## Vermont Clean Water Fund Board Meeting Agenda

Date/Time:Monday, November 6, 2017, 3:30pm – 4:30pmLocation:National Life Building Main 2– 1 National Life Drive, The Winooski Room (M240)

Welcome, Approval of Agenda Agency of Administration Secretary and Clean Water Fund Board Chair Susanne Young	<b>3:30-3:35 pm</b>
Review State Fiscal Year (FY) 2019 Clean Water Fund Budget Process Agency of Natural Resources Secretary Julie Moore	3:35-3:40 pm
<ul> <li>Finalize Recommended FY2019 Clean Water Fund Allocations</li> <li>Clean Water Initiative Program Manager Kari Dolan <ul> <li>Summary of October 2017 public comment period and responses</li> <li>Allocating FY2019 Capital Bill bond premium from sale of bonds (\$2.26 million)</li> </ul> </li> </ul>	<b>3:40-4:00 pm</b>
<b>Clean Water Fund FY2019 Budget Instructions</b> Agency of Administration Assistant Director of Budget and Management Sam Winship	4:00-4:10 pm
Update on Common Signage for State-Funded Clean Water Projects Buildings and General Services Principal Assistant to the Commissioner Erik Filkorn	4:10-4:15 pm
<b>Update on Legislative Reports</b> Clean Water Initiative Program Nonpoint Source Coordinator Emily Bird	4:15-4:20 pm
Comments from the Public Secretary Susanne Young	4:20-4:25 pm
Next Steps/Future Meeting Secretary Susanne Young	4:25-4:30 pm
Adjourn	4:30 pm
<ol> <li>Supporting Materials:</li> <li>September 5, 2017 Draft Clean Water Fund Board Meeting Minutes</li> <li>October 2, 2017 Draft Clean Water Fund Board Meeting Minutes</li> <li>October 31, 2017 Draft Clean Water Fund Board Meeting Minutes</li> </ol>	

- 4. FY2019 Clean Water Fund Board Budget Process
- 5. Compilation of FY2019 Clean Water Fund Bond Premium Public Comments (October 2017)
- 6. Final FY2019 Clean Water Fund Priorities and Allocations (November 6, 2017)

#### Vermont Clean Water Fund Board **Meeting Minutes**

Date/Time: Tuesday, September 5, 2017, 3:00pm – 4:30pm Location: National Life Building Main 2–1 National Life Drive, Winooski Room M240

#### **Clean Water Fund Board Members/Designees:**

Susanne Young, Agency of Administration (AoA) Secretary and Clean Water Fund Board Chair Julie Moore, Agency of Natural Resources (ANR) Secretary Michael Schirling, Agency of Commerce and Community Development (ACCD) Secretary Anson Tebbetts, Agency of Agriculture, Food and Markets (AAFM) Secretary

#### Attendees:

Karen Adams. Town of Colchester Dan Dutcher, VTrans Jason Aronowitz, AoA Brad Ferland, AoA Emily Bird, Dept. of Environmental Erik Filkorn, Buildings & General Services Conservation (DEC) Jen Hollar, VT Housing & Conservation Board Joanna Pallito, DEC Eric Blatt, DEC Diane Bothfeld, AAFM Ashley Romeo-Boles, Vermont Chamber of Jared Carpenter, Lake Champlain Committee Commerce Chris Cochran, ACCD Sue Scribner, VTrans Kari Dolan, DEC

## Welcome, Approval of Agenda and Past Meeting Minutes

Agency of Administration Secretary and Clean Water Fund Board Chair Susanne Young

- Anson Tebbetts motioned for approval of previous Board meeting minutes
- Julie Moore seconded the motion
- No objections
- Minutes approved

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Agency of Natural Resources Secretary Julie Moore

• See supporting materials

#### **Update on Clean Water Fund Property Transfer Surcharge Receipt Revenues** 3:10-3:15 pm

Agency of Administration Assistant Director Budget and Management Sam Winship

- See supporting materials
- Receipt revenues for FY2018 are preliminary, but so far, the year is above forecast
- Noted that the first \$1 million of the property transfer tax surcharge goes to affordable housing

#### **Final FY2018 Clean Water Fund Allocations**

Department of Environmental Conservation Clean Water Initiative Program Manager Kari Dolan Proposed Action: Approval of Final Allocations

• Final FY2018 Clean Water Fund Allocations were updated to support the costs of 300 reusable clean water project signs (required by statute)

#### 3:15-3:25 pm

3:00-3:05 pm

3:05-3:10 pm

- Remainder of surplus FY2017 revenue will be used to partially restore DEC's allocation (reduced previously to accommodate \$1 million redirected from the Clean Water Fund to affordable housing)
- Julie Moore motioned for approval of final FY2018 Clean Water Fund Allocations
- Anson Tebbetts seconded the motion
- No objections
- Final FY2018 Clean Water Fund Allocations approved

#### **Draft FY2019 Clean Water Fund Allocations**

Clean Water Initiative Program Manager Kari Dolan

- Summary of July 2017 public comment period and responses to online questionnaire
  - DEC provided responses to July 2017 public comments (see supporting materials)
- Proposed adjustments to FY2019 allocations based on public comments
  - FY2019 allocations were updated based on the July 2017 public comment period, and include a cover memo summarizing those changes (see supporting materials)

3:25-3:45 pm

- Clean Water Fund statutory priorities, and how they relate to each allocation, are summarized in a separate document (see supporting materials)
- For the FY2019 Clean Water Fund allocations, the Board is only providing recommendations to allocate Capital funds and property transfer tax surcharge funds; funds from the Transportation and Appropriation bills have already been allocated
- FY2019 Capital Bill includes \$2.26 million in bond premiums from the sale of bonds; bond premiums materialize from bond sales interest, and behave like Capital funds; the Clean Water Fund Board will need to recommend how to allocate these funds, however, spending authority for these funds does not yet exist, and will be authorized through the FY2019 Capital Bill in the upcoming Legislative session
- A proposal for allocating bond premium funds will be developed at the Secretary-level prior to the Clean Water Fund Board making its final budget recommendation on October 20, 2017; the recommendation will be based on agencies' ability to manage additional resources, cost effectiveness of activities, and funding demand
- Noted agencies' limited capacity to administer pass-through funds at current staffing levels and recommended to identify opportunities to build capacity where feasible

Proposed Action: Approval of Final Allocations

- Julie Moore motioned for approval of final draft FY2019 Clean Water Fund Allocations
- Anson Tebbetts seconded the motion
- No objections
- Final draft FY2019 Clean Water Fund Allocations approved

#### Discussion:

- During prior Board working meetings, the Board discussed the potential to integrate the Municipal Roads Grants-in-Aid program into VTrans' allocation; VTrans will discuss internally and with ANR; prior to October 20, 2017, the Board will decide where the program resides before making their final FY2019 Clean Water Fund budget recommendation
- Allocation #3 from the September 5, 2017 FY2019 Clean Water Fund Allocations for ANR to support the Agronomy and Conservation Assistance Program (ACAP) was recommended to be integrated into AAFM's draft allocation #2; this adjustment reduces administrative costs by eliminating the redundancy of having two agencies manage similar work

- Julie Moore motioned to amend the final draft FY2019 Clean Water Fund Allocations by integrating ANR's allocation #3 into AAFM's allocation #2
- Anson Tebbetts seconded the motion
- No objections
- Amendment to the final draft FY2019 Clean Water Fund Allocations approved

## Progress Report on the Water Quality Funding Working Group (H516, Sec. 26) 3:45-3:55 pm

Agency of Natural Resources Secretary Julie Moore

- Water Quality Funding Working Group has been meeting biweekly since late June 2017 to evaluate long term clean water funding options; recommendations will be summarized in a report and submitted to the Legislature by November 15, 2017
- Working Group will present their draft recommendations to an advisory group beginning September 8, 2017

#### **Upcoming Legislative Reporting Requirements**

DEC CWIP Nonpoint Source Coordinator Emily Bird

- Interim report on available clean water federal funding was submitted to the Legislature by AoA Secretary on September 1, 2017 (see supporting materials)
  - The Trump Administration's proposed budget would negatively impact Vermont's ability to administer clean water programs, and leadership has been in regular communication with Vermont's delegation on this issue
  - The Legislature has requested testimony on this topic the week of September 11, 2017
- Listing of FY2018 capital-funded clean water projects due November 1, 2017
  - Agencies will submit a listing of projects funded with capital funds in FY2018 as of October 15, 2017 to DEC by October 20, 2017 using the DEC-provided template
  - DEC will compile the projects list and submit to the Legislature by November 1, 2017
- Vermont Clean Water Initiative 2017 Investment Report due January 15, 2018
  - Agencies are on track to produce the Investment Report and the review process will begin in October 2017

#### Update on Common Signage for State-Funded Clean Water Projects4:05-4:10 pm

Buildings and General Services Principal Assistant to the Commissioner Erik Filkorn Proposed Action: Approve Draft Plan

- See supporting materials for the final draft *Implementation Plan for the Use of Signage to Identify Clean Water Projects Funded by the State of Vermont*
- Buildings and General Services will make applicable committee chairs aware of the plan and begin production of the signs
- Julie Moore motioned to approve the Implementation Plan for the Use of Signage to Identify Clean Water Projects Funded by the State of Vermont
- Michael Schirling seconded the motion
- No objections
- Implementation Plan for the Use of Signage to Identify Clean Water Projects Funded by the State of Vermont approved

#### **Comments from the Public**

Agency of Administration Secretary and Clean Water Fund Board Chair Susanne Young

### 4:10-4:20 pm

3:55-4:05 pm

• Jared Carpenter, Lake Champlain Committee: Thank you for taking the time to respond to the July 2017 public comments; Lake Champlain Committee may comment with recommendations for allocating the \$2.26 bond premium funds

#### **Next Steps/Future Meeting**

Secretary Susanne Young

- AoA is hiring a financial analyst to assist in accounting for clean water funds; AoA will coordinate with agencies' financial officers to determine how the new hire can assist
- Schedule October 2017 Clean Water Fund Board working meeting and meeting

#### Adjourn

• Meeting adjourned at 4:14 pm

#### **Supporting Materials:**

- 1. June 29, 2017 and August 23, 2017 Draft Clean Water Fund Board Meeting Minutes
- 2. FY2019 Clean Water Fund Board Budget Process
- 3. FY2017-2018 Clean Water Fund Revenue Summary and Forecast
- 4. Draft Memorandum: Final FY2018 Clean Water Fund Allocations
- 5. Compilation of FY2019 Clean Water Fund Public Comments
- 6. Draft Proposed FY2019 Clean Water Fund Priorities and Allocations
- 7. Draft Interim Legislative Report on Available Clean Water Federal Funding
- 8. Draft Template for Listing of FY2018 Capital-Funded Clean Water Projects
- 9. Vermont Clean Water Initiative 2017 Investment Report Timeline

#### 4:20-4:25 pm

4:30 pm

#### Vermont Clean Water Fund Board Working Meeting Minutes

Date/Time:Friday, October 6, 2017, 2:00pm - 3:00pmLocation:National Life Building Main 2 - 1 National Life Drive, The Catamount Room (N215)

