

The Vermont Clean Water Fund Board

Agenda

Date/Time: Friday, April 8, 2016, 1:00pm – 2:30pm

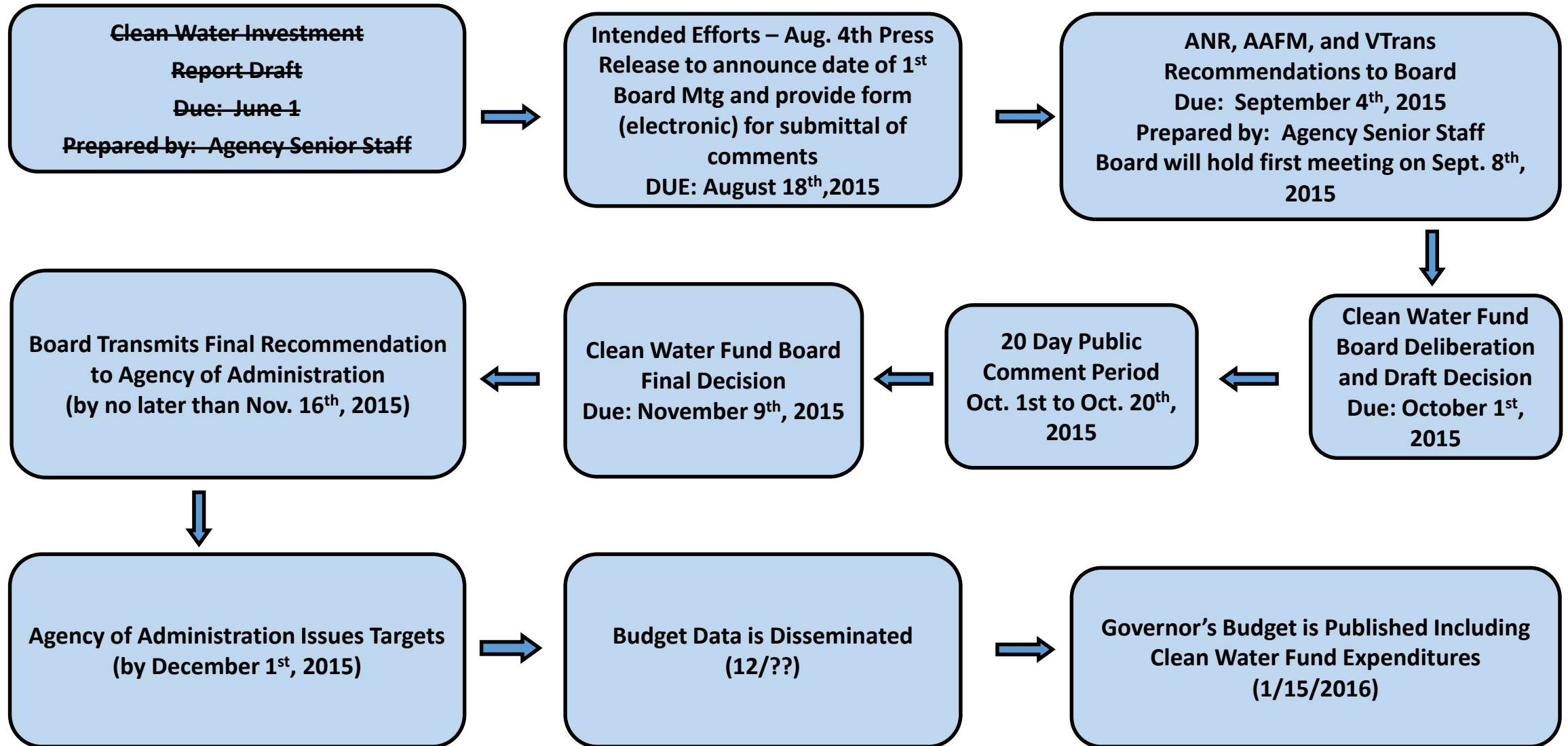
Location: National Life Davis Building – 5th Floor Board Room

