An Overview of Water Quality Law and Funding

House Committee on Ways and Means

Jan. 14, 2019

CWA Requirements-Permitting

- Discharge of pollutants from a point source to a navigable water-e.g., wastewater treatment, industrial discharge, etc.
- The construction stormwater permit for disturbance of more than 1 acre of land.
- The multisector general permit for stormwater runoff from industrial sites.
- The municipal separate storm sewer permit for stormwater control in specified towns.
- The concentrated animal feeding operation permit for certain farms that have an actual discharge or are proposing an actual discharge.

Residual Designation Authority

- EPA has "residual designation" authority to require permits for other discharges or category of discharges on a case-by-case basis when it determines that:
  - the discharge contribute to a violation of water quality standards;
  - The discharge is a significant contributor of pollutant to a water; or
  - controls are needed for the discharge based on wasteload allocations that are part of a TMDL that address the pollutant(s) of concern.

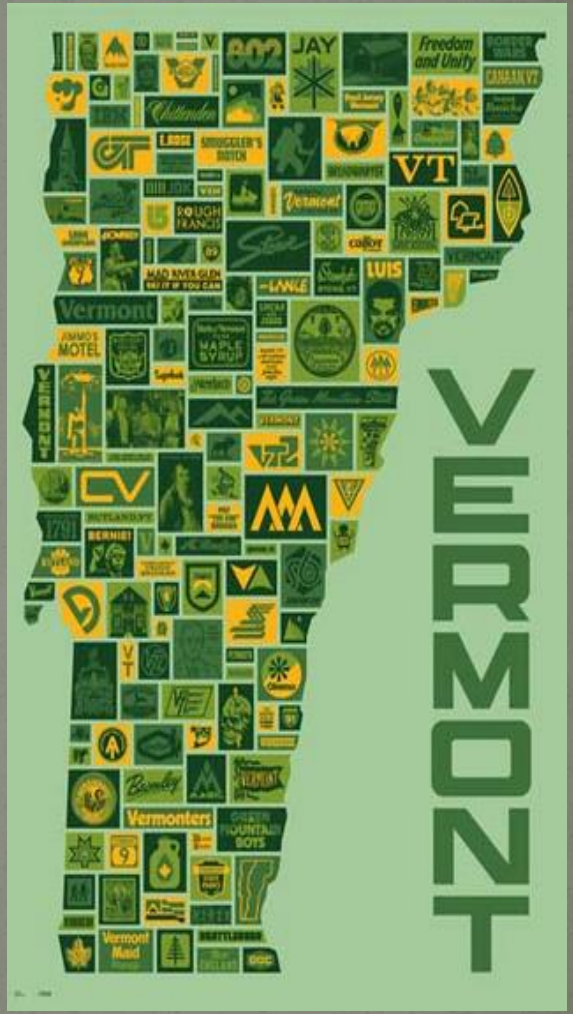
  40 CFR 122.26(a)(9)(i)(C) and (D)

CWA Requirements-Permitting

- EPA's enforcement of the CWA operates largely through the CWA permitting programs with RDA as a hook.
- EPA may delegate a state agency as the permitting and enforcement authority in the state.
- In 1974, EPA delegated ANR as the CWA permitting authority for Vermont.
  - Approximately, 47 states have been delegated.
- EPA retains oversight over permit issuance and may make recommendations and require conditions for federally required permits such as wastewater permits.

Vermont-Specific Permitting

- Vermont has enacted permitting requirements in addition to the federal CWA, including:
  - State stormwater operating permits for construction or expansion of 1 acre of impervious surface (½ acre in 2022).
  - State permitting for activities in a significant wetland or buffer of a significant wetland.
  - Stream alteration permits for altering the course of a watercourse by moving, filling, or excavating 10 cubic yards of instream material in any year.
  - Lake shoreland permit for cleared area or impervious surface in a lake shoreland area.
  - State large farm and medium farm permitting.



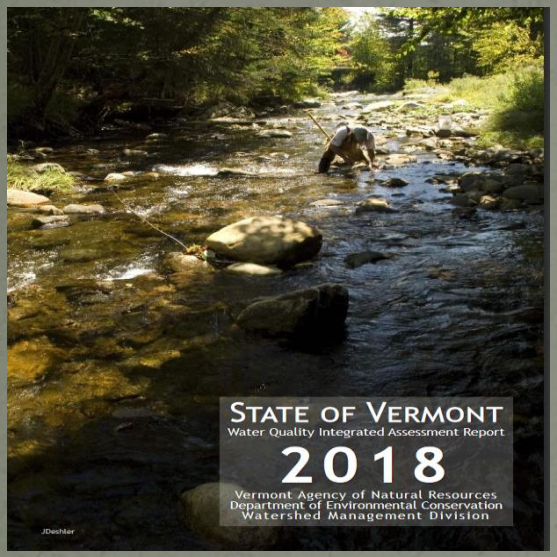
CWA Requirements: Water Quality Preservation

- States must establish water quality standards for state waters. 33 U.S.C. § 1313 (CWA § 303(a)).
- The standards must ensure full support of designated uses of the water. The designated uses are:

Public Water Supply	Aesthetics
Fishing	Irrigation
Boating	Aquatic Biota
Swimming	Aquatic Habitat

VWQS: https://dec.vermont.gov/sites/dec/files/documents/wsmd_water_quality_standards_2016.pdf

CWA Requirements—Water Quality Preservation



Most recent assessment can be found at: https://dec.vermont.gov/sites/dec/files/documents/WaterQualityAssessmentReport_305b_2018.pdf

See also DEC Assessment and Listing website at: https://dec.vermont.gov/watershed/map/assessment

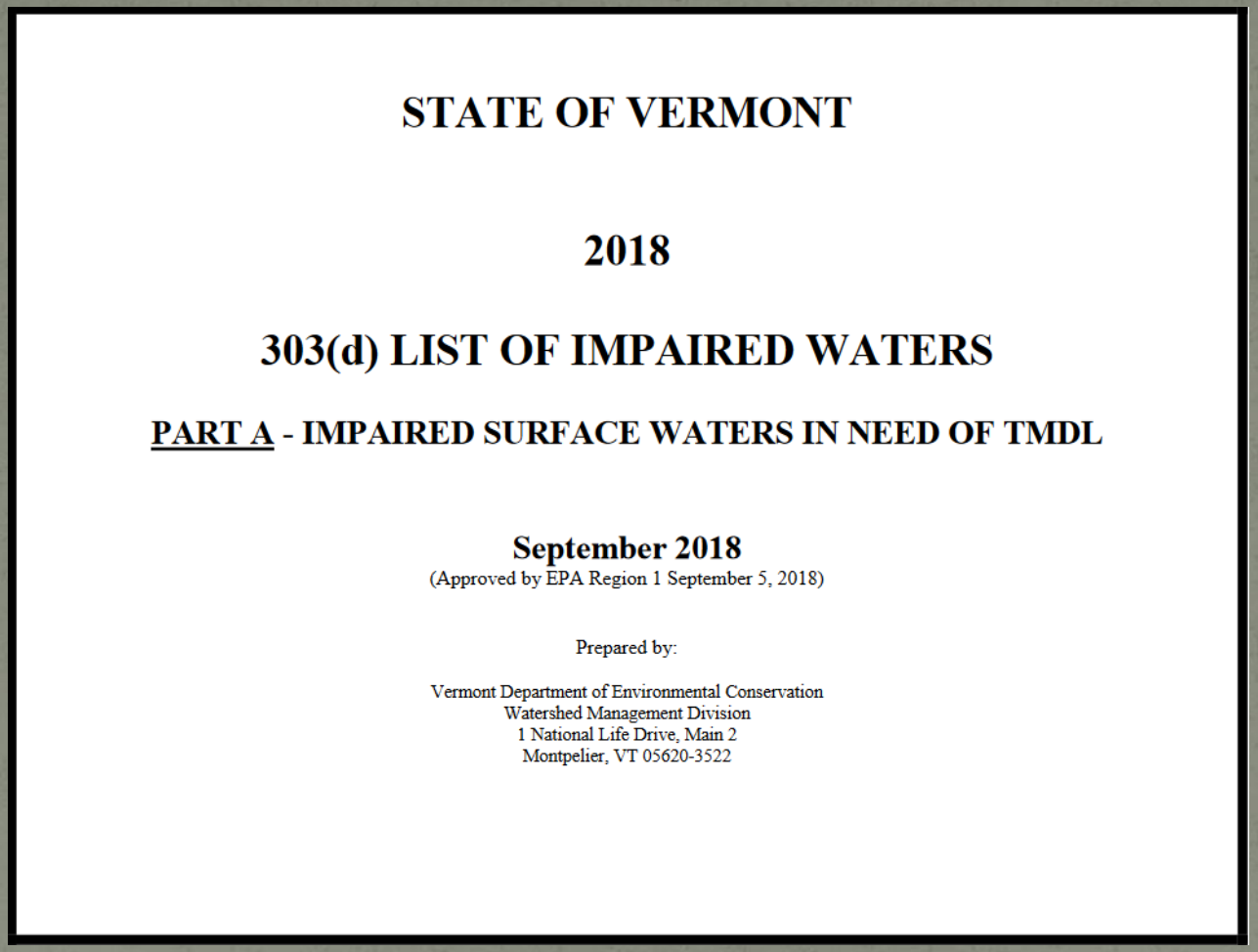
- The CWA requires states to report every two years on the quality of state waters.
- 7,100 miles of rivers and streams.
- 230,900 acres of lakes, reservoirs and ponds.
- Approximately 300,000 acres of freshwater wetlands.
- Results indicate that the majority of waters meet standards—e.g., in 2016, of the 5,798 miles of rivers assessed, 4,389 miles fully supported all designated uses.

CWA § 303(d): Impaired Waters

- Requires states at least every three years to review whether state waters comply with the state water quality standards. 33 U.S.C. § 1313 (CWA § 303(d)).
- If a water, or water segment, does not meet state water quality standards, it is designated IMPAIRED, and the the state must develop a cleanup plan for the water—total maximum daily load plan. 33 U.S.C. § 1313 (CWA § 303(d)).

