

To: Chris Bray, Chair, Senate Natural Resources and Energy Committee
Bobby Starr, Chair, Senate Agriculture Committee
Richard Mazza, Chair, Senate Transportation Committee
Jeanette White, Chair, Senate Government Operations Committee

Cc: Peg Flory, Chair, Senate Institutions Committee
Tim Ashe, Chair, Senate Finance Committee
Jane Kitchel, Chair, Senate Appropriations Committee

From: David Mears, Commissioner, Vermont Department of Environmental Conservation

Date: March 11, 2015

Re: Response to Clean Water Bill (H.35 and S.49) Budget and Revenue Questions

- I. Introduction: The following summary of the budget and revenue proposals pending before the Vermont Legislature is provided in response to a series of related inquiries from you and other committee chairs. It is meant to be read in conjunction with the attached set of tables in a Power Point slide presentation entitled “Funding Vermont’s Clean Water Initiative.”

We have organized the information around the three state funding mechanisms: (1) Clean Water Fund proposal; (2) Operating budget proposal; and (3) Capital budget proposals including transportation funding. For each category, this memorandum will provide a brief background explanation of the need and then describe both the requested expenditures and proposed sources of revenue.

- II. Summary Table: The attached table on page 2 of the slide presentation titled “Clean Water Initiative-Balance Sheet,” provides a simplified synopsis of the state funds being requested from the Vermont General Assembly for implementation of the Vermont Clean Water Initiative in FY 16 with projections for future years based on current information.

- III. General Background

- A. Vermont Clean Water Initiative: In November 2014, we issued a document entitled the [Vermont Clean Water Initiative](#) in response to a request from the Vermont General Assembly (Act 97). This document describes a strategy for

addressing the major sources of water pollution into Vermont's surface waters, including Lake Champlain. There are two important elements to this strategy, relevant to funding decisions:

1. Polluted Stormwater Runoff as the Main Priority: The primary focus of the strategy is on reducing polluted stormwater runoff from developed land, roads, and farms. The tools proposed for addressing these sources of pollution include:
 - a. Education, Outreach, Technical Assistance, Mapping, Planning and Prioritization: We will use a mix of these tools to make sure that municipalities, farmers, landowners and other partners have the tools they need to address stormwater pollution, and to ensure that we are spending our implementation dollars in a strategic and cost-effective manner;
 - b. Pollution Control and Abatement: Our highest priority is to use a mix of regulatory and funding tools to do the on-the-ground work to control stormwater pollution; and
 - c. Natural Resource Conservation: Vermont has natural, cost effective mechanisms for reducing polluted stormwater runoff through restoring and protecting wetlands, forests, floodplains and river corridors. One of our priorities is to increase funding for conservation programs.
2. Staging: To put in place the additional resources to ensure that we invest the pollution control and abatement resources most effectively, we have proposed three stages:
 - a. In stage one, we will lay the groundwork for enhancing existing pollution control and abatement, and natural resource conservation investments through increasing organizational capacity for state government and our partner organizations, and building the necessary regulatory and funding mechanisms. This stage will take two to three years.

Stage one overlaps with the first phase of the Lake Champlain restoration plan described below. The State's commitment to funding this plan is one of the first measures of accountability that EPA will be reviewing when they decide whether to approve the

State's plan.

- b. In stage two, we will fully implement the regulatory, funding and outreach programs, building on existing programs; and
- c. In stage three, we will measure and report on the results of those efforts, adapting our implementation plan in response to the results.

B. Federal Obligations Under the Clean Water Act: For waters that are not meeting state water quality standards, such as Lake Champlain which is not meeting the standard for phosphorus, the state is required to have a plan for reducing the sources of pollution that are causing the standards to be exceeded. The state must demonstrate both that the plan, if implemented, would work, and that the state has the resources and authority necessary to implement the plan.

1. Lake Champlain Total Maximum Daily Load (TMDL): The plan that Vermont submitted to EPA in 2002 was found to be inadequate in 2011. Vermont developed and submitted a [Lake Champlain Phosphorus TMDL Phase One Implementation Plan](#) to EPA for approval in May 2014.

2. EPA Approval: EPA is expected to act on the state's proposed plan for Lake Champlain in the late spring/early summer of 2015 after completing its technical review and evaluating whether, as noted above, the state has sufficient capacity and authority to implement the plan.

3. Consequences of Failing to Act: If the state's plan is not accepted by EPA, then EPA will be required to take the primary role in implementing the TMDL. EPA's focus will be on those sources of pollution within their immediate jurisdiction to address including wastewater treatment plants and large stormwater dischargers (large cities, farms and developments). This approach will impose significant costs in a less cost-effective manner and with a loss of control and access to decision-makers for Vermont communities and businesses.