1. Welcome and Introductions (5 minutes)
Agency of Administration Secretary and Clean Water Fund Board Chair Justin Johnson
2. Process for Clean Water Fund Allocations (15 minutes)
Secretary Justin Johnson
 - a. Reporting on the distribution of CWF FY16 and FY17 funds
 - b. Developing the proposed FY18 draft allocations
3. Update on the Clean Water Fund property transfer tax receipt revenues (10 minutes)
Secretary Justin Johnson
4. Review of the Clean Water Fund Allocations for FY17 (15 minutes)
Agency of Natural Resources Deputy Secretary Trey Martin
Clean Water Initiative Program (CWIP) Manager Kari Dolan
5. Developing the VT Clean Water Initiative Investment and Performance Annual Report, due January, 2017 (10 minutes)
CWIP Manager Kari Dolan
6. Update on the “Financing Clean Water Implementation” Report (10 minutes)
Deputy Secretary Trey Martin
CWIP Manager Kari Dolan
Vermont Deputy Treasurer Michael Clasen
Office of the State Treasurer Director of Policy Tim Lueders-Dumont
7. Questions (20 minutes)
Secretary Justin Johnson
8. Next meeting (5 minutes)
Secretary Justin Johnson

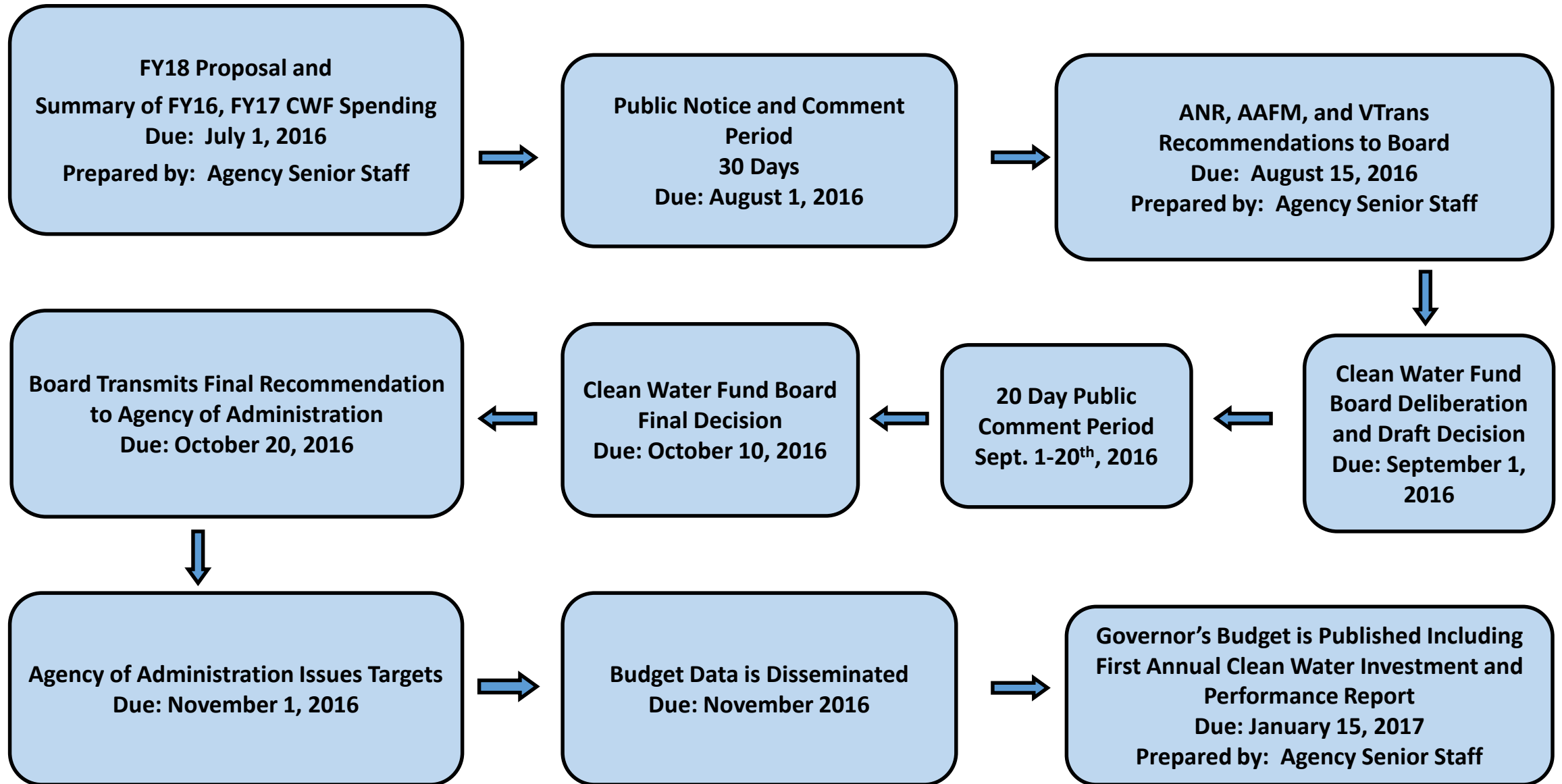
Supporting materials:

- Clean Water Fund Process_FY16 and FY17
- Clean Water Fund Process_FY18
- Draft Clean Water Fund Allocation Priorities, Adjusted
- Vermont Clean Water Initiative Annual Investment & Performance Report
- Financing Clean Water Implementation, Stakeholder Meetings Schedule
- Financing Clean Water Implementation – Frequently Asked Questions and Answers

Clean Water Fund Process for FY16 Budget Adjustment & FY17 Budget (starts 8/4/15)



Clean Water Fund Process for FY18 Budget (starts on 7/1/16)



FUND ALLOCATION PRIORITIES FOR CLEAN WATER FUND BOARD – Final Adjustment

Purpose: As directed by Act 64, 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.

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. Award or assist municipalities in compliance with water quality requirements during the first three years of the Clean Water Fund; and,
- I. 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 establish minimum of 50-foot buffers with native vegetation
D. Compliance with road permit	Supports road-related stormwater runoff and erosion control practices that assist municipalities and VTrans in achieving compliance with the State road general permit requirements
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 technologies that enhance BMP implementation 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
H. Municipal assistance	Aids municipalities in understanding critical sources of water pollution, identifying and implementing priority water pollution controls
I. 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 & 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

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

#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities									State FY16	Draft State FY17	Adjusted State FY17 ¹		
					A	B	C	D	E	F	G	H	I					
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 ²	X	X										\$600,000	\$600,000	
2	Agriculture (AAFM)	Grants & Contracts	Incentives for farmers to implement phosphorus reduction practices above regulatory requirements; 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 ²	X	X				X						\$225,000	\$925,000	\$893,000 ³
3	Agriculture (AAFM)	Operating	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	X										\$450,000	\$450,000	\$450,000
SUBTOTAL (FY16, Adjusted FY17) = \$2,618,000											\$675,000	\$1,975,000	\$1,943,000					

1. Clean Water Fund actual revenues over projected forecasts anticipate a \$707,000 shortfall for State Fiscal Years (SFY) 2016 and 2017, requiring a downward adjustment for some SFY2017 allocations.
2. Funds are complementary, supporting implementation of similar projects.
3. The SFY2017 allocation shows a reduction of \$32,000. This adjustment is acceptable to the AAFM, since the agency is in the process of increasing its capacity to more effectively manage this allocation in the future.

#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities									State FY16	Draft State FY17	Adjusted State FY17	
					A	B	C	D	E	F	G	H	I				
4	All Sectors (ANR)	DEC 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 agricultural and municipal projects that are identified and prioritized in Tactical Basin Plans		X	X	X		X	X			X	X	\$100,000	\$885,000	\$885,000
5	All Sectors (ANR)	DEC Ecosystem Restoration Grants & Contracts	Improved water quality monitoring to track effectiveness of implementation using watershed associations and the LaRosa Partnership		X	X	X	X	X				X	X	--	\$200,000	\$200,000
SUBTOTAL (FY16, FY17) = \$1,185,000											\$100,000	\$1,085,000	\$1,085,000				

