



Capital Funding to AAFM Water Quality Grants to Farmers

Testimony to House Corrections & Institutions March 28, 2024

Overview



- CWB Board Budget Process Overview
- Clean Water Goals and Progress
- BMP Program Project Examples
- VAAFM Capital Funding
- Incoming IRA Funding

AAFM WQ Programs

PROGRAM	DESCRIPTION	
Farm Agronomic Practices Program FAP	Financial assistance to Vermont farms for implementation of soil-based agronomic practices that improve soil quality and reduce runoff and erosion. Financial assistance for educational or instructional activities also available. Per/acre payment rates based on practice type.	
Best Management Practices Program BMP	Technical and financial assistance program focusing on engineered and structural on-farm improvements which protect or promote water quality. Up to 90% State cost share towards eligible practices & expenses.	
Conservation Reserve Enhancement Program CREP	Technical and financial assistance program designed to reduce sediment runoff and improve water quality by removing land from agricultural production and establishing vegetative buffers. Up to 100% cost share towards implementation costs, plus incentive, annual rental, & maintenance payments.	
Capital Equipment Assistance Program CEAP	Financial assistance for new or innovative equipment that will improve water quality, improve manure management, separate phosphorus (P) from manure, or decrease greenhouse gas emissions. Funding limits dependent on equipment type. Up to 90% State cost share.	
Grassed Waterway and Filter Strip Program GWFS	Technical and financial assistance to address erosion and surface runoff through the establishment of perennially vegetated and harvestable grassed waterways, filter strips, and critical source area seedings. Per acre incentive payments and up to 90% State cost share for implementation costs.	

AAFM WQ Programs

PROGRAM

DESCRIPTION

Pasture and Surface Water Fencing Program

PSWF

Vermont Farmers Ecosystem Stewardship Program

VFESP

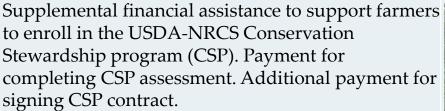
Vermont Pay for Performance Program

VPFP

Agricultural Clean Water Initiative Program

AGCWIP

Pasture management technical and financial assistance to Vermont farmers to improve water quality and on-farm livestock exclusion from surface waters statewide. Up to 90% State cost share for implementation costs.



Innovative, performance-based program which provides financial compensation for reducing phosphorus (P) losses from farms. Payment based on modeled P reductions across farm operation.

Funding opportunities for local and regional partners to work with farms to support the improvement of water quality across the state of Vermont through education and outreach, technical assistance, organizational capacity development, and conservation practice surveys.









