



Water Quality Division

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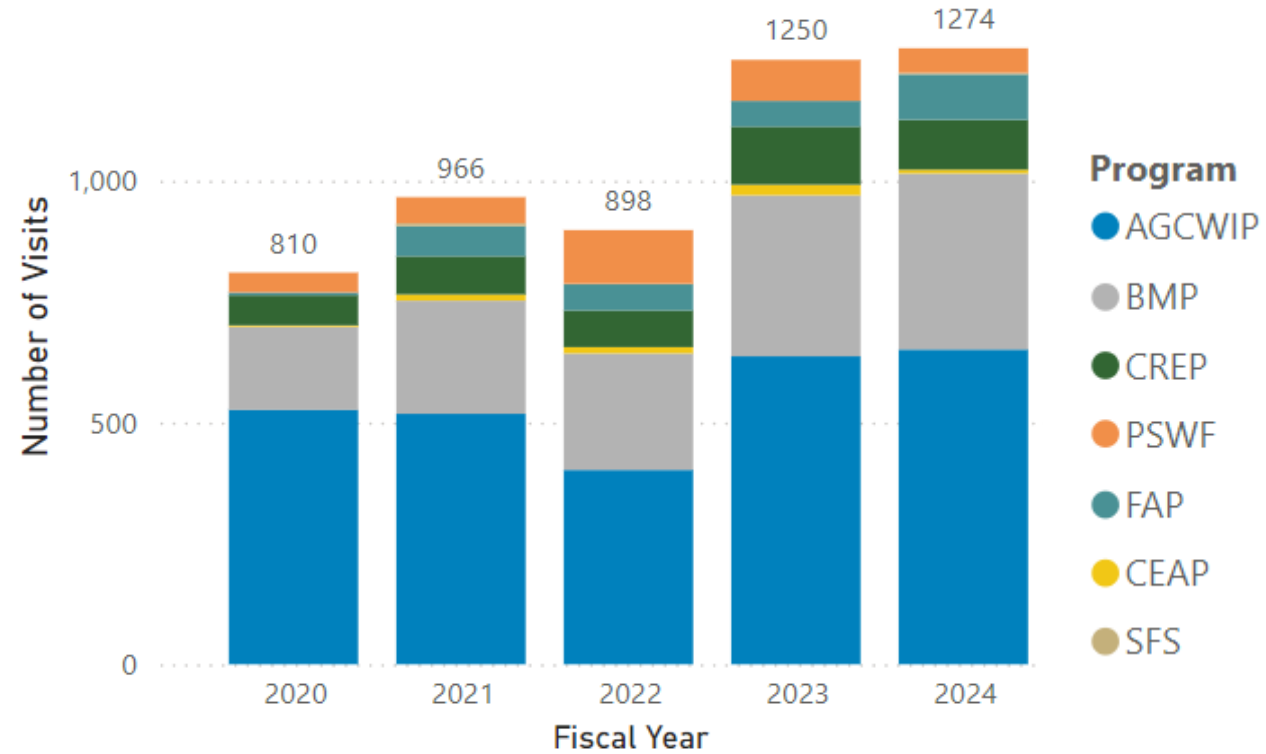
Overview