Table 2: State Agency Recommendations – Agency of Natural Resources

#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities							State FY16	Draft State FY17	Adjusted State FY17			
					A	B	C	D	E	F	G				H	I	
6	Agriculture (ANR)	DEC Ecosystem Restoration Grants & Contracts	Agronomy & Conservation Assistance Program (ACAP) – contract to continue delivering agronomic technical and financial support of three agronomists in Lake Champlain Basin and BMP financial assistance in livestock exclusion		X	X	X		X					X	--	\$485,000	\$0 ⁴
7	Municipal Stormwater (ANR)	DEC Ecosystem Restoration Grants & Contracts	Municipal stormwater project identification and prioritization methodology used in Tactical Basin Planning and TMDL implementation		X	X		X	X				X	X	\$400,000	\$500,000	\$500,000
8	Municipal Stormwater (ANR)	DEC Ecosystem Restoration Grants & Contracts	Project implementation to mitigate impacts from stormwater runoff being generated from municipalities' developed areas		X	X		X	X	X			X	X	\$400,000	\$840,000	\$840,000
9	Municipal Stormwater (ANR)	DEC Ecosystem Restoration Grants & Contracts	Municipal Capital Equipment Assistance to assist municipalities in purchasing equipment that enhances local water quality-focused Best Management Practice implementation, such as hydroseeders, high efficiency vacuum street sweepers and vacuum (vactor) trucks	Local matching funds	X	X		X	X	X			X	X	--	\$395,000	\$395,000

4. The SFY2017 allocation shows a reduction of \$485,000. DEC is able to continue to support this program at current levels in SFY17, outside of the Clean Water Fund, using \$230,000 of federal funds from the Lake Champlain Basin Program (LCBP).

Table 2: State Agency Recommendations – Agency of Natural Resources (continued)

#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities									State FY16	Draft State FY17	Adjusted State FY17	
					A	B	C	D	E	F	G	H	I				
10	Natural Resources (ANR)	DEC 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 back to natural stability (referred to as 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 ⁵	X	X	X		X		X				--	\$1,150,000	\$1,150,000
11	Wastewater Treatment (ANR)	FED State Revolving Fund Loan Program	Help leverage additional federal funds to provide some municipal assistance in compliance with TMDLs		X	X				X		X		--	\$500,000	\$310,000 ⁶	
SUBTOTAL (FY16, Adjusted FY17) = \$3,995,000														\$800,000	\$3,870,000	\$3,195,000	

5. As described in Footnote 2 above, the USDA funds are complementary, supporting implementation of similar projects.

6. The SFY2017 allocation shows a reduction of \$190,000. DEC is able to continue to support this program in SFY17, outside of the Clean Water Fund, using \$190,000 of federal funds from the Lake Champlain Basin Program (LCBP).

Table 2: State Agency Recommendations – Agency of Commerce and Community Development

#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities									State FY16	Draft State FY17	Adjusted State FY17		
					A	B	C	D	E	F	G	H	I					
12	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, SPR Program)	X	X	X		X	X						\$430,000	--	--
SUBTOTAL (FY16, FY17) = \$430,000																\$430,000	--	--

Table 2: State Agency Recommendations – Agency of Transportation

#	Sector (Agency)	Funding Program	Activities	Other Funds	Priorities									State FY16	Draft State FY17	Adjusted State FY17	
					A	B	C	D	E	F	G	H	I				
13	Municipal Roads (VTrans)	Municipal Mitigation Grant Program	Inventory, prioritization and implementation to address municipal gravel road-related stormwater mitigation projects, in compliance with state road general permit	Local matching funds	X	X		X	X	X			X	X	--	\$570,000	\$570,000
14	Municipal Roads (VTrans)	Municipal Mitigation Grant Program	Inventory, prioritization and implementation to address municipalities' non-gravel road-related stormwater mitigation projects, in compliance with state road general permit, and including replacement of undersized culverts	Local matching funds	X	X			X	X			X		--	\$895,000	\$895,000
SUBTOTAL (FY16, FY17) = \$1,465,000															--	\$1,465,000	\$1,465,000

Table 2: State Agency Recommendations by Sector

Sector Summary	State FY16	Preliminary State FY17	Adjusted State FY17	Adjusted Total
Agriculture	\$675,000	\$2,460,000	\$1,943,000	\$2,618,000
Municipal (roads, stormwater)	\$800,000	\$3,200,000	\$3,200,000	\$4,000,000
Municipal Wastewater	--	\$500,000	\$310,000	\$310,000
Natural Resources	--	\$1,150,000	\$1,150,000	\$1,150,000
All Sectors – LiDAR Mapping	\$430,000	--	--	\$430,000
All Sectors – Partner Support	\$100,000	\$1,085,000	\$1,085,000	\$1,185,000
TOTAL	\$2,005,000	\$8,395,000	\$7,688,000	\$9,693,000

