

# **The Vermont Clean Water Fund Board**

## **Agenda**

**Date/Time:** Thursday, September 8, 2016, 1:30pm – 3:00pm

**Location:** The Vermont State House – Room 11

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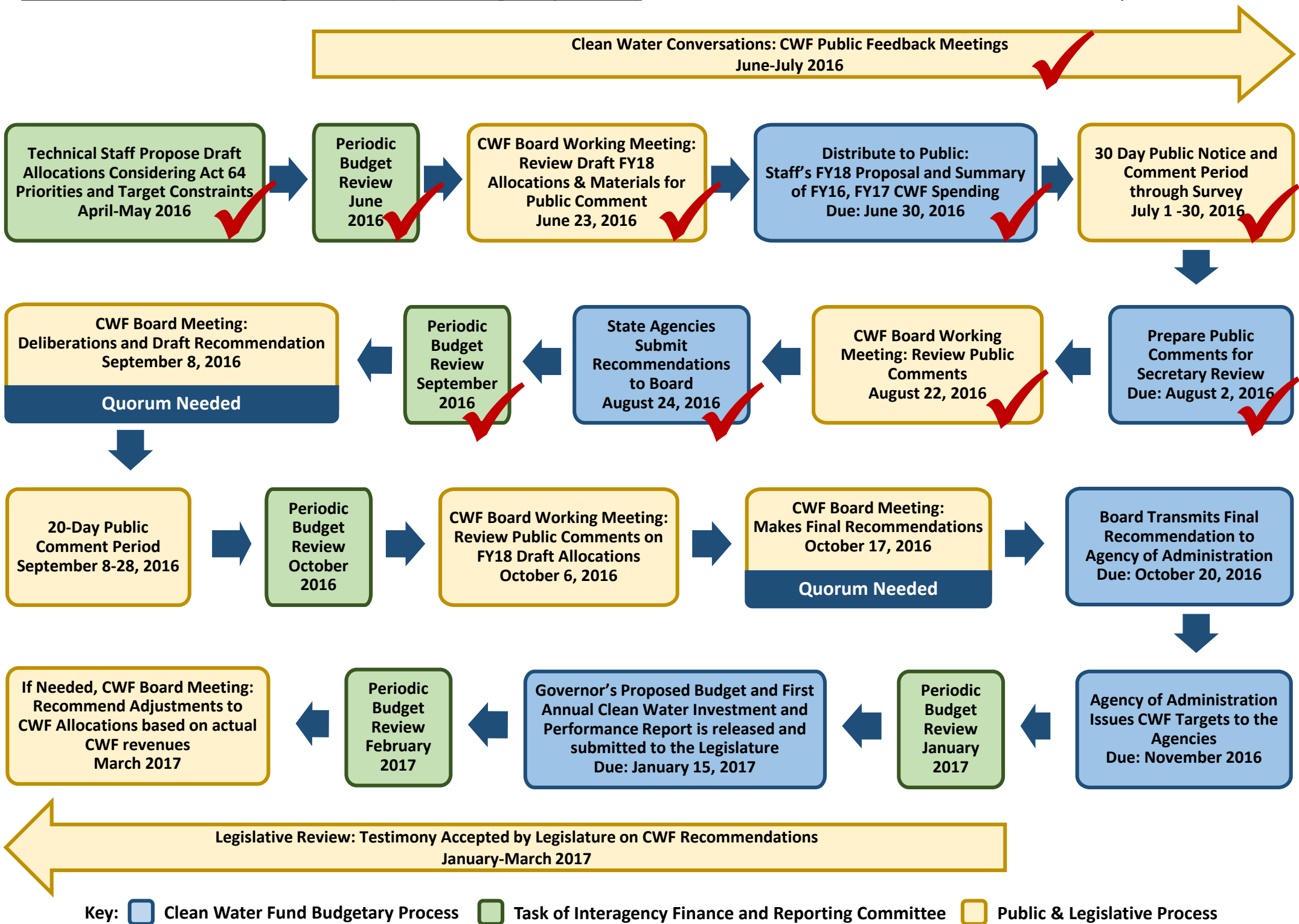
1. Welcome and Introductions (5 minutes)  
Changes to the Agenda  
Agency of Administration Secretary and Clean Water Fund Board Chair Justin Johnson
2. Process for FY18 Clean Water Fund Allocations (10 minutes)  
Agency of Natural Resources Secretary Deb Markowitz
  - a. Public Process
  - b. Budget Process
3. Review of July 30-Day Public Notice and Comment Period and Other Comments Received (15 minutes)  
Clean Water Initiative Program (CWIP) Manager Kari Dolan
  - a. Summary of Comments Received
  - b. Summary of Adjustments to Allocations
4. Clean Water Fund Allocations for FY18 Review and Recommendation (15 minutes)  
Secretary Deb Markowitz
5. Clean Water Fund Board Vote on Funding Recommendations (5 minutes)  
Secretary Justin Johnson
6. Update on the “Funding Clean Water Improvements” Legislative Report (15 minutes)  
Secretary Deb Markowitz
  - a. Funding Clean Water Improvements Legislative Report Process
  - b. Opportunities for Public Input
7. Questions (20 minutes)  
Secretary Justin Johnson
8. Next Meeting (5 minutes)  
Secretary Justin Johnson