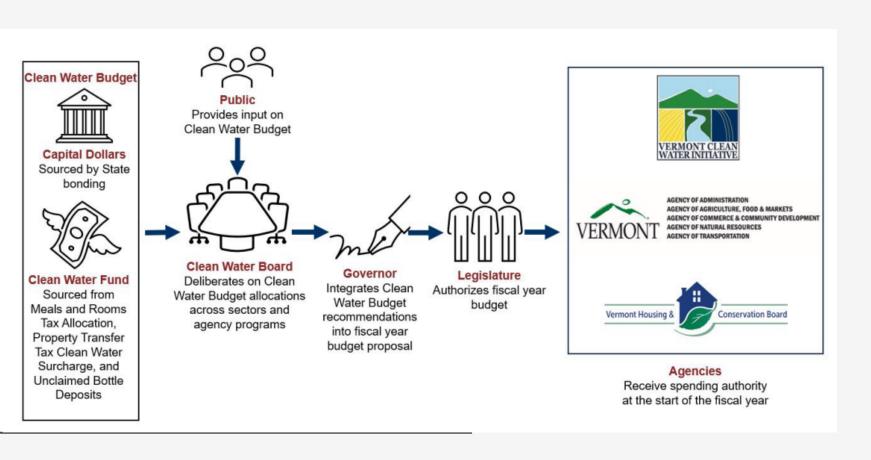








Clean Water Board Budget Process & Timeline





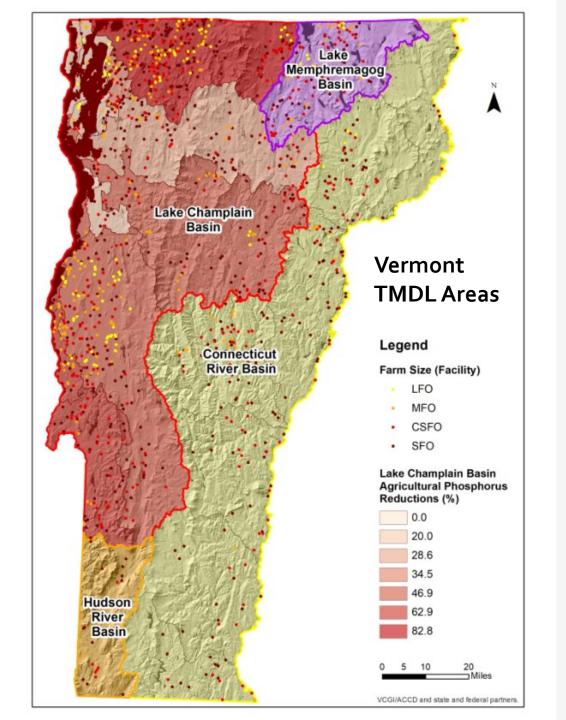
FINAL STATE FISCAL YEAR 2025 (SFY25) CLEAN WATER BUDGET RECOMMENDATION

Recommended by the Clean Water Board on (12/5/2023)

				SFY2S B/	ASE FUNDS			s	FY25 ONE-TIME FUND	S			
No.	Agency	Activity	Clean Water Fund	Capital Bill (SFY25 Capital Budget Target = S6m(¹	Filling the 54m Base Gap from SFY2S Capital Bill with Clean Water Fund Unallocated Unreserved	Subtotal Base Funds	SFY25 Compared to SFY24 Base Funds	Clean Water Fund Prior Year Unallocated Unreserved	American Rescue Plan Act (ARPA) ²	Subtotal One-Time Funds	SFY25 Compared to SFY24 One-Time Funds	Total SFY25 (Base + One-Time)	SFY25 Total Compared to SFY24 Total
Clear	Water Budget Statutory Prior	ty Tier 1 (Items of Equal Priority)											
1.5	ANR-DEC (CWIP)	Water Quality Restoration Formula Grants to Clean Water Service Providers & O&M	7.210.000			7,210,000		1,150,000		1,150,000		8,360,000	_
1.3	ANR-DEC (CWIP)	Basin Planning, Basin Water Quality Council Participation, Education, and Outreach	750,000			750,000	100,000					750,000	100,000
1.3	Water Quality Enhancement (Grands											
4.5	110 000 comm	Philipsolds Harry consistence Philipson White Particular	F 000 000										

				SFY25 BA	SE FUNDS					
No.	Agency	Activity	Clean Water Fund	Capital Bill (SFY25 Capital Budget Target = \$6m) ¹	Filling the \$4m Base Gap from SFY25 Capital Bill with Clean Water Fund Unallocated/ Unreserved	Subtotal Base Funds				
Clean V	Nater Budget Statutory Priori	ry Tier 1 (Items of Equal Priority)								
1.1	ANR-DEC (CWIP)	Water Quality Restoration Formula Grants to Clean Water Service Providers & O&M	7,210,000			7,210,000				
1.2	ANR-DEC (CWIP)	Basin Planning, Basin Water Quality Council Participation, Education, and Outreach	750,000			750,000				
1.3	Water Quality Enhancement G	trants								
1.31	ANR-DEC (CWIP)	Statewide Non-regulatory Clean Water Projects	5,000,000			5,000,000				
1.32	VHCB	Land Conservation and Water Quality Projects			2,000,000	2,000,000				
1.4	AAFM	Water Quality Grants to Partners and Farmers	6,696,887	550,000	1,200,000	8,446,887				
1.5	Agency and Partner Operating	Support								
1.51	AAFM	Program Support	900,000			900,000				
1.52	ANR-DEC (CWIP)	Program and Partner Support	930,000			930,000				
1										