Table 2: State Agency Recommendations by Administering Agency

Agency Summary	State FY16	Preliminary State FY17	Adjusted State FY17	Adjusted Total
Agency of Agriculture	\$675,000	\$1,975,000	\$1,943,000	\$2,618,000
Agency of Natural Resources	\$900,000	\$4,955,000	\$4,280,000	\$5,180,000
Agency of Commerce and Community Development	\$430,000	--	--	\$430,000
Agency of Transportation	--	\$1,465,000	\$1,465,000	\$1,465,000
TOTAL	\$2,005,000	\$8,395,000	\$7,688,000	\$9,693,000

Vermont Clean Water Initiative



Annual Investment & Performance Report

Summary of the Vermont Clean Water Initiative, describing investments, actions, outcomes, and future recommendations

Prepared for the Vermont General Assembly
in Accordance with Act 64 (2015) Section §1389a

January 2017



Agency of Natural Resources

Agency of Agriculture, Food & Markets

Agency of Transportation

Agency of Commerce & Community Development

Agency of Administration

Draft Outline of the Clean Water Initiative Annual Investment and Performance Report Reporting Period State Fiscal Year 2016 (July 1, 2015 – June 30, 2016)

Investment Measures

- **How were State Fiscal Year 2016 and 2017 water quality funds (including the Clean Water Fund) allocated and complemented across programs and the state?**
 - Total funds invested by agency program and funding source
 - Total funds invested by watershed
 - Total funds invested by county
 - Total funds complemented by the Clean Water Fund

Social Measures

- **What is the level and extent of our outreach efforts?**
 - Number of outreach events held (i.e., trainings, workshops, and public meetings)
 - Hours of education/training received
- **What is the level and extent of technical assistance provided?**
 - Summary of each agencies technical assistance efforts (e.g., number of projects reviewed and authorized, number of site visits conducted)

Program-Based Performance Measures

- **What is the extent of work completed on the ground supported by the Clean Water Initiative?**
 - Number of projects completed by project type
 - Project measures achieved by project type (e.g., acres treated, linear feet improved)

Environmental-Based Performance Measures & Indicators

- **What are the nutrient and sediment removal benefits of Clean Water Initiative implementation projects in meeting water quality restoration goals?**
 - Summary of estimated pollutant load removed from implementation projects
 - Summary of progress meeting pollutant loading targets identified in major TMDLs for nonpoint sources, stormwater, and wastewater treatment facilities
- **What are the additional environmental benefits of Clean Water Initiative implementation projects?**
 - Summary of project measures related to flood resiliency, habitat structure/connectivity, ecosystem function, economic value, and public health by project type
- **What is the extent of water quality monitoring and assessment efforts?**
 - Number of sites monitored to ensure compliance with National Pollutant Discharge Elimination System permits
 - Number of sites monitored to confirm/track impairments
 - Percent of projects monitored before and after implementation to demonstrate success
- **What are the trends in water quality based on water quality monitoring and assessment data?**
 - The condition of Vermont's surface waters, and if conditions are improving, staying the same, or getting worse

State Fiscal Year 2018 Clean Water Fund Proposed Allocations

- **Summary of SFY2018 Clean Water Fund proposed allocations by agency at the program level**

Success Stories

- **Compilation of success stories representing each sector and different project types**

State of Vermont Long-Term Financing of Statewide Water Quality Improvement Stakeholder Meetings, Montpelier, VT

Co-Hosts: Alyssa Schuren, VT Department of Environmental Conservation Commissioner
Beth Pearce, State Treasurer, Michael Clasen, State Deputy Treasurer, Office of the State Treasurer

Partners: Department of Taxes and Agencies of Agriculture, Food and Markets, Transportation and Commerce and Community Development