TOTAL MAXIMUM DAILY LOAD (TMDL)

§ 303(d) List of Impaired Waters



STATE OF VERMONT

2018

303(d) LIST OF IMPAIRED WATERS

PART A - IMPAIRED SURFACE WATERS IN NEED OF TMDL

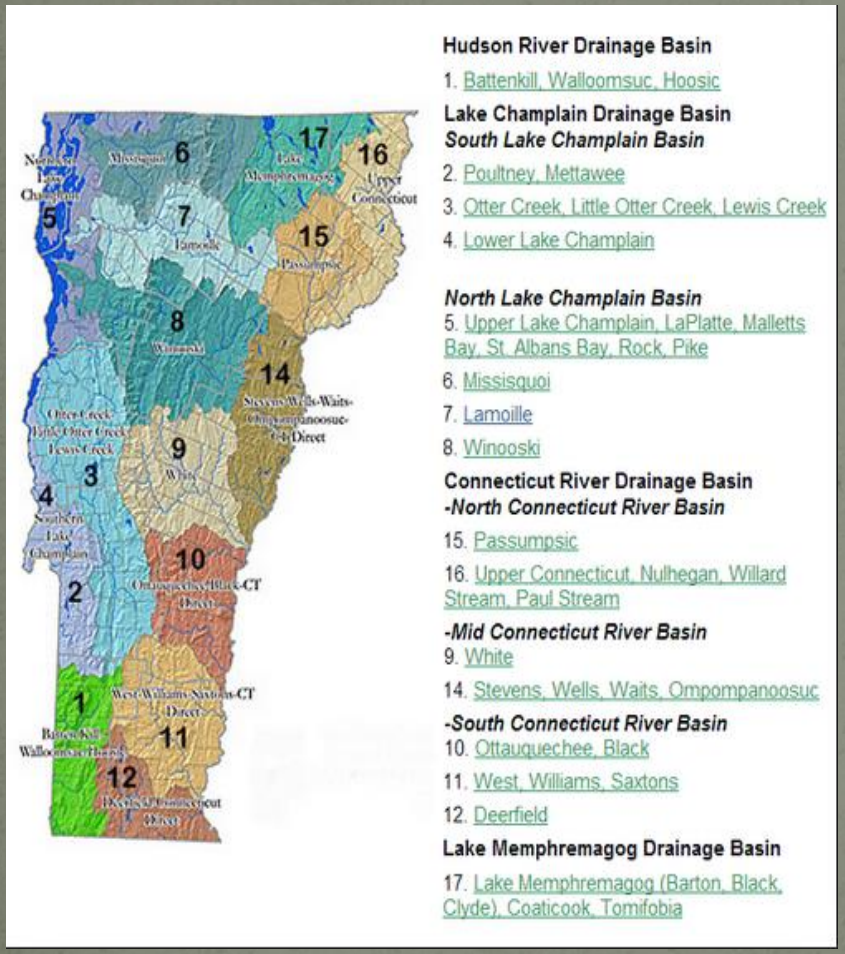
September 2018
(Approved by EPA Region 1 September 5, 2018)

Prepared by:

Vermont Department of Environmental Conservation
Watershed Management Division
1 National Life Drive, Main 2
Montpelier, VT 05620-3522

https://dec.vermont.gov/sites/dec/files/documents/mp_PriorityWatersList_PartA_303d_2018.pdf

Impaired Waters in Every Watershed



- Lake Memphremagog TMDL
- Deerfield River segment
- Rock River segment
- Connecticut River TMDL Pending
- Lake Carmi TMDL
- Otter Creek
- Winooski River segment
- White River, third branch
- Hoosic River
- Mettawee River segment
- Lake Champlain TMDL

Cause of Impairments

Sediment/Turbidity/Flow
from
Stormwater/Streambank Erosion

Phosphorus/Nutrients
from
Agricultural Runoff/Stormwater

What Constitutes a TMDL?

- A TMDL is a target or goal that, when reached, should result in the cleanup of the water so that it meets the State water quality standards and is no longer impaired.
  - The maximum amount of a pollutant allowed to enter a water so that the water will meet and continue to meet water quality standards.
  - This does not mean zero. Some amount likely will be allowed to enter the waterbody.
- Where are the pollutants coming from:
  - Point source: pipes, ditches, etc. (WLA)
  - Nonpoint source: overland flow, streambank erosion (LA)
- If a TMDL relies on nonpoint source reduction, it must include a margin of safety to account for uncertainty in predicting how well pollutant reductions will result in meeting water quality standards. (MOS)

How Do You Get There? Plan for It.


With Proposed Date Changes
(August 2016)

VERMONT LAKE CHAMPLAIN
PHOSPHORUS TMDL PHASE 1
IMPLEMENTATION PLAN

DRAFT AUGUST 2016

- Actions necessary to clean up a water are included in a separate implementation plan.
  - An implementation plan can include a suite of activities to remediate the water.
- The suite of activities can apply to all waters that drain to the impaired water.
  - E.g., Waters draining to the Winooski River in Montpelier fall under the Lake Champlain TMDL.

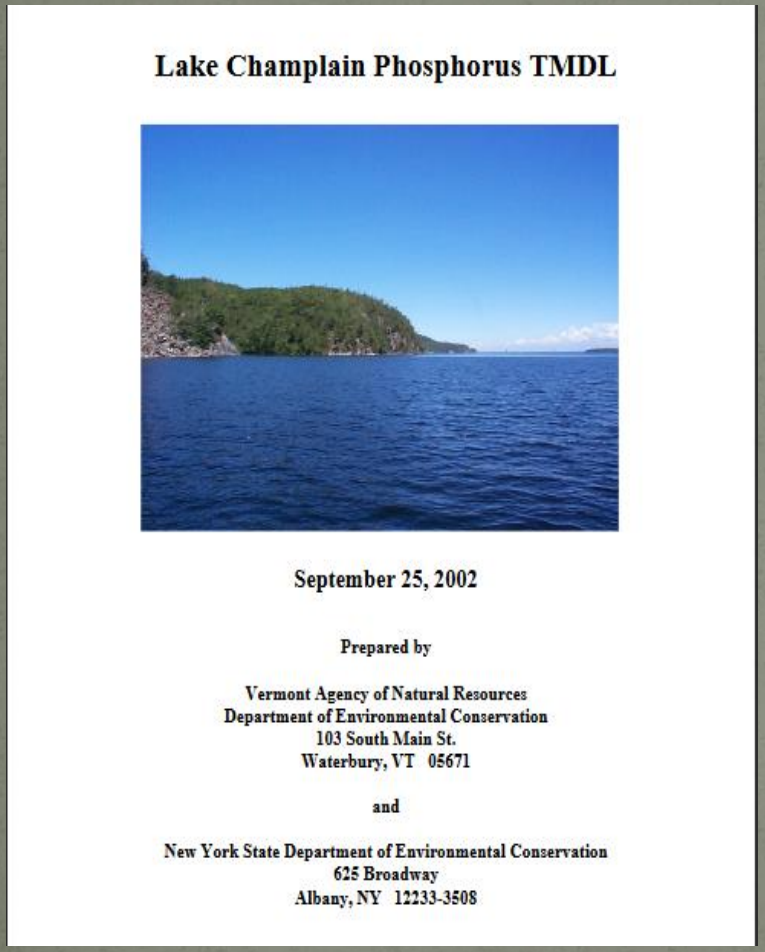
EPA Approval

- The CWA requires EPA to approve each TMDL proposed by a state.
- CWA technically does not require EPA to approve an implementation plan.
- But EPA may not approve a TMDL until it is satisfied with the implementation plan.

EPA Approval

- EPA rules require TMDLs to include certain minimum provisions:
  - Identification of Waterbody, Pollutant of Concern, Pollutant Sources, and Priority Ranking.
  - Applicable WQS and Numeric Water Quality Target.
  - Loading Capacity.
  - Load Allocations and Waste Load Allocations.
  - Margin of Safety.
  - Consideration of Seasonal Variation.
  - If relying on LAs for nonpoint, Reasonable Assurances that the LAs will achieve the load reductions.
  - Monitoring Plan to Track TMDL Effectiveness.
  - Implementation Plan.
  - Public Participation. See 40 C.F.R. part 130.

Lake Champlain TMDL



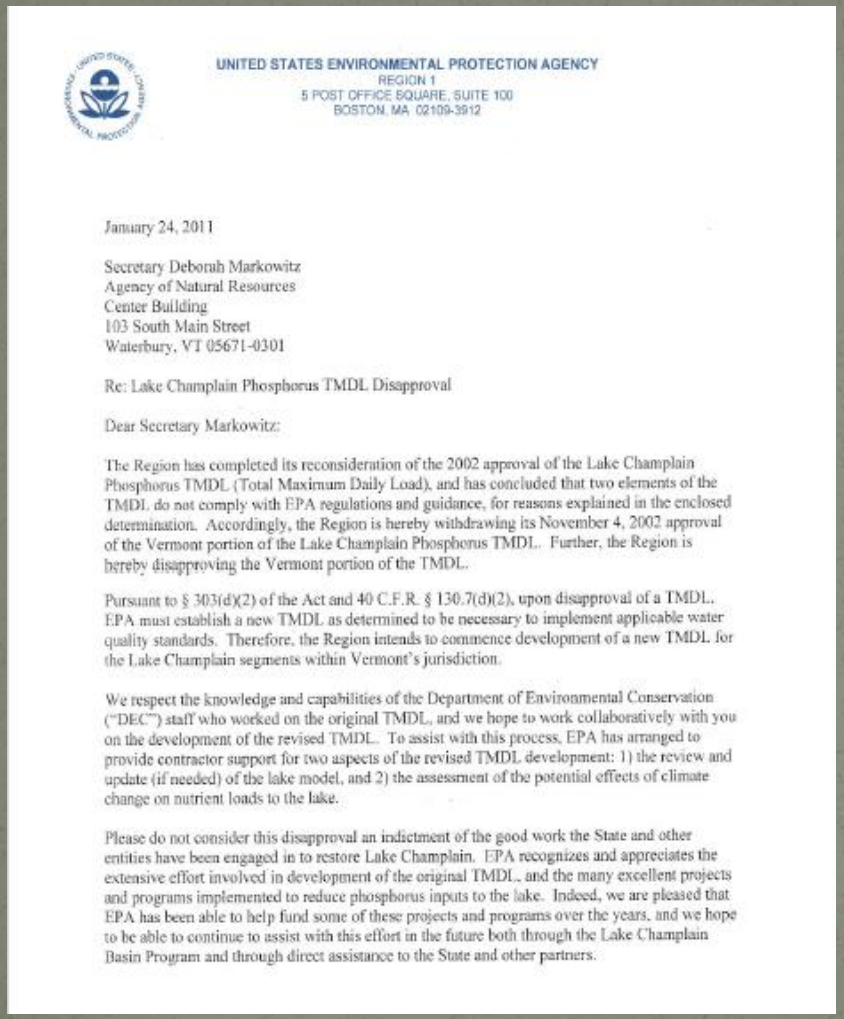
- Lake Champlain is impaired by the nutrient phosphorus, which causes algal blooms and obnoxious odors, and leads to low dissolved oxygen concentrations, impaired aquatic life, and reduced recreational use.
- Vermont and New York agreed to a TMDL in 2002.