											•
Final SFY 2025 Clean Water Budget Recommendation by Agency		SFY25 BA	SE FUNDS				FY25 ONE-TIME FUND	9			
Agency	Clean Water Fund	Capital Bill (SFY25 Capital Budget Tarpet = SGm) ¹	Filling the \$4m Base Gap from SFY25 Capital Bill with Clean Water Fund Prior Year Unallocated! Unreserved	Subtotal Base Funds	SFY25 Base Compared to SFY24 Base	Clean Water Fund Prior Year Unallocated Unreserved	American Rescue Plan Act (ARPA) ²	Subtotal One-Time Funds	SFY25 Compared to SFY24 One-Time Funds	Total SFY25 (Base + One-Time)	SFY25 Total Compared to SFY24 Total
AAFN	7.596.887	\$50,000	1,200,000	9.346.887	459,988	213.113	_	213,113	(2.796.887)	9,540,000	(2.326.899)
ACCD					-						-
ANR (DEC)	14,010,000	4,900,000		18,910,800	(356,731)	2,600,000		2,600,000	(6,191,250)	21,510,000	(6,507,981)
ANR (FPR)	144.000	\$50,000		694.000	367					694,000	347
AsA	25,000			25,800	25,000				(100,000)	25,000	(75,000)
VHCB			2,800,000	2,800,800						2,900,000	
VTrans	4,000,000			4,000,000		1,000,000		1,000,000		5,000,000	
Total Proposed for Appropriation ¹	25,775,887	6,000,000	4,000,000	35.775.897	129,644	3,813,113		3,913,113	(9.020.127)	29,589,000	(8.909.492)



Vermont Clean Water Initiative 2023 Performance Report













Cover photo image descriptions (clockwise from top lett):
Stone-lined ditch implementation in Troy, funded through Grants-in-Add in partnership with the Town of Troy / Half-acre buffer planting along the
Green River in Guidroft, funded through the Capital Fund in partnership with the Cornectical River Conservancy / Lamolile 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 cludient tenovals, funded by the Clean Water Fund in partnership with the Department of Forset, Parks, and Recreation





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













Investment measures show how Vermont invests in clean water projects from identification and planning through design, implementation, and maintenance.



Education measures summarize outreach and technical assistance to support, identify, develop, and maintain clean water projects.



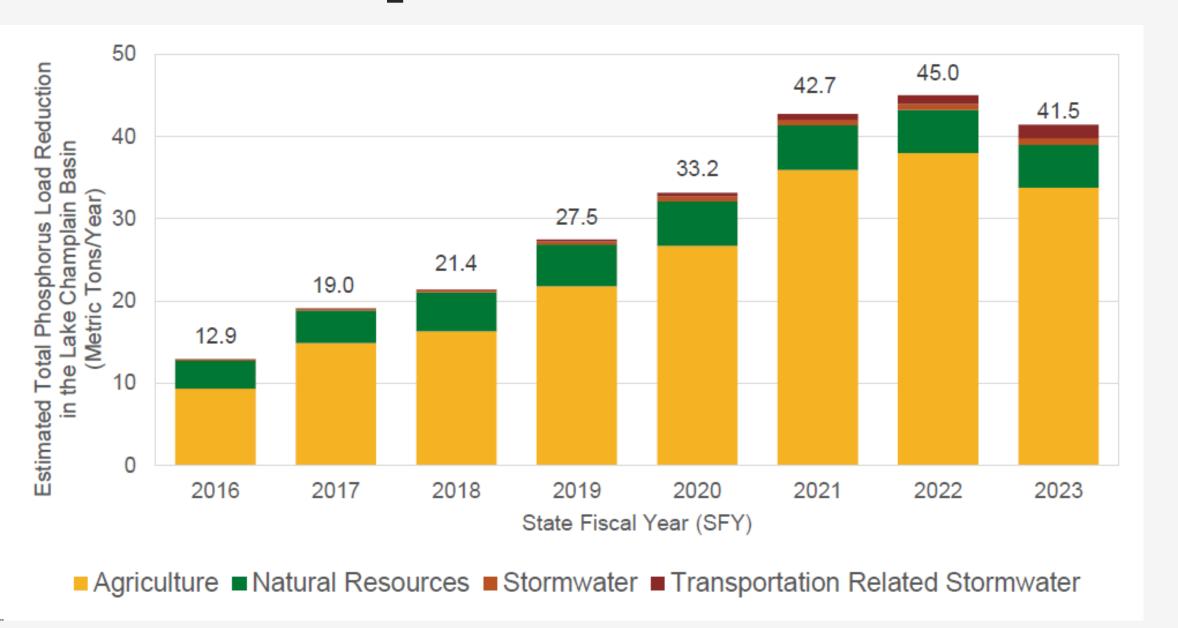
Project output measures quantify the results of clean water projects.