- Education, Technical and Financial Assistance
- Inspection and Enforcement

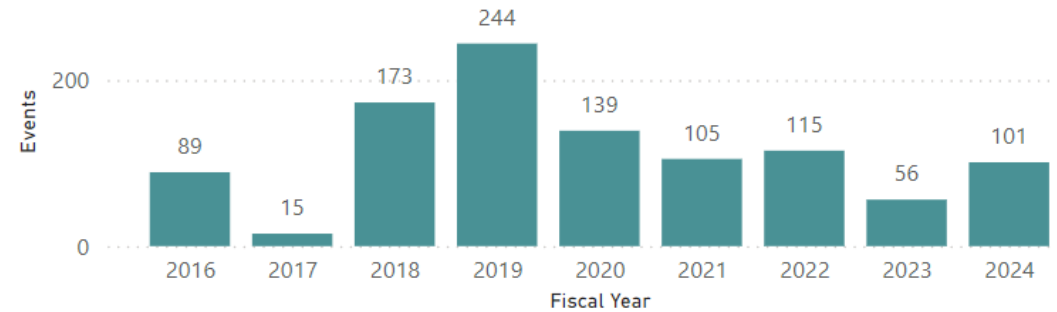
Technical Assistance & Education



Visits by Fiscal Year and Program



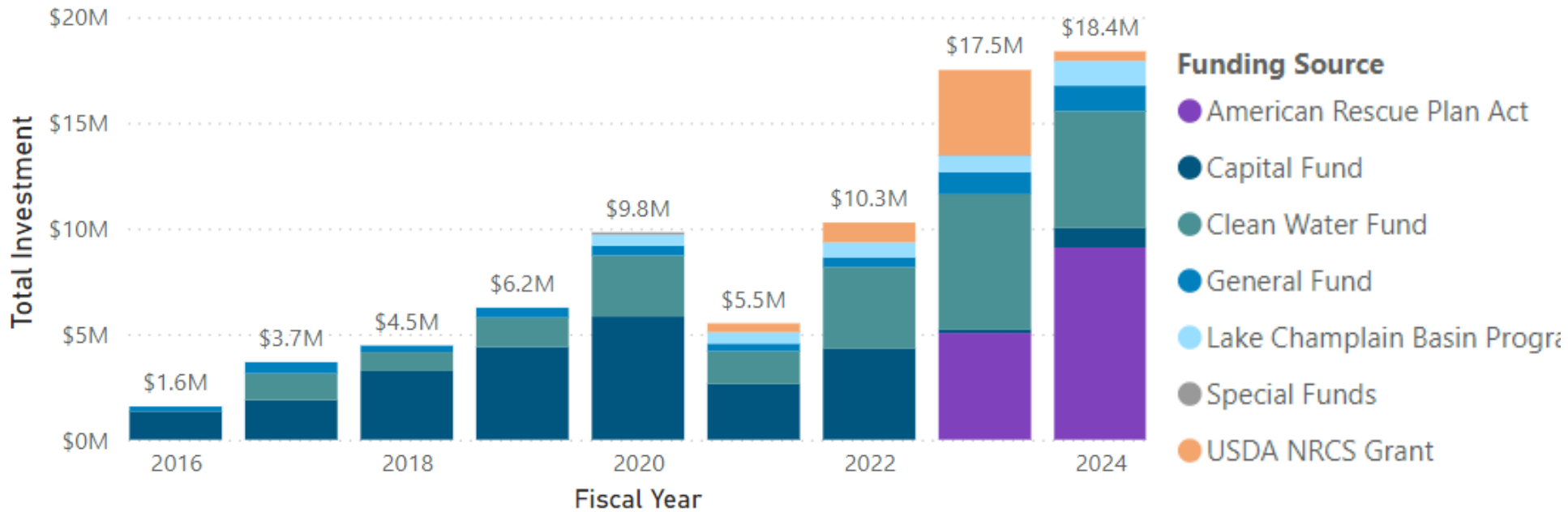
Events by Fiscal Year



Financial Assistance



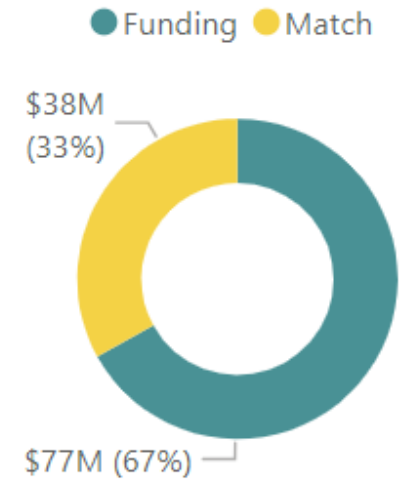
Total Investment by Fiscal Year and Funding Source



Funding Source

- American Rescue Plan Act
- Capital Fund
- Clean Water Fund
- General Fund
- Lake Champlain Basin Progr
- Special Funds
- USDA NRCS Grant

Total Investment by Type





Best Management Practices (BMP) Program

Before (left) and after (right) installation of a heavy use area protection BMP project on a small farm in Swanton, VT to reduce livestock impacts to nearby waters and provide an area that is more easily managed for livestock barnyard area.



2008 – PRE CREP



2008 – POST CREP



2022 – 14 Years Later

Conservation Reserve Enhancement Program (CREP)

Riparian area pre- restoration, post-restoration and 14 years after restoration through the CREP Program. Additional conservation practices supported included livestock exclusion and fencing, a reinforced cattle crossing, riparian forest buffer planting and water source development for cows to replace stream access.



Pasture & Surface Water Fencing (PSWF) Program






Before (left) and after (right) of a riparian area restored through the PSWF Program. This project included implementation of a grassed filter strip, fencing, and watering sources.



Seeding and Filter Strip (SFS) Program

Before (left) and after (right) installation of a 50-foot-wide grass filter strips along a corn field in the Memphremagog watershed.