#### **Clean Water Fund Board Members/Designees:**

Susanne Young, Agency of Administration (AoA) Secretary and Clean Water Fund Board Chair Joe Flynn, Agency of Transportation (VTrans) Secretary Julie Moore, Agency of Natural Resources (ANR) Secretary Michael Schirling, Agency of Commerce and Community Development (ACCD) Secretary Anson Tebbetts, Agency of Agriculture, Food and Markets (AAFM) Secretary

#### Attendees:

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Jason Aronowitz, AoA	Brad Ferland, AoA
Emily Bird, Dept. of Environmental	Erik Filkorn, Buildings & General Services
Conservation (DEC)	Bob Fischer, City of South Burlington
Eric Blatt, DEC	Jen Hollar, Vermont Housing & Conservation
Emily Boedecker, DEC	Board (VHCB)
Diane Bothfeld, AAFM	Joanna Pallito, DEC
Jared Carpenter, Lake Champlain Committee	Sue Scribner, VTrans
Kari Dolan, DEC	Noah, Community College of Vermont Student
Dan Dutcher, VTrans	

#### Welcome, Approval of Agenda

2:00-2:05 pm

Agency of Administration Secretary and Clean Water Fund Board Chair Susanne Young

#### Review State Fiscal Year (FY) 2019 Clean Water Fund Budget Process 2:05-2:10 pm

Agency of Natural Resources Secretary Julie Moore

- See meeting materials
- October 17<sup>th</sup> meeting to make final budget recommendation will be moved to the first week of November; the Board would like to evaluate the status of spending capital funds using the November 1<sup>st</sup> report on FY2018 capital fund awards before making their final recommendation

#### Prepare Final Recommended FY2019 Clean Water Fund Allocations

Clean Water Initiative Program Manager Kari Dolan

- Summary of September 2017 public comment period and responses
  - See meeting materials; in summary, public comments expressed: concerns for Vermont's water quality, especially regarding blue green algae blooms in Lake Carmi; support to fund agricultural work, but raised concerns about capacity to administer funds with current AAFM staffing levels; support for the municipal roads grants-in-aid program; support for enhanced investments in natural resources restoration; the need for investment in planning efforts to lead to more shovel ready projects

2:10-2:40 pm

- Proposed adjustments to FY2019 allocations based on September 2017 public comments
  - AAFM and VTrans allocations swapped equal amounts of Clean Water Funds and capital funds; AAFM received more flexible Clean Water Funds to deliver technical assistance to farmers, addressing agricultural capacity concerns; VTrans received more capital funds to support construction costs
  - Board members requested additional time to review comments and responses to comments and send questions/comments to Kari Dolan by Wednesday, October 11<sup>th</sup>
- Allocating FY2019 Capital Bill bond premium from sale of bonds (\$2.26 million)
  - Governor's FY2019 budget had anticipated a proposal of \$2.26M in bond premium funds be appropriated from the sale of bonds to support clean water efforts, and to be allocated through the Clean Water Fund Board process with a final proposal to the legislature in the FY19 Capital Adjustment Bill
  - The Board presented a proposal to support innovative projects with these additional bond premium funds, shown in Table 10 of the draft FY2019 budget recommendation
  - The Board will post their proposal for a 20-day public comment in October 2017 via online questionnaire, and will make their final budget recommendation in early November 2017
  - In late October/early November 2017 the bond premium funds will be proposed for a formal appropriation, as recommended by the Board with concurrence from the Legislature, through the formal FY2019 capital bill budget adjustment process that will occur this coming session
  - Comment from Jen Hollar, VHCB: The Board is considering the use of bond premium funds for phosphorus extraction equipment; farmers currently have access to VHCB grants of up to \$40,000 for this purpose; it is an eligible use of Water Quality Grants funded by the capital bill through VHCB (H.519: Section 11 (f)(4)); if a new program is created at AAFM to also fund phosphorus extraction equipment, there will need to be careful coordination to best serve farmers
  - Comment from Jen Hollar, VHCB: VHCB committed \$2.8 million FY18 capital dollars to projects that will close over the next year; \$1 million is available specifically for water quality and fee purchase to farmers; VHCB will know more in the next month on spending status and demand for these funds; VHCB still needs to work out details on who will hold the land, and how to target greatest need versus willing seller; VHCB will coordinate with AAFM and ANR to make a recommendation to the Board on funding needs to support fee purchase in the coming years
  - AAFM amended statute to allow funding of equipment up to \$300,000 and added phosphorus extraction technology to the list of equipment eligible for funding; AAFM welcomes additional grant funds to help meet the demand for this technology; AAFM noted that staff capacity is not a concern for phosphorus extraction technology because it is "off-the-shelf" and does not require substantial engineering to implement
  - ANR made commitment to complete Lake Carmi aeration feasibility study and need to be prepared to implement the recommendations of the study
  - Phosphorus extraction technology for municipal waste streams is also a high priority for ANR
  - Phosphorus extraction technology will require a plan to export extracted phosphorus; there are potential markets in southern New England, but those markets need to be developed

• Sale of nutrients can lead to operating wastewater at a profit; there may be a way to combine resources that is more useful to towns and farmers

#### Update on Common Signage for State-Funded Clean Water Projects

Buildings and General Services Principal Assistant to the Commissioner Erik Filkorn

- Signage plan approved at prior Board meeting
- Sign posts, as originally proposed, may trigger dig safe requirements; proposed using smaller posts to avoid dig safe requirement

#### **Comments from the Public**

Secretary Susanne Young

#### **Next Steps/Future Meeting**

Secretary Susanne Young

Adjourn

3:00 pm

2:40-2:45 pm

2:45-2:55 pm

2:55-3:00 pm

#### Supporting Materials:

- 1. September 5, 2017 Draft Clean Water Fund Board Meeting Minutes
- 2. FY2019 Clean Water Fund Board Budget Process
- 3. Compilation of FY2019 Clean Water Fund Public Comments
- 4. Responses to FY2019 Clean Water Fund Public Comments
- 5. Final Draft FY2019 Clean Water Fund Priorities and Allocations (October 5, 2017)

#### Vermont Clean Water Fund Board Meeting Minutes

 Date/Time:
 Tuesday, October 31, 2017, 10:30am – 11:00am

 Location:
 Skype Meeting: Toll number: +1 (802) 552-8456, access code: 23951660 (Host: 44728)

#### Attendees

Susanne Young, Agency of Administration (AoA) Secretary and Clean Water Fund Board Chair Joe Flynn, Agency of Transportation (VTrans) Secretary Julie Moore, Agency of Natural Resources (ANR) Secretary Anson Tebbetts, Agency of Agriculture, Food and Markets (AAFM) Secretary

#### Attendees:

Emily Bird, Dept. of Environmental Conservation (DEC)Eric Blatt, DECEmily Davis, Windham Regional Commission Kari Dolan, DECDan Dutcher, VTrans Rebecca Ellis, DEC Brad Ferland, AoA Erik Filkorn, Buildings & General Services Jen Hollar, Vermont Housing & Conservation Board (VHCB) Joanna Pallito, DEC

#### Welcome, Approval of Agenda

Agency of Administration Secretary and Clean Water Fund Board Chair Susanne Young

Legislative Report: Clean Water Capital Fund Report, due to the General Assembly on Nov. 1st.

Agency of Administration Secretary and Clean Water Fund Board Chair Susanne Young

• The Board recommended adding definitions of terms to the report, including obligated, awarded, and encumbered, prior to submitting to the General Assembly

Proposed Action: Approve Report for transmittal to the General Assembly

- Joe Flynn motioned for approval of the Clean Water Capital Fund Report
- Anson Tebbetts and Julie Moore seconded the motion
- No objections
- Report approved

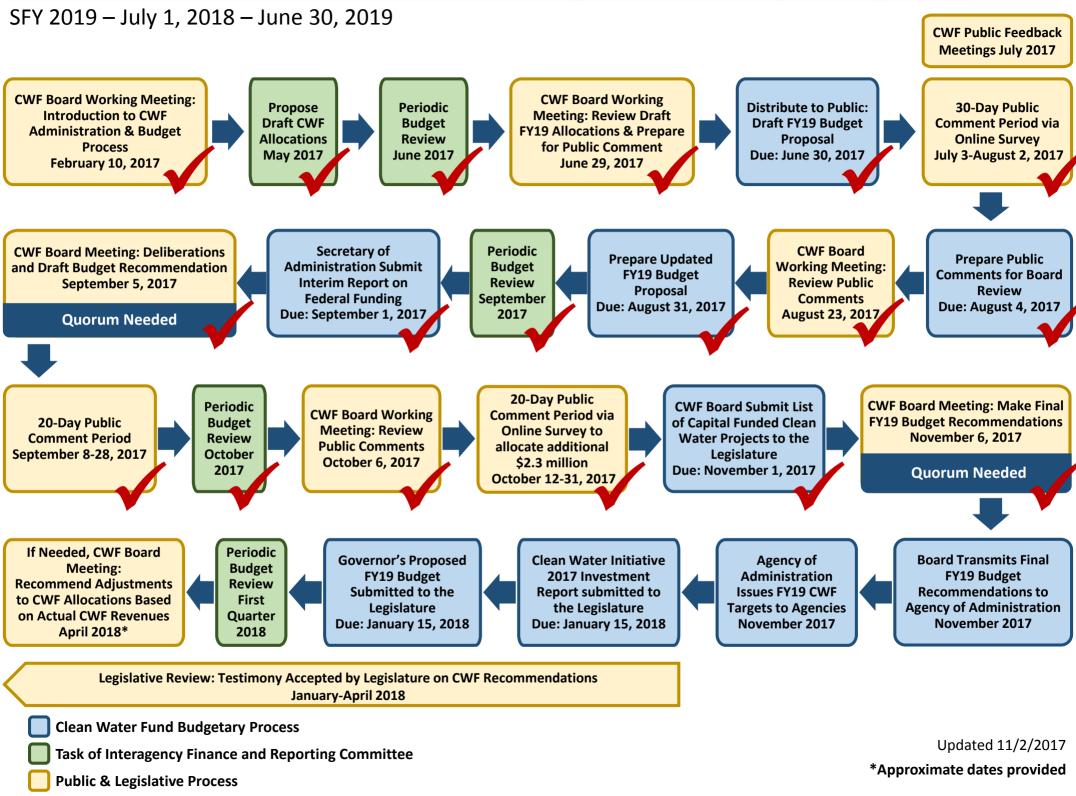
Next Steps/Future Meeting Secretary Susanne Young

#### Adjourn

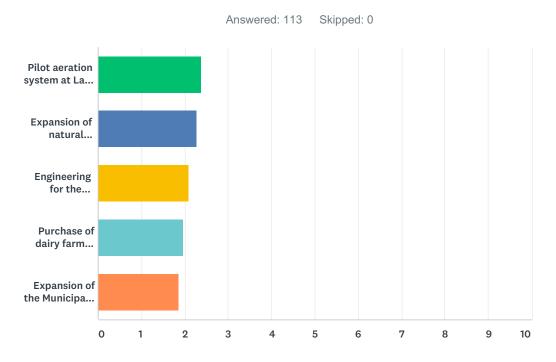
#### **Supporting Materials:**

• List of Clean Water Improvement Projects Funded with Vermont Capital Funds Draft Report, Due to the General Assembly on November 1, 2017

## Clean Water Fund (CWF) State Fiscal Year (SFY) 2019 Budget Process (February 2017 – April 2018)



Q1 The Board's fiscal year 2019 Clean Water Fund budget recommendation includes \$2.3 million in bond premium funds from the sale of general obligation bonds. The Board is proposing to support innovative projects with these funds, summarized in Table 10 of the draft Vermont Clean Water Fund fiscal year 2019 budget. Please prioritize the proposed projects, using the matrix below.