Pollutant reduction measures are estimated nutrient load reductions achieved by clean water projects.

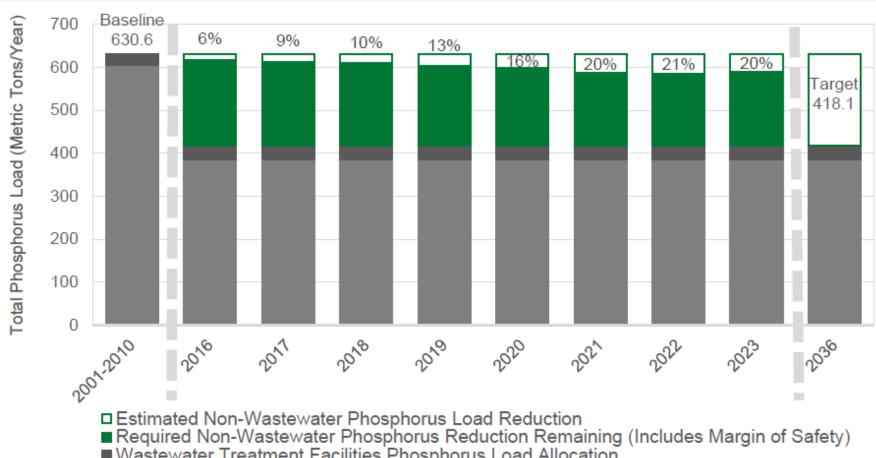
CLEAN WATER PERFORMANCE REPORT

Lake Champlain Estimated Reductions



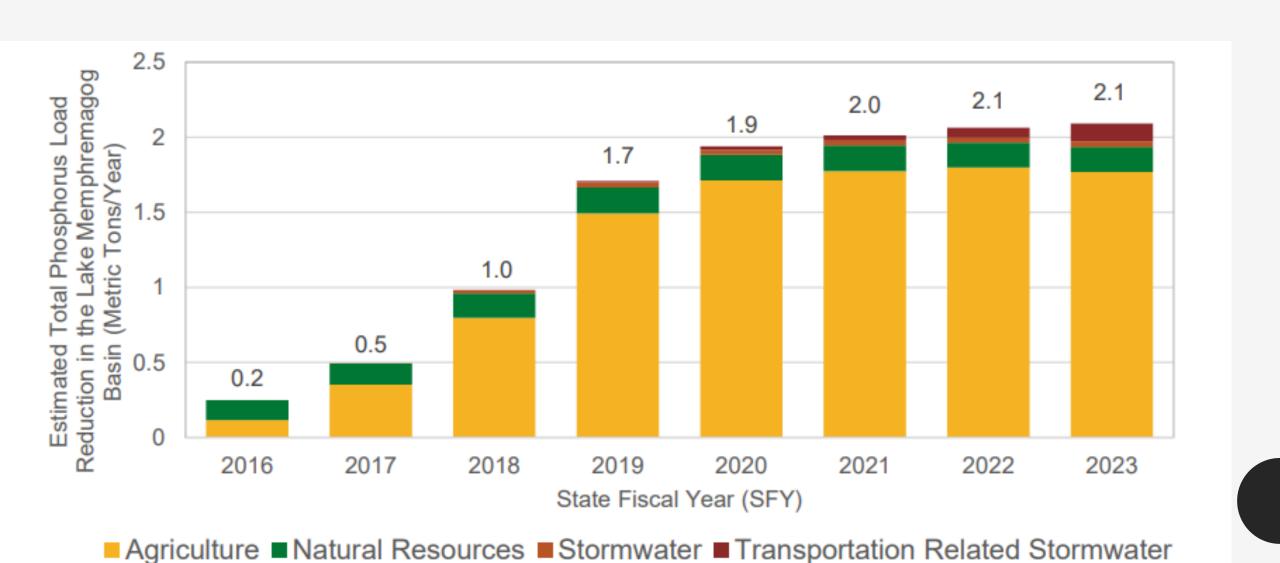
Lake Champlain **TMDL Progress**

Estimated total phosphorus load reductions in effect during SFY 2016–2023 relative to the Lake Champlain TMDL total phosphorus baseline and target total phosphorus load in metric tons per year.