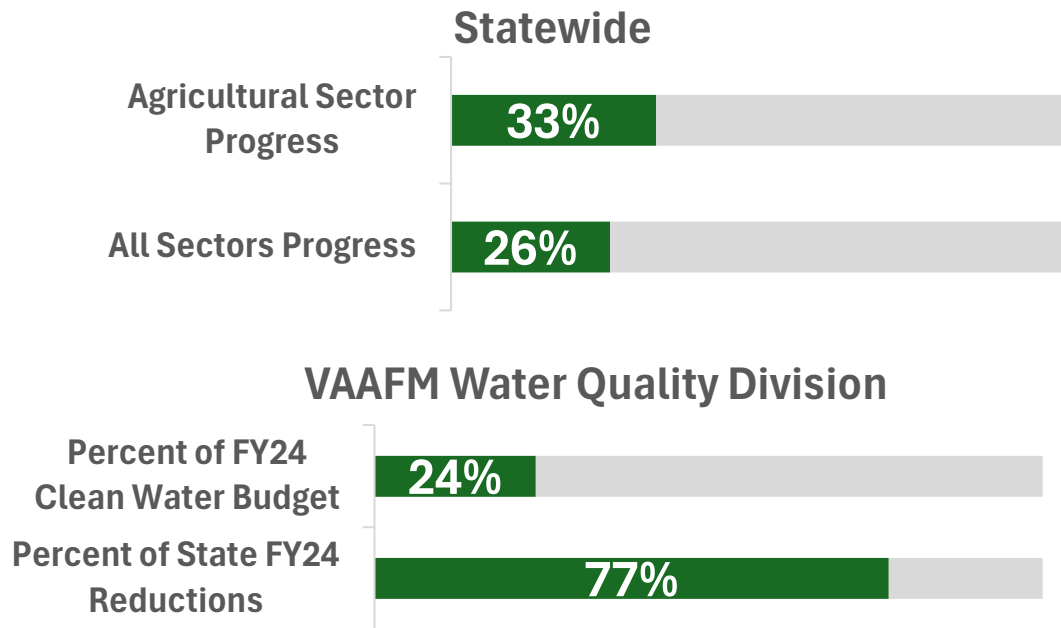
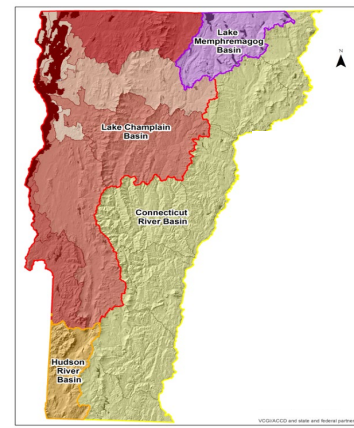
Financial Assistance Programs

PROGRAM	PROGRAM FOCUS	
<p>Farm Agronomic Practices Program</p> <p>FAP</p>	<p>Per acre payments for agronomic practices that improve soil quality and reduce runoff and erosion. Support for educational or instructional activities also available.</p>	
<p>Best Management Practices Program</p> <p>BMP</p>	<p>Technical engineering consultations, financial assistance, and federal project cost assistance for structural on-farm improvements to protect or improve water quality.</p>	
<p>Conservation Reserve Enhancement Program</p> <p>CREP</p>	<p>Technical and financial assistance for removing land from agricultural production and establishing vegetative buffers.</p>	
<p>Capital Equipment Assistance Program</p> <p>CEAP</p>	<p>Financial assistance for new or innovative equipment that will improve water quality, improve manure management, or decrease greenhouse gas emissions.</p>	
<p>Seeding and Filter Strip Program</p> <p>SFS</p>	<p>Technical and financial assistance to address erosion and surface runoff through the establishment of perennially vegetated and harvestable filter strips, seedings, and grassed waterways.</p>	

