An Overview of Water Quality Law

House Committee on Agriculture, Food Resiliency and Forestry

Jan. 21, 2025

Clean Water Act--Amendments

- In 1972, Congress passed the Clean Water Act (CWA)Amendments.
- The CWA amended the then existing Federal Water Pollution Control Act, which remains the controlling law.

Multi-Purpose

- The CWA aims to prevent, reduce, and eliminate pollution in the nation's water in order to “restore and maintain the chemical, physical, and biological integrity of the Nation's waters.” 33 U.S.C. § 1251 (CWA § 101).
- The CWA achieves these purposes in multiple ways—water quality requirements on States; permitting requirements; wetlands regulation; funding, and others.

Federal CWA Requirements-Permitting

33 U.S.C. §1362 (CWA §502)

- A discharge of pollutants to a navigable water is prohibited unless the discharger has a permit from U.S. EPA or a delegated state.
- "Discharge of pollutants" means (A) any addition of any **pollutant** to **navigable waters** from any **point source**, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.
- The term "**pollutant**" means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.
- "Navigable waters" mean "waters of the United States, including the territorial seas."

Federal CWA Requirements-Permitting

40 C.F.R. §122.2, U.S. EPA Rules

Discharge of a pollutant means:

(a) Any addition of any "pollutant" or combination of pollutants to "**waters of the United States**" from any "point source," or

(b) Any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

What Used to Require a Permit

30 C.F.R. § 120.2 Definitions. For the purpose of this regulation these terms are defined as follows:

(a) Waters of the United States means:

(1) **Waters** which are:

(i) Currently used, or were used in the past, or may be susceptible to use in **interstate or foreign commerce**, including all waters which are subject to the ebb and flow of the tide;

(ii) The territorial seas; or

(iii) Interstate waters, **including interstate wetlands**;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) **Tributaries** of waters identified in paragraph (a)(1) or (2) of this section:

(i) That are relatively permanent, standing or continuously flowing bodies of water; or

(ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;

(4) **Wetlands** adjacent to the following waters:

(i) Waters identified in paragraph (a)(1) of this section; or

(ii) **Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3)(i) of this section and with a continuous surface connection to those waters; or (iii) Waters identified in paragraph (a)(2) or (3) of this section when the wetlands either alone or in combination with similarly situated waters in the region, <u>significantly affect the chemical, physical, or biological integrity of waters</u> identified in paragraph (a)(1) of this section; . . .**

Significantly Affect

(6) Significantly affect means a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section. To determine whether waters, either alone or in combination with similarly situated waters in the region, have a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section, the functions identified in paragraph (c)(6)(i) of this section will be assessed and the factors identified in paragraph (c)(6)(ii) of this section will be considered:

(i) Functions to be assessed:

(A) Contribution of flow;

(B) Trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants);

(C) Retention and attenuation of floodwaters and runoff;

(D) Modulation of temperature in waters identified in paragraph (a)(1) of this section; or

(E) Provision of habitat and food resources for aquatic species located in waters identified in paragraph (a)(1) of this section;

(ii) Factors to be considered:

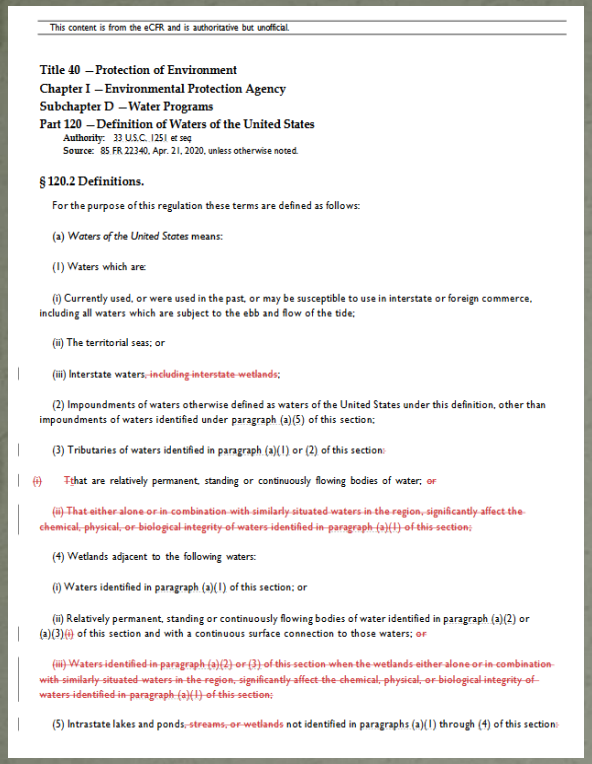
(A) The distance from a water identified in paragraph (a)(1) of this section;

(B) Hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow;

(C) The size, density, or number of waters that have been determined to be similarly situated;

(D) Landscape position and geomorphology; and

(E) Climatological variables such as temperature, rainfall, and snowpack



This content is from the eCFR and is authoritative but unofficial.

Title 40 — Protection of Environment
Chapter I — Environmental Protection Agency
Subchapter D — Water Programs
Part 120 — Definition of Waters of the United States

Authority: 33 U.S.C. 1251 *et seq*
Source: 85 FR 22340, Apr. 21, 2020, unless otherwise noted.

§ 120.2 Definitions.

For the purpose of this regulation these terms are defined as follows:

(a) *Waters of the United States* means:

(1) Waters which are:

(i) Currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

(ii) The territorial seas; or

(iii) Interstate waters, ~~including interstate wetlands~~;

(2) Impoundments of waters otherwise defined as waters of the United States under this definition, other than impoundments of waters identified under paragraph (a)(5) of this section;

(3) Tributaries of waters identified in paragraph (a)(1) or (2) of this section:

~~(i)~~ ~~T~~that are relatively permanent, standing or continuously flowing bodies of water; ~~or~~

~~(ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;~~

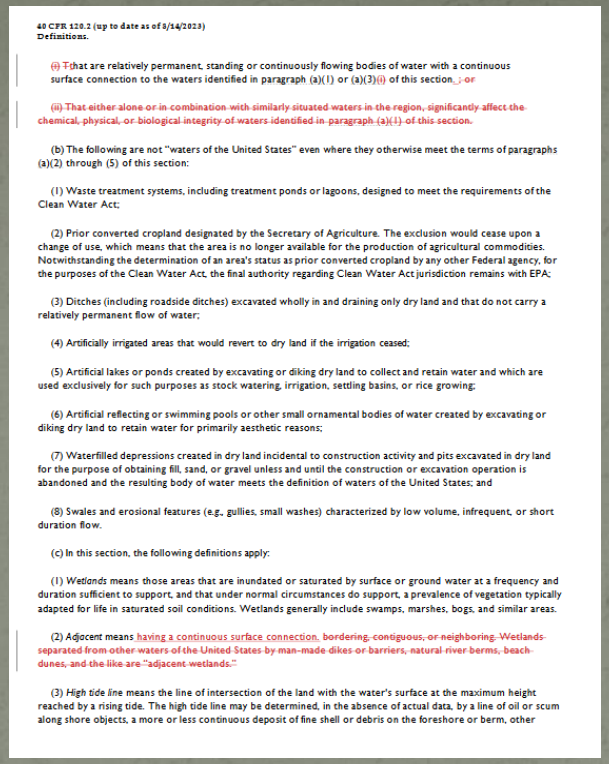
(4) Wetlands adjacent to the following waters:

(i) Waters identified in paragraph (a)(1) of this section; or

(ii) Relatively permanent, standing or continuously flowing bodies of water identified in paragraph (a)(2) or (a)(3)(i) of this section and with a continuous surface connection to those waters; ~~or~~

~~(iii) Waters identified in paragraph (a)(2) or (3) of this section when the wetlands either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section;~~

(5) Intrastate lakes and ponds, ~~streams, or wetlands~~ not identified in paragraphs (a)(1) through (4) of this section



40 CFR 120.2 (up to date as of 8/14/2023)
Definitions.

~~(i)~~ ~~T~~that are relatively permanent, standing or continuously flowing bodies of water with a continuous surface connection to the waters identified in paragraph (a)(1) or (a)(3)(i) of this section ; ~~or~~

~~(ii) That either alone or in combination with similarly situated waters in the region, significantly affect the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section.~~

(b) The following are not "waters of the United States" even where they otherwise meet the terms of paragraphs (a)(2) through (5) of this section:

(1) Waste treatment systems, including treatment ponds or lagoons, designed to meet the requirements of the Clean Water Act;