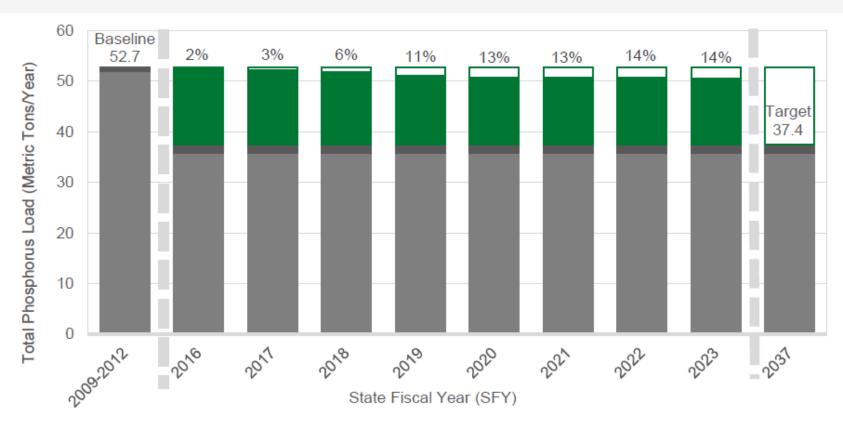
- Wastewater Treatment Facilities Phosphorus Load Allocation
- Non-Wastewater Phosphorus Load Allocation

Lake Memphremagog Estimated Reductions



Lake Memphremagog TMDL Progress

Estimated total phosphorus load reductions in effect during SFY 2016–2023 in the context of the Lake Memphremagog TMDL total phosphorus baseline and target total phosphorus load in metric tons per year.



- □ Estimated Non-Wastewater Phosphorus Load Reduction
- Required Non-Wastewater Phosphorus Reduction Remaining (Includes Margin of Safety)
- Wastewater Treatment Facilities Phosphorus Load Allocation
- Non-Wastewater Phosphorus Load Allocation

Vermont's Clean Water Investments in the Connecticut River Basin

Click symbol to view description of accountability measures.

Reaching the Connecticut River basin's water quality goals requires investments across all land use sectors. The following figure summarizes state clean water investments in the Connecticut River basin from SFY 2016 to 2023. Federal funds awarded to projects directly by federal agencies are not included in this report as they are outside the scope of this report.