### Supporting Materials:

- Clean Water Fund Budget Process, FY18
- Summary of Online Questionnaire Results (Full Questionnaire Results available here: <http://dec.vermont.gov/watershed/cwi/cwf>)
- Memo on Recommended Adjustments to Draft FY18 Clean Water Fund Allocations
- Clean Water Initiative FY16 LiDAR Acquisition Factsheet
- Draft FY18 Clean Water Fund Allocations
- Funding Clean Water Improvements Legislative Report Process

# Clean Water Fund FY18 Budget Process (Process Begins April 2016)

Updated 9/7/2016



## **Memorandum**

**Date:** August 2, 2016  
**To:** Clean Water Initiative Interagency Finance & Reporting Subcommittee  
**From:** Clean Water Initiative Program  
**Subject:** Summary of Results of the Vermont Clean Water Fund Fiscal Year 2018 Priorities Questionnaire

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The Clean Water Fund (CWF) Board posted an online questionnaire to collect public and stakeholder input on the State Fiscal Year 2018 CWF allocation priorities. The public notice and comment period was for 30 days from July 1<sup>st</sup> to July 30<sup>th</sup>. We received 260 responses. The results of the survey are as follows:

**Question #1: Rate the water pollution sources that the CWF Board should focus on for FY18.**

- a. Approximately 75% of respondents rated agricultural lands as high priority;
- b. Approximately 50% of respondents rated lack of vegetated buffers along waterways as a high priority;
- c. Approximately 45% of respondents rated unstable stream channels and wastewater treatment as a high priority;
- d. Approximately 40% of respondents rated developed lands as a high priority;
- e. Approximately 35% of respondents rated industrial facilities and roads as a high priority;
- f. Approximately 20% of respondents rated logging areas and logging roads as a high priority.

**Question #2: The fundamental purpose of the CWF is to target the most significant water pollution sources in order to achieve clean water in the most cost-effective manner. How well does this targeting of the CWF meet your expectations for achieving clean water across the state?**

- a. 71% of respondents generally agreed with this statement, and 15% did not agree. It would be helpful in future surveys to inquire further into the public's expectations for these funds.

**Question #3: Which of the following activities should the Vermont CWF employ to address current water quality needs for FY2018?**

- a. There was significant support for using the CWF to support financial assistance through grants (82%);
- b. Respondents also support technical assistance activities to offer guidance in implementation (74%) and to support municipalities in establishing local stormwater management programs (62%);
- c. There was also support for using the CWF to support monitoring, water quality testing and mapping for tracking purposes (64%).

**Question #4: Indicate how you would allocate FY2018 funds from the CWF among the program categories listed below to address the State's priority clean water needs.**

- a. There was strong interest to support all sectors; there was no majority of respondents favoring one sector over others;
- b. Respondents would like to see the agricultural sector receive around 30% of the funds; municipalities receive between 20-30% of the funds, which grants for municipal roads would receive an additional 10-25%; and funds for the restoration of natural resources receive between 10-25%.

**Question #7: How did you hear of this questionnaire?**

- a. Majority (75%) of respondents heard about the questionnaire through email, followed by word of mouth (10%) and Clean Water Conversations outreach (8%).

**Other Notable Comments**

- a. U.S. EPA Region 1 commented that Lake Champlain Basin Program will no longer support the agronomist positions in Lake Champlain Basin beyond Oct 2018. We will need to evaluate whether a portion of the FY2018 CWF budget should provide funds to support this work.

**The Vermont Clean Water Fund Board, Working Meeting**  
**Meeting Notes**  
**Monday, August 22, 2016, 1:00-2:00**  
**National Life Davis Building – 5<sup>th</sup> Floor Board Room**

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**Board Members/Designees in Attendance:**

- Diane Bothfeld, Deputy Secretary, Agency of Agriculture, Food and Markets (AAFM)
- Chris Cole, Secretary, Vermont Agency of Transportation (VTrans)
- Justin Johnson, Secretary, Agency of Administration (AoA)
- Trey Martin, Deputy Secretary, Agency of Natural Resources (ANR)
- Patricia Moulton, Secretary, Agency of Commerce and Community Development (ACCD)
- Chuck Ross, Secretary, AAFM
- Alyssa Schuren, Commissioner, Department of Environmental Conservation (DEC)

**Other Agency Staff in Attendance:**

- Emily Bird, Clean Water Initiative Program (CWIP), DEC
- Michele Boomhower, VTrans
- Kari Dolan, CWIP, DEC
- Joanna Pallito, Administration and Innovation Division (AID), DEC