EVENT	DATE	TIME	LOCATION	DISCUSSION TOPICS
#1	Monday, March 7, 2016	10:00am – 12:00pm	Vermont College College Hall Chapel 36 College Street Montpelier, VT	Kick-off Meeting to provide background information, report requirements, opportunities and challenges for a shared vision and sector-based discussions of clean water needs
#2	Wednesday, April 27, 2016	9:00am – 12:00pm	Capitol Plaza Governor's Ballroom 100 State Street Montpelier, VT	Workgroup Meeting to discuss needs and revenue sources to address: (a) Agricultural Water Quality (b) Municipal Water Quality, Part I – Developed Lands and Roads
#3	Wednesday, April 27, 2016	1:00pm – 4:00pm	Capitol Plaza Governor's Ballroom 100 State Street Montpelier, VT	Workgroup Meeting to discuss needs and revenue sources to address: (c) Natural Resources Restoration (d) Municipal Water Quality, Part II (continuation) – Wastewater Treatment, Combined Sewer Overflow systems
#4	Wednesday, May 18, 2016	9:00am – 12:00pm	Vermont College College Hall Chapel 36 College Street Montpelier, VT	Workgroup Meeting to discuss revenue options to address: (a) Agricultural Water Quality (b) Municipal Water Quality, Part I – Developed Lands and Roads
#5	Wednesday, May 18, 2016	1:00pm – 4:00pm	Vermont College College Hall Chapel 36 College Street Montpelier, VT	Workgroup Meeting to discuss revenue options to address: (c) Natural Resources Restoration (d) Municipal Water Quality, Part II (continuation) – Wastewater treatment, combined Sewer Overflow Systems
#6	Wednesday, June 1, 2016	9:00am – 12:00pm	Vermont College College Hall Chapel 36 College Street Montpelier, VT	Solutions Summit to summarize discussions and identify next steps

Frequently Asked Questions and Answers about the Report on Financing Clean Water Implementation

A. Obligations under the State and Federal Water Quality Laws

1. What are the requirements under these Federal Clean Water Act obligations?

Answer: The Lake Champlain Phosphorus TMDL and its Implementation Plan, and other TMDLs across the State, will require action and investment from a broad spectrum of stakeholders including municipalities, farmers, businesses and other property owners to control water pollution.

2. What are the consequences of not meeting the Federal Clean Water Act obligations or not spending more money to control the water pollution sources?

Answer: Additional resources are necessary for the quality of Vermont's waters to improve. Additionally, if we do not meet the TMDL commitments, the EPA will step in to reduce water pollution in Vermont using its own authorities to force pollution reductions. Their actions will almost certainly be less cost-effective for the State.

3. What is the purpose of Act 64 – referred to as the “Vermont Clean Water Act,” which was signed into law in 2015?

Answer: The purpose of Act 64 is to:

- a. Protect clean water as fundamental to Vermont's quality of life and economy;
- b. Invest in state government authority and capacity to keep waters free from threats to clean water;
- c. Allow Vermont to meet the Lake Champlain Phosphorus TMDL – the Federal Clean Water Act obligations to control phosphorus pollution into Lake Champlain -- and all of Vermont's waters.

4. What does Act 64 do?

Answer: Act 64 gives the state new tools, resources and obligations to reduce polluted stormwater runoff from agricultural lands and developed areas. It also establishes a new *Clean Water Fund* to assist communities and partners with their role of restoring and protecting the State's waters.

B. The Vermont Clean Water Fund and the Vermont Clean Water Funding Report

5. What is the purpose of the “Clean Water Fund?”

Answer: The purpose of the Clean Water Fund is to assist municipalities, farmers and partners with their role in restoring and protecting our State's waters by targeting resources to achieve the greatest outcomes. The Clean Water Fund directs monies to existing funding and technical assistance programs in state agencies, invests directly in

pollution control and supports partner organizations to support implementation of priority actions.

6. Why does Vermont need a “Clean Water Fund?”

Answer: The Clean Water Fund can help municipalities, farmers and others comply with clean water regulations.

7. Will the State report on the Clean Water Fund investments?

Answer: Yes, the state agencies will account for and report on the funds spent and the results of those investments in an annual report. The first report is due in January, 2017 and annually thereafter.

8. Why does Act 64 call for a report by the State Treasurer -- in consultation with the Secretary of Administration, the Commissioner of Environmental Conservation and Commissioner of Taxes -- on long-term financing of a Clean Water Fund?

Answer: The existing revenue source that supports the Clean Water Fund – a surcharge on the Property Transfer Tax -- sunsets at the start of State Fiscal Year 2018 (July 1, 2017).