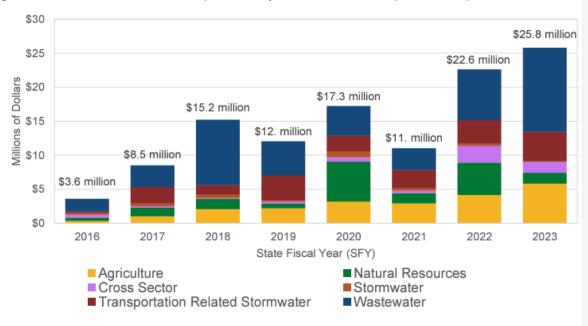


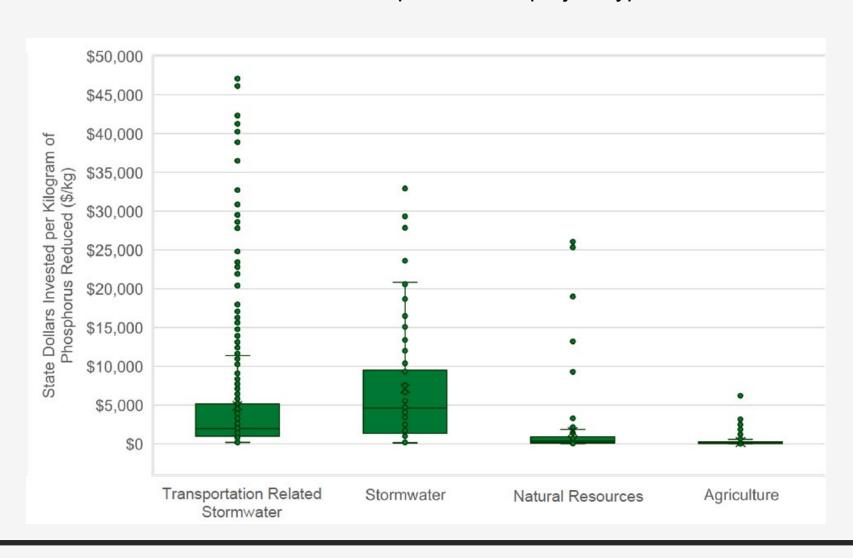
Figure 34: Total dollars awarded by State of Vermont agencies to clean water projects in the Connecticut River basin by land use sector, SFY 2016–2023.

Future Total Nitrogen Load Reduction Tracking

Nitrogen reduction estimates cannot be reported for the Connecticut River basin, as the State of Vermont does not yet have baseline nitrogen loading rates or nitrogen reduction efficiencies for clean water projects in the Connecticut River basin. EPA-supported efforts are underway to develop consistent methods for all five states covered under the Long Island Sound TMDL to estimate nitrogen reductions for clean water projects. Vermont will set a schedule to publish methods to account for nitrogen reductions in the Connecticut River basin to comply with Vermont's Clean Water Service Delivery Act, Act 76 of 2019 (10 V.S.A. § 923) and to align with ongoing five state nitrogen tracking coordination efforts.

Cost Efficiency of Clean Water Projects:

Dollars invested per estimated kilogram of total phosphorus load reduced over the effective lifespan of each project type



Best Management Practice (BMP) Program

Example Calculation			
Project Costs	\$550,000		
		Percent	Cost-Share Restrictions
Federal Contribution	\$350,000	64%	75% max
State Contribution	\$100,000	18%	15%-90%
Farmer Contribution	\$100,000	18%	10% and up

- Technical assistance to identify and assess farmstead water quality concerns, and to assist farmers in the implementation of structural improvements designed to abate agricultural waste discharges to Vermont waters.
- Financial assistance is available for farmers implementing a water quality project through the USDA NRCS Environmental Quality Incentive Program or for implementing structural practice without federal assistance to improve water quality.

Program staff aim to help Vermont farmers achieve and maintain regulatory compliance in a way that is both viable for the operation of the farm and beneficial to water quality.

BMP Project – Highgate VT

VAAFM staff inspected Laroche Dairy & Sons in September of 2022 and observed a muddy feed bunk area where there was no collection system for the leachate runoff. The inspector identified the leachate was running off directly into a field, which would eventually lead to Lake Champlain.

A paved bunk apron was installed in August 2023, which improved this area by sending leachate directly into the manure pit and preventing run-off into nearby waterways.

State Costs - \$61,449.75







BMP Project – Wheelock, VT

Chandler Pond Farm is a small, diversified farm producing grass-fed beef, vegetables, and berries. The farmer, Mark Dill, reached out to one of the BMP engineers for technical assistance to improve their outside barnyard. The BMP engineer observed a "mud hole" where the cows were feeding with no runoff collection.

The engineer recommended a woodchip barnyard, installed in 2022. These are heavy use areas that use woodchips as a base material instead of concrete, which is often a cost barrier to implementation

State Costs - \$88,395.18







BMP Project – Barton, VT

In order to satisfy the organic requirement for daily time outside, the Decker farm was allowing their milking cows access to a hillside next to the barn. With no infrastructure in place, this can cause problems like soil erosion and manure runoff into drainage ditches and streams.

The BMP Program assisted the farm to construct a new concrete barnyard in May 2023, pitched towards the existing gutter cleaner system in the barn so that cows can easily go outside in nearly any weather. The system ensures that all manure and nutrients are contained and transferred to the manure pit.

State Costs - \$86,625



Before (left) and after (right) installation of a Best Management Practice (BMP) project on a small farm in Swanton, VT.