	HIGH PRIORITY	MEDIUM PRIORITY	LOW PRIORITY	I DO NOT KNOW	TOTAL	WEIGHTED AVERAGE
Pilot aeration system at Lake Carmi to mitigate harmful algal blooms (\$0.2 million)	60.36% 67	19.82% 22	17.12% 19	2.70% 3	111	2.38
Expansion of natural resources restoration efforts for total maximum daily load (TMDL) compliance (\$0.2 million)	53.33% 56	27.62% 29	12.38% 13	6.67% 7	105	2.28
Engineering for the recovery of phosphorus from municipal waste streams, animal manure, food, and food-processing waste (\$0.1 million)	43.52% 47	29.63% 32	19.44% 21	7.41% 8	108	2.09
Purchase of dairy farm equipment to extract phosphorus from manure (\$2 million)	33.64% 36	38.32% 41	18.69% 20	9.35% 10	107	1.96
Expansion of the Municipal Roads Grants-in-Aid pilot project (\$0.2-0.5 million)	34.29% 36	29.52% 31	23.81% 25	12.38% 13	105	1.86

#	COMMENTS FOR "PURCHASE OF DAIRY FARM EQUIPMENT TO EXTRACT PHOSPHORUS FROM MANURE (\$2 MILLION)"	DATE
1	This could be funded but farms should have to pay a high match rate to use the equipment.	10/30/2017 4:15 PM
2	If we are referring to anaerobic digestors then the discussion should be how to build a new sector of the economy and not just the purchase of machinery.	10/30/2017 3:09 PM
3	I do not have enough information of the potential for P abatement through this program.	10/26/2017 9:13 PM

4	WHO WILL FOOT THE BILL? THE VERMONT TAXPAYER AGAIN !!!	10/20/2017 12:18 PM
5	This is important and might be accomplished by including 2 or 3 farms instead of 3-4 farms, thus allowing funding for the less expensive, but very important projects listed below.	10/19/2017 9:28 AM
6	Farmers need this help if the are to reduce run-off from their fields. I don't know how the rules read now but it makes sense that the number of livestock should be tied to the extraction requirement.	10/18/2017 8:23 AM
7	make sure you are also figuring out what to do with the phosphorus after you extract it	10/17/2017 7:19 PM
8	Phosphorous going into lakes has got to be managed and reduced on a long term basis.	10/17/2017 4:16 PM
9	Invest more money in cleaning up our lakes. Enforce regulations already on the books so farmers can't spread phosphorus loaded manure along waterways and shorelines. Money talks - fine farmers if they don't use buffers areas and injection processes instead.	10/16/2017 6:25 PM
10	Extracting phosphorus from manure will not reduce the amount of manure in VT watersheds. VT farms are producing too much manure for the available land.	10/16/2017 4:53 PM
11	Perhaps one or more of these farms could be bought out or significantly reduced for the same amount of money and urged to diversify its products, since too much milk is produced anyway.	10/16/2017 2:55 PM
12	Soil injection system for use of manure for land fertilizer would be more appropriate than trying to remove the phosphorus.	10/16/2017 9:11 AM
13	What will be done with phosphorus after it is extracted?	10/13/2017 2:37 PM
14	Do these farms have nutrient management plans that inform them how much phosphorus is needed on their land? This would seem to be a precursor to investing in capital equipment. Also, do they have a track record of applying manure to fields appropriately, and are they in compliance with the new required agricultural practices including buffer widths along streams?	10/13/2017 11:17 AM
15	I believe the Ag Dept should be paying a minimum of 50% for this	10/12/2017 6:23 PM
16	Any reduction in phosphorus is critical. The state should furnish whatever incentives necessary to accomplish this goal.	10/12/2017 2:03 PM
17	At the Benjamin Farm in Franklin near Lake Carmi this phosphorus extraction equipment was put in a few years ago. This machine has allowed this farm to build a new barn for more cows to produce more manure. The effect of this machine only continues the problem of too much manure. The same result occurred at the Machia Farm in Sheldon.	10/12/2017 1:56 PM
18	If manure has to be spread it needs to be rendered harmless to lakes and streams.	10/12/2017 1:52 PM
19	basically this would give a farmer a free machine allowing him to purchase more cows which would increase the amount of phosphorus.	10/12/2017 1:12 PM
20	Unless you can specifically tell us what equipment you are purchasingthis is a misleading question. Right now, there is no "dairy farm equipment" that extracts phosphorus from manure.	10/12/2017 11:18 AM
21	A stronger buffer policy would have done with without any additional expenditure. An Agency of Ag failure.	10/12/2017 9:43 AM
#	COMMENTS FOR "PILOT AERATION SYSTEM AT LAKE CARMI TO MITIGATE HARMFUL ALGAL BLOOMS (\$0.2 MILLION)"	DATE
1	while this is desirable, funds should be spent on the legally required compliance goals of the Lake Champlain TMDL.	10/30/2017 4:15 PM
2	Sounds like a band aid	10/26/2017 9:13 PM
3	Top priority for Lake Carmi !!!!!	10/26/2017 3:34 PM
4	Lake Carmi is a small enough body of water that a pilot program could get beneficial information and results	10/23/2017 6:33 AM
5	WHO WILL FOOT THE BILL? THE VERMONT TAXPAYER AGAIN !!!	10/20/2017 12:18 PM
6	It was unclear from Table 10 if this is to be a one of a kind or a model project that could, if successful, be used to better address algae blooms in other lakes. If it is the latter, my enthusiasm would be increased, i.e., it is not an isolated, single problem lake	10/19/2017 9:28 AM
7	The lake this year was unusable for a lot of the summer because of the Algai blooms, we were very disheartened. The lake was not healthy and needs this to help it to survive.	10/18/2017 9:27 PM

8	My family built our cottage at Lake Carmi in 1946 and still camp there today. Over my 61 years, I have seen the decline of this beautiful lake, but the rate of deterioration is accelerating. The situation is nothing short of an emergency. Our property value is significantly affected and the town of Franklin will be hurt as well. Aeration is an essential immediate response to the crisis, while mandatory phosphorus extraction is the longer-term solution.	10/18/2017 8:23 AM
9	Lake Carmi is such a valuable resource and the horrible algae blooms there are ruining this beautiful lake.	10/17/2017 4:16 PM
10	Lake Carmi water quality has become severely degraded due to dairy and other nutrient inputs. Recreational use is suffering, and property values are in jeopardy. Areas of the Lake are now off limits to boats due to weeds, and the cyanobacter occurrence is endangering pets and people. Lake Carmi needs help now!	10/16/2017 6:54 PM
11	If pollution of lakes doesn't stop, we will loose these precious natural resources which are enjoyed by Vermonters and others. Our lakes are necessary for the local economy.	10/16/2017 6:25 PM
12	This is a highly significant project to help mitigate the terrible state of the lake!!	10/16/2017 6:04 PM
13	If you can't help Lake Carmi with it's small watershed then you have no hope for Lake Champlain. You also need to get Ben and Jerry's (Unilever) to chip in.	10/16/2017 5:25 PM
14	I own a cottage on Lake Carmi and use the lake for recreation. The lake has serious problems with algae blooms and milfoil which need to be rectified.	10/16/2017 4:53 PM
15	Being a witness to what happened in Lake Carmi in 2017, brings about a very strong yes on this topic. It is a beginning, to be followed by expansion of the aeration system to the whole lake or at least half the lake to get the system to work.	10/16/2017 3:47 PM
16	While this may mitigate the blooms, what are the underlying causes? There are large corn fields sloping to the lake from the south, from which runoff of manure, fertiilizer and glyphosate can enter the Lake. Many camps along the west side of the lake: what are their septic facilities?	10/16/2017 2:55 PM
17	Lake users need immediate relief from toxic algae blooms while the flow of phosphorus into the lake is being mitigated. Aeration is our only form of relief at the moment.	10/13/2017 2:37 PM
18	This is not fixing the source of the problem. All landowners and shoreline camp owners of Lake Carmi need to made hard decisions about how their land and land use practices may be affecting the lake's water quality, and take the necessary steps, rather than relying on the state to fix their recreational use of the lake with Band-Aid practices.	10/13/2017 11:17 AM
19	need now	10/13/2017 10:48 AM
20	Because this can help all lakes this should be a high priority	10/12/2017 6:23 PM
21	I think this is worth a try and we may get some data for future projects	10/12/2017 5:41 PM
22	Very essential to clear up very poor water quality. Aeration seems to be the only hope at this time as run off of manure from farms will take years to be of affect.	10/12/2017 5:00 PM
23	I use lake water to shower could not for 2 months this summer	10/12/2017 4:56 PM
24	You should also be working on the reduction of phosphorus entering the lake from within the watershed area.	10/12/2017 4:13 PM
25	Our daughter owns property on Lake Carmi's north shore and we have seen this once safe and beautiful lake become a toxic eyesore. Being unable to enter the water, sit in your yard because you can't stand the stench, and watching fish dying, for weeks at a time is an absolute disgrace to the state of Vermont. People all over the state of Vermont, as well as many other areas are watching to see if the state will come through with their promises. We are in a desperate fight to save our lake. No one should have live with such tainted waters. Please help us save our lake. It can be done because it has been done elsewhere.	10/12/2017 3:14 PM
26	It's not clear to me that adequate steps have been taken to minimize the phosphorus that is coming into Lake Carmi, as opposed to spending money to aerate the lake water. What is being done to reduce the runoff of water laden with phosphorus from farms, etc?	10/12/2017 2:42 PM
27	Lake Carmi is in crisis. The state must save the lake. Failure to save Lake Carmi will result in the loss of Lake Champlain. The people of Vermont deserve clean lakes.	10/12/2017 2:03 PM