Disapproval

- In 2010, CLF petitioned EPA asserting that the Vermont portion of the 2002 TMDL for Lake Champlain did not meet the minimum requirements for TMDL approval.
- Note, the petition only related to Vermont, and not to New York.
- Vermont and New York are in two different EPA regions—Vermont is in Region 1 and NY in Region 2.

Region 1

Disapproval



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

January 24, 2011

Secretary Deborah Markowitz
Agency of Natural Resources
Center Building
103 South Main Street
Waterbury, VT 05671-0301

Re: Lake Champlain Phosphorus TMDL Disapproval

Dear Secretary Markowitz:

The Region has completed its reconsideration of the 2002 approval of the Lake Champlain Phosphorus TMDL (Total Maximum Daily Load), and has concluded that two elements of the TMDL do not comply with EPA regulations and guidance, for reasons explained in the enclosed determination. Accordingly, the Region is hereby withdrawing its November 4, 2002 approval of the Vermont portion of the Lake Champlain Phosphorus TMDL. Further, the Region is hereby disapproving the Vermont portion of the TMDL.

Pursuant to § 303(d)(2) of the Act and 40 C.F.R. § 130.7(d)(2), upon disapproval of a TMDL, EPA must establish a new TMDL as determined to be necessary to implement applicable water quality standards. Therefore, the Region intends to commence development of a new TMDL for the Lake Champlain segments within Vermont's jurisdiction.

We respect the knowledge and capabilities of the Department of Environmental Conservation ("DEC") staff who worked on the original TMDL, and we hope to work collaboratively with you on the development of the revised TMDL. To assist with this process, EPA has arranged to provide contractor support for two aspects of the revised TMDL development: 1) the review and update (if needed) of the lake model, and 2) the assessment of the potential effects of climate change on nutrient loads to the lake.

Please do not consider this disapproval an indictment of the good work the State and other entities have been engaged in to restore Lake Champlain. EPA recognizes and appreciates the extensive effort involved in development of the original TMDL, and the many excellent projects and programs implemented to reduce phosphorus inputs to the lake. Indeed, we are pleased that EPA has been able to help fund some of these projects and programs over the years, and we hope to be able to continue to assist with this effort in the future both through the Lake Champlain Basin Program and through direct assistance to the State and other partners.

- In 2011, EPA Region 1 disapproved the Vermont portion of the Lake Champlain TMDL.
- EPA concluded it did not provide an adequate margin of safety and did not provide reasonable assurances that the load reductions would be reached.

Basis for Disapproval

Inadequate Margin of Safety

The Region concludes that neither of the conservative assumptions relied upon in the 2002 TMDL provides an implicit MOS for four of the nine segments included in the TMDL (South Lake A, Missisquoi Bay, St. Albans Bay, and the Northeast Arm), and that only one segment, South Lake B, is provided an implicit MOS based on both the assumptions cited in the TMDL document. Therefore, the Region concludes upon reconsideration that the level of MOS provided is insufficient and inconsistent with EPA regulations.

Basis for Disapproval

Reasonable Assurances

1) No reasonable assurance that nonpoint source control actions will occur, and

2) If these actions occur, there is no reasonable assurance that they would achieve enough phosphorus reduction to meet the load allocations specified in the TMDL.

So, EPA Disapproved, Now What?

- If [EPA] disapproves a TMDL, the Clean Water Act requires EPA to establish the new TMDL.
- EPA is supposed to establish how the TMDL will be implemented.
- EPA needs to do all of this in 30 days from the date of disapproval of the TMDL.

  30 U.S.C. 1313(d)(2) (CWA 303(d))

EPA Delay—Might be a Good Thing

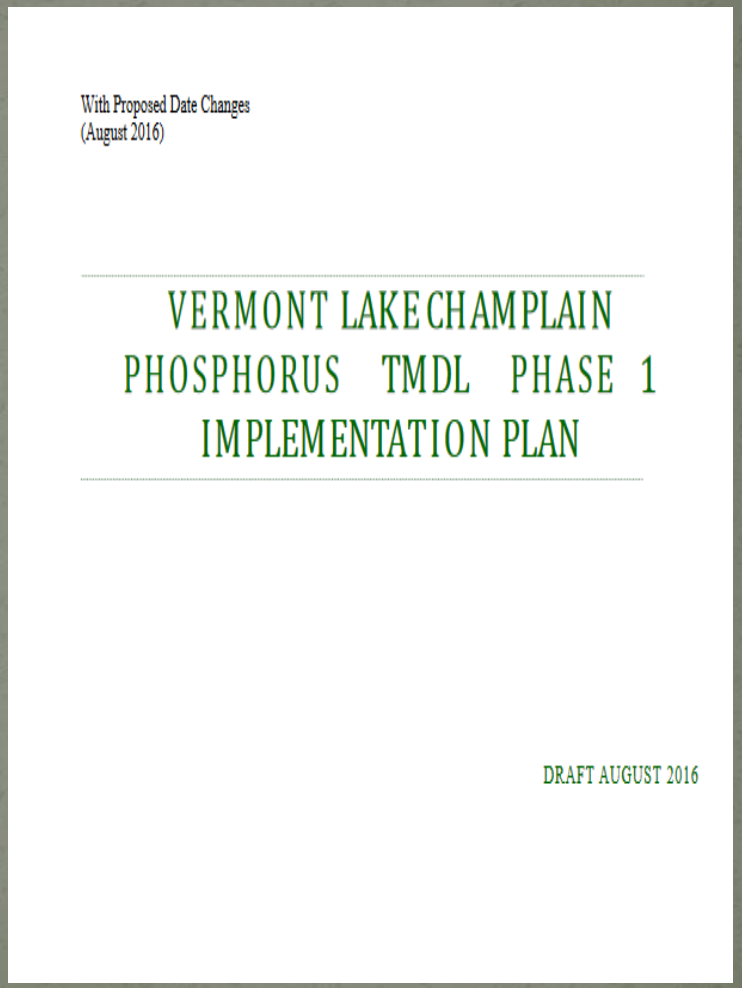
- Discharge of pollutants from a point source to a navigable water-e.g., wastewater treatment, industrial discharge, etc.
- The construction stormwater permit for disturbance of more than 1 acre of land.
- The multisector general permit for stormwater runoff from industrial sites.
- The municipal separate storm sewer permit for stormwater control in specified towns.
- The concentrated animal feeding operation permit for certain farms that have an actual discharge or are proposing an actual discharge

All In!

Act 64 of 2015: Vermont Clean Water Act

Purpose

Provide mechanisms, staffing, and **financing** necessary for **State waters** to achieve and maintain compliance with the Vermont water quality standards.


With Proposed Date Changes
(August 2016)