(2) Prior converted cropland designated by the Secretary of Agriculture. The exclusion would cease upon a change of use, which means that the area is no longer available for the production of agricultural commodities. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with EPA;

(3) Ditches (including roadside ditches) excavated wholly in and draining only dry land and that do not carry a relatively permanent flow of water;

(4) Artificially irrigated areas that would revert to dry land if the irrigation ceased;

(5) Artificial lakes or ponds created by excavating or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing;

(6) Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating or diking dry land to retain water for primarily aesthetic reasons;

(7) Waterfilled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States; and

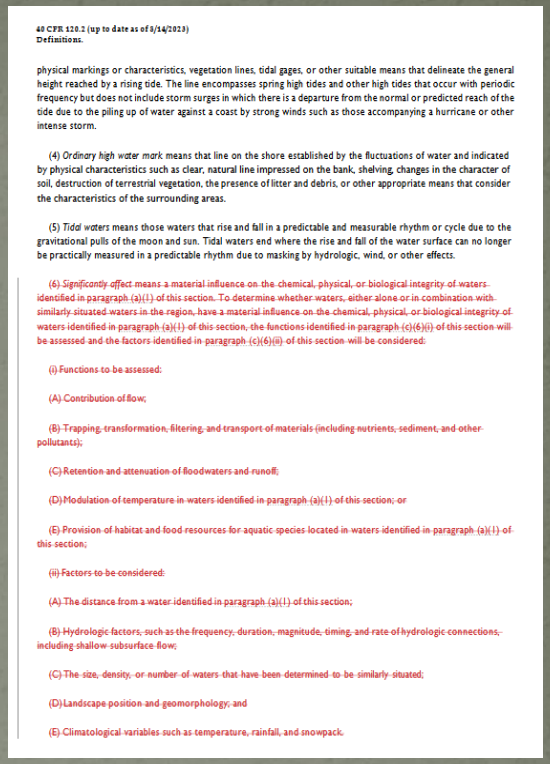
(8) Swales and erosional features (e.g., gullies, small washes) characterized by low volume, infrequent, or short duration flow.

(c) In this section, the following definitions apply:

(1) *Wetlands* means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

(2) *Adjacent* means having a continuous surface connection, bordering, contiguous, or neighboring. Wetlands separated from other waters of the United States by man-made dikes or barriers, natural river berms, beach dunes, and the like are "adjacent wetlands."

(3) *High tide line* means the line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other



40 CFR 120.2 (up to date as of 8/14/2023)
Definitions.

physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

(4) *Ordinary high water mark* means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

(5) *Tidal waters* means those waters that rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by hydrologic, wind, or other effects.

(6) *Significantly affect* means a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section. To determine whether waters, either alone or in combination with similarly situated waters in the region, have a material influence on the chemical, physical, or biological integrity of waters identified in paragraph (a)(1) of this section, the functions identified in paragraph (c)(6)(i) of this section will be assessed and the factors identified in paragraph (c)(6)(ii) of this section will be considered:

(i) Functions to be assessed:

(A) Contribution of flow;

(B) Trapping, transformation, filtering, and transport of materials (including nutrients, sediment, and other pollutants);

(C) Retention and attenuation of floodwaters and runoff;

(D) Modulation of temperature in waters identified in paragraph (a)(1) of this section; or

(E) Provision of habitat and food resources for aquatic species located in waters identified in paragraph (a)(1) of this section;

(ii) Factors to be considered:

(A) The distance from a water identified in paragraph (a)(1) of this section;

(B) Hydrologic factors, such as the frequency, duration, magnitude, timing, and rate of hydrologic connections, including shallow subsurface flow;

(C) The size, density, or number of waters that have been determined to be similarly situated;

(D) Landscape position and geomorphology; and

(E) Climatological variables such as temperature, rainfall, and snowpack.

Whether a wetland significantly affects a navigable water or its tributaries is no longer relevant. U.S. Supreme Court held that CWA jurisdiction only applies to wetlands with a continuous surface connection to bodies that are "waters of the United States" in their own right,' so that they are 'indistinguishable' from those waters. Sackett v. EPA, 598 U.S. 651 (2023).

Vermont Significantly Unaffected

- The CWA, EPA's Rules, and the Sackett decision related to federal jurisdiction.
- Vermont, like all states, has authority to regulate to a higher standard and prohibit or regulate activity not prohibited or regulated under the CWA and its rules.

(a) No person shall discharge any waste, substance, or material into waters of the State . . . without first obtaining a permit for that discharge from the Secretary. 10 V.S.A. 1259(a).

"Waters" includes all rivers, streams, creeks, brooks, reservoirs, ponds, lakes, springs, and all bodies of surface waters, artificial or natural, that are contained within, flow through, or border upon the State or any portion of it. 10 VSA 1251

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.

National Pollutant Discharge Elimination System Permits (NPDES)

NPDES requires permits for:

- Concentrated animal feeding operations (CAFOs)
- Industrial wastewater
- Municipal wastewater
- Stormwater—runoff from construction sites, urban development, and industrial sites
- Residual Designation Authority (RDA)--Permit may be required when EPA determines that the discharge contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the U.S.

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.

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

- The CWA requires states to report every two years on the quality of state waters.
- 7,100 miles of rivers and streams.
- 280 lakes, ponds, and reservoirs over 20 acres; 206 lakes, ponds, and reservoirs less than 5 acres.
- 242,219 acres of lakes, reservoirs and ponds, including 171,967 acres of Lake Champlain in Vermont.
- 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.

2022-2023 Water Quality Assessment Report

https://dec.vermont.gov/sites/dec/files/documents/2023_BiannualAssessmentReport-Final.pdf

Watershed Management Division

2022-2023 Water Quality Monitoring and Assessment Summary Report

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WATERSHED MANAGEMENT DIVISION

VERMONT

This report supplements our obligations to EPA under Sections 303(d), 305(b), and 314 of the federal Clean Water Act.

Contents

CWA § 303(d): Impaired Waters

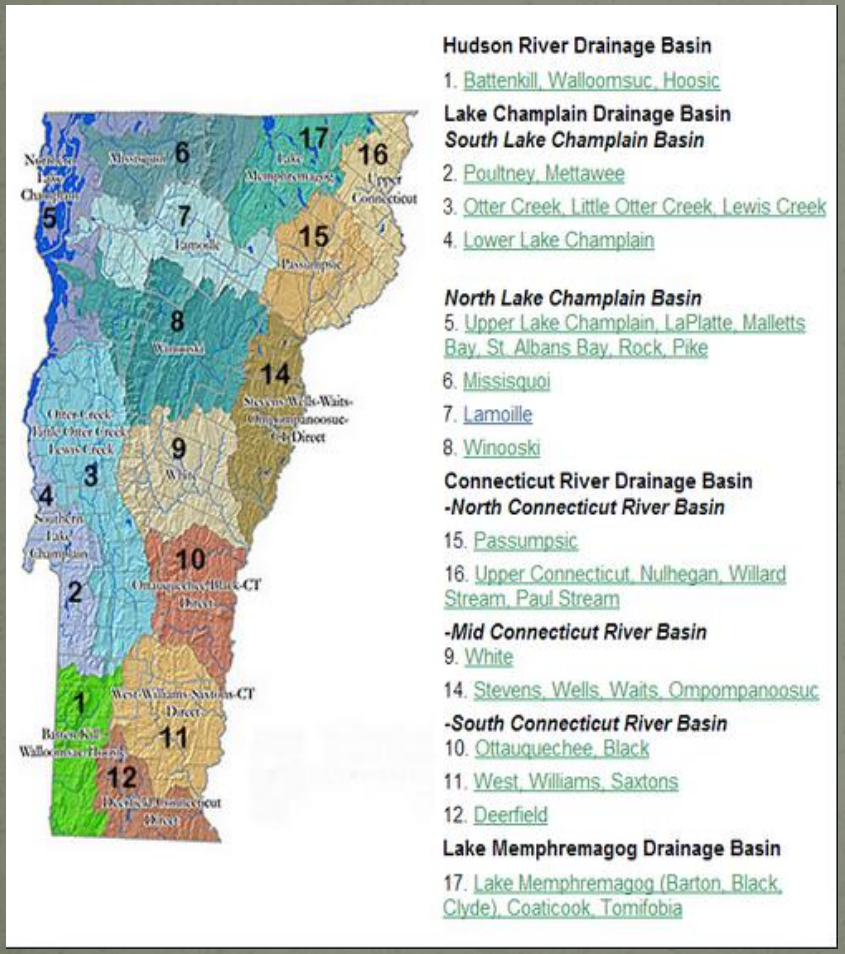
- Requires states at least every three years to review whether state waters comply with the state water quality standards. 33 U.S.C. § 1313 (CWA § 303(d)).
- If a water, or water segment, does not meet state water quality standards, it is designated IMPAIRED, and the the state must develop a cleanup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

https://dec.vermont.gov/sites/dec/files/documents/PriorityWatersList_PartA_303d_2022.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

