "thousands of additional wetland acres." It is not clear whether this is occurring, or if ANR must take additional steps to effectuate the broader protection. If the latter, then such steps should be discussed and integrated into the plan, given the stated importance of wetlands in the abatement of NPS nutrients.

We support DEC's commitment to station one District Ecologist in the Lake Champlain basin, and request this commitment be added to the Implementation Steps and include a start date. The narrative in the Implementation Mechanism section (p. 111) states that several exceptional or irreplaceable wetlands within the Lake Champlain basin have been identified. However, under Milestones for Partial Implementation, item 2, (p. 112), only two of these wetlands will be advanced through the rulemaking process for Class I designation. We recommend that all wetlands within the basin that function to improve the water quality of Lake Champlain, and are eligible for Class I designation, be considered for advancement through the rulemaking process. Additionally, please provide an estimate of the acreage of these wetlands in the revised plan. Please clarify what is meant by Milestones for "Partial" Implementation (p. 112) and the basis for doing a majority of this work in 2020 and 2025 rather than beginning sooner.

CLIMATE CHANGE AND RESILIENCE (pp. 116 – 133)

The Draft Plan adequately addresses planning for larger storms related to stormwater. It would be helpful to address how green infrastructure can be designed for larger storms where feasible (e.g., infiltration BMPs with substrate that captures and treats runoff). Also, it will be important to address measures that the Agriculture sector can implement to mitigate impacts from larger storms.

IMPLEMENTATION SCHEDULE AND ACCOUNTABILITY FRAMEWORK (p. 134)

In Chapter 7, the Phase One Plan includes a 20 year implementation schedule to allow communities the time needed for planning and staging the most cost effective approach for improvements to roads and stormwater infrastructure (p. 134). However, before a 20-yr implementation schedule can be considered, VT DEC needs to more thoroughly document its basis for this request. For example, DEC should provide a discussion that explains and details specific milestones and implementation actions that will be needed during this 20 year period. While EPA is prepared to consider that some of the implementation work will extend 20 years into the future, we will require a clearer commitment to implement the higher benefit programs in the early and middle phases of implementation. We would hope that no more than the last 10% of the planned reductions would occur between years 16 to 20. We understand that the finer detail on timing within each sub-watershed would be worked out in the Tactical Basin Planning process.

DEC should clearly explain how the Phase 2 Implementation Plans will integrate with the Tactical Plans and schedules. Additionally, this Phase One Plan should clearly commit to and specify a date by which the detailed Phase 2 Plan(s) will be completed. We continue to believe that progress reporting will need to be more frequent than every five years, especially until the Tactical Basin Planning process is completed for all the watersheds. Working from the proposed schedule in the Tactical Basin Planning section in Chapter 5, that would suggest the first reporting and evaluation phase would run through December 2017. If the Tactical Basin Plans are as detailed as we expect, providing an accountability framework at the sub-watershed level, then we would be prepared to discuss extending the progress reporting cycle, perhaps to mirror the Tactical Basin Planning cycle.

Implementation Steps and Timeframes for the programs in Chapter 5 need to include intermediate steps. Some examples include stormwater from municipal roads (p. 80) and stormwater from existing developed lands (p. 81). Milestones should be clearly defined for the various actions so that EPA can clearly gage progress. For example, revisions to the AAP rules need to include dates for initiating the revisions, completing a draft revised rule, and adopting the rules. Implementation steps listed as ongoing, annually, bi-annually, quarterly etc., need to include and explain when these steps were, or will be, started. This will give a better understanding of the start dates. Many new actions are not scheduled to start until 2016 or 2017 at the earliest. At a minimum, the Plan should clearly lay out actions that will be established by the end of 2016 (i.e., not just actions that will be started).

With regard to accountability and progress reporting, we strongly encourage Vermont to include some state backstops or contingencies in the revised plan for the significant new actions and

programs. For example, if some of the voluntary or incentive programs (or the funding for those programs) fall short, what additional actions will the State take? EPA is happy to discuss this further.