4. Other Impaired Waters: Other major Vermont surface waters that are impaired as a result of nutrient pollution such as Lake Champlain include Lake Memphremagog and the Connecticut River. The State is engaged with EPA in developing and implementing TMDLs for these waters as well. The combined watersheds of Lake Champlain, Lake Memphremagog and the Connecticut River encompass nearly the entirety

of the State. There are smaller lakes and ponds, and specific stream areas within these watersheds that also exhibit nutrient impairment.

IV. Clean Water Fund

A. Background: The attached table on page 3 of the slide presentation titled “Clean Water Fund-State Revenue Needs Estimate,” reflects our best estimates of the known costs that are appropriate for state funding through a Clean Water Fund structure as proposed in H.35.

1.Clean Water Fund Decision-making Process: The process for allocating funds from the Clean Water Fund would involve three discrete steps:

- a. Agency personnel staffing the Clean Water Fund governance board report on funding needs to the board and offer recommendations for expenditures from the fund;
- b. The Clean Water Fund governance board evaluates the information provided by Agency personnel and proposes expenditures to be included in the Governor’s budget proposal; and
- c. The General Assembly appropriates expenditures from the Fund with consideration given to the recommendations of the Clean Water Fund governance board.

2.Timing of Expenditures from Clean Water Fund: Under this model, the soonest that funds could be disbursed from the Clean Water Fund, independent of the source of revenue is FY 17 since those expenditures require General Assembly action on the recommendations of a Clean Water Fund board that has not yet been established. For this reason, this spreadsheet does not include a column for FY 16 and is the reason that the Governor’s proposed budget does not include any proposed expenditures from the Fund for FY 16.

In addition, the Administration proposal for the primary state source of revenue is a parcel-based assessment on non-residential properties. It will take at least until FY 17 before we would be able to have the system in place to collect this assessment.

B. Expenditures:

1. Who: The Clean Water Fund as we have proposed and as reflected in H.35 is intended to be used for assisting the following categories of entities in achieving our shared clean water goals in the following order of priority:

- municipalities;
- partner organizations such as watershed groups, conservation districts and regional planning commissions;
- farmers; and,
- regulated entities such as businesses and owners of developed land.

The order of priority is based on need and availability of other revenues.

2. What: The work that is to be funded under the Clean Water Fund will be directed to addressing polluted stormwater runoff from developed land, roads, farms and streambank erosion through a variety of tools as discussed in the General Background section of this memorandum.

3. How Much: As described in the table on page 3 of the slide presentation, the known costs that could potentially be covered by the Clean Water Fund in the next few years is in the range of \$3-7M. The potential maximum levels of potential state funding opportunities are not yet known and will require the development and gathering of additional information. We know enough about those potential costs, however, to know that a conservative estimate of those costs is likely to be at least in the tens of millions of dollars, particularly as they relate to the municipal costs of controlling polluted stormwater runoff from developed lands and roads. These costs will be borne by some combination of the state, federal and municipal governments, and private businesses and landowners.

4. Variables Affecting State Funding Needs: In addition to needing more detailed cost assessments to be able to estimate the potential need for state revenues, there are also policy questions that the General Assembly will want to address and which will affect the level of need for state revenue such as the types of funding mechanisms (grants or loans), recipients of the Clean Water Funds, phasing and geographic distribution of funds. We will develop recommendations to the Clean Water Fund governance board and ultimately to the General Assembly on those questions at the same time that we propose to make expenditures from the Fund.

C. Source of Revenue:

1. Parcel Assessment: The Administration continues to recommend that the General Assembly adopt a version of the parcel assessment recommended in the Governor's budget. The figures in page three of the slide presentation support the Administration's determination that there is at least a need for the \$4-6 million per year in the early years of implementing the Vermont Clean Water Initiative. These figures also support the level of revenue associated with the revenue proposals in H.35 of \$13.2M (as modified by the memorandum from House Fish, Wildlife and Water Resources to House Ways and Means sent on February 26, 2015). Revenues that exceed the ranges described above can accrue to a fund balance to support the costs that will mount in the later years.

2. Other Revenue Sources: When the Clean Water Fund is established, we anticipate that Vermont state government will be able to use those funds to leverage additional private and federal monies. Determining the level of non-state sources of revenue and the conditions on the use of those monies will need to await the creation of the fund and the outcome of discussions with potential funding partners.