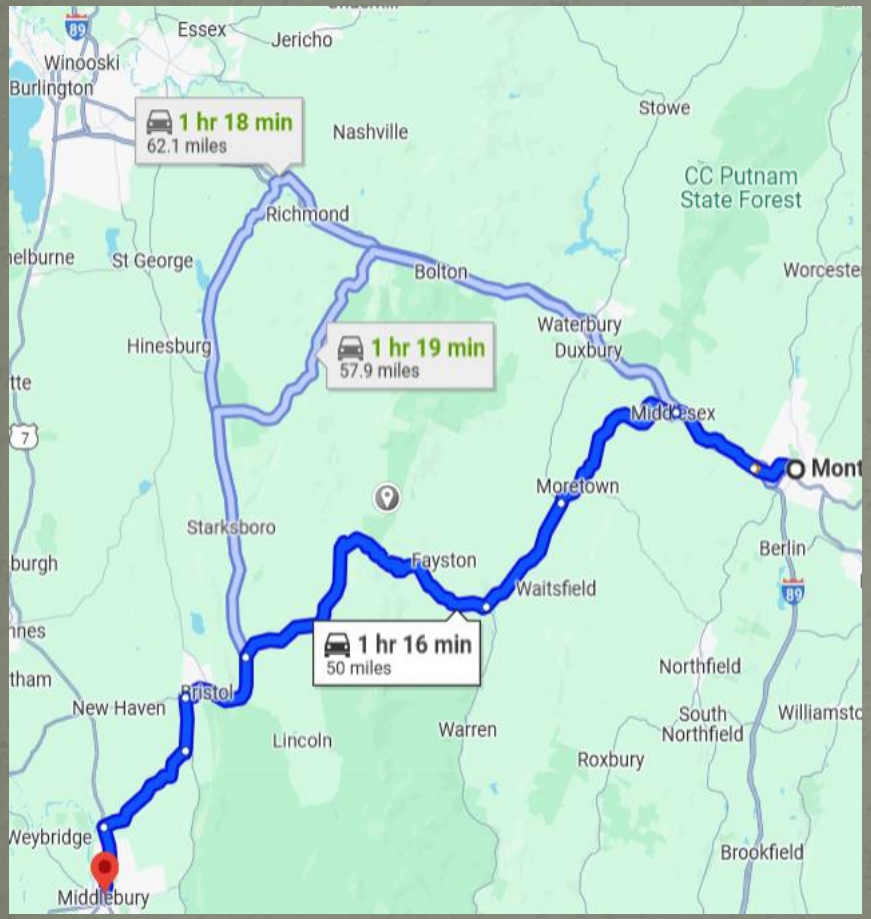
Phosphorus/Nutrients
from
Agricultural Runoff/Stormwater

Clean Water Act Section 303(d): Impaired Waters and Total Maximum Daily Loads (TMDLs)

What Constitutes a TMDL?

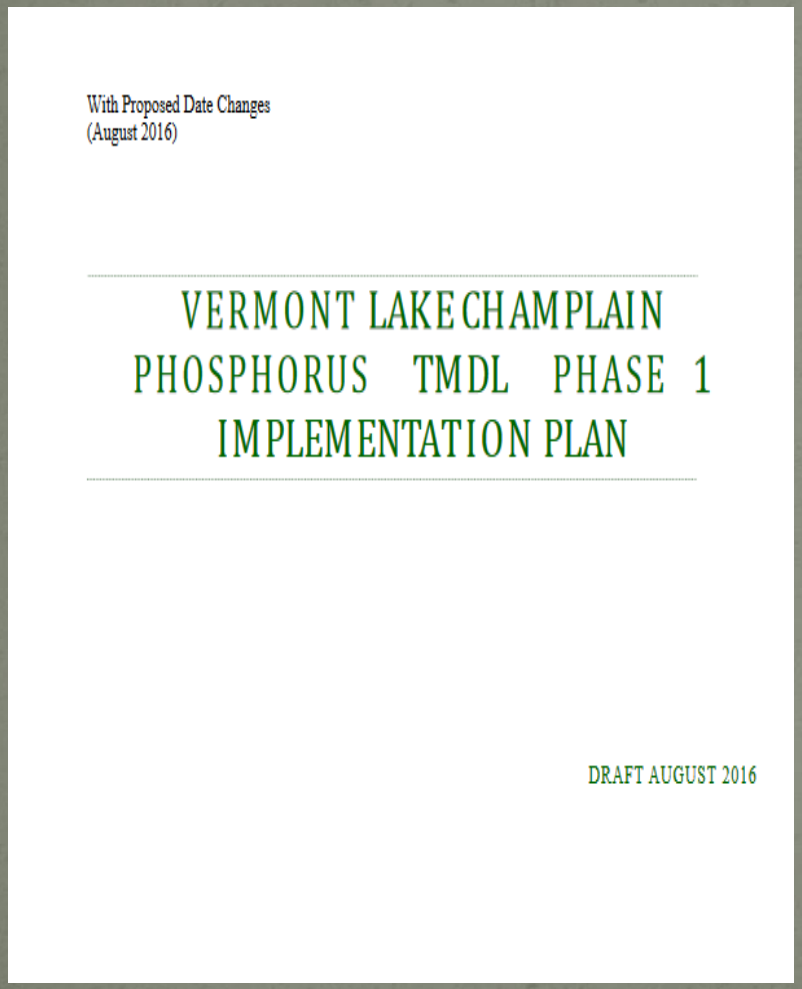
- A TMDL is a target or goal that, when reached, should result in the cleanup of the water so that it meets the State water quality standards and is no longer impaired.
  - The maximum amount of a pollutant allowed to enter a water from existing sources so that the water will meet and continue to meet 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? Are There Options?



- 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.

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


PREPARED BY THE STATE OF VERMONT FOR THE
U.S. ENVIRONMENTAL PROTECTION AGENCY

VERMONT

What Were the Alternatives?

- CWA NPDES Permitting Authority—i.e. Permits for Ground Alteration, Wastewater, CAFOs, Urban Stormwater, Industrial Stormwater, and Designated Sources.

- All of EPA's Authority.
- Additional State programs for stormwater control.
- Agricultural controls.
- Transportation controls.
- Cost Effective

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.
- The State negotiated with EPA to reach an agreement on what the State could implement under State law, without EPA imposing less-effective permitting requirements.

How Do You Get There? Plan for It.

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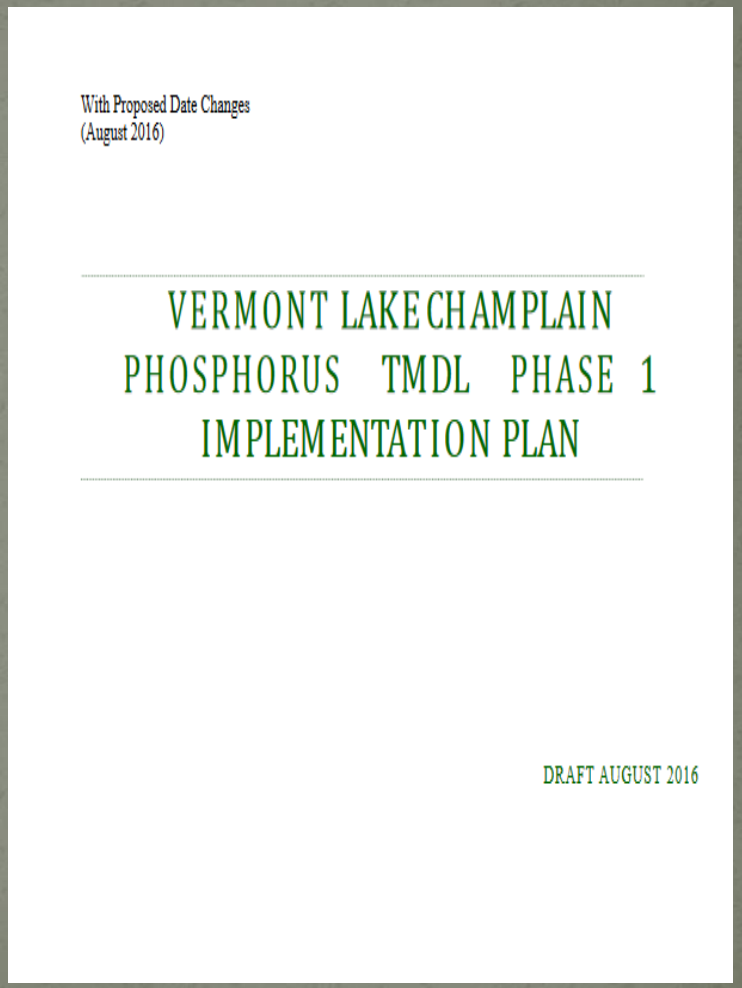
All In!