28	This project has been promised by Commissioner Emily Boedecker, on behalf of Governor Scott, at the Lake Carmi TMDL meeting on September 28 in Franklin. She said we have the \$200,000 for the project and another \$50,000 for the design. People voting should know that the aeration system is a done deal before they vote.	10/12/2017 1:56 PM
29	The fourth largest lake in Vermont will be rendered useless if aeration is not employed.	10/12/2017 1:52 PM
30	We here at Lake Carmi will not allow you to turn this beautiful lake into a wastewater treatment plant.	10/12/2017 11:18 AM
#	COMMENTS FOR "EXPANSION OF THE MUNICIPAL ROADS GRANTS-IN-AID PILOT PROJECT (\$0.2-0.5 MILLION)"	DATE
1	This program performed well in 2017. There was a high level of participation by towns plus it is easily fit in their existing typical annual road programs.	10/30/2017 4:15 PM
2	This program is currently poorly detailed, unclear and difficult to administer due to the overlap of maintenance and upgrades for roads. It's a cumbersome process which should be streamlined prior to additional funds being assigned to it.	10/30/2017 3:09 PM
3	Multiple positive outcomes. However, not sure how we can continue to ignore contributions of sediment and P from private roads	10/26/2017 9:13 PM
4	WHO WILL FOOT THE BILL? THE VERMONT TAXPAYER AGAIN !!!	10/20/2017 12:18 PM
5	This affects the ENTIRE state and with this as a major factor in affecting water quality. As such, this merits the highest level of funding possible.	10/19/2017 9:28 AM
6	Not sure what this is.	10/17/2017 4:16 PM
7	Only a small portion of water pollution comes from roads. The majority of water pollution is caused by farmers spreading manure, containing phosphorus, along the shorelines of our waterways and lakes. Enforce the laws you already have on the books for farmers by fining them if they don't adhere to state regulations.	10/16/2017 6:25 PM
8	Stop using Roundup, Accord or glyphosate next to water to kill weeds, to reduce excess phosphorus.	10/16/2017 2:55 PM
9	Require the municipality to control storm water runoff wherever it exist and not just roads. In many cases work on roads just to meet a standard could create more problems than exist presently.	10/16/2017 9:11 AM
10	This will help towns prepare for the time when compliance is required.	10/13/2017 11:17 AM
11	Don't need at this time.	10/13/2017 10:48 AM
12	Some how it would be good to get the private roads on the lake funded.I believe that would have the most impact.	10/12/2017 5:41 PM
13	The roads both public and private need to be repaired to prevent runoff into the lakes.	10/12/2017 2:03 PM
14	This survey is skewed by the fact that the first item is \$2 million. The total amount available is only \$2.3 million. If someone votes for the \$2 million item they will be forced to give a low priory to two of the other items.	10/12/2017 1:56 PM
15	Roads hydrologically connected to the lake must not be a conduit for pollution to our lakes and streams.	10/12/2017 1:52 PM
16	Fix the main problems first. The BIGGEST producer of phosphorus in our waterways is industrial dairy.	10/12/2017 11:18 AM
#	COMMENTS FOR "EXPANSION OF NATURAL RESOURCES RESTORATION EFFORTS FOR TOTAL MAXIMUM DAILY LOAD (TMDL) COMPLIANCE (\$0.2 MILLION)"	DATE
1	It's all for TMDL compliance of some sort, the wording of Natural Resources Restoration is vague.	10/30/2017 3:09 PM
2	Multiple positive outcomes.	10/26/2017 9:13 PM
3	WHO WILL FOOT THE BILL? THE VERMONT TAXPAYER AGAIN !!!	10/20/2017 12:18 PM
4	Based on the Table 10 summary, this seems to be a highly important area to fund.	10/19/2017 9:28 AM
5	Again, not sure what this is.	10/17/2017 4:16 PM

6	I believe that we have to take another look at the Lake Carmi TMDL, making sure it is up to date as it has not yet made any significant difference. All the dairy farms adjoining the lake are now gone, but there is still lots of pollution coming into the lake from manure spreading, tile drainage and a medium-size farm whose fields drain into the lake via Marsh Brook.	10/16/2017 3:47 PM
7	Buffer areas along ditches, streams and lakes should be expanded to at least 50 ft to prevent P- laden sediment from entering runoff into waters of the state.	10/16/2017 2:55 PM
}	we must lessen the amount of phosphorus entering our streams	10/13/2017 2:37 PM
)	Natural resources restoration offers the biggest bang for the buck in terms of phosphorus abatement relative to financial investment. It also delivers more co-benefits such as flood resilience and habitat improvement, than any of the other activities proposed here.	10/13/2017 11:17 AM
0	need now	10/13/2017 10:48 AM
1	If this is building storm ponds and man made wet lands. I am all for it.	10/12/2017 5:41 PM
2	this would help manure is spread too close to the lake and nearby streams	10/12/2017 4:56 PM
3	I'm not Isure what you mean by 'natural resources restoration'?	10/12/2017 2:42 PM
4	Any project that helps our waterways is critical	10/12/2017 2:03 PM
5	The	10/12/2017 1:56 PM
6	Compliance with TMDL action items must be enforced. If this began in 2009 when the Lake Carmi TMDL was approved the lake would be in better condition today.	10/12/2017 1:52 PM
17	Finally, you are recommending something that may actually work.	10/12/2017 11:18 AM
¥	COMMENTS FOR "ENGINEERING FOR THE RECOVERY OF PHOSPHORUS FROM MUNICIPAL WASTE STREAMS, ANIMAL MANURE, FOOD, AND FOOD-PROCESSING WASTE (\$0.1 MILLION)"	DATE
1	Our wastewater treatment plants are less than 3% of the overall phosphorus contribution to the lake. Directing funds and mandating upgrades to this sector is ill advised.	10/30/2017 3:09 PM
2	I do not have enough information of the potential for P abatement through this program.	10/26/2017 9:13 PM
3	Funding needs to be awarded to lake associations who are interested in collecting initial data for phosphorus in streams that drain into their lakes. Especially those that run through or are adjacent to farms.	10/23/2017 5:09 PM
1	WHO WILL FOOT THE BILL? THE VERMONT TAXPAYER AGAIN !!!	10/20/2017 12:18 PM
5	This too affects the ENTIRE state and as such, this merits the highest priority in funding that is possible.	10/19/2017 9:28 AM
6	Again, algae blooms in Lake Carmi and Champlain have to be mitigated.	10/17/2017 4:16 PM
,	Especially municipal waste streams.	10/16/2017 8:31 PM
8	Let's find a way to prevent sources of phosphorus from being used or from entering municipal wastestream: glyphosate. https://www.no-tillfarmer.com/articles/5793-scientists-glyphosate-contributes-to-phosphorus-runoff-in-lake-erie	10/16/2017 2:55 PM
)	This effort would give very limited results and would be way too costly	10/16/2017 9:11 AM
10	must lessen phosphorus entering our streams	10/13/2017 2:37 PM
11	These waste streams are quite diverse and it is hard to comment on solutions that may vary depending on the waste stream. Are there better ways to fund diversion of food waste than engineering solutions to remove phosphorus, such as funding commercial composting facilities and delivery mechanisms from producer to composter? The animal manure waste is already addressed in the first option of this survey. Municipal waste streams are a small gain in phosphorus reduction for a very large cost. The ROI isn't very good.	10/13/2017 11:17 AM
12	need now	10/13/2017 10:48 AM
13	A good idea, but what is being done to minimize the waste at the source, i. e., getting farms and other phosphorus-containing souces to eliminate their runoff? It seems to me that this should be the first step. That would be cheaper than attempting to remove the phosphorus after it enters the environment.	10/12/2017 2:42 PM

Vermont Clean Water Fund Fiscal Year 2019 Priorities

14	Innovation is necessary to reduce the phosphorus	10/12/2017 2:03 PM
15	Anything to mitigate phosphorous will be a plus.	10/12/2017 1:52 PM
16	Frustrated on the lack of progress with cleaning up Lake Champlain. For instance, there had been discussion some years ago about removing the causeway between Alburgh and North Hero to increase flow in that part of the lake - are any projects of that sort still being considered?	10/12/2017 1:44 PM
17	What? Another study? No Thank you	10/12/2017 11:18 AM
18	Thank you for all the work you have been doing over the years! Jill	10/12/2017 10:46 AM
19	Municipalities can pay for this.	10/12/2017 9:43 AM

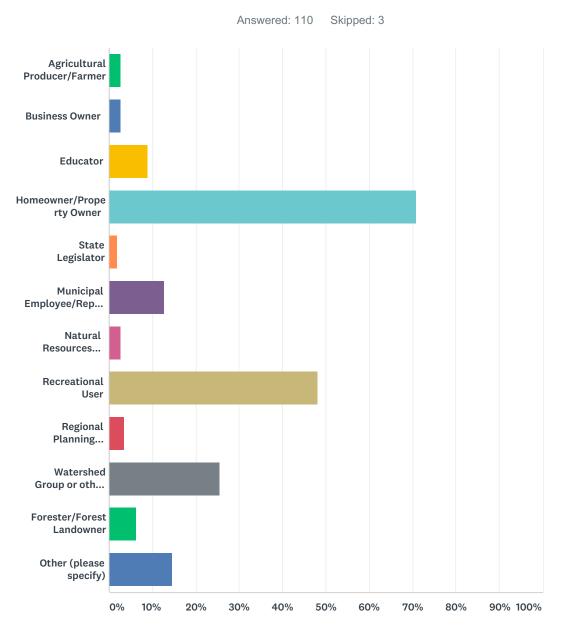
# Q2 Provide additional innovative project suggestions for the Board's consideration (optional):

Answered: 29 Skipped: 84

#	RESPONSES	DATE
1	If we do not allow funds to be allocated to planning and engineering then we are clogging the pipeline for future projects. If we as a state refuse to provide funds which can get projects to the point of shovel readiness then in future years we will be faced with a shortage of capital projects to implement. A significant portion of these funds should be attributed to planning and engineering as opposed to the options listed above.	10/30/2017 3:09 PM
2	Tax P from ag inputs (fertilizer, pesticides), and discharges from ag, impervious surfaces, and fuel. This will reward ag producers that run lower impact operations, promoting better practices. Make small (symbolic) payments to landowners of wetlands	10/26/2017 9:13 PM
3	I think the money spent should have as close a tie to outcomes as possible, with a focus on cost efficiency. An emerging tool in this regard is an environmental impact bond structure (pay -for-success contracting). I urge state decision makers to investigate this opportunity for Vermont.	10/24/2017 2:20 PM
4	See above. Also, to follow up with assistance in how to mitigate if there is sufficient evidence to do so.	10/23/2017 5:09 PM
5	Explore the growing of Hemp to off set the cost of these programs. It has multiple uses as a building material, clothing, medical extraction, As a cover crop it may provide a dual purpose plant for farmers helping mitigate run off damage.	10/23/2017 4:05 PM
6	Farms need reparian buffers and should be required to stop mowing/fertilizing 200 feet from any waterway.	10/21/2017 1:49 PM
7	none	10/21/2017 6:51 AM
8	You may notice all the comments above are the same and I'm sure, won't be popular. However, as a VT taxpayer, I feel my current load is far too heavy, already. Maybe some of our high salaried politicians will chip in	10/20/2017 12:18 PM
9	Private sources of pollution (e.g. farms, businesses), should not receive public funds to clean up. Use public funds for those pollution sources that are caused by all of us - roads, schools.	10/19/2017 12:41 PM
10	Work with homeowners to mitigate runoff and erosion from their properties.	10/17/2017 7:40 AM
11	Pay farmers a higher price than they would yeild from crops to allow/rent a buffer zone on black creek in St. Albans. Etc.	10/16/2017 8:20 PM
12	Pay farmers/landowners with key watershed parcels to remove them from agricultural production or to refrain from applying manure and fertilizers.	10/16/2017 4:53 PM
13	funding small community projects that will increase water quality.	10/16/2017 4:52 PM
14	have every septic system checked on the lake with dye system to see which ones have failed.Its a common sense no brainer test that has ben used for over 50 years & inexpensive	10/16/2017 4:49 PM
15	Moratorium on manure spreading and manage results	10/16/2017 4:40 PM
16	Carmi has been green for many, many years. Please ensure that this beautiful lake is available for use to a wide segment of residents and visitors!!	10/16/2017 4:12 PM
17	Pick 2 farms that are big contributors to P in waters. Give them a strong financial incentive and/or strong legal incentive to sell out or greatly reduce and diversify their operation. Otherwise we are enabling an unsustainable, dangerous and polluting industry.	10/16/2017 2:55 PM
18	Require municipalities to test water from the major waterways in their towns to identify where the problems exist and how severe at their own expense and then plan the best approach and action to take.	10/16/2017 9:11 AM