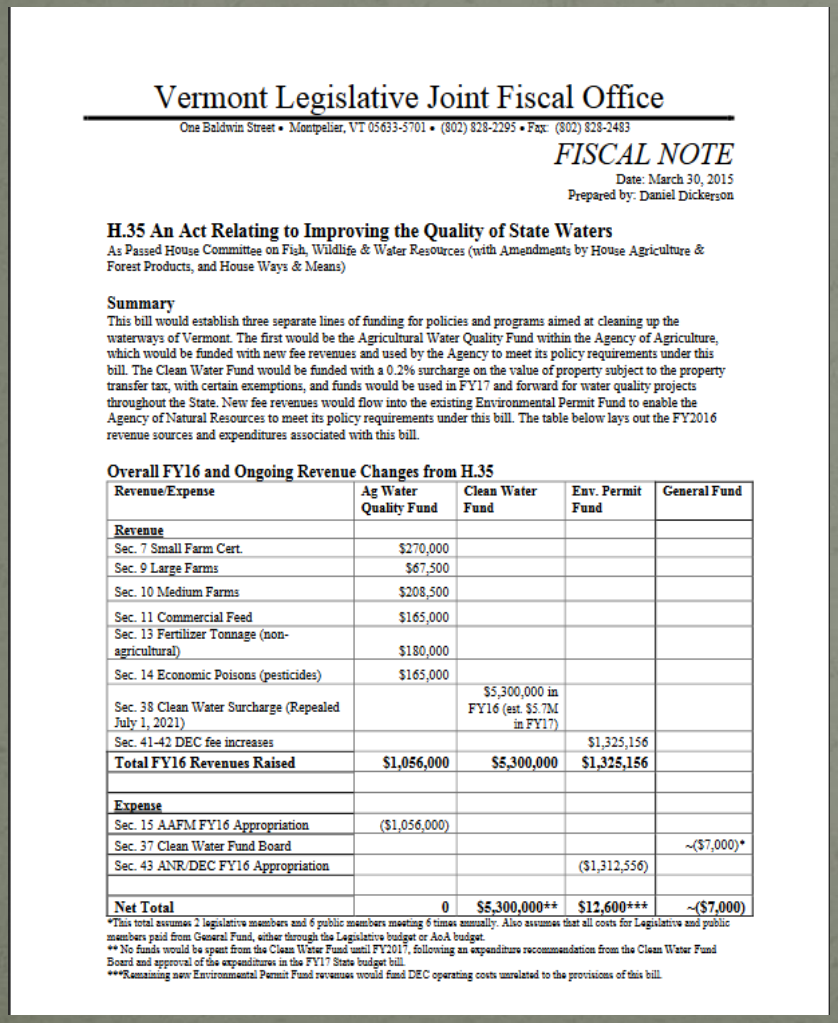
VERMONT LAKE CHAMPLAIN
PHOSPHORUS TMDL PHASE 1
IMPLEMENTATION PLAN

DRAFT AUGUST 2016

Act 64: Water Quality Requirements

- Amended the Required Agricultural Practices (RAPs) to require new water quality measures.
- Required small farms to certify compliance with RAPs by 7/1/18.
- Required water quality training for operators of LFOs, MFOs, and SFOs.
- Required AAFM to train and certify custom applicators of manure or nutrients.
- Amended AAFM's water quality enforcement authority to be more consistent with ANR authority.
- Required the Department of Forests, Parks and Recreation to revise the acceptable management practices for maintaining water quality on logging jobs by rule by July 1, 2016
- Completely rewrote the statute governing regulation of stormwater runoff from impervious surfaces.
- Required ANR to develop a municipal roads general permit for stormwater discharges.
- Required ANR to develop a general permit for discharges of stormwater from impervious surface of 3 or more acres in size that previously were unpermitted.
- Required ANR to develop a schedule to update the basin plans for the 15 watersheds with plans.

Act 64: Water Quality Funding



Vermont Legislative Joint Fiscal Office

One Baldwin Street • Montpelier, VT 05633-5701 • (802) 828-2295 • Fax: (802) 828-2483

FISCAL NOTE

Date: March 30, 2015
Prepared by: Daniel Dickerson

H.35 An Act Relating to Improving the Quality of State Waters
As Passed House Committee on Fish, Wildlife & Water Resources (with Amendments by House Agriculture & Forest Products, and House Ways & Means)

Summary
This bill would establish three separate lines of funding for policies and programs aimed at cleaning up the waterways of Vermont. The first would be the Agricultural Water Quality Fund within the Agency of Agriculture, which would be funded with new fee revenues and used by the Agency to meet its policy requirements under this bill. The Clean Water Fund would be funded with a 0.2% surcharge on the value of property subject to the property transfer tax, with certain exemptions, and funds would be used in FY17 and forward for water quality projects throughout the State. New fee revenues would flow into the existing Environmental Permit Fund to enable the Agency of Natural Resources to meet its policy requirements under this bill. The table below lays out the FY2016 revenue sources and expenditures associated with this bill.

Overall FY16 and Ongoing Revenue Changes from H.35

Revenue/Expense	Ag Water Quality Fund	Clean Water Fund	Env. Permit Fund	General Fund
Revenue				
Sec. 7 Small Farm Cert.	$270,000			
Sec. 9 Large Farms	$67,500			
Sec. 10 Medium Farms	$208,500			
Sec. 11 Commercial Feed	$165,000			
Sec. 13 Fertilizer Tonnage (non-agricultural)	$180,000			
Sec. 14 Economic Poisons (pesticides)	$165,000			
Sec. 38 Clean Water Surcharge (Repealed July 1, 2021)		$5,300,000 in FY16 (est. $5.7M in FY17)		
Sec. 41-42 DEC fee increases			$1,325,156	
Total FY16 Revenues Raised	**$1,056,000**	**$5,300,000**	**$1,325,156**	
Expense				
Sec. 15 AAFM FY16 Appropriation	($1,056,000)			
Sec. 37 Clean Water Fund Board				~($7,000)*
Sec. 43 ANR/DEC FY16 Appropriation			($1,312,556)	
Net Total	**0**	**$5,300,000****	**$12,600*****	**~($7,000)**

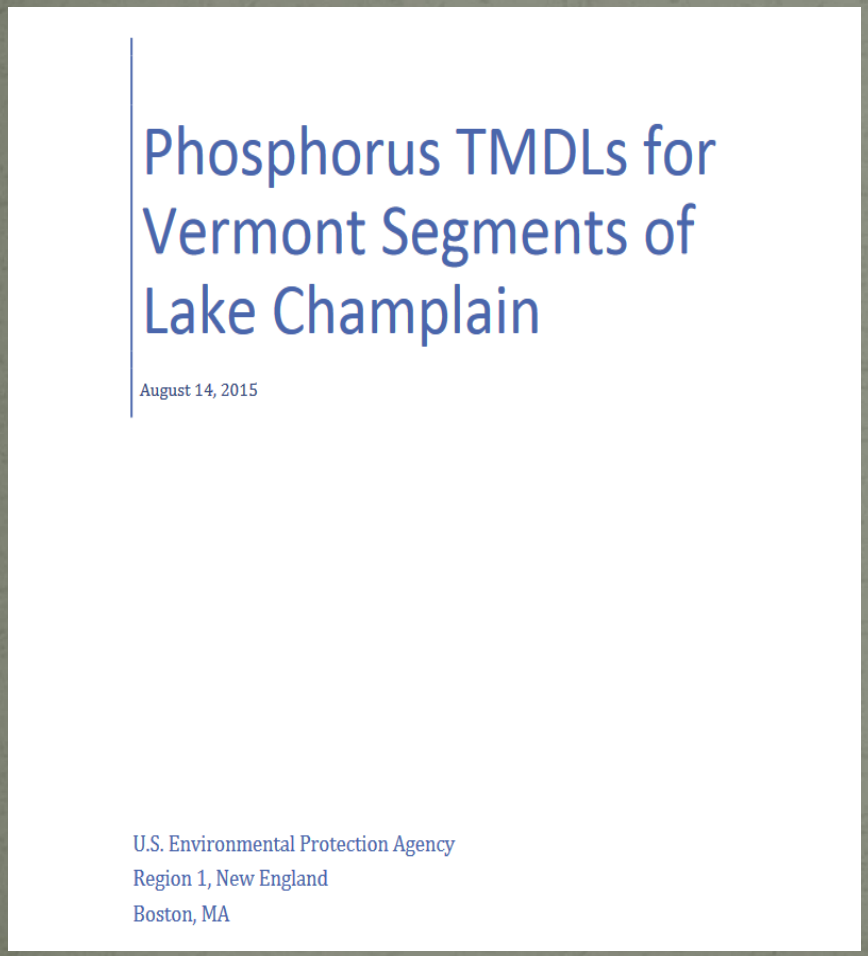
*This total assumes 2 legislative members and 6 public members meeting 6 times annually. Also assumes that all costs for Legislative and public members paid from General Fund, either through the Legislative budget or AoA budget.
** No funds would be spent from the Clean Water Fund until FY2017, following an expenditure recommendation from the Clean Water Fund Board and approval of the expenditures in the FY17 State budget bill.
***Remaining new Environmental Permit Fund revenues would fund DEC operating costs unrelated to the provisions of this bill.

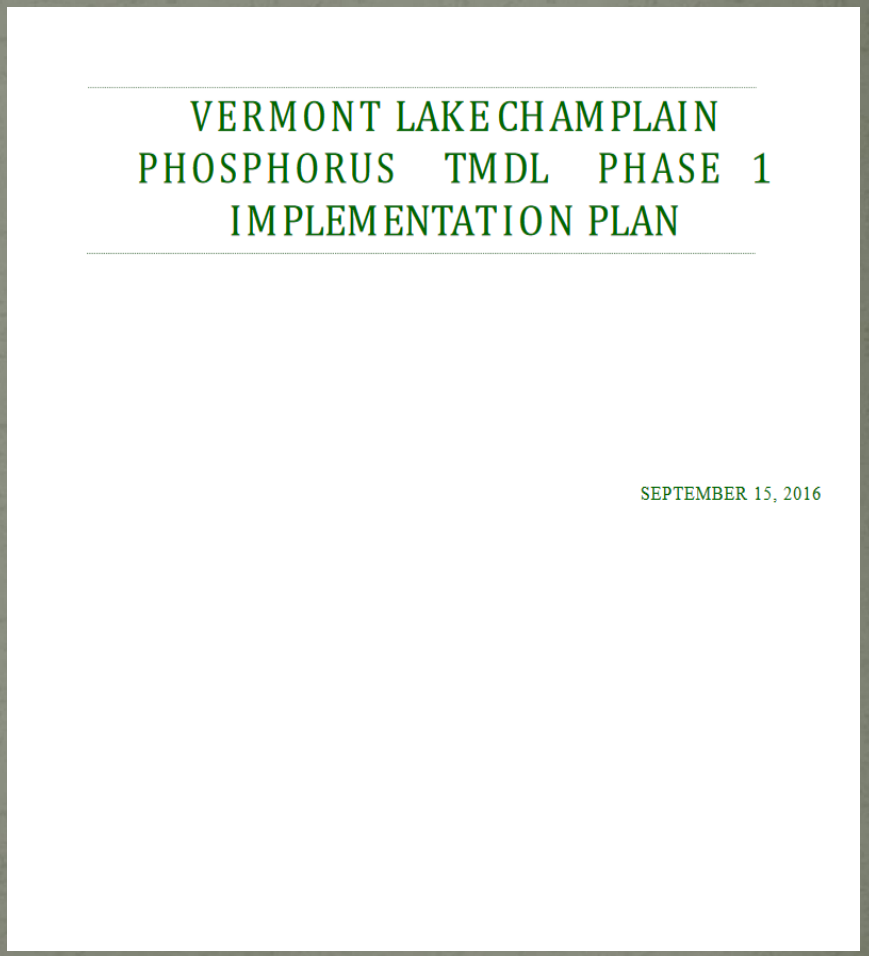
- Act 64 increased DEC permit fees on most water quality or water-related programs to pay for new staff needed to implement Act 64.
  - Raised $1.3 million annually.
- Act 64 established or increased AAFM fees to pay for new staff needed to implement Act 64.
  - Raised $1 million annually.