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 Funding

- Established a Clean Water Fund Special Fund to assist the State in complying with water quality requirements.
- 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.

Water Quality Funding

Title 10 : Conservation and Development

Chapter 047 : Water Pollution Control

Subchapter 007 : VERMONT CLEAN WATER FUND

(Cite as: 10 V.S.A. § 1388)

§ 1388. Clean Water Fund

(a) There is created a special fund to be known as the Clean Water Fund to be administered by the Secretary of Administration. The Fund shall consist of:

(1) revenues from the Property Transfer Tax surcharge established under 32 V.S.A. § 9602a;

(2) other gifts, donations, and impact fees received from any source, public or private, dedicated for deposit into the Fund and approved by the Secretary of Administration;

(3) the unclaimed beverage container deposits (escheats) remitted to the State under chapter 53 of this title;

(4) six percent of the revenues from the meals and rooms taxes imposed under 32 V.S.A. chapter 225; and

(5) other revenues dedicated for deposit into the Fund by the General Assembly.

(b) Notwithstanding any contrary provisions of 32 V.S.A. chapter 7, subchapter 5, unexpended balances and any earnings shall remain in the Fund from year to year. (Added 2015, No. 64, § 37, eff. June 16, 2015; amended 2017, No. 208 (Adj. Sess.), § 4b, eff. May 30, 2018; 2019, No. 76, § 3a, eff. Oct. 1, 2019.)

Water Quality Funding

State Fiscal Year 2026 Clean Water Budget at a Glance

State Fiscal Year 2026 Clean Water Budget by Funding Source

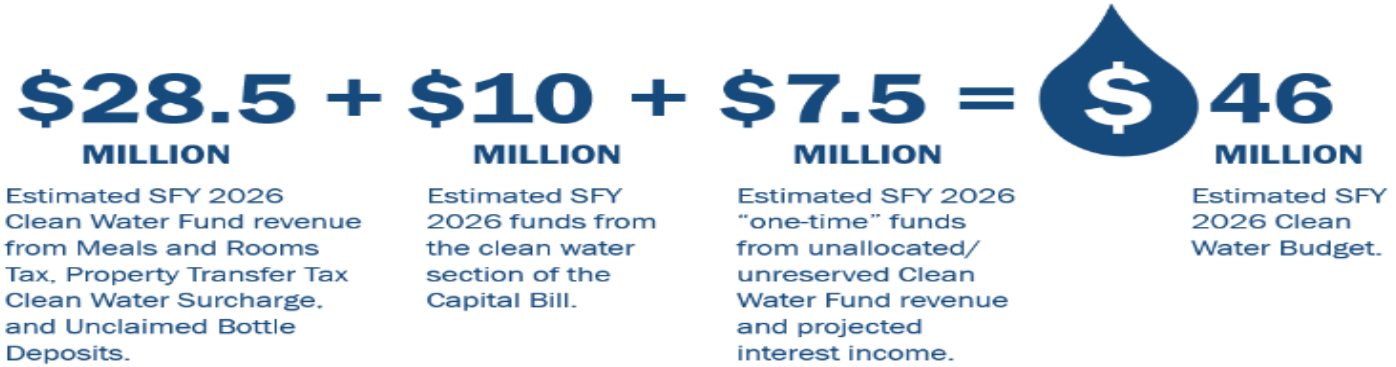


Figure 1: State Fiscal Year 2026 Clean Water Budget totals by funding source. The SFY 2026 Clean Water Budget totals approximately $46 million, and is made up of:

- $28.5 million in forecasted SFY 2026 Clean Water Fund revenue,
- $10 million from the clean water section of the Capital Bill, and
- $7.5 million in "one-time" funds from unallocated/unreserved Clean Water Fund revenue and projected interest income.

See page 5 of the SFY 2026 Policy Document for the final SFY 2026 Clean Water Budget recommendation sheet.

Proposed 2026 Budget at: https://dec.vermont.gov/sites/dec/files/WID/CWIP/2024-12-03_FINAL_SFY26CleanWaterBudgetRecommendation.pdf

Clean Water Initiative Annual Report

Vermont Clean Water Initiative
2023 Performance Report





Cover photo image descriptions (clockwise from top left):
Stone-lined ditch implementation in Troy, funded through Grants-in-Aid in partnership with the Town of Troy / Half-acre buffer planting along the Green River in Guilford, funded through the Capital Fund in partnership with the Connecticut River Conservancy / Lamoille River basin planted with cover crops, implemented by the Agency of Agriculture, Food & Markets with Lake Champlain Basin Program funds / Missisquoi River / French Hill block culvert removals, funded by the Clean Water Fund in partnership with the Department of Forest, Parks, and Recreation

VERMONT CLEAN WATER INITIATIVE

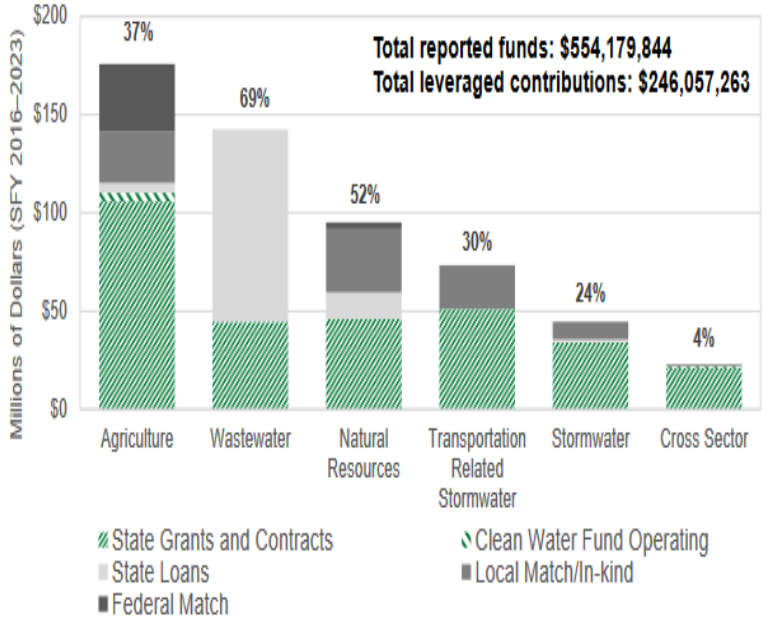
VERMONT

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

Clean Water Initiative Annual Report

Investments and Leveraged Contributions by Land Use Sector

State-funded clean water projects leverage local and federal contributions to help cover project costs and to further clean water efforts in Vermont. Loans are considered leverage as they are mostly paid back to the state for continued lending. The following figure summarizes leveraged contributions from SFY 2016 to 2023 by land use sector.



Total Maximum Daily Load (TMDL) Progress

The 2023 Performance Report summarizes the state's progress in implementing the Lake Champlain and Lake Memphremagog phosphorus Total Maximum Daily Loads (TMDLs). TMDLs identify water pollution (e.g., phosphorus) reductions required to restore water quality. The figures below show the estimated total phosphorus load reduction (metric tons per year) achieved by clean water project implementation thus far in the Lake Champlain (left) and Lake Memphremagog (right) basins. Estimates include the results of projects implemented through state and federal funding programs and in response to regulatory requirements. *See Report Chapters 3 and 4 for more information.*

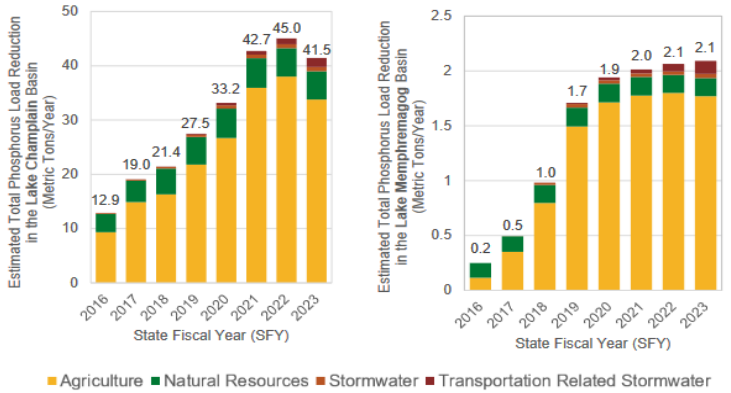


Figure ES-2: Annual estimated total phosphorus load reductions (metric tons per year) associated with reported clean water projects in the Lake Champlain (left) and Lake Memphremagog (right) basins during SFY 2016–2023 by land use sector.