V. Operating Budget

A. Background: This discussion summarizes existing state agency responsibilities and is helpful to understanding the requests for new resources described in the attached table on page 4 of the slide presentation titled "VT DEC and AAFM Proposed FY '16 Revenue and Expenditures."

The State agencies with primary responsibility for implementing the Vermont Clean Water Initiative and Lake Champlain Phosphorus TMDL Phase One Implementation Plan are ANR, AAFM and AOT. The Administration's proposal for new resources builds upon a foundation of existing programs. The primary responsibilities for each agency are briefly summarized here:

1. ANR Responsibilities:

a. Stormwater Regulation: administers stormwater regulations applicable to municipalities and owners of developed land;

- b. Forest Stormwater Management Practices: administers the “accepted management practices” program to reduce polluted stormwater runoff from logging operations;
- c. Education and Outreach, Technical Assistance: provides education, outreach, and technical assistance to the regulated community;
- d. Mapping and Planning: monitors water quality, maps natural resources and develops watershed plans to guide regulations and investments for ANR and our partners including AAFM and AOT; and,
- e. Funding: administers low interest loan and grant programs to assist municipalities and partner organizations.

2. AAFM Responsibilities:

- a. Administering Farm Pollution Regulations: administers the accepted agricultural practices (AAPs) program, Medium Farm Operation General Permit and the Large Farm Operation Individual Permit programs;
- b. Education and Outreach, Technical Assistance: provides education, outreach and technical assistance to farmers;
- c. Funding: administers grants program to assist farmers with implementation of pollution control and abatement projects including nutrient management; and,
- d. Mapping and Planning: works with ANR to monitor groundwater quality, maps permitted farm information and guides regulations and investments for non-point source agricultural pollution efforts.

3. AOT Responsibilities:

- a. State Roads: constructing and maintaining state transportation infrastructure in a manner that minimizes polluted stormwater runoff and maintains compliance with various state and federal surface water quality regulations;

b. Training, Education and Outreach, Technical Assistance: provides training, information, support and technical assistance to municipalities relating to design, construction and maintenance of municipally owned transportation infrastructure; and

c. Funding: administers grant and incentive programs to assist municipalities with minimizing polluted stormwater runoff from town highways and related infrastructure.

4. Primary Sources of Existing Revenue for Operating Budgets: Current budgets for the clean water work performed by ANR, AAFM and AOT include state General Fund, fees and federal grants.

B. New Expenditures: The Administration's budget proposal includes proposals to increase capacity for ANR and AAFM in FY16. We are not proposing to increase the capacity or funding for AOT in FY16 but do anticipate increasing AOT's capacity in FY17.

1. ANR: We propose \$1.5M in new or increased regulatory fees to support,

a. New Positions: thirteen (13) permanent positions in the Vermont Department of Environmental Conservation as described in Appendix 1 to this memorandum. These funds will be used to implement new programs as well as to target actions and track results. We will also provide financial, technical and educational assistance to municipalities, businesses and private landowners.

b. Contracting with Regional Planning Commissions (RPCs): approximately \$333,000 for contracting with RPCs to provide assistance to municipalities relating to planning and implementation of stormwater pollution control and abatement for developed lands and town highways.

2. AAFM: We propose \$1.2M in new or increased fees to support

a. New Positions: seven (7) permanent positions as described in Appendix 2;

b. Program and Operating: Create manure application certification program, expand nutrient management planning to small farms,

create a small farm certification program, information technology support, and operational costs for proposed positions; and

c. Grants to Farmers: approximately \$250,000 to supplement federal funds with targeted state grants.

3. Future Year Projections: We are not ready to project future needs given uncertainties. We will, in the future, continue to look for other resources to support the necessary agency capacity including federal funds. In addition, the agencies have embarked on efforts to find more efficient means of providing services and to shift staff and funds when possible in order to minimize the need to request new revenue from the General Assembly.

C. Revenues:

1. DEC Fees: We have proposed a package of new and increased regulatory fees in the amount of \$1.5M to cover the proposed expenditures for ANR above.
2. AAFM Fees: We have proposed a package of new and increased fees in the amount of \$1.2M to cover the proposed expenditures for AAFM above.