**Members of the Public in Attendance:**

- Roger Crouse, Lake Iroquois Association and Federation of Vermont Lakes and Ponds (FOVLAP)
- Robert Donnis, Lake Iroquois Association
- Karen Horn, Vermont League of Cities and Towns (VLCT)

**Clean Water Fund (CWF) property transfer tax receipt revenues (see page 2 of [Agenda and Meeting Materials](#)):**

- CWF annual revenue projection was initially \$5.2 million for three years
- In State Fiscal Year (SFY) 2016, the annual revenue projections were adjusted to \$4.65 million, and final revenue for SFY16 came in at \$4,692,875
- CWF dollars have been allocated to State agencies to administer to projects through existing funding programs
- During a recent CWF revenue update, Finance & Management (F&M) recommended staying course with \$4.9 million budget planning target for SFY17; if adjustments need to be made, those adjustments would be evaluated in December 2016
- Noted that the first month of SFY17 out-performed the first month of SFY16; the CWF typically performs well in the first and last quarter of the SFY
- The CWF summary of actual and forecasted revenue was reviewed; on this summary, revenue forecasts were updated at the close of a month to represent actual revenue; the Board recommended keeping the original forecasted revenue at the close of each month so that the Board can evaluate the actual performance of the fund compared to forecasted performance; DEC will follow up with the Tax Department to see if adjustments can be made to the CWF revenue summary moving forward

**Interim Clean Water Fund Expenditure Contingency Plan:**

- The Clean Water Initiative Interagency Finance and Reporting Subcommittee worked with AoA to develop a [CWF Expenditure Contingency Plan](#) in the case the CWF underperforms
- Under the contingency plan, the CWF Board will set aside a contingency fund equal to 10% of the prior year's total revenue
- The contingency fund will never exceed 10% of the prior year's revenue, and the CWF Board will not be adding 10% to the contingency fund each year
- In case the CWF underperforms, the CWF Board will use these funds to fill the gap
- Under this approach, the CWF Board only allocates 90% of the CWF dollars, so that if the CWF underperforms, the Board can draw down on reserve funds
- Agency Staff will send the contingency plan to the CWF Board for feedback by mid-September; DEC will work with AoA to update and circulate the Contingency Plan

**Process for SFY18 CWF allocations (see page 3 of [Agenda and Meeting Materials](#)):**

- The CWF SFY18 Budget Process has been updated to reflect opportunities for public participation in the budget process (items in yellow); items in blue represent tasks of the CWF Board and items in green represent tasks of the Clean Water Initiative Interagency Finance and Reporting Subcommittee
- This year the CWF Budget Process included an enhanced public input process with multiple opportunities for comment; in June-July 2016 the CWIP held nine Clean Water Conversation meetings in partnership with the Regional Planning Commissions to collect feedback on allocating CWF dollars and opportunities for public participation in the process
- The Budget Process also includes periodic budget reviews to monitor revenues and adjust targets as needed for allocating funds

**Review comments received during 30-day public comment period:**Summary of online questionnaire results:

- The CWF Board posted an online questionnaire, targeting the lay audience to provide input on how the CWF should be used to meet statewide clean water goals; survey also offered the opportunity for respondents to expand on their responses with open ended comments
- The survey was developed by CWIP with input from the CWF Board during the June 23<sup>rd</sup> CWF Board working meeting
- This year the public comment period was extended to 30-days; there was great public response; 260 individuals completed the survey (see results, pages 4-23 of [Agenda and Meeting Materials](#))
- General outcomes of the survey are summarized in an August 12, 2016 memo to the CWF Board (see page 4 of [Agenda and Meeting Materials](#))
- Respondents expressed strong interest in supporting agriculture, municipalities, improving vegetated buffers, and more stable river channels
- Respondents supported targeting of CWF dollars to the highest priority and most cost effective projects
- Public strongly supported grant funding and technical assistance to inform land use practices that are good for clean water

- There is strong interest to demonstrate that investments are making a difference in clean water; respondents supported monitoring and mapping to demonstrate improvements
- Strong support to provide assistance to all sectors; not just one sector to be the sole recipient; recognized the need across all sectors; and strong support to prioritize funding for agriculture and municipal support
- Most respondents heard about the survey by email, followed by word of mouth and Clean Water Conversation meetings; CWIP anticipates continuing Clean Water Conversations outreach in future years; this year Clean Water Conversations mostly targeted municipalities as they were held in partnership with Regional Planning Commissions, but in future years CWIP would like to work with additional partners to hold similar meetings to raise awareness of the CWF and opportunities to get engaged, targeting all sectors
- Received comment from EPA that the federal government will no longer be supporting Agronomy and Conservation Assistance Program (ACAP) in the Lake Champlain Basin through the Lake Champlain Basin Program; CWF dollars may be needed to continue the program
- Secretary Ross asked if respondents were calling for implementation of best management practices (BMPs), and if so, do the respondents know what a BMP is? Recommendation made to reword as, “providing guidance in implementation” or “activities to make improvements for clean water” in future surveys; recommendation made to include information on demographics of respondents to understand the audience reached and their knowledge of water quality issues, which can inform how to best target outreach on the CWF budget process moving forward
- Roger Crouse recommended utilizing FOVLAP as a resource to conduct outreach and solicit input from Vermont’s lake associations on future public comment periods; FOVLAP is an important partner for the State to understand the challenges faced by lake associations
- Based on a comment received from the public, Secretary Moulton asked if solar panels are considered a pervious surface based on a determination by the Public Service Board; Agency Staff will look into this and provide clarification