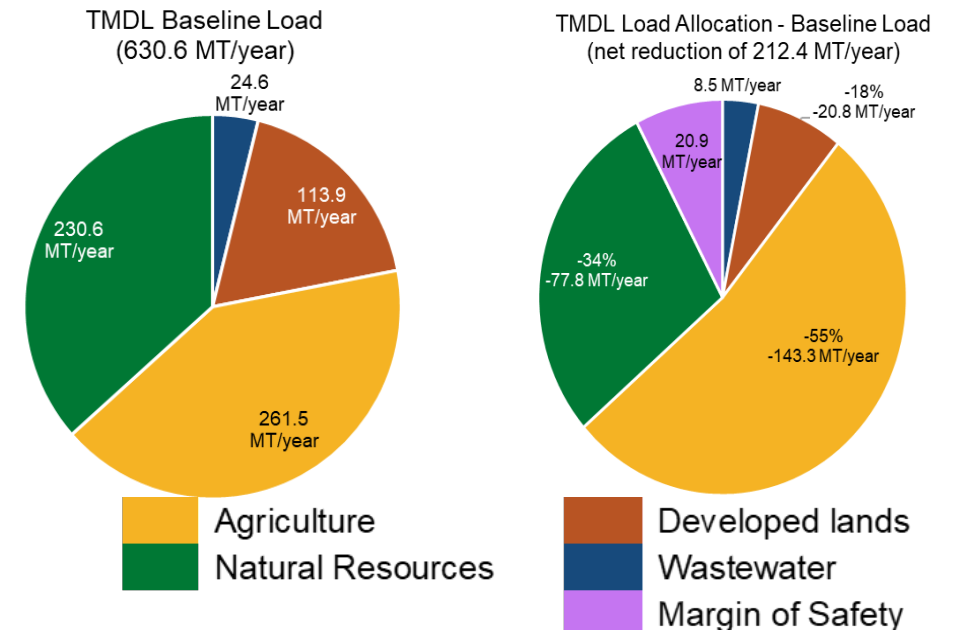
AAFM WQ Programs

PROGRAM	DESCRIPTION	
<p>Pasture and Surface Water Fencing Program</p> <p>PSWF</p>	<p>Pasture management technical and financial assistance for livestock exclusion from surface waters and grazing system improvements.</p>	
<p>Vermont Farmers Ecosystem Stewardship Program</p> <p>VFESP</p>	<p>Supplemental financial assistance to support farmers to enroll in the USDA-NRCS Conservation Stewardship program (CSP).</p>	
<p>Vermont Pay for Performance Program</p> <p>VPPF</p>	<p>Innovative, performance-based program which provides financial compensation for reducing phosphorus (P) losses from farms.</p>	
<p>Agricultural Clean Water Initiative Program</p> <p>AGCWIP</p>	<p>Funding for local and regional partners to improve water quality through education and outreach, technical assistance, organizational capacity development, and conservation practice surveys.</p>	

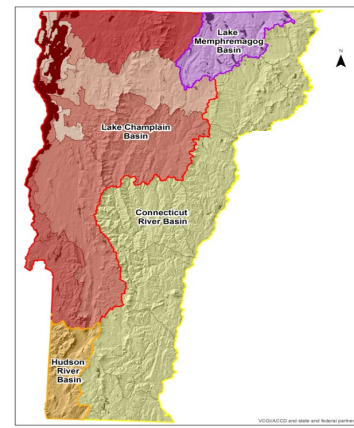
TMDL Progress – Lake Champlain



Lake Champlain TMDL Baseline Load, and Modeled Load Increase (+) or Reduction (-) by Sector. Percentage indicates percent reduction from baseline for sectors with a required reduction.