VI. Capital and Transportation Budgets (Page 5 of the slide presentation titled “Clean Water Programs in Capital and Transportation Bills”)

- A. Ecosystem Restoration Program: This program provides competitive grants to municipalities and partner organizations (e.g. watershed groups, conservation districts and regional planning commissions) to perform work related to controlling polluted stormwater runoff. In past years, the Capital Budget for this program has been approximately \$2.5M. We propose to increase this by \$1.25M to \$3.75M.
- B. Clean Water State Revolving Fund (CWSRF): The Clean Water State Revolving Fund program combines federal and state funds to provide low interest loans to help communities meet the goals of the Clean Water Act by improving water quality, protecting aquatic wildlife, protecting and restoring drinking water sources, and preserving Vermont's waters for recreational use. EPA dedicates \$6.9 million for Vermont and the state provides a 20% match, or \$1.3 million. Projects

eligible for CWSRF loans include wastewater treatment facility improvement, refurbishment and expansion; combined sewer overflow; dry weather flow; sewer line replacement and expansion; storm water/green infrastructure/nonpoint source pollution; water/energy efficiency; and environmentally innovative projects.

- C. Agricultural Capital Programs: The Best Management Practices (BMPs), Conservation Reserve Enhancement (CREP), and Critical Area Seeding programs were created to provide state financial assistance to Vermont farmers in support of their voluntary construction of on-farm improvements designed to abate non-point agricultural waste discharges. These programs maximize use of federal financial assistance and use least cost methods available to accomplish the abatement required. The Critical Area Seeding program is a proposed change from the current Vermont Agricultural Buffer Program that will focus on critical areas in the landscape that release disproportionately greater amounts of phosphorus.
- D. Better Backroads Program: The Better Backroads Program is a municipal assistance program that supports projects on town highways to improve water quality and lower maintenance costs. The grant funds are currently provided by the AOT and DEC and we propose to increase the level of these grants using Clean Water Fund monies.
- The Vermont Better Backroads Program’s goal is to promote the use of erosion control and maintenance techniques that save money while protecting and enhancing Vermont’s lakes and streams. Funds, subject to availability, are distributed as grants to municipalities and local organizations.
- Funding for this program has fluctuated in recent years depending on availability of funds. The base Transportation Fund level is \$440,000 per year.
- E. Vermont State Transportation Stormwater Permit Compliance and Clean Water Initiative Support: AOT and ANR are collaborating on a new statewide stormwater transportation permit (referred to as a “TS4” permit). This new permitting approach will give greater flexibility to AOT for improving the stormwater management across the state transportation network and increase both the cost effectiveness and pollution reduction benefits of the state’s stormwater management efforts. We propose to add four positions to AOT to implement the TS4 program and provide additional Clean Water Initiative Support. The funding for these positions is included in the \$3.56 million figure on the “Transportation-TS4 Implementation and Clean Water Initiative Support” row, page 5 of the slide presentation.

- F. Transportation Alternatives Program: The federally funded Transportation Alternatives program provides funding for a number of project types including any environmental mitigation activity - including pollution prevention and pollution abatement activities and mitigation to address stormwater management, control, and water pollution prevention or abatement -related to highway construction or due to highway runoff. A set aside of \$1,100,000 has been proposed to provide funding for projects that fit this criteria.
- VII. Federal Funds: We have included a summary of the most significant sources of federal funds that align with the Vermont Clean Water Initiative on page 6 of the slide presentation titled “Federal Programs that Support Vermont’s Clean Water Initiative by Year.” There are other smaller sources of federal funds that support components of our clean water programs including discretionary grant programs from EPA and USDA, and funding from agencies such as the Federal Emergency Management Agency (FEMA), U.S. Army of Engineers, U.S. Geologic Survey, U.S. Fish and Wildlife Service and others.

Appendix One: Description of DEC Clean Water Initiative Positions

Program Area	# of Positions	Position Description
State Highway Stormwater Regulation	1	The Phase 1 Plan requires the development and implementation of a State Highway (TS4) General Permit, a new program to address stormwater from state highways. The TS4 will include a “phosphorus control plan” covering stormwater discharges from the state highway system. The position is needed to develop the program, provide technical assistance, and review implementation of VTrans’ stormwater plans over a multi-year period.
Municipal Highway Stormwater Regulation	1	This is the key position for a new Municipal Highway General Permit, a new program to address stormwater from local roads. This program will involve public outreach to all communities, development of a general permit and technical and permitting standards, and issuing authorizations under the new general permit.
Developed Land Stormwater Regulation	2	These positions will support development and implementation of a new program to address stormwater runoff from existing developed land that is currently unregulated. This effort will include substantial public outreach, the development and issuance of general and individual permits and the permitting of hundreds of currently unpermitted existing impervious surfaces.
Wastewater	2	These are permit writer positions responsible for writing the permits for and assisting municipalities with the task of upgrading wastewater treatment plants to meet new nutrient requirements. This work is critical to the effective implementation of both the Long Island Sound and Lake Champlain TMDLs due to the need to reissue the 94 expired permits and the associated need to develop innovative solutions to assist municipalities with meeting these new limits.
Rivers	1	The Phase 1 Plan emphasizes the need to regulate municipally exempt activities and Act 250 developments and review all development proposals (under state and municipal jurisdiction) on floodplains in the Lake Champlain basin. With this new position the Program will review more municipal projects, create a regional Certified Floodplain Technician Program, and increase the regulatory and technical assistance capacity for floodplain protection. This position will work with the Program’s river scientists to capitalize on opportunities identified during their regulatory work to