#### Adjustments to Draft SFY18 Clean Water Fund Allocations:

- Reviewed proposed changes to SFY18 CWF Allocations based on public comment period
- Recommended to allocate CWF dollars to support ACAP in the Lake Champlain Basin, covering the future funding gap from federal dollars, which requires reallocating funds from other line items
- Since there is strong support for agriculture and municipalities, recommended taking funds from DEC allocations (exact adjustments and justification included in memo on page 24 of [Agenda and Meeting Materials](#))
- In addition, allocations were combined for stormwater planning and implementation so that DEC has flexibility in awarding those dollars to projects based on demand for planning and implementation any given year

#### Comments from the public:

- Roger Crouse commented that him and Robert attended for education on the CWF; he heard about the CWF and the CWF Board at the annual FOVLAP meeting at the end of

the public comment period; he encouraged the CWF Board to use FOVLAP as a resource to get the word out on the CWF Budget Process

- Robert Donnis asked if any CWF dollars would be used for remediation in lakes from erosion and sediment issues
- Kari Dolan (CWIP) responded that the intent of the CWF is to reduce sources of water pollution; these funds are being channeled through existing funding programs and organizations can apply for funding at AAFM, ANR, and VTrans for clean water projects; these projects focus primarily on pollution treatment and prevention as opposed to treating symptoms
- Deputy Secretary Martin added that Act 64 established priorities to the CWF and each allocation is assigned priorities; innovative research and analysis is one of those priorities, which may involve treating in-lake symptoms once pollution sources are addressed
- Karen Horn (VLCT) expressed concern in the \$60,000 reallocation from municipal stormwater to accommodate funding for ACAP; VLCT understands funding is limited and that the State is looking at alternative funding and revenue sources, however, towns are trying to get a handle on these issues; VLCT suggested that the CWF Board consider pulling \$60,000 from LiDAR mapping to cover the ACAP adjustment
- Kari Dolan (CWIP) responded that the LiDAR line item enables us to bring the State to a current standard for mapping and will fill gaps in Franklin, Bennington, and Addison counties; these dollars are also competitive and leveraging a federal grant; further, LiDAR provides benefits across sectors to identify hazards, conduct stormwater mapping, assessing connected impervious surfaces to waterways, and assist in identifying priority projects; it is very cost effective to invest in LiDAR
- Secretary Moulton added that LiDAR has many cobenefits beyond water quality, including emergency management, road construction, all of which benefit municipalities
- Commissioner Schuren asked Secretary Moulton to confirm the required nonfederal match is 55-60% and see if there is any flexibility in the amount of CWF dollars needed for match
- Kari Dolan (CWIP) added that ANR is willing to reduce allocation for Ecosystem Restoration grants to bridge the gap because the Program has not received the expected level of interest from municipalities to address stormwater in the first SFY17 grant round, and the Program has capital funds available to support municipal stormwater needs in addition to the CWF; the Program is hopeful to see increased demand; asked VLCT to help get the word out on funding available
- Karen Horn (VLCT) added that VLCT is surprised that the CWF is being used to support LiDAR mapping and believes it is an underlying obligation of the State and should not be the obligation of the CWF; VLCT also suspected the lower than expected demand for municipal stormwater projects is due to the uncertainty of municipal requirements prior to the release of the Lake Champlain Phosphorus Total Maximum Daily Loads (TMDL)

#### **Next Clean Water Fund Board meeting:**

- The Board will consider comments received and update the SFY18 CWF Allocations accordingly
- During the next CWF Board meeting the Board will present and vote on the updated draft SFY18 CWF Allocations, beginning a 20-day public comment period (September 8-28)