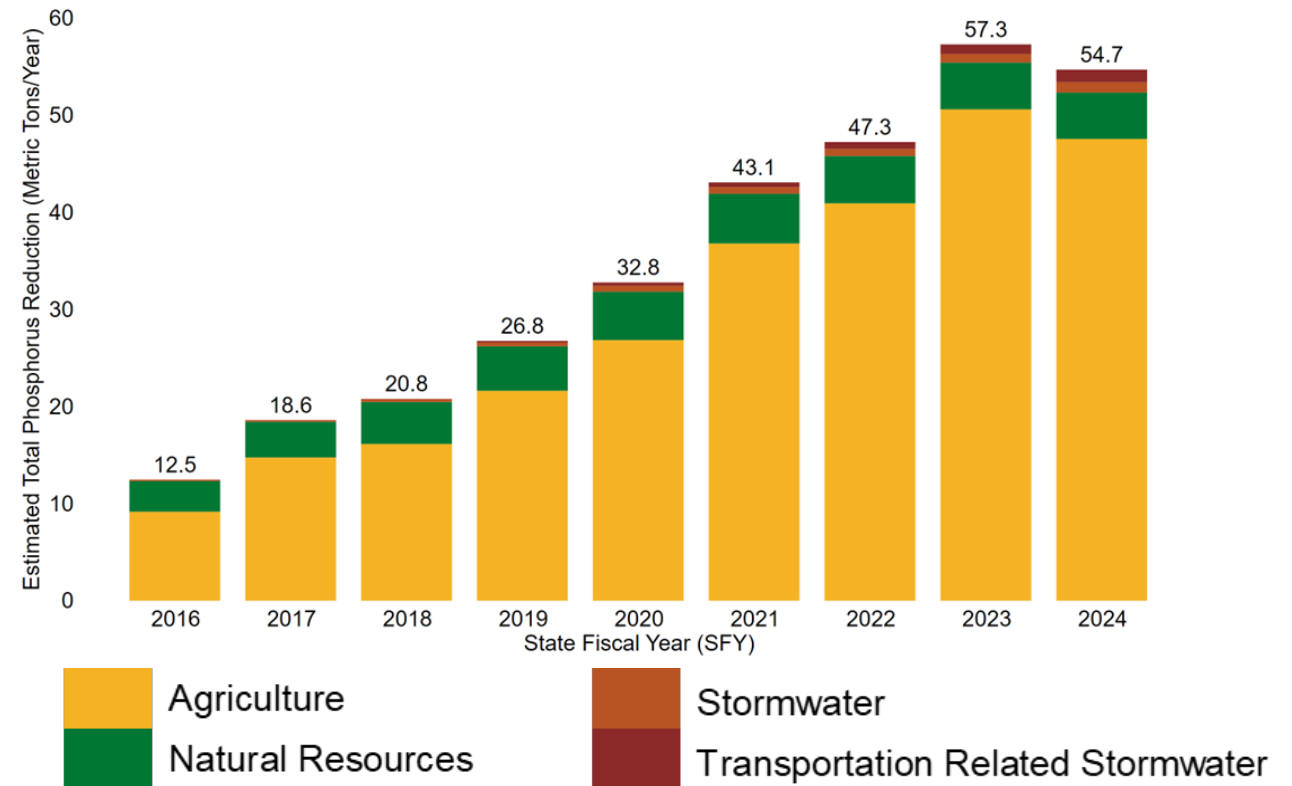


Total Maximum Daily Load (TMDL) Progress – Lake Champlain

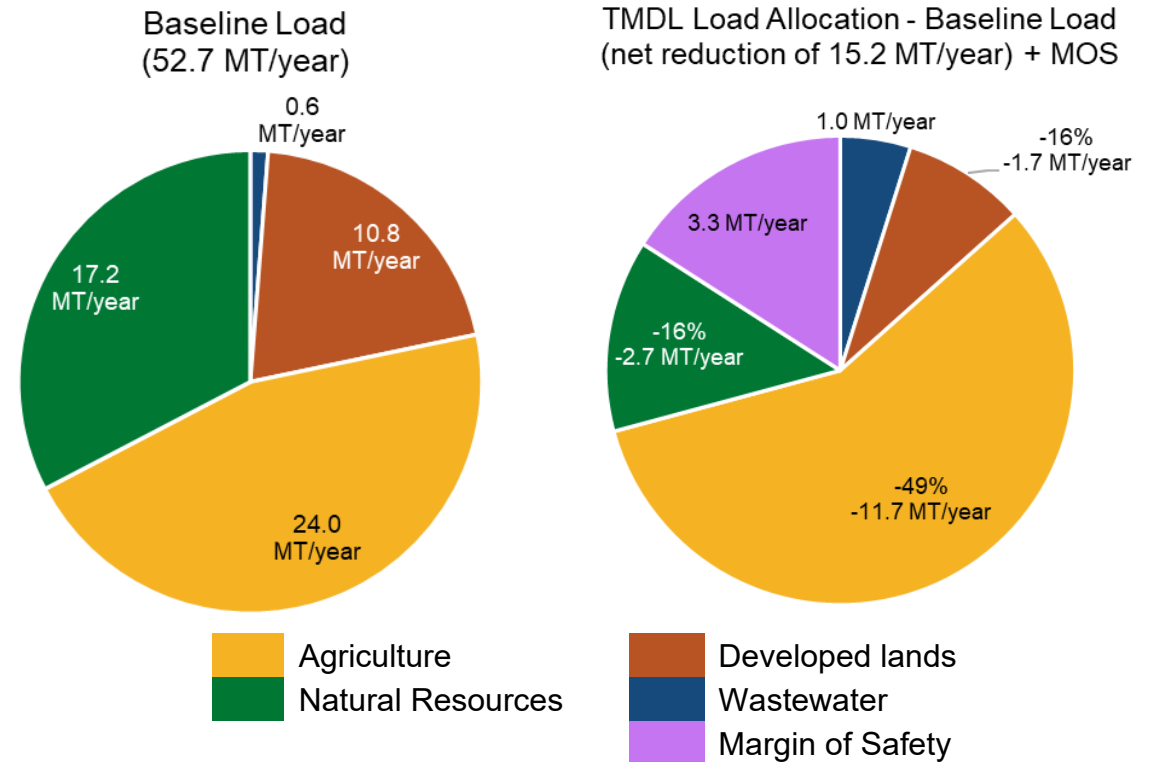
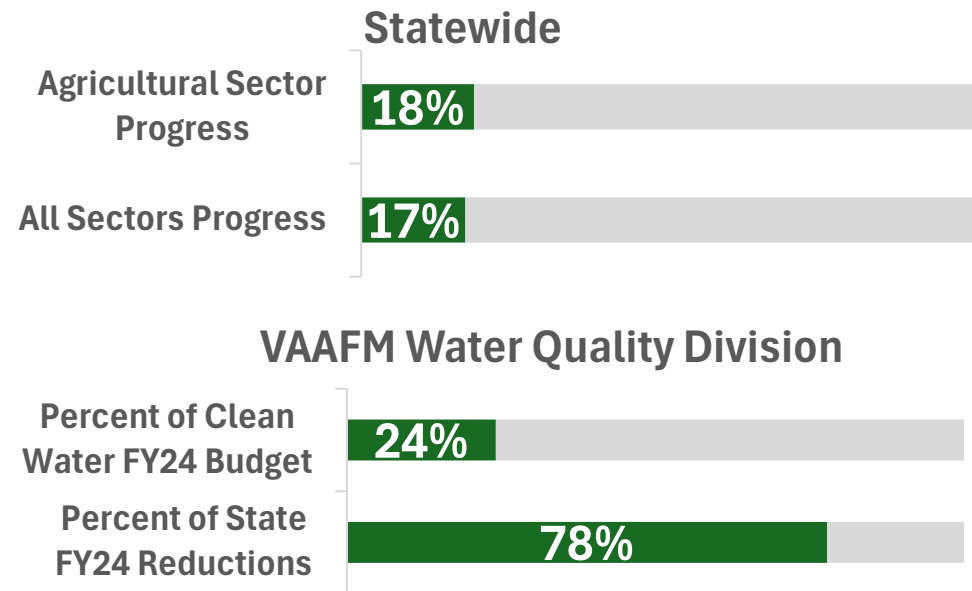
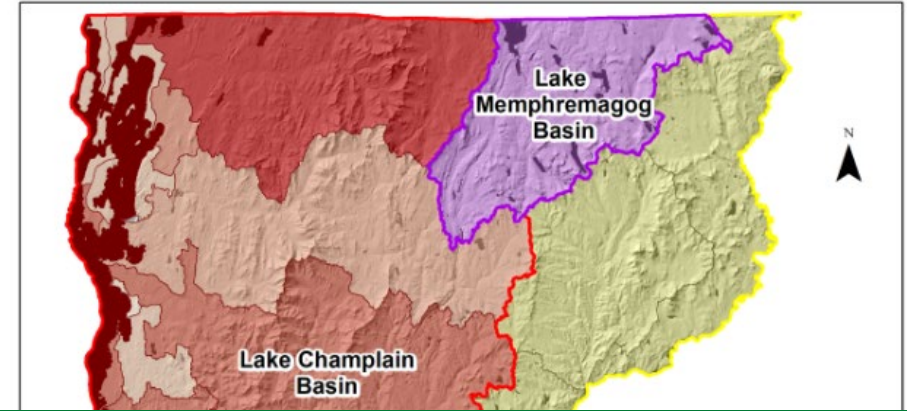