Over the past eight state fiscal years, the state has made substantial progress towards reaching the water quality targets outlined in the state's large-scale phosphorus TMDLs, with 20% of the required reduction achieved to date in the Lake Champlain basin and 14% of the required reduction achieved to date in the Lake Memphremagog basin. Achieving the water quality goals outlined in the state's large-scale TMDLs is not a linear path — variance in the rate of progress is to be expected over the 20-year implementation period. The rate of progress in estimated phosphorus reductions in both the Lake Champlain and Lake Memphremagog basins has slowed in SFY 2023, however several ongoing factors are expected to accelerate the rate of progress in future years, including:

Water Quality Enforcement

Chapter 201 : Administrative Environmental Law Enforcement

Subchapter 003 : ENFORCEMENT

(Cite as: 10 V.S.A. § 8010)

§ 8010. Administrative penalties

(a) An administrative penalty may be included in an administrative order issued under section 8008 of this title or in an emergency administrative order issued under subdivision 8009(a)(1) or (3) of this title. An order assessing administrative penalties shall be accompanied by an affidavit setting forth the facts establishing the date of violation.

(b) In determining the amount of the penalty, the Secretary shall consider the following:

(1) the degree of actual or potential impact on public health, safety, welfare, and the environment resulting from the violation;

(2) the presence of mitigating circumstances, including unreasonable delay by the Secretary in seeking enforcement;

ANR

(3) whether the respondent knew or had reason to know the violation existed;

(4) the respondent's record of compliance;

(5) [Repealed.]

(6) the deterrent effect of the penalty;

(7) the State's actual costs of enforcement; and

(8) the length of time the violation has existed.

(c)(1) A penalty of not more than $42,500.00 may be assessed for each determination of a separate violation. In addition, if the Secretary determines that a violation is continuing, the Secretary may assess a penalty of not more than $17,000.00 for each day the violation continues. The maximum amount of penalty assessed under this subsection shall not exceed $170,000.00.

(2) In addition to any penalty assessed under subdivision (1) of this subsection, the Secretary may also recapture economic benefit resulting from a violation up to the $170,000.00 maximum allowed under subdivision (1) of this subsection.

Chapter 215 : Agricultural Water Quality

Subchapter 010 : ENFORCEMENT

(Cite as: 6 V.S.A. § 4993)

§ 4993. Administrative enforcement; cease and desist orders; emergency orders

(a) Notwithstanding the requirements of section 4992 of this title, the Secretary at any time may pursue one or more of the following enforcement actions:

(1) Issue a cease and desist order in accordance with the requirements of subsection (b) of this section to a person the Secretary believes to be in violation of the requirements of this chapter.

(2) Issue emergency administrative orders to protect water quality when an alleged violation, activity, or farm practice:

(A) presents an immediate threat of substantial harm to the environment or immediate threat to the public health or welfare;

(B) is likely to result in an immediate threat of substantial harm to the environment or immediate threat to the public health or welfare; or

AAFM

(C) requires a permit or an amendment to a farm issued under this chapter and a farm owner or operator has commenced an activity or is continuing an activity without a permit or permit amendment.

(3) Institute appropriate proceedings on behalf of the Agency of Agriculture, Food and Markets to enforce the requirements of this chapter, rules adopted under this chapter, or a permit or certification issued under this chapter.

(4) Order mandatory corrective actions, including a requirement that the owner or operator of a farm sell or otherwise remove livestock from a farm or production area when the volume of waste produced by livestock on the farm exceeds the infrastructure capacity of the farm or the production area to manage the waste or waste leachate and prevent runoff or leaching of wastes to waters of the State or groundwater, as required by this chapter.

(5) Seek administrative or civil penalties in accordance with the requirements of section 15, 16, 17, or 4995 of this title. Notwithstanding the requirements of section 15 of this title to the contrary, the maximum administrative penalty issued by the Secretary under this section shall not exceed $5,000.0 for each violation, and the maximum amount of any administrative penalty assessed for separate and distinct violations of this chapter shall not exceed $50,000.00.

(b) A person may request that the Secretary hold a hearing on a cease and desist order or an emergency order issued under this section within five days of receipt of the order. Upon receipt of a request for a hearing, the Secretary promptly shall set a date and time for a hearing. A request for a hearing on a cease and desist order or emergency order issued under this section shall not stay the order. (Added 2015, No. 64, § 17.)

Why? Water Quality Enforcement

(d) Cooperation and coordination. The Secretary of Agriculture, Food and Markets shall coordinate with the Secretary of Natural Resources in implementing and enforcing programs, plans, and practices developed for reducing and eliminating agricultural nonpoint source pollutants and discharges from concentrated animal feeding operations. On or before July 1, 2016, the Secretary of Agriculture, Food and Markets and the Secretary of Natural Resources shall revise the memorandum of understanding for the nonpoint program describing program administration, grant negotiation, grant sharing, and how they will coordinate watershed planning activities to comply with Pub. L. No. 92-500. The memorandum of understanding shall describe how the agencies will implement the antidegradation implementation policy, including how the agencies will apply the antidegradation implementation policy to new sources of agricultural nonpoint source pollutants. The Secretary of Agriculture, Food and Markets and the Secretary of Natural Resources shall develop the memorandum of understanding according to the public notice and comment process of 10 V.S.A. § 1259(i) regarding the implementation of the federal Concentrated Animal Feeding Operation Program and the relationship between the requirements of the federal program and State agricultural water quality requirements for large, medium, and small farms under this chapter. The memorandum of understanding shall describe Program administration, permit issuance, an appellate process, and enforcement authority and implementation. The memorandum of understanding shall be consistent with the federal National Pollutant Discharge Elimination System permit regulations for discharges from concentrated animal feeding operations. The allocation of duties under this chapter between the Secretary of Agriculture, Food and Markets and the Secretary of Natural Resources shall be consistent with the Secretary's duties, established under the provisions of 10 V.S.A. § 1258(b), to comply with Pub. L. No. 92-500. The Secretary of Natural Resources shall be the State lead person in applying for federal funds under Pub. L. No. 92-500 but shall consult with the Secretary of Agriculture, Food and Markets during the process. The agricultural nonpoint source program may compete with other programs for competitive watershed projects funded from federal funds. The Secretary of Agriculture, Food and Markets shall be represented in reviewing these projects for funding. Actions by the Secretary of Agriculture, Food and Markets under this chapter concerning agricultural nonpoint source pollution shall be consistent with the water quality standards and water pollution control requirements of 10 V.S.A. chapter 47 and the federal Clean Water Act as amended. In addition, the Secretary of Agriculture, Food and Markets shall coordinate with the Secretary of Natural Resources in implementing and enforcing programs, plans, and practices developed for the proper management of composting facilities when those facilities are located on a farm. On or before January 15, 2016, the Secretary of Agriculture, Food and Markets and the Secretary of Natural Resources shall each develop three separate measures of the performance of the agencies under the memorandum of understanding required by this subsection. Beginning on January 15, 2017 and annually thereafter, the Secretary of Agriculture, Food and Markets and the Secretary of Natural Resources shall submit separate reports to the Senate Committee on Agriculture, the House Committee on Agriculture, Food Resiliency, and Forestry, the Senate Committee on Natural Resources and Energy, and the House Committee on Environment and Energy regarding the success of each agency in meeting the performance measures for the memorandum of understanding. (Added

6 V.S.A. §4810(d) Mandated MOU for Cooperation

MEMORANDUM OF UNDERSTANDING

between

the AGENCY OF AGRICULTURE, FOOD, AND MARKETS

and

the AGENCY OF NATURAL RESOURCES

REGARDING IMPLEMENTATION AND

ENFORCEMENT of

AGRICULTURAL WATER QUALITY PROGRAMS

AS REQUIRED BY 6 V.S.A. § 4810, 10 V.S.A. §§ 1259(i) and 8003(d)