Act 64: Water Quality Funding

- Established a Clean Water Fund Special Fund to assist the State in complying with water quality requirements and implementation of water quality projects.
- To provide monies to the Clean Water Fund, Act 64 established a Clean Water Surcharge of 0.2% on the property transfer tax.
- A Clean Water Board shall administer the Fund.
- The Board consists of the Secretaries of ANR, AAFM, AOT, ACCD, and Administration.
  - In 2018, 4 members of the public appointed by the Governor were added to the Board's membership.

Act 64 = EPA Approval of TMDL





TMDL ACCOUNTABILITY FRAMEWORK

- Lake Champlain TMDL included a list of actions that Vermont needed to complete.
- Of equal importance are the financial resources needed to implement the new and revised programs identified in the revised Phase 1 Implementation Plan.
- Establish long-term revenue sources to support water quality improvement via the Clean Water Fund, as described in the TMDLs' Accountability Framework.

Just a Little Short

Summary: Costs for Clean Water Improvements by Sector

Vermont Water Quality Funding 20-Year Projection ($s in millions, unless otherwise indicated), Page 1

Tier 1 and Tier 2 Legend
Blue Shaded lines are "Tier 1" costs, the incremental costs associated with TMDLs, Act 64 (2015) and CSO Policy (2016).
Unshaded lines are "Tier 2" costs, costs that support, enhance and catalyze compliance.
Tan shaded lines represent total of "Tier 1" and "Tier 2"

Tier 1 Summary: Costs & Financing Sources	Projected 20-Year Costs	Projected 20-Yr Financing	Total 20-Year Gap	Annualized Gap
Tier 1 Municipal Wastewater Pollution Control, including CSO	$337,971,000	$215,181,138	($122,789,862)	($6,139,493)

Tier 1 Summary: Costs & Funding Sources	Projected 20-Year Costs	Projected 20-Year Funds	Total 20-Year Gap	Annualized Gap
Tier 1 Agriculture Pollution Control	$527,633,654	$207,350,000	($320,283,654)	($16,014,183)
Tier 1 Stormwater Pollution Control, Including Roads	$694,678,108	$212,315,179	($482,362,929)	($24,118,146)
Tier 1 Natural Resources Restoration for Pollution Control	$83,885,000	$32,927,000	($50,958,000)	($2,547,900)
Tier 1 Subtotal: Agriculture, Stormwater, Natural Resources	$1,306,196,762	$452,592,179	($853,604,583)	($42,680,229)
Tier 1 Total	**$1,644,167,762**	**$667,773,317**	**($976,394,445)**	**($48,819,722)**

Tier 2 Summary: Costs & Financing Sources	Projected 20-Year Costs	Projected 20-Yr Financing	Total 20-Year Gap	Annualized Gap
Tier 2 Municipal Wastewater Control	$530,399,000	$378,603,565	($151,795,435)	($7,589,772)

Tier 2 Summary: Costs & Funding Sources to Support Compliance	Projected 20-Year Costs	Projected 20-Yr Funds	Total 20-Year Gap	Annualized Gap
Tier 2 Agriculture Pollution Control	$46,766,538	$0	($46,766,538)	($2,338,327)
Tier 2 Stormwater Pollution Control, Including Roads	$32,540,000	$6,159,000	($26,381,000)	($1,319,050)
Tier 2 Natural Resources Restoration for Pollution Control	$58,868,000	$6,435,000	($52,433,000)	($2,621,650)
Tier 2 Subtotal: Agriculture, Stormwater, Natural Resources	$138,174,538	$12,594,000	($125,580,538)	($6,279,027)
Tier 2 Total	**$668,573,538**	**$391,197,565**	**($277,375,974)**	**($13,868,799)**

Tier 1 & Tier 2 Total				
Total Summary: Costs & Financing Sources	**Projected 20-Year Costs**	**Projected 20-Yr Financing**	**Total 20-Year Gap**	**Annualized Gap**
Municipal Wastewater Control, including CSO	$868,370,000	$593,784,703	($274,585,297)	($13,729,265)

Total Summary: Costs & Funding Sources	Projected 20-Year Costs	Projected 20-Yr Funds	Total 20-Year Gap	Annualized Gap
Agriculture Pollution Control	$574,400,192	$207,350,000	($367,050,192)	($18,352,510)
Stormwater Pollution Control, Including Roads	$727,218,108	$207,994,179	($519,223,929)	($25,437,196)
Natural Resources Restoration for Pollution Control	$142,753,000	$39,362,000	($103,391,000)	($5,169,550)
Subtotal: Agriculture, Stormwater, Natural Resources	$1,444,371,300	$454,706,179	($989,665,121)	($48,959,256)
Tier 1 & Tier 2 Total	**$2,312,741,300**	**$1,048,490,882**	**($1,264,250,418)**	**($62,688,521)**

Projected 20-year costs, state, municipal, and private: $2,312, 741,300

Projected 20-year funds: $1,048,490,882

Unavoidable or Inevitable Costs

- Some of the costs included within the $2.3 billion estimated 20 year costs to the State likely are unavoidable.
- Cost estimates note that approximately $530 million to $590 million will be required over 20 years for wastewater treatment plant upgrades and combined sewer overflow retrofits.
  - Incurred regardless of TMDL or implementation plan.

Act 64, Sec. 40. Legislative Report

- Require State Treasurer to report to General Assembly.
- Recommend **long term funding** sources for Clean Water Fund. Recommendations shall Include:
  - Proposed revenue sources
  - Recommendation for incentivizing Best Management Practices
  - Estimated amount of revenue to be generated by revenue source.
  - Summary of how each source will be administered, collected, and enforced
  - Assessment of whether the State should use bonds to finance water quality improvements
  - Legislative proposal to implement each of the proposed revenue sources