19	Decisions for these proposed projects should be weighed in the context of Return on Investment for phosphorus reduced per dollar invested. Decisions should also consider the co-benefits of public safety (reduced flooding) and natural resource restoration (riverine and in-stream habitat) which is an economic generator for the state in terms of outdoor recreation.	10/13/2017 11:17 AM
20	Go back to taking the boards out of the Mill Pond Dam like we have been doing for 47 years. Now the Lake has no flow going out when it does not rain.	10/13/2017 10:48 AM
21	a study to find non chemical means of weed control in lakes	10/12/2017 6:23 PM
22	I am a strong believer that directing water away from brooks ans into storm ponds and into man made wet lands would catch a lot of sediments. I think these can be built in already buffered area that farmers can not use now.	10/12/2017 5:41 PM
23	It's my belief that the major source of phosphorus-laden runoff is the very large farms that have sometimes several thousand cows. You need to do something about these farms waste digesters are one good idea.	10/12/2017 2:42 PM
24	The state should enforce the clean water act. We should have bigger buffers and a mandatory reduction in the spreading of manure	10/12/2017 2:03 PM
25	Promoting increased dairy in Franklin County is a mistake. The county is oversaturated in manure from industrialized dairy The impaired condition of Champlain and Carmi and streams prove this fact.	10/12/2017 1:56 PM
26	Numerous property owners who pay substantial property taxes could not use their lake homes because of noxious and toxic blue green algae blooms on Lake Carmi. Aeration must be funded to provide relief for these homeowners.	10/12/2017 1:52 PM
27	Removal of man made causeways, such as the one between Alburgh and North Hero.	10/12/2017 1:44 PM
28	the state should simply enforce the RAP's already in place	10/12/2017 1:12 PM
29	If you aren't working toward reducing the nutrient overload into our watersyou aren't doing your job.	10/12/2017 11:18 AM

## Q3 We are interested to know who is completing this survey. Which groups do you belong to or identify with (select all that apply)?



ANSWER CHOICES	RESPONSES	
Agricultural Producer/Farmer	2.73%	3
Business Owner	2.73%	3
Educator	9.09%	10
Homeowner/Property Owner	70.91%	78
State Legislator	1.82%	2
Municipal Employee/Representative	12.73%	14
Natural Resources Conservation District	2.73%	3

Recreational User	48.18%	53
Regional Planning Commission	3.64%	4
Watershed Group or other Nongovernmental Organization	25.45%	28
Forester/Forest Landowner	6.36%	7
Other (please specify)	14.55%	16

Total Respondents: 110

#	OTHER (PLEASE SPECIFY)	DATE
1	Lake Association president	10/23/2017 5:09 PM
2	Concerned private citizen that has participated in creation of TMDL for e.Coli, volunteer water monitor, and canoeist.	10/23/2017 4:05 PM
3	A person Very concerned with the preservation of our natural resources!!	10/23/2017 6:33 AM
4	Federation of Vermont Lakes and Ponds	10/20/2017 1:13 PM
5	VERY TIRED AND DISGUSTED LIFETIME VERMONTER AND TAXPAYER	10/20/2017 12:18 PM
6	Aquatic Biologist	10/20/2017 9:39 AM
7	Vermont citizen	10/19/2017 1:04 PM
8	Environmental Engineer (TCE, Inc.)	10/19/2017 9:35 AM
9	summer resident on Lake Carmi	10/18/2017 4:18 PM
10	Lake Carmi Campers Association member	10/16/2017 8:31 PM
11	Summer resident in Vermont	10/16/2017 5:25 PM
12	individual researcher	10/16/2017 2:55 PM
13	Planner	10/13/2017 11:26 AM
14	Science-based non profit	10/13/2017 11:17 AM
15	Lay monitor for Lake Hortonia	10/12/2017 6:23 PM
16	Pelots Bay Restoration Association	10/12/2017 1:44 PM

#### VERMONT CLEAN WATER FUND SFY19 DISTRIBUTION PRIORITIES FOR FY19 DRAFT BUDGET

<u>Purpose</u>: As directed by Act 64 (2015) and modified by H.876 (2016), the Vermont Clean Water Fund Board is to develop an annual revenue estimate and propose a budget for the Clean Water Fund.

<u>Implementation Policies</u>: The Clean Water Fund provides additional state funds above current allocation levels to complement, enhance and leverage existing resources. The use of the Fund is to maximize opportunities for the restoration and protection of Vermont's water ways by prioritizing and targeting resources. To maximize the effectiveness of this Fund, the Fund should strengthen and complement existing state assistance programs (e.g., grant and loan pass-through programs), wherever feasible.

<u>Contingency to Avoid Overruns</u>: Ten percent of the anticipated annual revenues from the surcharge on the property transfer tax are set aside as a contingency to avoid the risk of spending more funds than the amount available in the Clean Water Fund for that fiscal year.

<u>Priorities</u>: The Board shall make its recommendation based on the following priorities, as stated in Act 64 Sec. 37 (10 VSA §1389(e)) and further described in Table One:

- A. Address sources of water pollution in waters listed as impaired (33 U.S.C. §1313(d));
- B. Address sources of water pollution identified as significant contributors of water pollution;
- C. Restore riparian (lands adjacent to waterways) conditions to minimize the risk of flood damage;
- D. Support state and municipal compliance with road-related stormwater permit requirements;
- E. Provide education and outreach regarding the implementation of water quality requirements;
- F. Support Innovative or alternative technologies or practices to improve water quality;
- G. Purchase land in order to take land out of practice when State requirements cannot be remediated through Best Management Practices;
- H. Assist municipalities in the establishment and operation of stormwater utilities;
- I. Prioritize awards to municipalities for compliance with water quality requirements during the first three years of the Clean Water Fund; and,
- J. After satisfying the above priorities, attempt to provide for equitable apportionment of awards to all regions of the State and for control of all point and nonpoint pollution sources in the State.

	Table 1: Summary of Clean Water Fund Priorities
Priority	Description
A: Sources of water pollution in Impaired Waters	Restores surface water impairment through grants, contracts or loans, targeting sources of pollution that are contributing to the water quality impairment
B. Significant sources of water pollution	Promotes cost-effectiveness by targeting sources of pollution that are significant contributors to water quality degradation
C. Riparian buffer restoration	Purchases permanent conservation easements on lands adjacent to waterways (river corridors, wetlands, riparian areas) and establishes minimum of 50-foot buffers with native vegetation
D. Compliance with municipal and State road permits	Aids municipalities and the State in implementing stormwater control practices for compliance with the municipal roads general permit and the stormwater permit pertaining to state highways
E. Education, outreach	Provides technical and educational support to municipal officials and road crews, farmers, loggers, homeowners and others about sources of water pollution, cost-effective solutions to mitigate impacts and implementation support
F. Innovative technologies	Supports innovative technologies or practices to reduce water pollution from farms, municipalities' developed lands, logging areas and other sources
G. Land acquisition	Purchases land in order to take land out of practice when water quality remediation is not achievable through agricultural Best Management Practices
H. Municipal Stormwater Utilities	Provide assistance for municipalities in establishing and operating stormwater utilities
I. Municipal assistance	Aids municipalities in understanding critical sources of water pollution, and in identifying, planning and implementing priority water pollution controls
J. Geographic equity	Adds to this set of priorities some consideration of location in the distribution of funds to support regional equity

### Acronyms

AAFM: Vermont Agency of Agriculture, Food and Markets

<u>ACAP</u>: Vermont DEC's Agronomy and Conservation Assistance Program, a program that provides support to partners in the delivery of agronomic (soil and nutrient management) assistance to farmers

ACCD: Vermont Agency of Commerce and Community Development

ANR: Agency of Natural Resources

<u>BMP</u>: Best Management Practices, activities to address water quality impacts from land-based sources that are the result of precipitation-driven runoff and erosion.

CWF: State of Vermont Clean Water Fund

DEC: Vermont Department of Environmental Conservation, a department under ANR

<u>FAP</u>: Farm Agronomic Practices, a set of practices for farmers to employ to minimize losses of soil, nutrients and agricultural waste from runoff and erosion to enhance soil health

FED: Vermont DEC's Facilities Engineering Division

LCB: Lake Champlain Basin. Vermont's portion of the LCB represents approximately half the land mass of Vermont

<u>LiDAR</u>: Standing for "Light Detection And Ranging," is a state-of-the-art mapping technology that produces high resolution maps as baseline information to aid in identifying priority water quality needs. Other applications include flood and erosion hazard mapping, landslide hazard mapping and transportation project support

LCBP: Lake Champlain Basin Program

<u>Stormwater Utilities</u>: is a system adopted by a municipality or group of municipalities under 24 V.S.A. chapter 97, 101 or 105 for the management of stormwater runoff.

<u>TMDL</u>: Total Maximum Daily Load; a pollution budget that establishes the maximum amount of a pollutant a waterbody can receive from many different sources of that pollutant while still meeting water quality standards. Federal Water Pollution Control Act of 1972, 33 U.S.C. Section 1251 et seq., Section 303(d)

<u>USDA</u>: United States Department of Agriculture, which, as part of the federal Farm Bill, offers a number of conservation programs to protect water quality and improve soil health

VTrans: Vermont Transportation Agency

	Table 2:	State Fiscal Yea	ar 2019 Distribution Priorities – Agency of	Agricul	tur	e, F	00	d ai	nd	Ma	rke	ts _		
#	Sector	Funding	Activities	Other				F	Prio	ritie	s		_	
	(Agency)	Program		Funds	Α	В	С	D	Ε	F	G	Н	I	J
1	Agriculture (AAFM)	On-Farm Implementation (Grants & Contracts)	Farm water quality capital improvements, matching USDA funds in Lake Champlain Basin (LCB) and supporting priority projects outside of the LCB; Farm agronomic practices (FAP) that exceed existing state and USDA funding resources	USDA <sup>1</sup>	X	X								Х
2	Agriculture (AAFM)	Grants & Contracts	Incentives for farmers to implement phosphorus reduction practices above regulatory requirements, including riparian and wetland restoration programs; Technology or other infrastructure that facilitates nutrient management development, data management and record keeping on farms; Creation of a Research Farm to study water quality runoff impacts from farm management systems and conservation practices; Alternative phosphorus reduction strategies (e.g., grassed-based farms, phosphorus separation strategies); Support for farm acquisition in order to overlay a conservation easement to establish agricultural practices that reduce phosphorus loading; Support for the Agronomy and Conservation Assistance Program (ACAP) - contract to deliver agronomic (field- based) technical support to farmers statewide	USDA <sup>1</sup>	X	X	X		X	X				x
2b	Agriculture (AAFM)	Operating <sup>2</sup>	Increased on farm oversight to enforce regulatory requirements, ensure all statewide investments on agricultural operations are on compliant farms, and meeting legal requirements for water quality		X	Х								

1. Funds are complementary, supporting implementation of similar projects.

2. The Clean Water Fund supported this allocation for three years. This draft allocation is to ensure support, while AAFM seeks alternative funds.