March 17, 2017

Available at: https://dec.vermont.gov/sites/dec/files/documents/MOU_AAFM-ANR_AgriculturalWaterQualityPrograms_2017-03-17.pdf

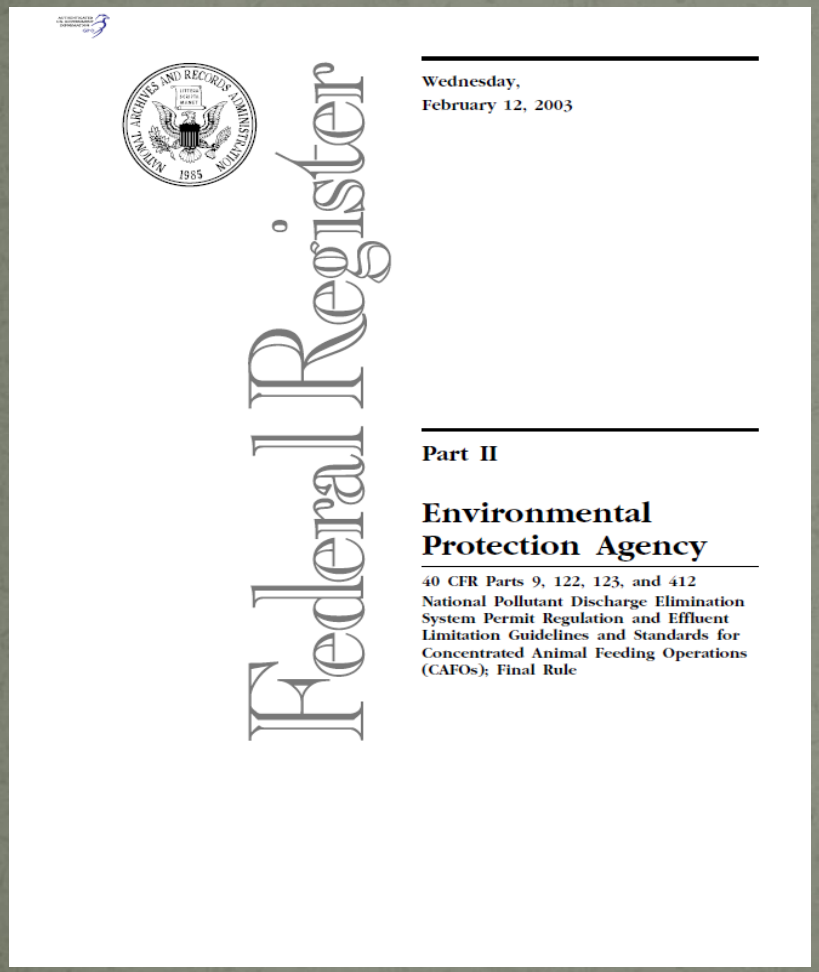
Anson B. Tebbetts, Secretary
Vermont Agency of Agriculture, Food and Markets

VERMONT
AGENCY OF AGRICULTURE, FOOD & MARKETS

Julia S. Moore, P.E., Secretary
Vermont Agency of Natural Resources

VERMONT
AGENCY OF NATURAL RESOURCES
Respect. Protect. Enjoy.

Because EPA Encouraged It!



Federal Register

Wednesday,
February 12, 2003

Part II

Environmental Protection Agency

40 CFR Parts 9, 122, 123, and 412
National Pollutant Discharge Elimination System Permit Regulation and Effluent Limitation Guidelines and Standards for Concentrated Animal Feeding Operations (CAFOs); Final Rule

F. What Flexibility Exists for States To Use Other Programs To Support the Achievement of the Goals of This Regulation?

In designing this final rule, EPA has striven to maximize the flexibility for States to implement appropriate and effective programs to protect water quality and public health by ensuring proper management of manure and related wastewater. This rule establishes binding legal requirements for Large CAFOs and maintains substantial flexibility for States to set other site-specific requirements for CAFOs as needed to achieve State program objectives. EPA encourages States to maximize use of voluntary and other non-NPDES programs to support efforts by medium and small operations to implement appropriate measures and correct problems that might otherwise cause them to be defined or designated as a CAFO. EPA encourages States to use the flexibility available under the rule so that their State non-NPDES programs complement the required regulatory program. The following examples can illustrate opportunities for this State flexibility:

- States are encouraged to work with State agriculture agencies, conservation districts, USDA and other stakeholders to create proactive programs to fix the problems of small and medium operations in advance of compelling the facilities to apply for NPDES permits.

Devil is in the Design

- The standards for the Vermont agricultural water quality program were designed to be as protective as the NPDES CAFO permit, while avoiding the need for NPDES permits.
- RAP § 6.01(a): Farms shall not create any discharge of agricultural wastes to surface waters of the State through a discrete conveyance such as, but not limited to, a pipe, ditch, or conduit without a permit from the Secretary of ANR.

Federal CAFO Requirements for Dairy Cows and Cattle

40 C.F.R. §412.31(a)

(a) For CAFO production areas. Except as provided in paragraphs (a)(1) through (a)(2) of this section, there must be no discharge of manure, litter, or process wastewater pollutants into waters of the U.S. from the production area, including design of the facility to maintain no discharge from precipitation from 25-year, 24-hour storm.

CWA Oversight and Citizen Enforcement

§1365. Citizen suits

(a) Authorization; jurisdiction

Except as provided in subsection (b) of this section and section 1319(g)(6) of this title, any citizen may commence a civil action on his own behalf—

(1) against any person (including (i) the United States, and (ii) any other governmental instrumentality or agency to the extent permitted by the eleventh amendment to the Constitution) who is alleged to be in violation of (A) an effluent standard or limitation under this chapter or (B) an order issued by the Administrator or a State with respect to such a standard or limitation, or

(2) against the Administrator where there is alleged a failure of the Administrator to perform any act or duty under this chapter which is not discretionary with the Administrator.

The district courts shall have jurisdiction, without regard to the amount in controversy or the citizenship of the parties, to enforce such an effluent standard or limitation, or such an order, or to order the Administrator to perform such act or duty, as the case may be, and to apply any appropriate civil penalties under section 1319(d) of this title.

(b) Notice

No action may be commenced—

(1) under subsection (a)(1) of this section—

(A) prior to sixty days after the plaintiff has given notice of the alleged violation (i) to the Administrator, (ii) to the State in which the alleged violation occurs, and (iii) to any alleged violator of the standard, limitation, or order, or

(B) if the Administrator or State has commenced and is diligently prosecuting a civil or criminal action in a court of the United States, or a State to require compliance with the standard, limitation, or order, but in any such action in a court of the United States any citizen may intervene as a matter of right.

(2) under subsection (a)(2) of this section prior to sixty days after the plaintiff has given notice of such action to the Administrator,

except that such action may be brought immediately after such notification in the case of an action under this section respecting a violation of sections 1316 and 1317(a) of this title. Notice under this subsection shall be given in such manner as the Administrator shall prescribe by regulation.

CWA Oversight and Citizen Enforcement

40 C.F.R. § 123.63

§ 123.63 Criteria for withdrawal of State programs.

(a) In the case of a sewage sludge management program, references in this section to "this part" will be deemed to refer to 40 CFR part 501. The Administrator may withdraw program approval when a State program no longer complies with the requirements of this part, and the State fails to take corrective action. Such circumstances include the following:

(1) Where the State's legal authority no longer meets the requirements of this part, including:

(i) Failure of the State to promulgate or enact new authorities when necessary; or

(ii) Action by a State legislature or court striking down or limiting State authorities.

(2) Where the operation of the State program fails to comply with the requirements of this part, including:

(i) Failure to exercise control over activities required to be regulated under this part, including failure to issue permits;

(ii) Repeated issuance of permits which do not conform to the requirements of this part; or

(iii) Failure to comply with the public participation requirements of this part.

(3) Where the State's enforcement program fails to comply with the requirements of this part, including:

(i) Failure to act on violations of permits or other program requirements;

(ii) Failure to seek adequate enforcement penalties or to collect administrative fines when imposed; or

(iii) Failure to inspect and monitor activities subject to regulation.

(4) Where the State program fails to comply with the terms of the Memorandum of Agreement required under § 123.24 (or, in the case of a sewage sludge management program, § 501.14 of this chapter).