State Treasurer's Report

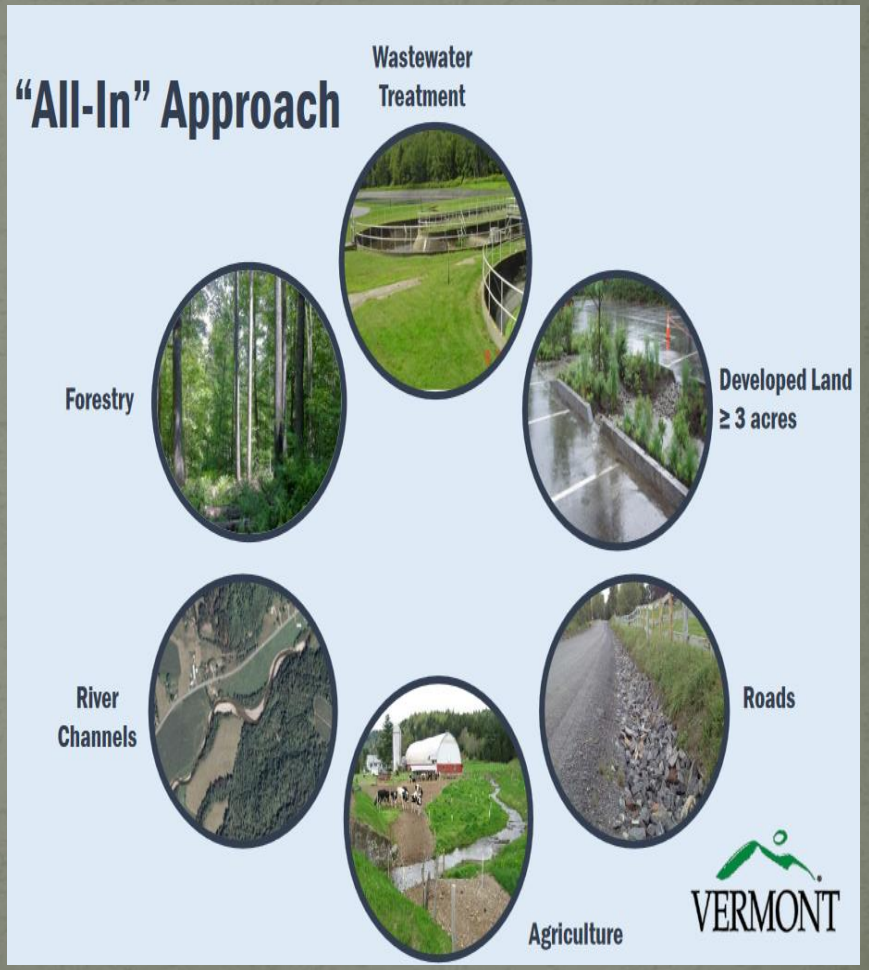
CLEAN WATER REPORT

REQUIRED BY ACT 64 OF 2015

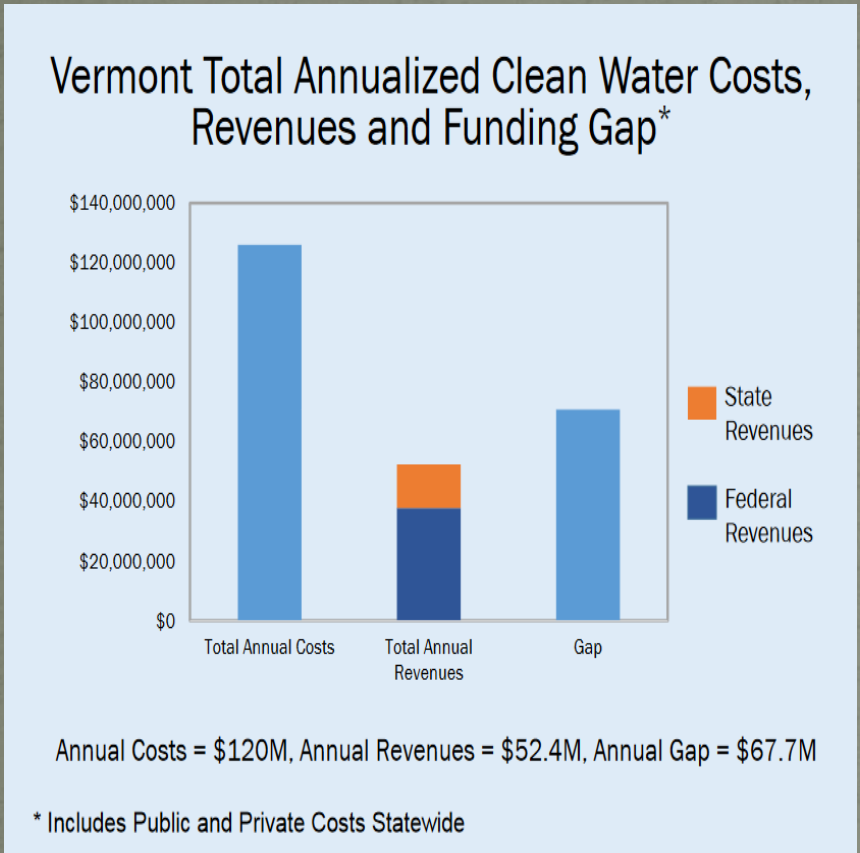
STATE OF VERMONT

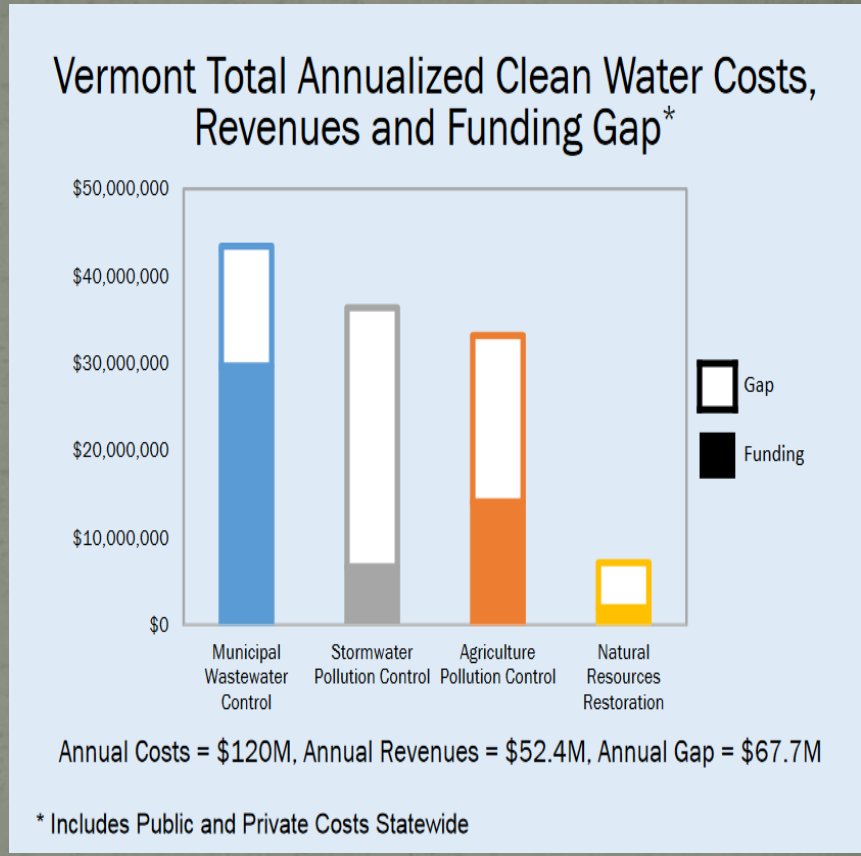
OFFICE OF THE STATE TREASURER

January 15, 2017



State Treasurer's Report





Share Responsibility

- An “all-in” approach requires shared responsibility across all sectors.
- If the State does not subsidize a portion of costs, they will be fully absorbed by farms, municipalities, businesses, and private residences.
- The State Treasurer recommended that the State should attempt to address a significant portion of the cost burden related to the regulatory costs.
- The report recommended that the State provide $25 million in additional monies to share the responsibility.

State Treasurer's Report

- To achieve these revenues the report recommended:
  - Establish a two-year interim funding plan for high-priority projects to facilitate water quality implementation efforts and allow for the long-term plan to be built.
    - $15m in available capital money + $5 m in transportation infrastructure bond money.
  - Establish a long-term funding plan.
    - To the extent possible, use existing resources.
    - If existing resources are inadequate enact a long-term revenue source.

Revenue Reviewed

- $50 annual flat parcel fee: $16.6 million
- $3 per acre per parcel fee: $15 million
- Impervious surface tiered acreage fee: $18 million
- Impervious surface tiered parcel fee: $18 million
- Property tax increase of $0.01: $8 million
- Surtax on personal income: $variable
- Excise tax on motor fuel: $3 million
- Sales tax on beauty salon services: $4.3 million
- Amending Current Use to 90% reduction: $4.5 million
- Reclaim unclaimed beverage container deposits: $2 million

Treasurer Revenue Recommendation

- Extend clean water surcharge on property transfers.
- Create an affinity card program to increase awareness and engagement of in-state and out-of-state visitors.
- If the General Assembly plans to use existing resources, use of existing resources must be predictable, reliable, and built into base budget.
- If existing resources do not provide the target level of subsidy, the General Assembly should consider adopting a parcel and/or impervious surface fees.
  - Given the nexus to the water quality and the ability to tie these revenues, and to incentivize best management practices, consideration should be given to incorporating a tiered impervious cover fee as a long-term revenue option.

<u>In the end, the decisions will be up to the Administration and the General Assembly</u>.

Legislative Response to Treasurer's Report

- Property Transfer Surcharge Tax was extended.
- Additional $25 in capital money was used in FY2018 and 2019.
- In 2018, the unclaimed bottle deposits were deposited to the Clean Water Fund. $1.5 to $2 million annually.
- Multiple other funding options were discussed, including several variations of per parcel/impervious surface fees.

Issues Discussed re Parcel and Impervious Surface Fees

- Who will collect the fee? Towns or the State.
- How to collect fees? On the property tax bill or a new bill?
- If the fee is a flat fee per parcel, is that regressive?
- If the fee is based on parcel size, does it reflect the nexus to water quality—a 4-acre parcel of impervious surface may be much worse than a 400-acre parcel of forestland.
- If the fee is on impervious surface, how will the amount of impervious surface be calculated? GIS? On the ground measurement? Default average fees (ERUs)?
- Who is exempt? Churches? Schools? Towns? Vtrans?

Work It: Act 73 of 2017

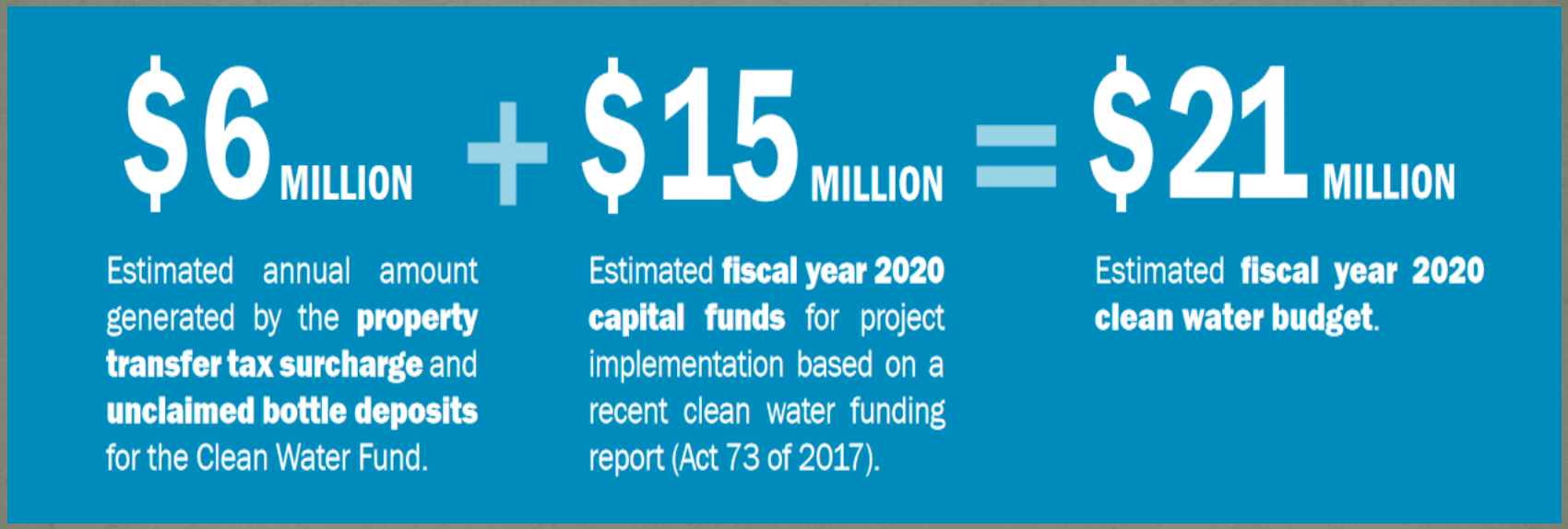
- Established the Working Group on Water Quality Funding to recommend to the General Assembly draft legislation for equitable and effective long-term funding methods to support clean water efforts in Vermont.
- The Working Group on Water Quality Funding did not recommend a long-term funding alternative.
- The Working Group recommended:
  - Utilizing existing State revenues and financial instruments to fund clean water through FY21.
  - Maintaining a Capital Bill clean water investment of $15 million a year through FY20-21.