	Та	ble 3: State I	Fiscal Year 2019 Distribution Priorities – A	gency of	Nat	ura	I R	eso	urc	es_				
#	Sector	Funding	Activities	Other					Prio	ritie	s			
	(Agency)	Program		Funds	Α	В	С	D	Ε	F	G	Н	I	J
3	All Sectors	Ecosystem	Partner support for project implementation		Х	Х	Х		Х	Х			Х	Х
	(ANR)	Restoration	involving delivery of technical and implementation											
		Grants &	services for projects that are identified and											
		Contracts	prioritized in Tactical Basin Plans, TMDLs, Act 64											
			and 2016 Combined Sewer Overflow Policy											
4	All Sectors	Ecosystem	Improved water quality monitoring, mapping and		Х	Х	Х	Х	Х				Х	Х
	(ANR)	Restoration	tracking to evaluate effectiveness of											
		Grants &	implementation, including the use of watershed											
		Contracts	associations and the LaRosa Partnership											
5	All Sectors	Ecosystem	Investments in innovative technologies, practices		Х	Х				Х				
	(ANR)	Restoration	or policies that facilitate, optimize or accelerate											
		Grants &	cost-effective nutrient removal strategies											
		Contracts												
6	Stormwater	Ecosystem	Stormwater planning/implementation:	Local	Х	Х		Х	Х			Х	Х	Х
	Controls	Restoration	(a) project identification & planning (b) assistance	funds as										
	(ANR)	Grants &	in developing stormwater utilities; (c)	match <sup>3</sup>										
		Contracts	construction; (d) capital equipment assistance; (e)											
			pilot block grant program to support construction											
			of clean water improvement projects											

3. Stormwater projects located within a Municipal Separate Storm Sewer System (MS4) community require 50% match. Road-related clean water projects require 20% match (cash or inkind). All other projects are incentivized to provide match at this time. See Ecosystem Restoration Grant Application Manual: <a href="http://dec.vermont.gov/sites/dec/files/wsm/erp/docs/Application\_Manual.pdf">http://dec.vermont.gov/sites/dec/files/wsm/erp/docs/Application\_Manual.pdf</a>.

	Table 3 (	Continued):	State Fiscal Year 2019 Distribution Priorit	ties – Ager	ncy	of	Na	tur	al F	lesc	our	ces		
#	Sector	Funding	Activities	Other					Prie	oritie	es			
	(Agency)	Program		Funds	Α	В	С	D	Ε	F	G	Н	Ι	J
7	Stormwater Controls (ANR)	Ecosystem Restoration Grants & Contracts	Municipal Roads Grants-In-Aid Pilot Project to help municipalities comply with the Municipal Roads General permit (MRGP)	Local funds as match	x	x		Х	X	X			X	х
8	Natural Resources (ANR)	Ecosystem Restoration Grants & Contracts	Flood resilience/Water Quality and Forest Health Projects, targeting restoration of wetlands, river corridors, floodplains, riparian areas and forest health projects, e.g.: (a) improvements in resilience and water quality; (b) restoration of unstable stream channels to natural stability (equilibrium conditions); (c) portable skidder bridges; (d) urban forestry water quality projects; and (e) trainings in compliance with logging practices that protect water quality	USDA <sup>4</sup>	x	x	x		x		x			X
9	Natural Resources (ANR)	Forest, Parks and Recreation Grants & Contracts	Portable skidder bridges for water quality improvements at logging areas per: H.495 Section 15		×	Х	Х		Х		X			х
10	Wastewater Treatment (ANR)	DEC-Grants & Contracts	Municipal assistance, TMDL implementation; Clean Water State Revolving Fund (SRF) match & clean water pollution control grants		x	x				Х			Х	
11	Wastewater (ANR)	DEC- Grants & Contracts	DEC Clean Water State Revolving Fund (SRF)		Х	Х				Х			Х	
12	Wastewater (ANR)	DEC- Grants & Contracts	DEC Municipal Pollution Control Grants (new projects)		Х	Х				Х			Х	

4. As described in Footnote 1 above, the USDA funds are complementary, supporting implementation of similar projects.

#	Sector	Funding	Activities	Other					Pric	oritie	es			
	(Agency)	Program		Funds	Α	В	С	D	Ε	F	G	Н	Ι	J
13	Municipal Roads	Municipal Mitigation	Inventory, prioritization and implementation to address municipal gravel and non-gravel road-	Local funds as	Х	Х		Х	Х	Х			Х	Х
	(VTrans)	Assistance Program	related stormwater mitigation projects, in compliance with state road general permit, and including replacement of undersized culverts	match										
14	State Roads (VTrans)	Municipal Mitigation Assistance Program	Funding to be used in conjunction with federal- aid funds to treat comingled stormwater from both highway and other sources	Local funds as match	X	х		Х		Х			Х	

	Tał	ole 5: State	e Fiscal Year 2019 Distribution Priorities –	- Agency o	f A	dm	ini	stra	tio	n				
#	Sector	Funding	Activities	Other			_		Prio	oritie	es			
	(Agency)	Program		Funds	Α	В	С	D	Ε	F	G	н	Т	J
15	Agency of Administration		Stormwater payments to municipalities with stormwater utilities (\$25,000 per municipality with a stormwater utility Per: 10 V.S.A. 1389 (e)(1)(H))		X	х						X		

Та	ble 6: State	Fiscal Year 201	19 Distribution Priorities – Agency of Co (ACCD)	ommerce a	anc	l Co	omi	nu	nity	/ De	eve	lop	me	nt
#	Sector	Funding	Activities	Other					Pric	oritie	es			
	(Agency)	Program		Funds	Α	В	С	D	Ε	F	G	Н	I	J
15	ACCD	Better Connections (in Coordination with ANR and VTrans)	Pilot funding for municipalities to incorporate stormwater management strategies into a comprehensive transportation, land use and economic development action plans		X	х		Х	Х	Х			Х	Х
16	ACCD	Downtown Transportation Fund (in Coordination with ANR and VTrans)	Pilot funding for capital improvements within or serving a designated downtown to incorporate stormwater management BMPs into the corresponding transportation (streetscape) improvements		X	X		Х	x	x			X	Х

Т	able 7: State	Fiscal Year 20	19 Distribution Priorities – Vermont Ho	ousing and		ons	erv	ati	on	Boa	ard	<b>(</b> ∨⊦	ICB	3)
#	Sector	Funding	Activities	Other					Pric	oritie	es			
	(Agency)	Program		Funds	Α	В	С	D	Ε	F	G	Н	I	J
17	VHCB	Clean Water Conservation and Farm Improvements	Water quality improvement projects, conservation projects and easements	Federal (USGS)	Х	х	Х		Х	Х	Х			Х

#	Sector	Funding	Activities	Other					Pric	oritie	es			
	(Agency)	Program		Funds	Α	В	С	D	Ε	F	G	н	I	J
1	(ANR)	Ecosystem	This project involves purchasing an aeration		Х	Х				Х				Х
		Restoration	system for Lake Carmi.											
		Grants &												
		Contracts												<u> </u>
2	Natural	Ecosystem	This project increases funds to help the state	USDA <sup>4</sup>	Х	Х	Х		Х		Х			Х
	Resources	Restoration	meet the natural resources restoration portion of											
	(ANR)	Grants &	the Lake Champlain restoration plan, referred to											
		Contracts	as the phosphorus TMDL and other federal and											
			state directives. The focus is to target those											
			floodplain and river corridor projects that will also											
			maximize benefits including flood resilience,											
			public safety and habitat improvement.											<u> </u>
3	Natural	Ecosystem	Engineering feasibility project to recover		Х	Х			Х	Х			Х	Х
	Resources	Restoration	phosphorus from municipal waste streams,											
	(ANR)	Grants &	animal manure and food and food-processing											
		Contracts	waste using anaerobic digestion											<u> </u>
4	Agriculture	Grants &	Methane anaerobic digestion is a technology that	USDA <sup>1</sup>	Х	Х	Х		Х	Х				Х
	(AAFM)	Contracts	produces energy by converting manure into											
			methane. A biproduct of methane digestion is											
			phosphorus-containing material. This pilot will											
			use innovative phosphorus extraction technology											
			to remove phosphorus from the byproduct											
			material, to be used for other purposes.											<u> </u>
5	Natural	Ecosystem	This project continues a pilot initiative to provide	Local	Х	Х		Х	Х	Х				Х
	Resources	Restoration	funding directly to participating municipalities	funds as										
	(ANR)	Grants &	(via the regional planning commissions) to	match										
		Contracts	implement Best Management Practices (BMPs)											
			on municipal roads, ahead of the state Municipal											
			Road General Permit (MRGP).						1					ł

## MEMORANDUM

То:	Clean Water Fund Board
From:	Kari Dolan, DEC Program Manager, Clean Water Investment Program
Subject:	Recommended Adjustments to DEC Clean Water Funds
Date:	November 6, 2017
Through:	Emily Boedecker, Commissioner
CC:	Pete LaFlamme, Watershed Management Division Director
	Mary Borg, Watershed Management Division Deputy Director
	Joanna Pallito, Administration and Innovation Division Director
	Rebecca Ellis, DEC Deputy Commissioner

Attached is the latest Clean Water Fund draft FY19 allocations, which includes the October 6<sup>th</sup> set of draft allocations (Tables 2-7), summary tables by sector and by agency (Tables 8-9), and a final draft proposal for the \$2.26 million allocation of the bond premium funds that were the result of the state's recent sale of general obligation bonds (Table 10).

We held a 20-day public comment period in October to seek public input on how the state should use the bond premium funds (Table 10), since the anticipated use of bond premium funds for clean water improvements was not included in the first two public comment periods. Although the Board could elect to spread the bond premium funds across state agency grant and contract programs, the Board took advantage of this opportunity to propose targeting those funds for specific purposes.

We released the draft Table 10 for public comment via Survey Monkey, and received 113 comments. Approximately 80% of the survey participants ranked the aeration system at Lake Carmi and natural resource restoration as either high or medium priority. Over 70% of the survey participants ranked the two phosphorus extraction engineering projects as high or medium priority. Over 60% of the survey participants ranked an increase in funding for the Municipal Roads Grants in Aid program as high or medium priority. There was also a strong interest to ensure that the Phosphorus Extraction Project at Dairy Farms Project achieves a net decrease in phosphorus and includes a post-extraction plan for the use of the extracted phosphorus.

Thus, the latest draft set of allocations below includes an amended Table 10, which proposes to use the \$2,259,988 in bond premium funds in the following manner:

- Aeration System at Lake Carmi: Full funding at \$200,000;
- Natural Resource Restoration: Increase in funding from \$200,000 to \$259,988;
- Recovering Phosphorus from Waste Feasibility Analysis: Full funding at \$100,000;
- Phosphorus Extraction at Dairy Farms & Post Extraction Plan: Partial funding from \$2M to \$1.6M;
- Municipal Roads Grants in Aid program: Partial funding from \$200,000 to \$100,000

## VERMONT CLEAN WATER FUND DRAFT DISTRIBUTIONS FOR FY19 DRAFT BUDGET

<u>Purpose</u>: As directed by Act 64 (2015) and modified by H.876 (2016), the Vermont Clean Water Fund Board is to develop an annual revenue estimate and propose a budget for the Clean Water Fund.