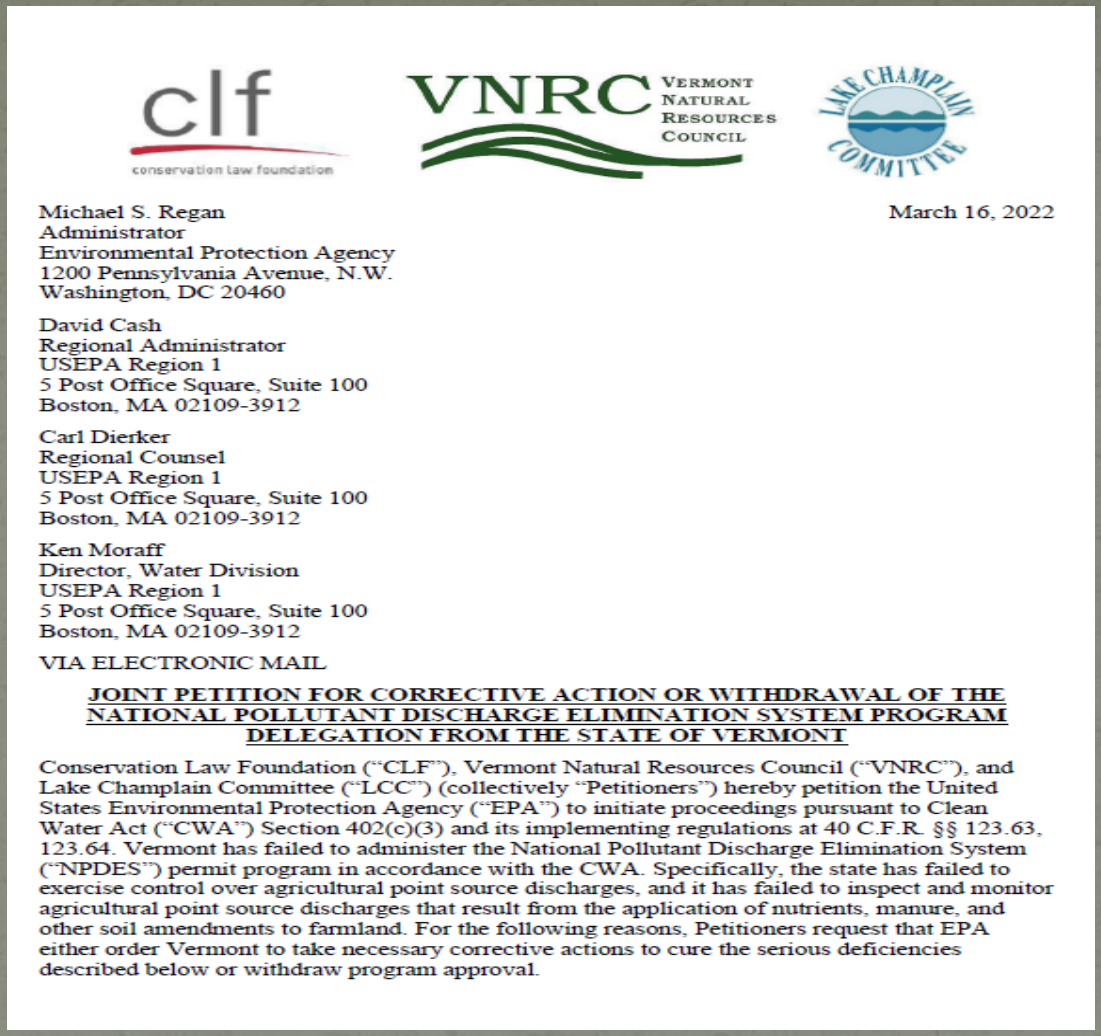
(5) Where the State fails to develop an adequate regulatory program for developing water quality-based effluent limits in NPDES permits.

(6) Where a Great Lakes State or Tribe (as defined in 40 CFR 132.2) fails to adequately incorporate the NPDES permitting implementation procedures promulgated by the State, Tribe, or EPA pursuant to 40 CFR part 132 into individual permits.

(b) [Reserved]

33 U.S.C. § 1342(c)(3) (aka CWA §402(c)(3))

(3) Whenever the Administrator determines after public hearing that a State is not administering a program approved under this section in accordance with requirements of this section, he shall so notify the State and, if appropriate corrective action is not taken within a reasonable time, not to exceed ninety days, the Administrator shall withdraw approval of such program. The Administrator shall not withdraw approval of any such program unless he shall first have notified the State, and made public, in writing, the reasons for such withdrawal.



clf conservation law foundation

VNRC Vermont Natural Resources Council

Lake Champlain Committee

Michael S. Regan
Administrator
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

March 16, 2022

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VIA ELECTRONIC MAIL

JOINT PETITION FOR CORRECTIVE ACTION OR WITHDRAWAL OF THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROGRAM DELEGATION FROM THE STATE OF VERMONT

Conservation Law Foundation ("CLF"), Vermont Natural Resources Council ("VNRC"), and Lake Champlain Committee ("LCC") (collectively "Petitioners") hereby petition the United States Environmental Protection Agency ("EPA") to initiate proceedings pursuant to Clean Water Act ("CWA") Section 402(c)(3) and its implementing regulations at 40 C.F.R. §§ 123.63, 123.64. Vermont has failed to administer the National Pollutant Discharge Elimination System ("NPDES") permit program in accordance with the CWA. Specifically, the state has failed to exercise control over agricultural point source discharges, and it has failed to inspect and monitor agricultural point source discharges that result from the application of nutrients, manure, and other soil amendments to farmland. For the following reasons, Petitioners request that EPA either order Vermont to take necessary corrective actions to cure the serious deficiencies described below or withdraw program approval.

Petition EPA to correct or withdraw VT NPDES delegation for failure to exercise control over agricultural point source discharges.

REGION 1 ADMINISTRATOR
BOSTON, MA 02109

September 9, 2024

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

RE: Joint petition from the Conservation Law Foundation, the Vermont Natural Resources Council, and the Lake Champlain Committee

Dear Secretary Moore,

On March 16, 2022, EPA Region 1 received a joint petition from the Conservation Law Foundation ("CLF"), the Vermont Natural Resources Council ("VNRC"), and the Lake Champlain Committee ("LCC") (collectively "Petitioners") pursuant to 40 C.F.R. §§ 123.63, 123.64. The Petitioners raised issues with Vermont's administration of the State's National Pollutant Discharge Elimination System ("NPDES") program as it relates to the regulation of the State's Concentrated Animal Feeding Operations ("CAFOs") and requested that EPA Region 1 take corrective action or withdraw its authorization of Vermont's NPDES program, which is administered by the Vermont Agency of Natural Resources ("ANR").

Region 1 recognizes that two agencies, ANR and the Agency of Agriculture, Food, and Markets ("AAFAM"), each have a role in the regulation of agriculture water pollution in Vermont. Region 1 also recognizes AAFM's critical role in providing support to the agricultural community in Vermont: agriculture is an important part of the state's economy and is integral to Vermont's identity. We also know that like the tourism, food and beverage, and outdoor recreation sectors, the agriculture sector depends on clean water for its operations and success. We understand the importance of AAFM's mission and role in Vermont, *and* it is also vital to recognize that the current division of responsibilities between ANR and AAFM is interfering with the regulation of Vermont's CAFOs and preventing Vermont from adequately addressing agricultural water quality.

As described below, concerns similar to those raised in this petition had been previously identified in a 2008 petition filed by the Vermont Law School Environmental and Natural Resources Law Clinic ("ENRLC"). That petition resulted in a 2013 Corrective Action Plan in which Vermont agreed to take steps to improve various aspects of its NPDES program, including its approach to CAFOs.

Based on Region 1's review of the information contained in the Petition, as well as our own investigation, it is clear that Vermont has not adequately addressed deficiencies in its CAFO program and has not complied with the requirements of the 2013 Corrective Action Plan. The flaws in this program are preventing Vermont from adequately controlling phosphorus discharges from CAFOs, which contribute to severe water quality problems in Lake Champlain and other water bodies in the state. Significant changes to the state's implementation of the program are necessary to ensure Vermont meets the obligations associated with its NPDES authorization.