SFY2024 Progress – 26%

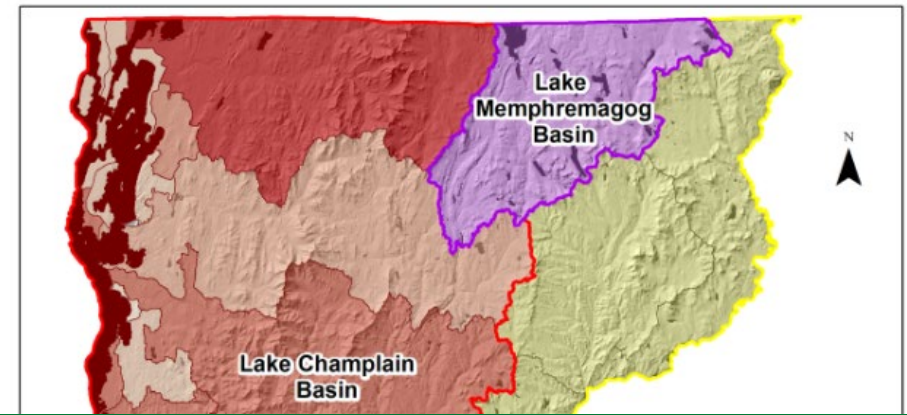
Estimated total phosphorus load reductions in effect during SFY 2016–2024.