<u>Implementation Policies</u>: The Clean Water Fund provides additional state funds above current allocation levels to complement, enhance and leverage existing resources. The use of the Fund is to maximize opportunities for the restoration and protection of Vermont's water ways by prioritizing and targeting resources. To maximize the effectiveness of this Fund, the Fund should strengthen and complement existing state assistance programs (e.g., grant and loan pass-through programs), wherever feasible.

<u>Contingency to Avoid Overruns</u>: Ten percent of the anticipated annual revenues from the surcharge on the property transfer tax are set aside as a contingency to avoid the risk of spending more funds than the amount available in the Clean Water Fund for that fiscal year.

<u>Priorities</u>: The Board shall make its recommendation based on the following priorities, as stated in Act 64 Sec. 37 (10 VSA §1389(e)). Please refer to a separate document entitled, *Vermont Clean Water Fund SFY19 Distribution Priorities* for more information about state priorities.

<u>What's New for FY19</u>: The State Legislature directed an additional \$11,112,944 of FY19 capital funds, targeted for clean water improvement projects, to be dispersed using the Clean Water Fund Board budget setting process. The tables in this document present draft allocations of Clean Water Funds, FY19 capital funds (H.519), the additional \$11,112,944 of FY19 capital funds (H519, Section 11 (f)(4)), and general funds as part of the Appropriations Bill:

Tables:

Table 1, page 3: Summary of SFY2018-2019 Clean Water Appropriations

Table 2, page 4: State Fiscal Year 2019 Recommendations – Agency of Agriculture, Food and Markets

Table 3, page 5-6: State Fiscal Year 2019 Recommendations – Agency of Natural Resources

Table 4, page 7: State Fiscal Year 2019 Recommendations – Agency of Transportation

Table 5, page 7: State Fiscal Year 2019 Recommendations – Agency of Administration

 Table 6, page 8: State Fiscal Year 2019 Recommendations – Agency of Commerce and Community

 Development

Table 7, page 8: State Fiscal Year 2019 Recommendations – Vermont Housing & Conservation Board

Table 8, page 9: Summary Recommendations for SFY19 Clean Water Funding, by Sector

Table 9, page 9: Table 2: Summary Recommendations for SFY19 Clean Water Funding, by Agency

Table 10, page 11: Recommendation to Support Clean Water Improvement Using State FY19 Bond Premium from Sale of Bonds

#### Table 1: Summary of SFY2018-2019 Clean Water Appropriations

The following tables present a draft proposal for distributing the FY19 Clean Water Fund revenues and Capital Funds, highlighted in yellow.

	Column A	Column B	Column C	Column D	Column E
		As Passed	House & Senate (S	5/5/2017)	Filling Gap
Capital Bill, H.519 Section 11: Clean Water Investments	Baseline (2-year total)	FY18	FY19	FY18 & FY19	= D-A (2-year total)
(a)(1) & (e)(1) AAFM BMP & CREP	\$3,800,000	\$3,450,000	\$2,000,000	\$5,450,000	\$1,650,000
(a)(2) AAFM Water Quality Grants & Contracts	\$-	\$600,000	\$-	\$600,000	\$600,000
(b)(1)&(f)(1) DEC Clean Water State Revolving Fund (SRF)	\$2,400,000	\$1,000,000	\$1,200,000	\$2,200,000	\$(200,000
(b)(2)&(f)(2) DEC Ecosystem Restoration Grants	\$7,460,000	\$6,000,000	\$5,000,000	\$11,000,000	\$3,540,000
(b)(3) DEC Municipal Pollution Control Grants (prior)	\$35,000	\$2,982,384	\$-	\$2,982,384	\$2,947,384
(b)(4)&(f)(3) DEC Municipal Pollution Control Grants (new)	\$3,306,500	\$2,704,232	\$1,407,268	\$4,111,500	\$805,000
(c) VTrans Municipal Mitigation Program	\$-	\$1,400,000	\$-	\$1,400,000	\$1,400,000
(d)(1) VHCB: water quality projects	\$3,750,000	\$2,800,000	\$2,750,000	\$5,550,000	\$1,800,000
(d)(2) VHCB: farm grants or fee purchase water quality projects	\$-	\$1,000,000	\$-	\$1,000,000	\$1,000,000
(f)(4) FY19 Statewide Clean Water Implementation	\$-	\$-	\$11,112,944	\$11,112,944	\$11,112,944
	\$20,751,500	\$21,936,616	\$23,470,212	\$45,406,828	\$24,655,328
Transportation Bill H.494					
State Highway Compliance	\$16,280,000	\$8,140,000	\$8,140,000	\$16,280,000	\$- *
Section 14: Transportation Alternatives (for stormwater)	\$2,200,000	\$2,200,000	\$2,200,000	\$4,400,000	\$2,200,000*
Section 8: Municipal Mitigation (for stormwater)	\$2,880,000	\$1,240,000	\$1,240,000	\$2,480,000	\$(400,000)`
Section 8: Municipal Mitigation, Federal Highway Administration(FHWA)	\$-	\$5,442,342	\$5,442,342	\$10,884,684	\$10,884,684
	\$21,360,000	\$17,022,342	\$17,022,342	\$34,044,684	\$12,684,684
Appropriations Bill					
DEC Federal match pass through for DEC Clean Water SRF	\$20,000,000	\$10,000,000	\$10,000,000	\$20,000,000	\$-*
DF&W Watershed Grants Program	\$70,000	\$35,000	\$35,000	\$70,000	\$-*
AAFM Farm Agronomic Practices Program	\$300,000	\$150,000	\$150,000	\$300,000	\$-*
AAFM Water Quality Grants and Contracts	\$594,000	\$297,000	\$297,000	\$594,000	\$-*
AAFM Operational Funds	\$750,000	\$375,000	\$375,000	\$750,000	\$-*
Clean Water Fund	\$-	\$4,000,000	\$4,000,000	\$8,000,000	\$8,000,000
FY19 Capital Bill: Bond premium from sale of bonds	\$-	\$-	\$2,259,988	\$2,259,988	\$2,259,988*
GRAND TOTAL	\$63,825,500	\$53,815,958	\$57,609,542	\$111,425,500	\$47,600,000

\* Rows 15-18, 22-26, 28: Appropriations for FY19 are projected.

Vermont's baseline annual spending on clean water projects is close to \$32 million, including more than \$15 million in federal funds.

In FY18, Vermont has appropriated \$54 million for clean water projects (state and federal funds).

In FY19, Vermont is projected to spend \$58 million on clean water efforts (state and federal funds).

Over 2 years, this represents an increase of \$48 million over baseline spending, or \$24 million average annual increase (state and federal funds).

		Table 2: State F	iscal Year 2019 Recommendations – Agenc	y of Agricult	ure, Food and	d Markets	
#	Sector (Agency)	Funding Program	Activities	CWF	Capital in FY19 Budget Capital Bill, H519, Sec. 11	Capital, New Capital Bill, H519, Sec. 11 (f)(4)	Total
1	Agriculture (AAFM)	On-Farm Implementation Grants & Contracts	Farm water quality capital improvements, matching USDA funds in Lake Champlain Basin (LCB) and supporting priority projects outside of the LCB; Farm agronomic practices (FAP) that exceed existing state and USDA funding resources	\$760,000	\$2,000,000 (e)	\$1,615,000	\$4,375,000
2	Agriculture (AAFM)	Grants & Contracts	Incentives for farmers to implement phosphorus reduction practices above regulatory requirements, including riparian and wetland restoration programs; Technology or other infrastructure that facilitates nutrient management development, data management and record keeping on farms; Creation of a Research Farm to study water quality runoff impacts from farm management systems and conservation practices; Alternative phosphorus reduction strategies (e.g., grassed-based farms, phosphorus separation strategies); Support for farm acquisition in order to overlay a conservation easement to establish agricultural practices that reduce phosphorus loading; Support for the Agronomy and Conservation Assistance Program (ACAP) - contract to deliver agronomic (field-based) technical support to farmers statewide	\$535,000			\$535,000
2b	Agriculture (AAFM)	Operating <sup>1</sup>	Increased on farm oversight to enforce regulatory requirements, ensure all statewide investments on agricultural operations are on compliant farms, and meeting legal requirements for water quality	\$375,000			\$375,000
SUE	STOTAL (FY19)	=		\$1,670,000	\$2,000,000	\$2,615,000	\$5,285,000

<sup>&</sup>lt;sup>1</sup> The Clean Water Fund supported this allocation for three years. This draft allocation is to ensure support while AAFM seeks alternative funds.

		Table 3: State	e Fiscal Year 2019 Recommendations –	Agency of N	atural Resour	rces	
#	Sector (Agency)	Funding Program	Activities	CWF	Capital in FY19 Budget Capital Bill, H519, Sec. 11	Capital, New Capital Bill, H519, Sec. 11 (f)(4)	Total
3	All Sectors (ANR)	Ecosystem Restoration Grants & Contracts	Partner support for project implementation involving delivery of technical and implementation services for projects that are identified and prioritized in Tactical Basin Plans, TMDLs, Act 64 and 2016 Combined Sewer Overflow Policy	\$630,000			\$630,000
4	All Sectors (ANR)	Ecosystem Restoration Grants & Contracts	Improved water quality monitoring, mapping and tracking to evaluate effectiveness of implementation, including the use of watershed associations and the LaRosa Partnership	\$200,000			\$200,000
5	All Sectors (ANR)	Ecosystem Restoration Grants & Contracts	Investments in innovative technologies, practices or policies that facilitate, optimize or accelerate cost-effective nutrient removal strategies	\$200,000			\$200,000
6	All Sectors (ANR)	Ecosystem Restoration Grants & Contracts	Stormwater planning/implementation: (a) project identification & planning (b) assistance in developing stormwater utilities; (c) construction; (d) capital equipment assistance; (e) pilot block grant program to support construction of clean water improvement projects	\$300,000	\$3,600,000 (f)(2)	\$1,000,000	\$4,900,000 <sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Stormwater projects located within a Municipal Separate Storm Sewer System (MS4) community require 50% match. Road-related clean water projects require 20% match (cash or in-kind). All other projects are incentivized to provide match at this time. See Ecosystem Restoration Grant Application Manual: http://dec.vermont.gov/sites/dec/files/wsm/erp/docs/Application Manual.pdf.