Work It: Act 73

- Beyond FY21, the Working Group assumed the annual capital investment would be between $10 and $12m per year.
- Additional revenues—other than capital funds—would likely be needed to support clean water work.
- The Working Group's discussion centered on a fee on the amount of runoff from a parcel, as the most viable and equitable long-term funding method.
- Two key issues that must be resolved in order to fully evaluate and implement a fee
  - Revenue collection (who collects)
  - Service delivery (delivery of funds and for what use).

And Then What?

- Act 168 of 2018 directed the Clean Water Board to recommend clean water projects to be funded with capital funds.



Clean Water Board FY20 Recommendations

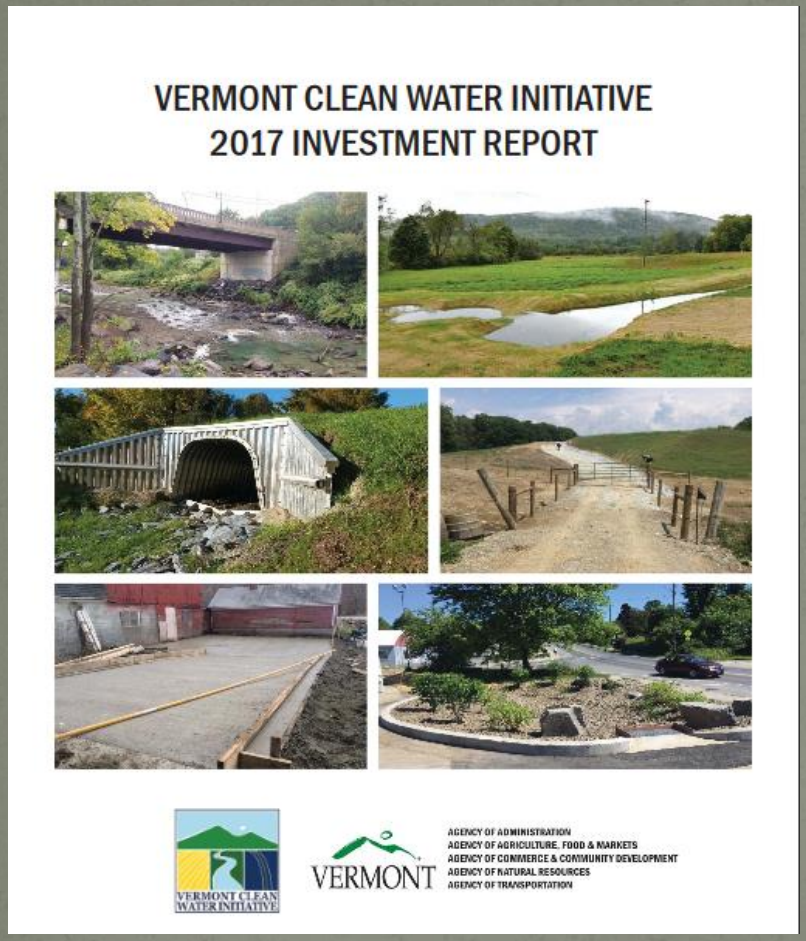
CLEAN WATER BOARD
SFY 2020 DRAFT BUDGET (11/13/2018)

No.	Sector	Agency	Activity	Clean Water Funds	Capital Bill FY20	Other	Total
1	Agriculture	AAFM	Agronomy Conservation Assistance Program (ACAP)	235,000	-	-	235,000
2	Agriculture	AAFM	Water Quality Grants to Partners and Farmers	2,050,000	4,000,000	-	6,050,000
3	Agriculture	AAFM	Operating	550,000	-	-	550,000
4	Agriculture	VHCB	Agricultural Water Quality Projects	-	1,100,000	-	1,100,000
5	Agriculture	VHCB	Water Quality Projects to Enhance Natural Resources	-	1,700,000	-	1,700,000
6	Innovation	All	Multi-Sector Innovation, DEC and Partner Support	2,480,000	-	-	2,480,000
7	Nat'l Resources	ANR-DEC	Natural Resources Restoration	450,000	2,200,000		2,650,000
8	Nat'l Resources	ANR-DEC	Lake Carmi Fund	50,000	50,000	-	100,000
9	Nat'l Resources	ANR-FPR	Forestry/Skidder Bridges	-	50,000	-	50,000
10	Roads	ANR-DEC	Municipal Roads Grants-in-Aid	3,600,000		-	3,600,000
11	Roads	VTrans	Municipal Better Roads	1,400,000		500,000	1,900,000
12	Stormwater	ANR-DEC	Municipal Stormwater Project Planning & Implt'ion (MS4)	1,500,000			1,500,000
13	Stormwater	ANR-DEC	Municipal Stormwater Project Planning & Implt'ion (Priv.)	600,000		-	600,000
14	Stormwater	AoA	Stormwater Utility Payments ($25K each)(e)(1)(H)	125,000	-	-	125,000
15	Stormwater	ACCD	Better Connections (SW planning)	100,000	-	-	100,000
16	Stormwater	ACCD	Downtown Transportation Fund (SW BMPs)	-	100,000	-	100,000
17	Wastewater	ANR-DEC	WWTF operators support	110,000	-	-	110,000
18	Wastewater	ANR-DEC	CWSRF	-	2,500,000	-	2,500,000
19	Wastewater	ANR-DEC	Municipal Pollution Control Grants	-	3,300,000	-	3,300,000
20			**Total Requested**	13,250,000	15,000,000	500,000	28,750,000
21			**Anticipated Available**	6,000,000	15,000,000		21,000,000

Revenue Sources of Clean Water Board Recommendations FY16-FY20

Clean Water Fund Board Recommended Funding FY2016 - FY2020					
	FY16	FY17	FY18	FY19	FY20 (proposed)
Clean Water Surcharge	4,719,216.51	5,803,208.94	4,737,194.61	4,000,000 (budgeted)	4,000,000
Interest			42,806.37		
Donations			240.00		
Capital Bill Funds				25,655,000	15,000,000
Unclaimed Bottle Deposits					2,000,000
Total	4,719,216.51	5,803,208.94	4,780,240.98	29,655,000	21,000,000

Clean Water Investment Report



VERMONT CLEAN WATER INITIATIVE
2017 INVESTMENT REPORT

VERMONT CLEAN WATER INITIATIVE

VERMONT

AGENCY OF ADMINISTRATION
AGENCY OF AGRICULTURE, FOOD & MARKETS
AGENCY OF COMMERCE & COMMUNITY DEVELOPMENT
AGENCY OF NATURAL RESOURCES
AGENCY OF TRANSPORTATION

VERMONT CLEAN WATER INITIATIVE 2017 INVESTMENT REPORT

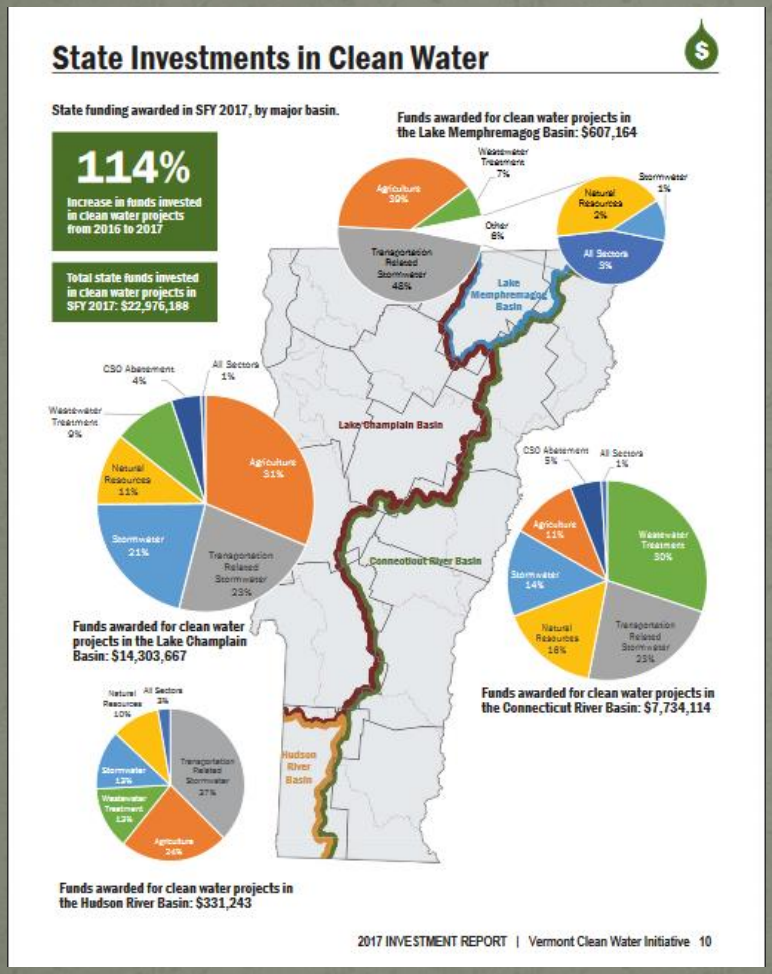
Summary of the Vermont Clean Water Initiative
Describing State Fiscal Year (SFY) 2017 State Investments, Actions, and Outcomes