### **Update on Long Term Financing of Statewide Clean Water Improvements:**

- Office of the State Treasurer and Clean Water Initiative agencies held a series of stakeholder meetings (March-June 2016) to collect input on clean water funding needs and identify the funding gap that should be covered by the CWF; agencies also collected input on potential revenue sources; 43 revenue options are being evaluated using value-based criteria (e.g., nexus to clean water, geographic distribution, etc.)
- Criteria used to evaluate revenue sources are still in draft form; need to determine when they become final, working with the Office of the State Treasurer
- The Tax Department is currently modeling and ranking the different revenue sources to inform recommendations to the legislature on revenue sources
- Clean Water Initiative agencies are organizing meetings with specific stakeholder groups in August-September, targeting the business community, farming community, municipalities, and environmental groups; there will be cross representation from each agency at these meetings
- Draft report with long term CWF revenue recommendations will be released in October for public comment; public meetings will be held following the draft report release; and the final report will be submitted to the legislature by December 2016
- The goal is for the recommended long term revenue sources is to replace the current short term CWF revenue source (i.e., property transfer tax surcharge), as the current revenue source sunsets after SFY18
- It is important to establish a long term funding source; even if the CWF goes away, the costs to comply with Act 64 and the Lake Champlain TMDL will not go away



## MEMORANDUM

**TO:** Clean Water Fund Board

**FROM:** Kari Dolan, Vermont Clean Water Initiative Program Manager

**DATE:** August 12, 2016 – UPDATED, September 7, 2016

**RE:** Draft Clean Water Fund Allocation Priorities for SFY18

**CC:** Beth Pearce, State Treasurer, Michael Clasen, Deputy State Treasurer, Diane Bothfeld, AAFM Deputy Secretary, Michele Boomhower, VTrans Policy, Planning & Intermodal Development Director, Joan Goldstein, DED Commissioner, Trey Martin, ANR Deputy Secretary, Alyssa Schuren, DEC Commissioner, Pete LaFlamme, WSMD Director, Joanna Pallito, AID Director, Mary Borg, WSMD Deputy Director

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Please find the attached latest draft *SFY18 Clean Water Fund Allocation Priorities* and public survey results. This draft describes the recommended broad uses of the Clean Water Fund for SFY18. These funds are critical in providing additional state funds above current state agency budgets to aid in addressing the State's priority clean water restoration needs.

The draft was originally constructed collaboratively by technical staff at the Agencies of Natural Resources (ANR), Agriculture, Food and Markets (AAFM), Commerce and Community Development (ACCD), and Transportation (VTrans) and approved by the Clean Water Fund Board at the June 23<sup>rd</sup> Board working session.

We considered feedback received from over 260 Vermonters who responded to the July public survey regarding expectations for the allocation of expenditures from the Clean Water Fund. Most members of the public who responded to the survey considered agriculture, river channel stability including vegetated buffers along waterways, and developed lands as priorities for funding. Based on public feedback, we recommend the following adjustments to the June allocation, which pertain to ANR's set of draft allocations only. We made no adjustments to the other agency draft allocations.

We also considered public comment received during the August 22<sup>nd</sup> Clean Water Fund Board Working Meeting. The Vermont League of Cities and Towns expressed concern about the \$60,000 reduction in funds to support municipal stormwater projects and suggested using funds from LiDAR mapping to address EPA's concern (refer to the 2016-08-22 CWF Working Mtg Notes, page 4.)

We acknowledge the importance of LiDAR mapping (see bullets below at the end of this memorandum). Additionally, ACCD Secretary Moulton verified that the level of funds to support LiDAR project is critical to remain competitive in our application for federal support.

Below is a summary of the adjustments made to arrive at the latest proposal:

<b>Activity</b>	<b>Adjustment</b>	<b>Justification</b>
Increased ANR Allocation #3: Support for the DEC program that delivers agronomic (field based) technical support to farmers in the Champlain Basin	Increased by \$159,600 (from \$75,000 to \$234,600); Refocused to implement the program within the Lake Champlain Basin	Comment from EPA; need to provide state support when federal funding (from the Lake Champlain Basin Program) no longer becomes available to support this program
Decreased ANR Allocation #4: Partners support	Reduced by \$80,000 (from \$450,000 to \$370,000)	To accommodate the increase in Allocation #3
Decreased ANR Allocation #6: Stormwater management	Reduced by \$40,000 (from \$800,000 to \$760,000)	To accommodate the increase in Allocation #3
Decreased ANR Allocation #8: Natural resources restoration	Reduced by \$39,600 (from \$265,000 to \$225,400)	To accommodate the increase in Allocation #3
Combined ANR stormwater allocations into one allocation, now ANR Allocation #6	Combined former ANR Allocations #6 (planning) and #7 (implementation))	To provide DEC greater flexibility in meeting municipal demand for stormwater management support

We look forward to discussing the draft at the next Board working meeting, scheduled for September 8, 2016.