Prior to defining the scope of corrective action, the Region engaged the Petitioners and ANR in settlement discussions, which provided further clarity on the causes of longstanding programmatic and enforcement deficiencies in Vermont's CAFO program, and the steps needed to effectively resolve those deficiencies.[1] It is clear that the relationship between Vermont's Department of Environmental Conservation ("DEC") and AAFM related to implementation of the program is a contributing factor in the failure of the Vermont's CAFO program to meet its Clean Water Act obligations. As a result, ANR's program operations are clearly failing to meet the requirements of the Clean Water Act. This conclusion is supported by evidence assembled by the petitioners and by subsequent inspections, inquiries, and analyses conducted by Region 1. Together, these reveal that ANR has not been provided sufficient resources or operational authority to administer the NPDES program, which has resulted in inadequate monitoring and enforcement activity, among other problems. EPA has closely observed program operations in Vermont for well over a decade and despite having had ample time and opportunity to cure longstanding program deficiencies, many of which were outlined in the 2008 withdrawal petition, ANR has failed to do so. Based on these considerations and EPA's direct experience overseeing program administration, EPA has concluded that the consolidation of authority to implement the NPDES program into ANR, which is the agency that has the legal authority to implement the program, is the only workable solution to quickly resolve this matter and to avoid the initiation of withdrawal proceedings. The following actions are necessary to achieve that end:

1. ANR, the state agency with authority to administer the CWA program, must be responsible for CAFO permitting, monitoring, and enforcement relevant to implementing the Clean Water Act's NPDES program on Vermont's farms. This includes making ANR responsible for conducting routine inspections, enforcing nutrient management planning requirements, and administering discharge permits. While EPA recognizes the critical role played by AAFM in addressing agricultural water pollution, Vermont's extensive sub-delegation of authority to AAFM has undermined the state's NPDES program and rendered it out of compliance with Clean Water Act requirements.

2. Vermont must provide ANR with sufficient resources to administer the NPDES program to meet CWA requirements.

[1] The parties to the settlement conference all expressly agree that this communication does not constitute final agency action on the pending Petition and is not to be construed as a grant or denial, in part or in full, actual or constructive. Rather, given that Vermont's Agency of Natural Resources is the entity authorized to implement the NPDES program, Region 1 is offering the only viable path to resolve this expeditiously short of acting upon the request to withdraw the program. While the Region solicited views and considered information from the parties to be fully informed, the views expressed in this document are EPA Region 1's alone.

Based on Region 1's review of the information contained in the Petition, as well as our own investigation, it is clear that Vermont has not adequately addressed deficiencies in its CAFO program and has not complied with the requirements of the 2013 Corrective Action Plan. The flaws in this program are preventing Vermont from adequately controlling phosphorus discharges from CAFOs, which contribute to severe water quality problems in Lake Champlain and other water bodies in the state. Significant changes to the state's implementation of the program are necessary to ensure Vermont meets the obligations associated with its NPDES authorization.

Therefore, to expeditiously resolve ANR's failure to carry out its obligations as the entity authorized to administer the NPDES program and avoid program removal, ANR needs to present a proposed corrective action plan and timeframe for resolution of the issues to EPA on or before December 5, 2024 (90 days from receipt of this letter). The corrective action plan must meet the following requirements: 1) ANR personnel must inspect all potentially jurisdictional farms to determine if a CAFO permit is required; 2) ANR personnel must review nutrient management plans and issue CAFO permits consistent with state and federal requirements; 3) ANR must comprehensively track permitting, monitoring and enforcement actions; 4) ANR must enforce against farms that are discharging without a permit; 5) ANR must have sufficient personnel to fully implement the foregoing requirements in a timely manner; 6) ANR must seek the necessary statutory and regulatory authority to fully implement the CWA requirements; and 7) ANR must include a reasonable but expeditious timeline, including a date certain for the completion of a corrective action plan. EPA expects to review and, if satisfactory, approve the plan quickly given the ongoing and unauthorized discharges from CAFOs in Vermont, with the resultant adverse impacts on water quality. EPA expects that ANR will immediately execute the plan as approved, and EPA will consult with ANR as necessary and appropriate.

EPA's Mandates Are Largely Policy Decisions for the Legislature

ANR Response

VERMONT
AGENCY OF NATURAL RESOURCES

State of Vermont
Agency of Natural Resources
1 National Life Drive, Davis 2
Montpelier, VT 05620-3101

(802) 828-1294
anr.info@vermont.gov
https://anr.vermont.gov/

December 9, 2024

David W. Cash, Administrator
EPA Region 1
5 Post Office Square - Suite 100
Boston, MA 02109-3912

Sent via email to cash.david@epa.gov.

Dear Administrator Cash:

Please find attached the Agency of Natural Resources' draft Corrective Action Plan. The Agency of Natural Resources (VTANR) recognizes that the United States Environmental Protection Agency (EPA) has made definitive findings that indicate that the Vermont Concentrated Animal Feeding Operation (CAFO) program is not currently in compliance with the federal Clean Water Act (CWA). We acknowledge that the findings were based on a thorough review of records and inspections conducted by EPA staff. We take these findings seriously.

ANR is committed to implementing changes to the Vermont CAFO program to address the concerns articulated in your September 6, 2024 letter. The enclosed draft Corrective Action Plan sets forth a four-year timeline with specific action steps for achieving compliance with the CWA and the enabling federal regulations. We believe that this Corrective Action Plan, if approved by EPA, and fully implemented with the oversight and assistance of EPA, will bring the Vermont CAFO program into compliance with the federal CWA.

Please feel free to reach out to our team to discuss any of the details in the Corrective Action Plan.

Sincerely,

Julia Moore, P.E., Secretary
Vermont Agency of Natural Resources

ANR Proposal

A. ANR will clearly define roles, responsibilities, and authority of the two agencies, which will be submitted to EPA for approval and will be subject to public notice and comment.

   1. ANR will determine if the farm needs a NPDES CAFO permit.

      a. Point source discharge requires CAFO permit.

      b. Non-point discharges where the farm has failed to follow an NMP requires a CAFO permit.

   2. ANR will regulate discharging farms that require a federal NPDES CAFO permit.

   3. ANR will enforce against farms that are discharging without a permit.

   4. AAFM will continue to regulate all farms that don't need a CAFO permit.

B. AAFM and ANR will share data management systems and resources to increase and improve information sharing on inspection, permitting, monitoring, and enforcement activities.

C. ANR and AAFM will jointly inspect medium and large farms. ANR will review all NMPs prior to inspections and determine if the NMPs are sufficient and being followed. ANR will review all NMPs for CAFOs and provide notice and public review of the NMPs in accordance with 10 VSA Chapter 170.

D. ANR will develop and adopt an updated Vermont CAFO Rule.

E. ANR will update the Medium Farm General CAFO Permit and Notice of Intent forms for General Permits and develop and adopt Individual CAFO Permits.

F. ANR will commit to annual reporting and tracking of Key Performance Indicators.

It Ain't Easy and It Ain't Simple

- See handout of evolution of State and federal agricultural water quality requirements over the past 40 years.
- Some issues remain unanswered—e.g. application of regulation to subsurface tile drainage.
- Big question will be whether to transfer the entire agricultural water quality program to ANR or to enhance and implement the existing ANR CAFO permit program while maintaining an AAFM agricultural water quality program.

It Ain't Easy and It Ain't Simple

- Vermont Clean Water Initiative 2020 Performance Report: Lake Champlain TMDL Progress Report
  - 97% of phosphorus load reductions between 2016 and 2020 associated with agricultural projects.
  - Load reductions from agricultural project to three reasons:
    1. Agricultural conservation practices are highly cost-effective in treatment of phosphorus;
    2. Substantial federal funds leveraged through the USDA-NRCS layer on top of state funds; and
    3. Existing methods to estimate agricultural load reductions, which other land use sectors lack.
  - 96% of agricultural reductions in 2020 were associated with annual practices with one-year lifespan. If level of effort is not maintained, load reductions will not carry through to future years.

And There is So Much More

- Water quality programs not addressed today include:
  - Wetlands law, State and federal
  - Basin planning
  - Water classification
  - Stream alteration
  - Aquatic nuisance control
  - Use of surface waters—wake boats, etc.
  - Lake shoreland development
  - Combined sewer overflows
  - Water quality standard for PFAS
  - Surface water diversion
  - Microplastics—standards, land application, sources.

Conclusion

- Water quality law in Vermont has a long history.
- Administration of the Clean Water Act and the multiple State water quality programs can be difficult and expensive.
- Water quality also inspires passionate advocates who care deeply about the condition and use of waters in the State.
- Despite negative media and recent EPA oversight, ANR and AAFM do sincerely attempt to preserve and improve the waters of the State.
- Unfortunately, achieving the goals that most everyone wants—clean, quality surface waters—is harder and will have a longer term for success than most would hope.