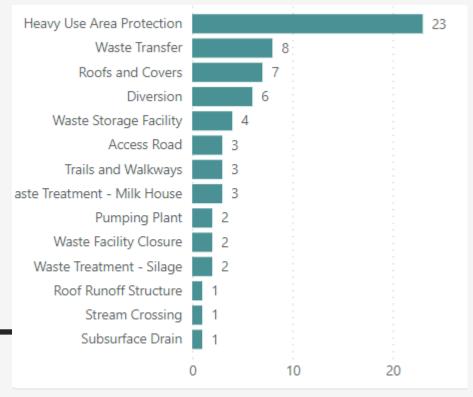


Before (left) and after (right) installation of a BMP project on a small farm in Georgia, VT.

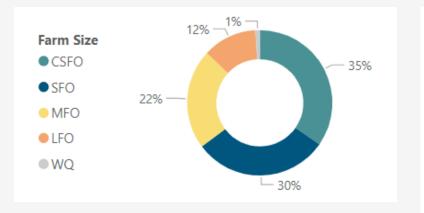
Best Management Practice (BMP) Program SFY2023

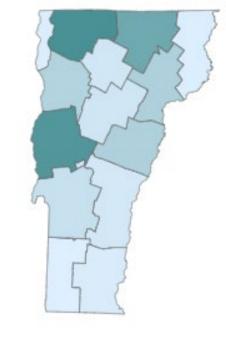
66 Grant Projects 194 Practices Installed 1,008 Visits to 287 Farms

Structural Practices Installed



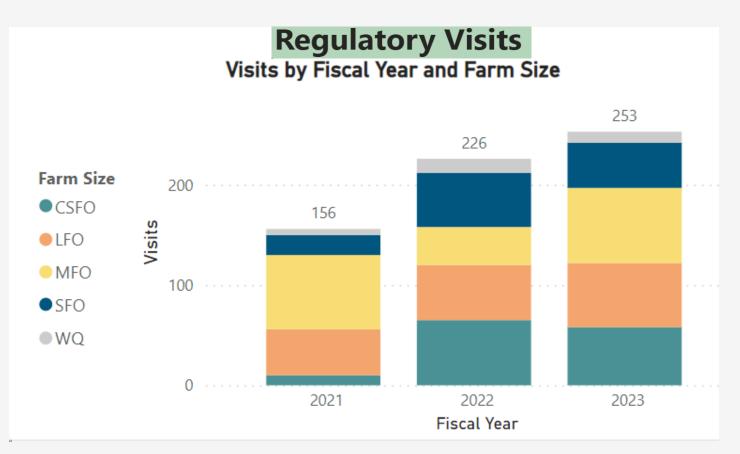
Technical Assistance Visits

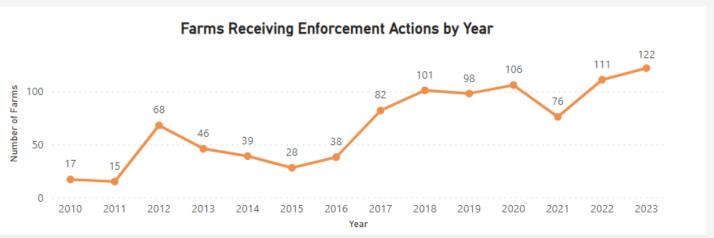




Accountability







Update on the \$6M in the BAA

"Our program is prepared to obligate all of the \$6 million in recent ARPA funding through the budget adjustment across roughly 65 individual projects to reduce water quality runoff from farm production areas."