#### Some Public Benefits Associated with LiDAR Mapping:

- Improved floodplain mapping – 8 counties still have extremely old and inaccurate FEMA flood hazard maps (including Addison and Franklin). High quality LiDAR is needed to leverage federal mapping funds and get FEMA to return to Vermont and invest in future map updates.
- Land use decision making – land use permitting and decision making relies on detailed topographic data. Having this information saves time and money for municipal governments and landowners.
- Hazard mitigation grant applications – The Benefit/Cost Analysis needed to support applications can be costly if detailed topographic info does not exist. LiDAR can substantially reduce the time and cost associated with this process resulting in quicker funding decisions for towns.
- LiDAR data enhances the capacity of GIS staff at Regional Planning Commission regarding mapping services they provide to towns to support municipal planning.
- Water pollution “Critical Source Area” identification and mapping to identify priority water quality restoration activities on agricultural land, logging areas, impervious surfaces and municipal road networks.



# VT Clean Water Initiative: FY16 LiDAR Acquisition



the Vermont

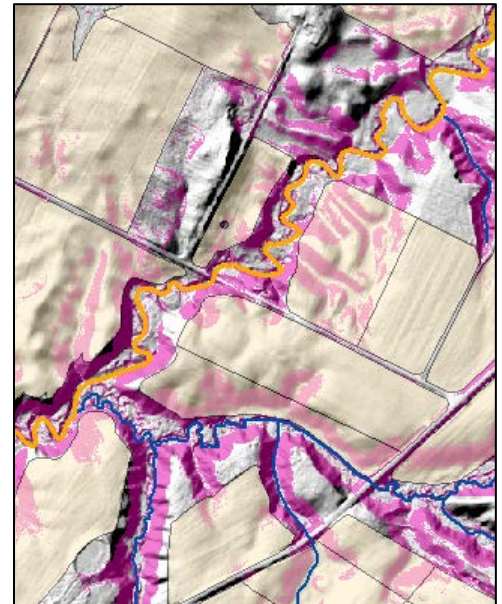
## LiDAR Data Supports Clean Water Initiative:

LiDAR (**L**ight **D**etection **A**nd **R**anging) is a remote sensing technology that produces elevation models of sufficient resolution<sup>1</sup> to support high precision river, stream, and unnamed tributary mapping in support of Clean Water initiatives. This increase in resolution affords analysis at the site level that is simply not possible with current elevation data. LiDAR data supports Act 64 and the VT Clean Water Initiative as follows:

### Required Agricultural Practices (RAPs):

LiDAR supports the mapping of ditches, diversions, gullies, swales and surface water features in direct support of nutrient management planning goals:

- Stacking manure outside of floodways and set back from various features, i.e., Property lines (200'), private water supplies (200') and perennial (200') and intermittent (100') surface waters.
- Not applying manure within certain distances of: private wells (100'), public water supplies (200'), perennial (25') and intermittent (10') surface waters.
- Establishing buffer widths on certain features, i.e., ditches, diversions, swales (10') and perennial (25') and intermittent (10') surface waters.



*Using LiDAR to locate Ravine & Gullies - Conduits of nutrients and sediment in Lake Champlain (Credit: Caroline Alves – USDA/NRCS)*

**Municipal Roads General Permit:** As part of the municipal roads storm water permit, municipalities will have to identify, inventory and prioritize erosion areas on local roads hydrologically connected to perennial streams.

- LiDAR elevation models can be used to map ditches, gullies, swales and unnamed tributaries. These features can then be used to:
  1. Identify Town highways with drainage systems connected to perennial streams;
  2. Inventory roads identified with ditch slopes GT 5% to be stone lined;
  3. Prioritize connected roads in a reliable and consistent way around the state to help ensure that:
    1. Only the local roads that affect water quality are regulated; and
    2. Water quality funds are targeted only on the roads that matter.



*Impervious surfaces can be derived from LiDAR*

<sup>1</sup> An increase from 36 to 8400 data points per acre compared to current elevation data (Elevation\_DEM0p7m vs. Elevation\_DEM10m), i.e., 0.7m horizontal resolution/ 9.25cm vertical accuracy vs. 10m horiz./1.87m vert., respectively.



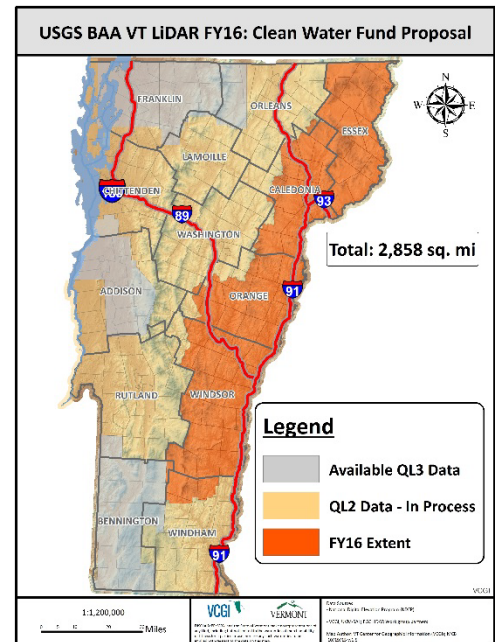
# VT Clean Water Initiative: FY16 LiDAR Acquisition