9. What is the intent of this State of Vermont Long-Term Water Quality Financing Report?

Answer: The intent of the report is to provide the Legislature a recommendation for financing water quality improvements that will replace the Property Transfer Tax when it sunsets in 2017. The report is to include:

- a. Recommendations for incentivizing Best Management Practices;
- b. An estimate of the amount of revenue generated from each proposed revenue source;
- c. A summary of how the source will be administered, collected and enforced.
- d. Recommendations on whether the State should bond and whether the revenue source would be sufficient for issuing water quality revenue bonds; and
- e. A legislative proposal to implement each of the sources.

10. What funding sources are being considered that could support long-term financing of the statewide water quality improvements?

Answer: The report will evaluate a number of funding sources. A list of some of those funding options are in an appendix to this document.

11. Are there any requirements the proposed sources must meet?

Answer: Yes. Act 64 instructs the proposed revenue sources to be designed to, “assess fees, taxes or other revenue sources from a property, parcel use, parcel type or an activity in proportion to the negative impacts of property, parcel use, parcel type or activity on the water quality of the State.”

12. What time period will the Report use?

Answer: We are planning to use a 20-year planning horizon for this report, reflecting the 20-year timeframe for the Lake Champlain TMDL. The analysis will attempt to reflect the water quality needs during that time period, recognizing that some needs will peak at different times. Tracking progress is critical, as it will help the state and its partners periodically evaluate the TMDL's progress, adapt the plan as needed, and adjust its efforts accordingly.

13. What share of the implementation/treatment costs will the State of VT pay, with assistance from the federal government and private donations?

Answer: The proportion of funds from each source—state, federal and private—will depend on how much sustainable new revenue is raised statewide to support the long-term Clean Water Fund.

14. Should maintenance costs be included in this report?

Answer: Maintenance costs will not be included, in order to be consistent across all sectors.

C. General Information on Vermont's Water Quality Challenges

15. What are the most significant source of water pollution to Vermont's waters?

Answer: The most significant sources of water pollution, and the most cost-effective to address, are associated with polluted stormwater runoff from developed lands, roads, farms and stream channel erosion due to rainfall and snowmelt.

16. What are the commitments of the Lake Champlain Phosphorus TMDL?

Answer: Below is a summary of the TMDL commitments, as described in the Phase I TMDL Implementation Plan and outlined in the *Act 97 Report – Vermont's Clean Water Initiative*:

a. *Agriculture:*

1. Revise the Required Agricultural Practices (formerly referred to as "Accepted Agricultural Practices or AAPs), regulation and inspection of small farms,
2. Other statutory changes will require agricultural producers to identify and address critical sources of agricultural runoff,
3. Implement appropriate management practices (buffering and other edge of field practices, livestock exclusion where there is erosion, and effective nutrient management).

b. *Stormwater:*

1. Expand stormwater regulations to require municipalities, businesses and private landowners to increase their investment in stormwater controls on existing and future developments.
2. Expand the existing municipal stormwater permit referred to as the Municipal Separate Storm Sewer System (MS4) General Permit to include phosphorus

controls. The municipalities subject to the permit include the nine municipalities in Chittenden County as well as St. Albans Town, St. Albans City, Rutland Town, Burlington Airport, the University of Vermont and the Vermont Agency of Transportation.

c. *Roads:*

1. Require municipalities to manage stormwater on municipal roads, including sediment and erosion control best management practices.
2. Develop and implement a statewide stormwater permit targeting state highways.

d. *Wastewater:*

1. Require more stringent concentration limits for wastewater treatment facility effluent in targeted segments of the Lake Champlain watershed.

e. *River Corridors:*

1. Use incentives to encourage adoption of flood resilience-based local development standards,
2. Promote restoration and conservation of floodplains, river corridors and wetlands

f. *Forests:*

1. Update AMPs to reduce water pollution on logging jobs.

17. Will investing in wastewater treatment and sewer infrastructure to address municipal overflow sewer systems needs be adequate for the purposes of achieving the Federal Clean Water Act obligations?

Answer: The State and the federal government have invested more than \$600 million since the 1970s to safeguard public health by providing wastewater treatment. Those investments continue to pay dividends to public health and safety, local economies and the environment. As these systems age, we need to continue to support these investments. However, investing in wastewater treatment plants alone will not solve our water quality problems nor achieve the Federal Clean Water Act obligations.