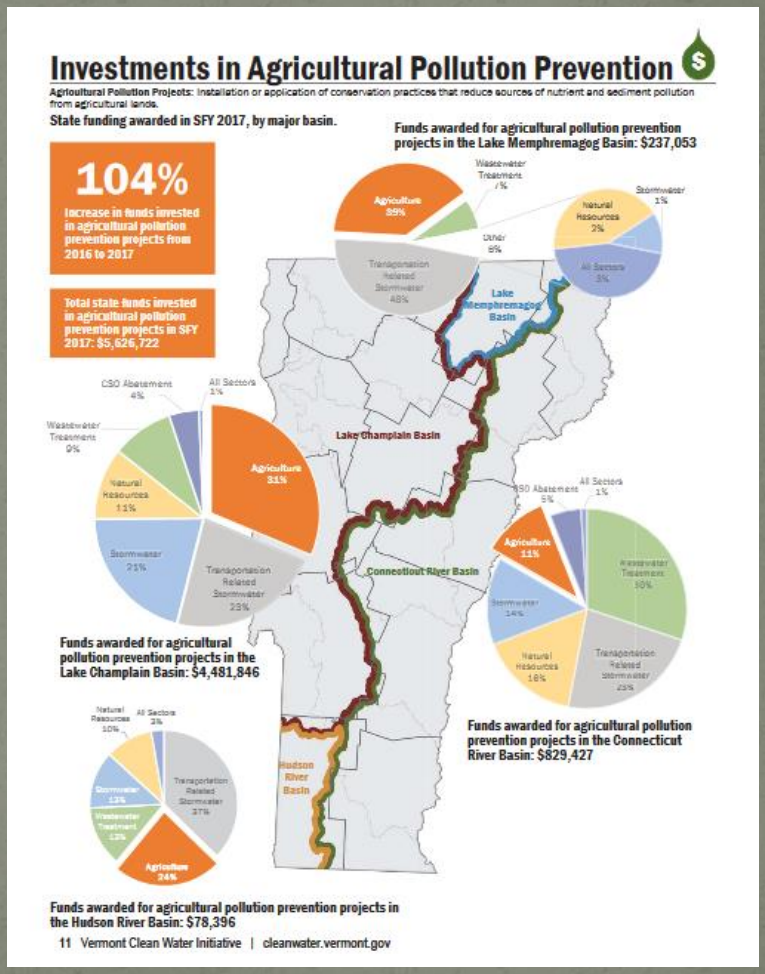
Submitted by the Vermont Agency of Administration
January 15, 2018

Relevant Statutory Reporting Requirements:	Fulfilled by:
Act 64 (2015),[1] Section 36, codified at 10 V.S.A. § 1386(d) Execution of the Implementation Plan for the Lake Champlain Total Maximum Daily Load (TMDL)	Vermont Clean Water Investment Report, Appendix C
Act 64 (2015),[1] Section 36, codified at 10 V.S.A. § 1386(e) Activities and Progress of Water Quality Ecosystem Restoration Programs	Vermont Clean Water Investment Report, Appendix B
Act 64 (2015),[1] Section 37, codified at 10 V.S.A. § 1389a (a) The Report shall summarize all investments, including their cost-effectiveness, made by the Clean Water Fund Board and other State agencies for clean water restoration over the prior calendar year.	Vermont Clean Water Investment Report, Chapters 3-5; reported by SFY[2]
Act 64 (2015),[1] Section 37, codified at 10 V.S.A. § 1389a (b)(1) Documentation of progress or shortcomings in meeting established indicators for clean water restoration	Future reports will include interim targets to evaluate progress
Act 64 (2015),[1] Section 37, codified at 10 V.S.A. § 1389a (b)(2) A summary of additional funding sources pursued by the Board, including whether those funding sources were attained; if it was not attained, why it was not attained; and where the money was allocated from the Fund	Vermont Clean Water Investment Report, Appendix D
Act 64 (2015),[1] Section 37, codified at 10 V.S.A. § 1389a (b)(3) A summary of water quality problems or concerns in each watershed basin of the State, a list of water quality projects identified as necessary in each basin of the State, and how identified projects have been prioritized for implementation	Vermont Clean Water Investment Report, Appendix A
Act 64 (2015),[1] Section 37, codified at 10 V.S.A. § 1389a (b)(4-5) A summary of any changes to applicable federal law or policy related to the State's water quality improvement efforts, including any changes to requirements to implement total maximum daily load plans in the State; a summary of available federal funding related to or for water quality improvement efforts in the State	Vermont Clean Water Investment Report, Appendix E

https://dec.vermont.gov/watershed/cwi/projects

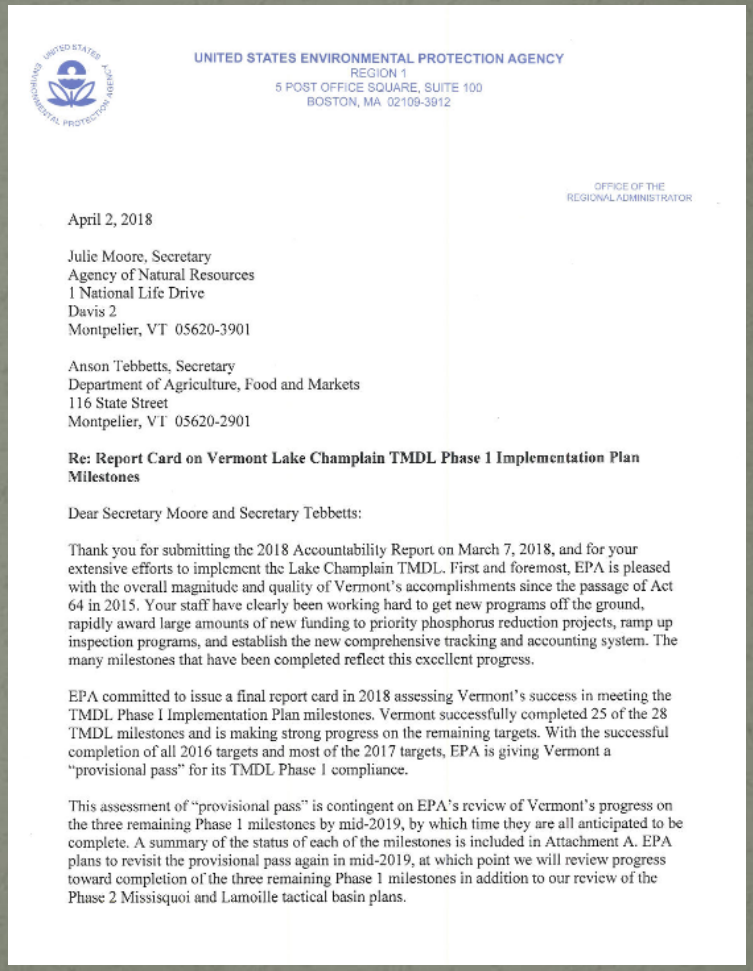
Clean Water Investment Report





Funding Grade: Incomplete

- EPA Accountability Framework for Lake Champlain TMDL.
- EPA issues a final report card in early 2018 assessing Vermont's success in meeting the Accountability Framework.



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

OFFICE OF THE
REGIONAL ADMINISTRATOR

April 2, 2018

Julie Moore, Secretary
Agency of Natural Resources
1 National Life Drive
Davis 2
Montpelier, VT 05620-3901

Anson Tebbetts, Secretary
Department of Agriculture, Food and Markets
116 State Street
Montpelier, VT 05620-2901

Re: Report Card on Vermont Lake Champlain TMDL Phase 1 Implementation Plan Milestones

Dear Secretary Moore and Secretary Tebbetts:

Thank you for submitting the 2018 Accountability Report on March 7, 2018, and for your extensive efforts to implement the Lake Champlain TMDL. First and foremost, EPA is pleased with the overall magnitude and quality of Vermont's accomplishments since the passage of Act 64 in 2015. Your staff have clearly been working hard to get new programs off the ground, rapidly award large amounts of new funding to priority phosphorus reduction projects, ramp up inspection programs, and establish the new comprehensive tracking and accounting system. The many milestones that have been completed reflect this excellent progress.

EPA committed to issue a final report card in 2018 assessing Vermont's success in meeting the TMDL Phase I Implementation Plan milestones. Vermont successfully completed 25 of the 28 TMDL milestones and is making strong progress on the remaining targets. With the successful completion of all 2016 targets and most of the 2017 targets, EPA is giving Vermont a "provisional pass" for its TMDL Phase 1 compliance.

This assessment of "provisional pass" is contingent on EPA's review of Vermont's progress on the three remaining Phase 1 milestones by mid-2019, by which time they are all anticipated to be complete. A summary of the status of each of the milestones is included in Attachment A. EPA plans to revisit the provisional pass again in mid-2019, at which point we will review progress toward completion of the three remaining Phase 1 milestones in addition to our review of the Phase 2 Missisquoi and Lamoille tactical basin plans.

Funding Grade: Incomplete

- EPA issued a report card in early 2018 assessing Vermont's success in meeting the EPA Accountability Framework for Lake Champlain TMDL.
- EPA "is pleased with the overall magnitude and quality of Vermont's accomplishments since passage of Act 64."
- Many milestones have been completed . . .Vermont successfully completed 25 of 28 TMDL milestones.

Nevertheless, "EPA is giving Vermont a provisional pass."

Funding Grade: Incomplete

- The provisional pass is contingent on EPA's review of Vermont's progress on three remaining Phase 1 milestones by mid-2019, by which time, they are all expected to be complete.
- The third remaining task is the establishment of long-term revenue sources.
- **It is important that the State establish a long-term revenue source as identified in the TMDL accountability framework since this is critical to successful and full implementation of the TMDL.**
  - **EPA does not specify an amount of long-term revenue required. Not all costs will be borne by the State.**

And What if You Don't? EPA

If EPA finds Vermont has failed to make satisfactory progress, EPA may take one or more of the following actions:

- Revise the TMDL to reallocate additional load reductions from nonpoint to point sources, such as wastewater treatment plants (e.g., reduce the wasteload allocations for facilities to the limit of phosphorus removal technology).
- Expand NPDES permit coverage to unregulated sources.
  - For example, exercise Residual Designation Authority (RDA) to increase the number of sources or communities regulated under the NPDES permit program.
- Increase and target federal enforcement and compliance assurance in the watershed.

And What if You Don't? Impacts

- Human uses of water resources–e.g., drinking water.
- Tourism. State waters support annual spending of $2.5 billion.
- Property Values.
- Natural resources and habitat.

Conclusion

- Federal and State water quality law requires the State to incur costs to implement permitting and water quality programs.
- TMDLs across the State and measures necessary to implement the TMDLs will require additional revenue to effectively implement.
- To provide the State's equitable share of the "All-In" approach, the State may need to increase revenue generate for water quality.
- If a long-term water source of water quality revenue is not enacted, the State may be subject to additional EPA-imposed water quality permitting requirements that likely may not be as effective as Act 64.