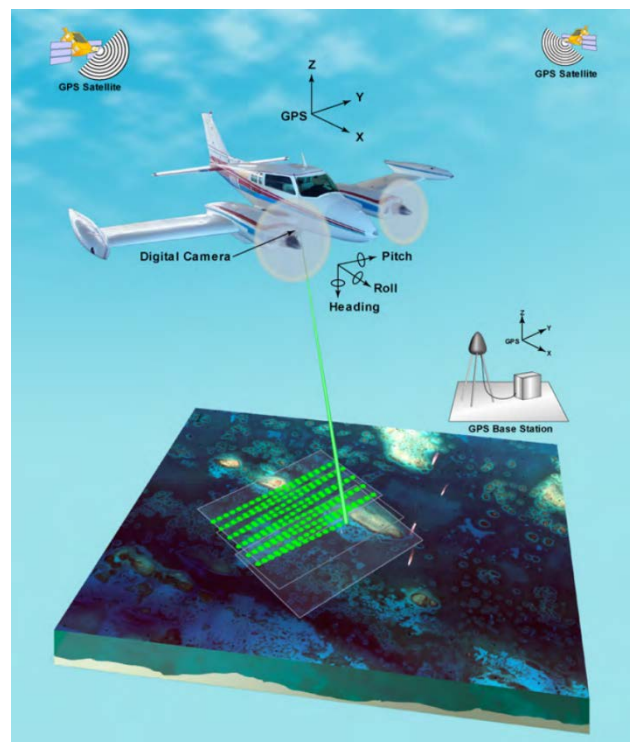
## Additional Uses:

See the VT State LiDAR Plan: Attachment A for a full listing of use cases: <http://tinyurl.com/VTLiDARPlan>.

- FEMA – National Flood Insurance Rate Map updates.
- Accurate river corridor layer to better reflect erosion hazards and mitigate riparian erosion.
- Runoff mapping in Town water and sewer districts.
- Directly supports creation of building footprints/parking lots/other impervious surface data to support town level decision making, e.g., density and stormwater/impervious surface planning.
- Town & regional level mapping of impervious surfaces (Act 64 general permits requirement on parcels with greater than 3 acres impervious surface.)
- NRCS agricultural management.
  1. Identification and mapping of ditched crop fields and ditch networks;
  2. Surface water flows off field surfaces into waterways;
  3. More accurate average slope values for agricultural lands;
  4. Identification of gullies to be addressed with conservation practices;
  5. Identification of areas with high erosion and runoff potential for P loading to Lake Champlain;
  6. Landscape visualization support in planning farm conservation.
- Vermont Geological Survey - Landslide hazard mapping.
- Transportation: Project design and survey support, road center line improvements and archeological assessment.
- Solar project siting and permitting.



*Proposed FY16 CWF supported data acquisition extent (in red)*



## LiDAR at a Glance

LiDAR is a remote sensing method using light in the form of a pulsed laser to measure ranges (variable distances) to the Earth yielding precise elevation data.

The combined utility of LiDAR elevation products supports such a wide array of applications that it can truly be considered a form of critical digital infrastructure.

## For More Information

### Contact:

Mike Brouillette; ACCD/VCGI LiDAR Coordinator;  
1 National Life Dr, Davis Bldg 6th Flr Montpelier, VT 05620-0501;  
(802) 882-3008; [Mike.Brouillette@Vermont.gov](mailto:Mike.Brouillette@Vermont.gov)

VT LiDAR Initiative web page [vcgi.vermont.gov/lidar](http://vcgi.vermont.gov/lidar)

## DRAFT VERMONT CLEAN WATER FUND SFY18 DISTRIBUTION PRIORITIES

**Purpose:** 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.

**Implementation Policies:** 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.

**Contingency to Avoid Overruns:** Ten percent of the annual Clean Water Funds are set aside as a contingency to avoid the risk of spending more funds than the amount available for that fiscal year.

**Priorities:** 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

ACAP: 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

BMP: 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

FAP: 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

LiDAR: 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

Stormwater Utilities: 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.

TMDL: 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)

USDA: 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: Recommendations – Agency of Agriculture, Food and Markets

#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities										State FY18
					A	B	C	D	E	F	G	H	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								X	\$400,000
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	USDA <sup>1</sup>	X	X				X					\$450,000
<b>SUBTOTAL (FY18) =</b>															<b>\$850,000</b>

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



Table 3: Recommendations – Agency of Natural Resources

#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities										State FY18
					A	B	C	D	E	F	G	H	I	J	
3	Agriculture (ANR)	Ecosystem Restoration Grants & Contracts	Support for the Agronomy and Conservation Assistance Program (ACAP) – contract to continue delivering agronomic (field-based) technical support to farmers in the Lake Champlain Basin		X	X	X		X					X	\$234,600 <sup>2</sup>
4	All Sectors (ANR)	Ecosystem Restoration Grants & Contracts	Partner support for project implementation (partners include conservation districts, extension services, watershed groups, farmer coalitions), involving delivery of technical and implementation services for projects that are identified and prioritized in Tactical Basin Plans		X	X	X		X	X			X	X	\$370,000
5	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		X	X	X	X	X				X	X	\$300,000
<b>SUBTOTAL (FY18) =</b>															<b>\$904,600</b>

2. DEC is currently managing this program in the Lake Champlain Basin using federal funds from the Lake Champlain Basin Program (LCBP). Since these funds will no longer be available to support this program, this allocation is necessary to transition the management of this program using state funds. DEC will manage these funds using a competitive process.