	Та	ble 3 (Continued):	State Fiscal Year 2019 Recommendation	ons – Agency	y of Natural R	esources	
#	Sector (Agency)	Funding Program	Activities	CWF	Capital in FY19 Budget Capital Bill, H519, Sec. 11	Capital, New Capital Bill, H519, Sec. 11 (f)(4)	Total
7	Stormwater Controls (ANR)	Ecosystem Restoration Grants & Contracts	Municipal Roads Grants-In-Aid Pilot Project to help municipalities comply with the Municipal Roads General permit (MRGP)		\$900,000 (f)(2)	\$2,097,944	\$2,997,944
8	Natural Resources (ANR)	Ecosystem Restoration Grants & Contracts	Flood resilience/Water Quality and Forest Health Projects, targeting restoration of wetlands, river corridors, floodplains, riparian areas and forest health projects, e.g.: (a) improvements in resilience and water quality; (b) restoration of unstable stream channels to natural stability (equilibrium conditions); (d) urban forestry water quality projects; and (e) trainings in compliance with logging practices that protect water quality	\$200,000	\$450,000 (f)(2)	\$300,000	\$950,000
9	Natural Resources (ANR)	Forest, Parks and Recreation Grants & Contracts	Portable skidder bridges for water quality improvements at logging areas per: H.495 Section 15		\$50,000 (f)(2)		\$50,000
10	Wastewater (ANR)	DEC- Grants & Contracts	Municipal assistance in optimization, asset management and other improvements related to TMDL implementation	\$100,000			\$100,000
11	Wastewater (ANR)	DEC- Grants & Contracts	DEC Clean Water State Revolving Fund (SRF)		\$1,200,000 (f)(1)		\$1,200,000
12	Wastewater (ANR)	DEC- Grants & Contracts	DEC Municipal Pollution Control Grants (new projects)		\$1,407,268 (f)(3)	\$2,500,000	\$3,907,268
SUBTO	DTAL (FY19) =	•		\$1,630,000	\$7,607,268	\$5,897,944	\$15,135,212

	Table 4: State Fiscal Year 2019 Recommendations – Agency of Transportation						
#	Sector (Agency)	Funding Program	Activities	CWF	Capital in FY19 Budget Capital Bill, H519, Sec. 11	Capital, New Capital Bill, H519, Sec. 11 (f)(4)	Total
13	Municipal Roads (VTrans)	Municipal Mitigation Assistance Program	Inventory, prioritization and implementation to address municipal gravel and non-gravel road-related stormwater mitigation projects, in compliance with state road general permit, and including replacement of undersized culverts			\$1,400,000	\$1,400,000
14	Municipal Roads (VTrans)	Municipal Mitigation Assistance Program	Funding to be used in conjunction with federal-aid funds to treat comingled stormwater from both highway and other sources			\$1,000,000	\$1,000,000
SUB	TOTAL (FY19) =	•	·			\$2,400,000	\$2,400,000

		Table 5: Stat	e Fiscal Year 2019 Recommendations -	- Agency of A	dministratio	n	
#	Sector (Agency)	Funding Program	Activities	CWF	Capital in FY19 Budget Capital Bill, H519, Sec. 11	Capital, New Capital Bill, H519, Sec. 11 (f)(4)	Total
15	Agency of Administration		Stormwater payments to municipalities with stormwater utilities (\$25,000 per municipality with a stormwater utility Per: 10 V.S.A. 1389 (e)(1)(H))	\$100,000			\$100,000
SUB	TOTAL (FY19) =			\$100,000			\$100,000

#	Sector (Agency)	Funding Program	Activities	CWF	Capital in FY19 Budget Capital Bill,	Capital, New Capital Bill, H519, Sec. 11	Total
16	ACCD	Better Connections (in Coordination with ANR and VTrans)	Pilot funding for municipalities to incorporate stormwater management strategies into a comprehensive transportation, land use and economic development action plans.	\$100,000	H519, Sec. 11 	(f)(4) 	\$100,000
17	ACCD	Downtown Transportation Fund (in Coordination with ANR and VTrans)	Pilot funding for capital improvements within or serving a designated downtown to incorporate stormwater management BMPs into the corresponding transportation (streetscape) improvements.			\$200,000	\$200,000
SUB	TOTAL (FY19) =		(	\$100,000		\$200,000	\$300,000

Table 7: State Fiscal Year 2019 Recommendations – Vermont Housing and Conservation Board (VHCB)							
#	Sector	Funding Program	Activities	CWF	Capital in	Capital, New	Total
	(Agency)				FY19 Budget	Capital Bill,	
					Capital Bill,	H519, Sec. 11	
					H519, Sec. 11	(f)(4)	
18	VHCB	Clean Water	Water quality improvement projects,		\$2,750,000	\$1,000,000	\$3,750,000
		Conservation and	conservation projects and easements				
		Farm Improvements					
SUB	TOTAL (FY19) =				\$2,750,000	\$1,000,000	\$3,750,000

Table 8: Recommendations for FY19 Clean Water Funding By Sector*	CWF	<b>Capital in</b> <b>FY19 Budget</b> Capital Bill, H519, Sec. 11	Capital, New Capital Bill, H519, Sec. 11 (f)(4)	Total
Agriculture	\$1,670,000	\$2,000,000	\$2,050,000	\$5,285,000
Stormwater Management – Non-Road Developed Lands	\$500,000	\$3,600,000	\$1,200,000	\$5,300,000
Stormwater Management – Transportation/Road Related		\$900,000	\$4,497,944	\$5,397,944
Municipal Wastewater	\$100,000	\$2,607,268	\$2,500,000	\$5,207,268
Natural Resources Restoration	\$200,000	\$500,000	\$300,000	\$1,000,000
Clean Water Land Conservation		\$2,750,000	\$1,000,000	\$3,750,000
All Sectors Support	\$1,030,000			\$1,030,000
Contingency Reserve*	\$500,000			\$500,000
TOTAL	\$4,000,000	\$12,357,268	\$11,112,944	\$27,470,212

Table 9: Recommendations for FY19 CWF By Administering Agency*	CWF	Capital in FY19 Budget Capital Bill, H519, Sec. 11	<b>Capital, New</b> Capital Bill, H519, Sec. 11 (f)(4)	Total
Agency of Agriculture	\$1,670,000	\$2,000,000	\$1,615,000	\$5,285,000
Agency of Natural Resources – Ecosystem Restoration	\$1,530,000	\$5,000,000	\$3,397,944	\$9,927,944
Agency of Natural Resources – Municipal Wastewater, CSO Controls	\$100,000	\$2,607,268	\$2,500,000	\$5,207,268
Agency of Commerce and Community Development	\$100,000		\$200,000	\$300,000
Agency of Transportation			\$2,400,000	\$2,400,000
Agency of Administration	\$100,000			\$100,000
Vermont Housing and Conservation Board		\$2,750,000	\$1,000,000	\$3,750,000
Contingency Reserve*	\$500,000			\$500,000
	\$4,000,000	\$12,357,268	\$11,112,944	\$27,470,212

\* A contingency reserve avoids the risk of spending more funds than are available in the fiscal year.

The FY2019 Clean Water Appropriations Budget includes a \$2.3 million allocation from the Bond premium that was the result of the state sale of general obligation bonds. Table 10 below identifies draft recommendations for use of these funds:

#### Table 10: FY19 Clean Water Improvement Projects, to be Supported by FY18 Bond Premium Funds - DRAFT

#	Agency	Project	Description	Amount
1	ANR	Aeration System at Lake Carmi	The state recently announced a suite of projects designed to restore and protect Lake Carmi in Franklin, Vermont. The lake is impaired by excessive phosphorus pollutant loading, which is contributing to the frequency of harmful algae blooms. The suite of projects includes an aeration system. Aeration involves injecting air, mechanical mixing or agitating water to improve water quality by increasing the level and circulation of oxygen. ANR is already committed to developing the engineering design for a pilot aeration project as well as other nutrient pollutant reduction projects. The project involves completing an aeration system for the lake.	\$200,000
2	ANR	Augmentation of Natural Resource Restoration for TMDL Compliance	This project increases funds to target natural resource restoration projects that reduce nutrient and sediment pollution. The increase in funding helps the state meet the natural resources restoration portion of the Lake Champlain restoration plan, referred to as the phosphorus TMDL and other federal and state directives. The focus is to target those floodplain and river corridor projects that will also maximize benefits including flood resilience, public safety and habitat improvement.	\$259,988
3	ANR	Recovering Phosphorus from Waste	Engineering feasibility project to recover phosphorus from municipal waste streams, animal manure and food and food-processing waste using anaerobic digestion	\$100,000
4	AAFM	Phosphorus Extraction Equipment at Dairy Farms	Methane anaerobic digestion is a technology that produces energy by converting manure into methane. A biproduct of methane digestion is phosphorus-containing material. This pilot will use innovative phosphorus extraction technology to remove phosphorus from the byproduct material, to be used for other purposes. The pilot project will purchase phosphorus extraction equipment for use at: (a) 2-3 farms that operate manure to methane digesters; (b) 2-3 farms that separate manure into solids and liquid portions for other uses. The equipment is estimated at \$300,000 to \$450,000 per farm with a manure to methane digesters and 10 additional farms with separators. Includes funds for post-extraction marketing plan.	\$1.6M
5	ANR	Expansion of the Municipal Roads Grants in Aid Pilot Project	This project proposes to increase second year funding for the Municipal Roads Grants-In-Aid Project, a pilot initiative that was launched in 2018 to provide funding directly to participating municipalities (via the regional planning commissions) to implement Best Management Practices (BMPs) on municipal roads, ahead of the state Municipal Road General Permit (MRGP). Road runoff, in addition to agricultural sources, is a significant source of water pollution. Road-related projects are among the most phosphorus-reducing and cost-effective actions to implement. The pilot project provides an opportunity for municipalities to become more familiar with the practices necessary to comply with the MRGP. The practices being supported by this pilot project should also improve local resilience to large storm events and will help save municipalities money in the long run in operations and maintenance costs. There was strong interest in the first year of this pilot project, with 186 municipalities enrolled (75% of eligible municipalities), and an estimated 29 road-miles meeting MRGP compliance.	\$100,000

## Acronyms

AAFM: Vermont Agency of Agriculture, Food and Markets

<u>ACAP</u>: Vermont DEC's Agronomy and Conservation Assistance Program, a program that provides support to partners in the delivery of agronomic (soil and nutrient management) assistance to farmers

ACCD: Vermont Agency of Commerce and Community Development

ANR: Agency of Natural Resources

<u>BMP</u>: Best Management Practices, activities to address water quality impacts from land-based sources that are the result of precipitation-driven runoff and erosion.

CWF: State of Vermont Clean Water Fund

DEC: Vermont Department of Environmental Conservation, a department under ANR

<u>FAP</u>: Farm Agronomic Practices, a set of practices for farmers to employ to minimize losses of soil, nutrients and agricultural waste from runoff and erosion to enhance soil health

FED: Vermont DEC's Facilities Engineering Division

<u>LCB</u>: Lake Champlain Basin. Vermont's portion of the LCB represents approximately half the land mass of Vermont

<u>LiDAR</u>: Standing for "Light Detection And Ranging," is a state-of-the-art mapping technology that produces high resolution maps as baseline information to aid in identifying priority water quality needs. Other applications include flood and erosion hazard mapping, landslide hazard mapping and transportation project support

LCBP: Lake Champlain Basin Program

<u>Stormwater Utilities</u>: is a system adopted by a municipality or group of municipalities under 24 V.S.A. chapter 97, 101 or 105 for the management of stormwater runoff.

<u>TMDL</u>: Total Maximum Daily Load; a pollution budget that establishes the maximum amount of a pollutant a waterbody can receive from many different sources of that pollutant while still meeting water quality standards. Federal Water Pollution Control Act of 1972, 33 U.S.C. Section 1251 et seq., Section 303(d)

<u>USDA</u>: United States Department of Agriculture, which, as part of the federal Farm Bill, offers a number of conservation programs to protect water quality and improve soil health

VTrans: Vermont Transportation Agency