TMDL Progress – Lake Memphremagog

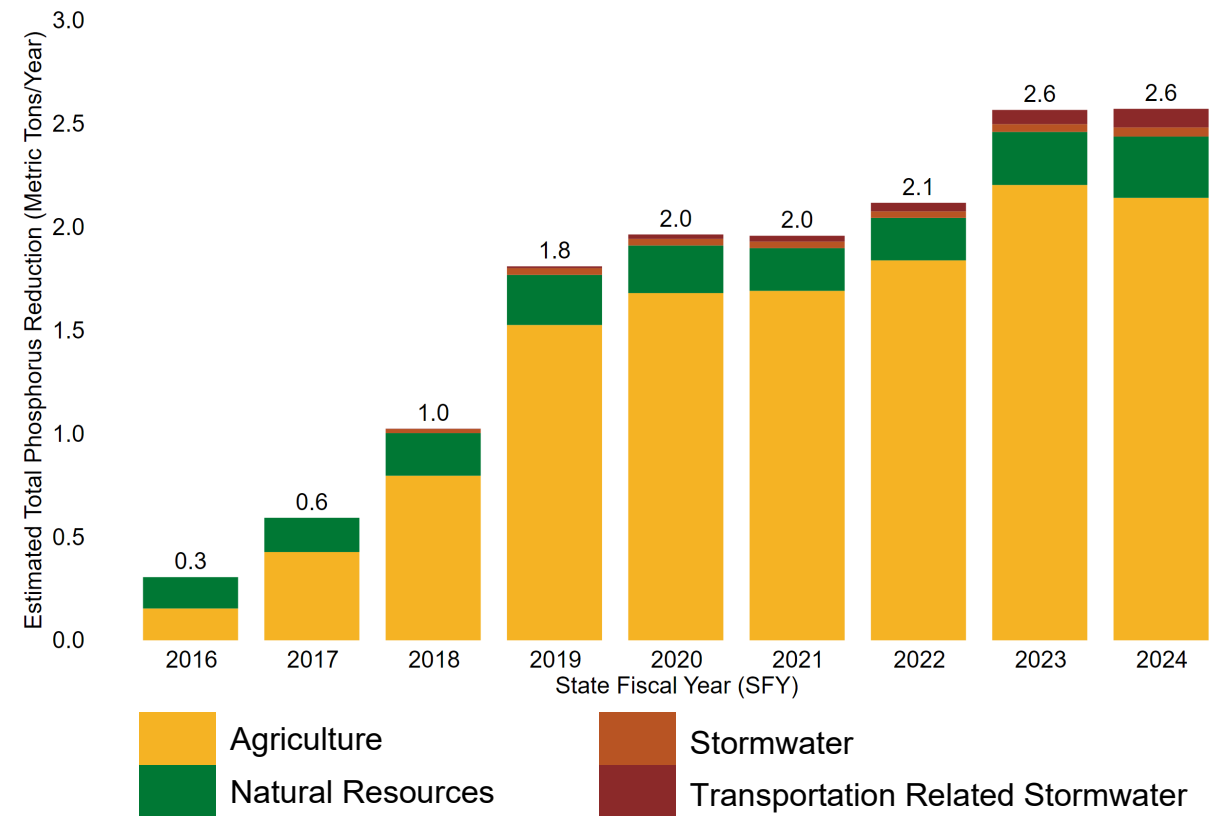


TMDL Progress – Lake Memphremagog



SFY2024 Progress - 17%

Estimated total phosphorus load reductions in effect during SFY 2016–2024.



Vermont Agricultural Water Quality Partnership (VAWQP)



“Conservation on farms can be a bit like completing a puzzle, taking one piece at a time and finding the best fit.” - Sarah Damsell, District Manager Orleans County Conservation District

PURPOSE & MISSION: Improve agricultural water quality in Vermont by coordinating partner efforts to provide education, technical and financial assistance to the farming community.

GOALS:

- 1) To improve water quality and wildlife habitat on all engaged farmland owner's and operators' properties
- 2) Deliver technical and financial assistance in the most efficient and effective manner
- 3) Provide the best service experience possible for the landowner

VAWQP Partners

- USDA Natural Resources Conservation Service
- USDA Farm Service Agency
- Vermont Association of Conservation Districts
- United States Fish and Wildlife Service
- University of Vermont Extension
- Vermont Agency of Natural Resources Department of Environmental Conservation
- Vermont Agency of Agriculture, Food and Markets
- Vermont Housing and Conservation Board
- Lake Champlain Basin Program