		implement projects involving the removal of river corridor and floodplain encroachments.
Wetlands	1	As part of the Phase I implementation plan, DEC has committed to expand technical, educational and regulatory assistance regarding wetland protection and restoration. DEC has also committed to coordinate with partners to increase wetland restoration throughout the basin, increase permit compliance, and give heightened protection to wetlands within the basin which provide water quality protection and erosion control. This staff addition will increase Wetlands Program capacity to carry out all of these tasks.

Administrative	3	The Phase I TMDL Plan will lead to a large administrative workload in reissuing the current expired Wastewater permits, and implementing the expanded stormwater, rivers, and wetlands permitting programs. These permits also have monitoring and compliance requirements that will also lead to a large increase in the administrative workload.
Monitoring, Assessment, and Planning	2	<p>The Phase I TMDL Plan requires a watershed modeler to conduct geographic and technical source-sector analyses using a critical source area identification system. The results of this modeling will direct implementation in the form of regulatory permitting actions, funding to prioritized target watersheds, and targeted pollution controls.</p> <p>In order to fulfill the state's obligations under the Lake Champlain TMDL, DEC also needs an environmental analyst to track the pollution reductions associated with implementation projects and to link DEC's tracking system to the tracking work that will be done by AAFM and VTrans.</p>

Appendix Two: Description of AAFM Clean Water Initiative Positions

Note: These positions may need to adjust to meet the final outcome of proposed legislation in order to accomplish the expected tasks.

Water Quality Permitting and Project Manager

The Agency currently issues permits to medium and large farm operations. Under the proposed EPA TMDL the agency is expected to create a small farm certification program (5,000+ farms will likely fall under this). This position will assist in the development of the small farm program and align all three farm programs so farms can seamlessly transition from one to the next should they choose to expand. This work will include creating the program, contracting to develop an online registration system for farms to view the permits/certifications, and training for all stakeholders. Additionally, this position will inspect farms for compliance.

Water Quality Specialist – Small Farm Inspector

Currently the inspection capabilities within the agency are insufficient to adequately enforce the current regulations, let alone the proposed changes the State has put forth in the EPA TMDL. These two positions will enhance our ability to be present on farms in order to uphold the regulations. Right now the farm to staff ratio is roughly 715 farms per person. (assumptions include: 1,000 dairies and 4,000 other livestock/backyard farms/crop farms, etc., and 7 FTE's for inspectors).

Agriculture Systems Specialist - Ag Engineer

As inspectors do their job, they inevitably drive workload onto engineering resources as farms need to make improvements in order to maintain compliance with water quality regulations. If the inspectors above are to be hired, a professional certified engineering position is essential in order to complete the progression of getting a farm to resolve water quality issues.

Financial Administrator II

Included in the additional clean water fund budget proposal is an increase in base allocations for programs. Most of these programs are pass-through grants administered by the Agency to partner organizations. If the funds are increased, a position will be needed to administer the grants in the ARMS division and any new initiatives and cooperative agreements the agency enters into.

GIS Project Supervisor

As the Agency performs all of the work in the TMDL, there is a need to show accountability of the progress made. Showing maps is one of the most effective ways to present this information to the public, especially in a natural resource field such as agriculture which is land based. Additionally, the ARM division is about to embark on a new water quality database that will track all of the permitting efforts and this position will ensure a linkage in the permit mapping as well so internal resources can be more efficient in the enforcement process by knowing where farms are situated and the resources they

have at their disposal (i.e. Additional manure pits so we don't have to issue them a spreading exemption in the winter which improves water quality or an understanding of who owns land when a complaint comes in and a more immediate ability to contact the farmer to resolve the issue).

Senior Agriculture Development Coordinator – Communications and Marketing

As the Agency increases its presence in water quality regulations and work with farmers, communication of efforts as well as a marketing assistance program will become paramount. This position will work with the Water Quality Specialists, Water Quality Permitting and Project Manager and Ag Resource Management Assistant Director to provide current information on water quality efforts, enforcement actions and programs that can assist farmers to meet water quality goals of the state.