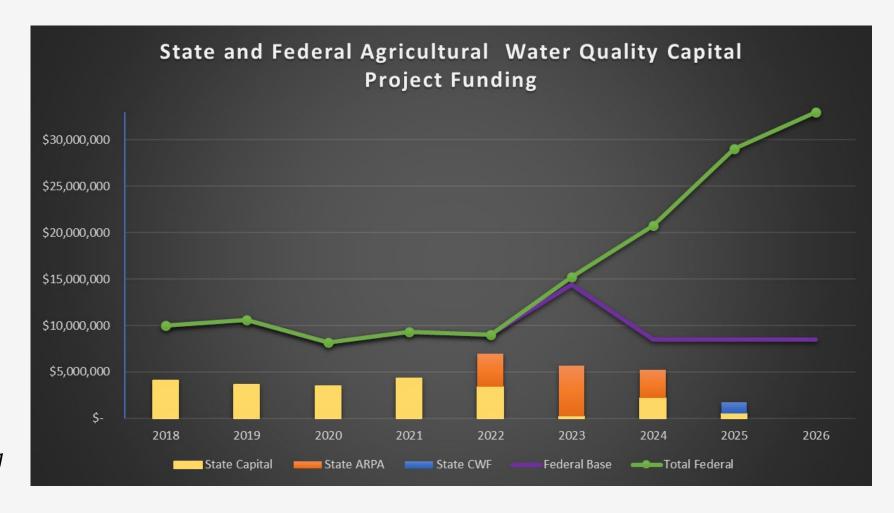
Adjusted Annu	ıal Al	locations					
		ARPA	Capital	Capital BAA	CWF	Total by FY	Change
2022	\$	3,500,000	\$ 3,436,109			\$ 6,936,109	
2023	\$	5,451,781	\$ 200,000			\$ 5,651,781	19%
2024	\$	3,000,000	\$ 2,202,019			\$ 5,202,019	8%
2025	\$	-	\$ 550,000		\$ 1,200,000	\$ 1,750,000	66%
Total by Fund	\$	11,951,781	\$ 6,388,128	\$ -	\$ 1,200,000	\$ 19,539,909	

Appropriated A	٩nnu	al Allocations									
	ARPA		ARPA Capital			Capital BAA	CWF		Total by FY		
2022	\$	3,500,000	\$	3,436,109					\$	6,936,109	
2023	\$	2,451,781	\$	200,000					\$	2,651,781	
2024	\$	-	\$	2,202,019	\$	6,000,000			\$	8,202,019	-2
2025	\$	-	\$	550,000			\$	1,200,000	\$	1,750,000	
Total by Fund	\$	5,951,781	\$	6,388,128	\$	6,000,000	\$	1,200,000	\$	19,539,909	

¹March 22,2024 memo House Corrections and Institutions Committee. Project details provided in a March 19, 2024 memo to House Corrections and Institutions Committee pages 6-8.

Vermont Funding for Water Quality Projects

A historically significant increase in federal funding under IRA is available for projects (if match is met) in 2024-2026.

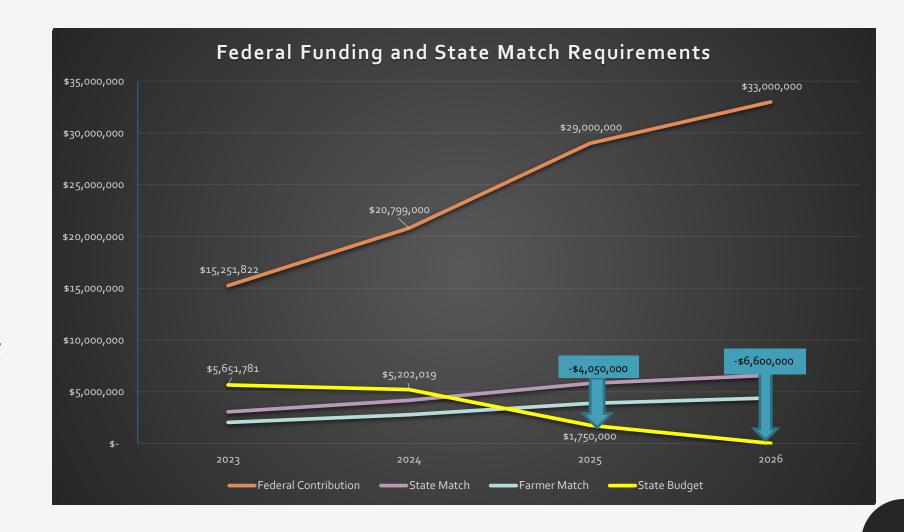


Demand v. Budget for SFY2025

Currently 266 open enforcement actions

April 1st deadline approaching for new state projects; 23 already submitted

June 14, 2024 is the federal deadline for projects so lots more to come!





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