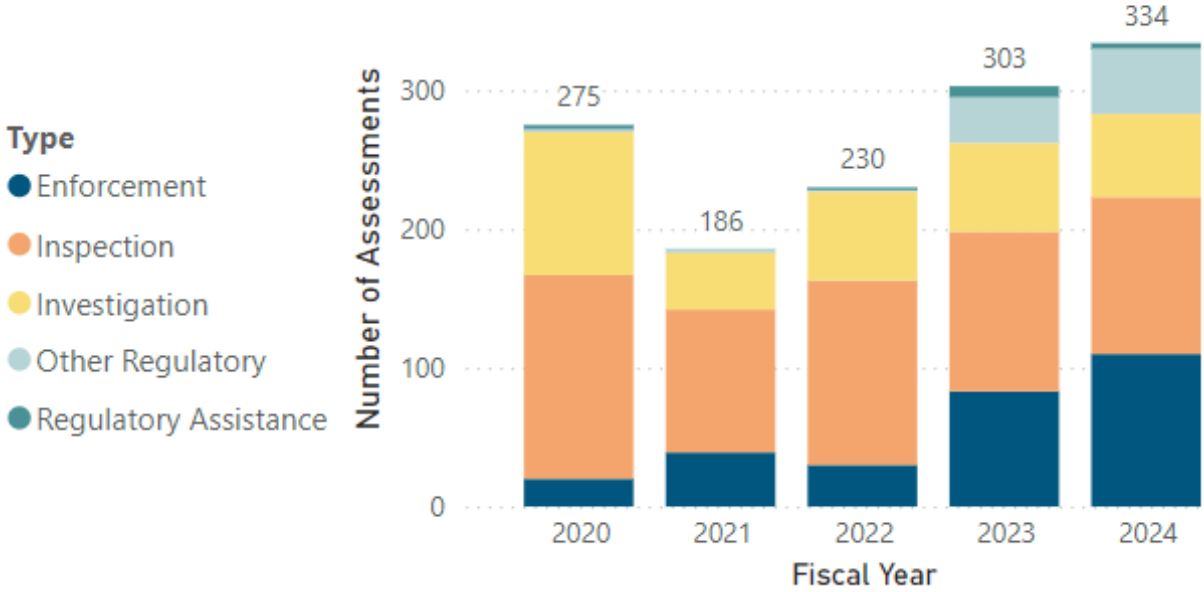
Regulatory



Inspection & Enforcement



Assessments by Fiscal Year and Type



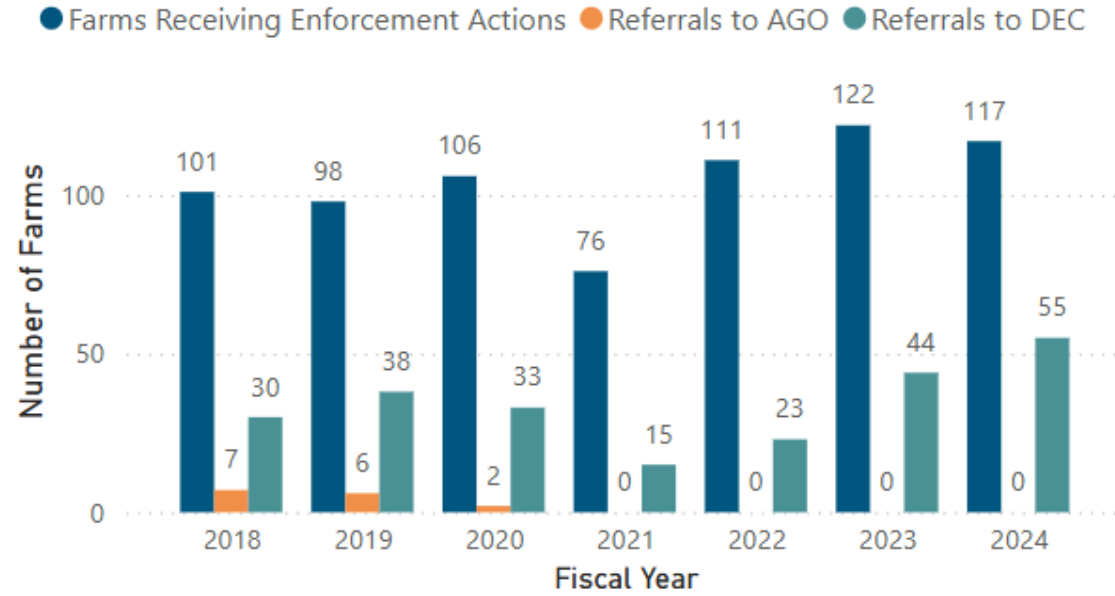
Farms Receiving Enforcement Actions by Year



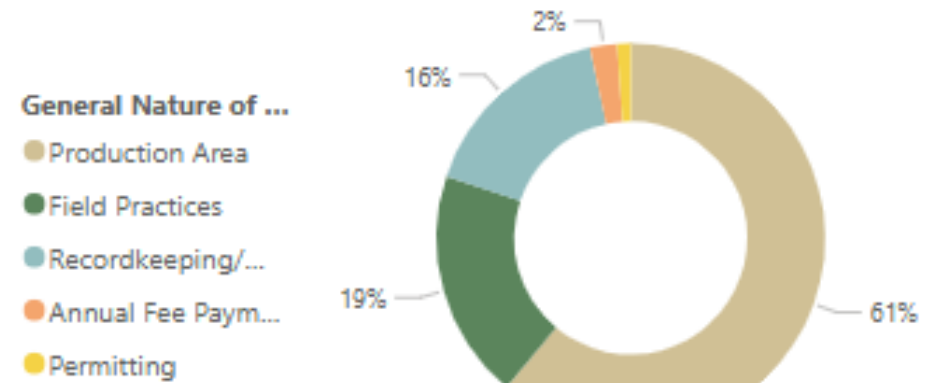
Inspection & Enforcement



Farms Receiving Enforcement Actions and Referrals



Counts/Violations by General Nature of Violation



Vermont Regulatory Framework

ANR CAFO (actual discharges)

AAFM MFO and LFO (prevent discharges)

AAFM RAPs (regulate all farms to prevent discharges)

Differences between Permitting Schemes



CAFO Permit (federal)	MFO and LFO Permits (state)
25 year-24 hour infrastructure	25 year-24 hour infrastructure
NMP	NMP
Allows Discharges	Prevents Discharges
No erosion requirements	Erosion standards
No nuisance requirements	Nuisance requirements
No construction requirements	Construction permitting
Citizen suits (anyone)	Aggrieved persons (impacted)
0 foot buffer (100' manure setback), or 35 foot buffer streams, or Alternative (equiv. to 100' setback)	25 foot buffers on streams, and 10 foot buffers on ditches
Winter Spreading	Ban on winter spreading
No soil phosphorus limits	Required phosphorus reductions
No soil condition requirements	Snow and saturated soil requirements
No min storage requirement	180 days of storage required
No groundwater regulations	Groundwater standards

Regional State Examples

Vermont

DEC manages CAFO permits, no permits issued to date. VAAFPM issues MFO (97) permits with minimum 3 year inspections, and LFO (36) permits with annual inspections.

Maine

EPA approved delegation including a MOU between the Agriculture and Environmental Departments. Agricultural Department inspects majority of farms and issues LOP permits. Environmental Department manages 6 CAFO permits in 2023. They had 33 farms that were greater than 200 mature cows in the 2022 census. Inspect at least once every 5 years.

New York

No CAFO permits in 2023. There were 633 farms with more than 200 mature cows in 2022 census. All alternative state “no discharge” permits issued by Environmental Department. Farms greater than 300 cows inspected once every 5 years. Farms between 200 and 300 cows are not inspected, complaint based.

New Hampshire

One permit managed by EPA in 2023. 14 farms greater than 200 cows in 2022 census. EPA inspects once every 5 years. No inspection or alternative permit on remaining farms, complaint driven.

Let's Take a Drive through PowerBI

Contact Us!

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