#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities										State FY18
					A	B	C	D	E	F	G	H	I	J	
6	Municipal Stormwater (ANR)	Ecosystem Restoration Grants & Contracts	Municipal stormwater planning and implementation including: (a) project identification, prioritization and planning for implementation; (b) Planning assistance for municipalities pursuing stormwater utilities; and (c) Project implementation to mitigate impacts from stormwater runoff being generated from municipalities' developed areas		X	X		X	X			X	X	X	\$760,000
7	Municipal Stormwater (ANR)	Ecosystem Restoration Grants & Contracts	Municipal Capital Equipment Assistance help purchase equipment that enhances local water quality-focused Best Management Practice implementation, such as hydroseeders	Local funds as match	X	X		X	X	X		X	X	X	\$100,000
8	Natural Resources (ANR)	Ecosystem Restoration Grants & Contracts	Flood resilience/Water Quality and Forest Health Projects, targeting the restoration of wetlands, river corridors, floodplains and riparian areas as well as forest health projects. Projects will focus on: (a) improvements in resilience and water quality; (b) restoration of unstable stream channels to natural stability (equilibrium conditions); (c) portable skidder bridge rental program to reduce nonpoint source pollution associated with logging operations; (d) urban forestry water quality projects; and (e) trainings in compliance with logging practices that protect water quality	USDA <sup>3</sup>	X	X	X		X		X			X	\$225,400
9	Wastewater Treatment (ANR)	Facilities Engineering Division	Municipal assistance in compliance with TMDLs, such as asset management – a process to determine how, where and when to make clean water infrastructure improvements		X	X				X			X		\$100,000 <sup>4</sup>
<b>SUBTOTAL (FY18) =</b>															<b>\$1,185,400</b>

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

4. DEC is able to support a second year of this program using federal funds (totaling \$190,000) from the Lake Champlain Basin Program (LCBP).

Table 4: Recommendations – Agency of Commerce and Community Development															
#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities										State FY18
					A	B	C	D	E	F	G	H	I	J	
10	Technical Support (ACCD)	Vermont Center for Geographic Information	LiDAR Mapping of the State of Vermont, Next Phase, to support agriculture, stormwater, river, forest road mapping	Federal (USGS)	X	X	X		X	X					\$460,000
SUBTOTAL (FY18) =															\$460,000

Table 5: Recommendations – Agency of Transportation															
#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities										State FY18
					A	B	C	D	E	F	G	H	I	J	
11	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	Local funds as match	X	X		X	X	X			X	X	\$1,025,000
12	State Roads (VTrans)	Municipal Mitigation Assistance Program	Stormwater incentive payments to municipalities with stormwater utilities (\$25,000 per municipality with a stormwater utility)	Local funds as match		X		X		X		X	X		\$75,000
SUBTOTAL (FY18) =															\$1,100,000

<b>Table 6: Recommendations by Sector*</b>	
	<b>State FY18</b>
Agriculture	<b>\$1,084,600</b>
Municipal (roads and stormwater management)	<b>\$1,960,000</b>
Municipal Wastewater	<b>\$100,000</b>
Natural Resources	<b>\$225,400</b>
All Sectors – LiDAR Mapping	<b>\$460,000</b>
All Sectors – Partner Support	<b>\$670,000</b>
10% Contingency Reserve*	<b>\$500,000</b>
<b>TOTAL</b>	<b>\$5,000,000</b>

<b>Table 7: Recommendations by Administering Agency*</b>	
	<b>State FY18</b>
Agency of Agriculture	<b>\$850,000</b>
Agency of Natural Resources	<b>\$2,090,000</b>
Agency of Commerce and Community Development	<b>\$460,000</b>
Agency of Transportation	<b>\$1,100,000</b>
10% Contingency Reserve*	<b>\$500,000</b>
<b>TOTAL</b>	<b>\$5,000,000</b>

\* As mentioned on page one, ten percent of the annual Clean Water Funds are set aside as a contingency to avoid the risk of spending more funds than are available in the fiscal year.

**DRAFT Process for Developing Legislative Report**  
**Financing Clean Water Improvement Using the State Clean Water Fund (CWF)**

