



Vermont Agency of Agriculture, Food
and Markets - Division of Water Quality

**State Fiscal Year 2024 Annual Report
on Financial and Technical
Assistance for Agricultural Water
Quality**

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6 V.S.A. § 4825.

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Contact Information

To receive this information in an alternative format or for other accessibility requests, please contact:

Nina Gage, Assistant Director
 Agency of Agriculture, Food and Markets, Division of Water Quality
 Nina.Gage@Vermont.gov, 802-622-4098

Table of Contents

Introduction	4
COMPANION & COMPLEMENTARY REPORTS	4
Agricultural Clean Water Initiative Program	6
Best Management Practice Program	11
Heavy Use Area Protection and Clean Water Diversion Osgood’s Organic Farm	13
Conservation Reserve Enhancement Program	15
Riparian Buffer Planting and Livestock Exclusion from Water Cayden Theberge Farm	17
Capital Equipment Assistance Program	18
Improving Cover Crops & Hayland on a Diversified Operation Sweetland Farm	20
Farm Agronomic Practice Program	22
Improving No-Till and Cover Crops Systems Grembowicz Farm	23
Seeding and Filter Strip Program	25
Filter Strip Establishment Nelson Farms VT, LLC	27
Pasture and Surface Water Fencing Program	28
Sheep Grazing Management Plan and Infrastructure Hands and Heart Farm	29
VT Farmer Ecosystem Stewardship Program	31
Incentive for Conservation Practices Trillium Hill Farm, LLC	32
Vermont Pay for Performance Program	34
Rotational Grazing Choiniere Family Farm	36



Figures and Tables

Table 1. AGCWIP Investments Actual and Projected _____	6
Table 2. BMP Investments Actual and Projected _____	11
Figure 2. (Left) Uncovered barnyard had runoff issues in wet conditions. (Right) New covered barnyard area provides a clean area for manure storage and livestock and eliminates runoff concerns. _____	13
Table 3. CREP Investments Actual and Projected _____	15
Figure 3. (Left) Trees and shrubs planted in the newly established riparian buffer zone. (Right) Stream crossing installed to enable livestock crossing with reduced impacts. _	17
Table 4. CEAP Investments Actual and Projected _____	18
Figure 4. Norah Lake, owner and head farmer of Sweetland Farm, and their no till grain drill for cover cropping and no till pasture and hayland renovation. _____	20
Table 5. FAP Investments Actual and Projected _____	22
Figure 5. A multispecies cover crop mix of radish and winter rye cover soil and prevent sediment runoff through the winter months while building soil health, sequestering carbon in the soil, and providing additional anti-compaction benefits for the farm. ____	23
Table 6. SFS Investments Actual and Projected _____	25
Figure 6: Newly installed Filter Strip adjacent to cropland currently managed in corn.	27
Table 7. PSWF Investments Actual and Projected _____	28
Figure 7. (Left) Perimeter pasture fence and water pipeline. (Right) Sheep grazing in a paddock as part of the farm’s rotational grazing management plan in September 2024. _____	29
Table 8. VFESP Investments Actual and Projected _____	31
Figure 8. Fall evening view of mulched crop beds at Trillium Hill Farm in Hinesburg__	32
Table 9. VFPF Investments Actual and Projected _____	34
Figure 9. Rotational grazing of dairy herd at Choiniere Family Farm in Highgate Center. _____	36



Introduction

The Vermont Agency of Agriculture, Food & Markets (VAAFAM) presents this annual report to the General Assembly of Vermont regarding activities in support of the objectives of Subchapter 3: Water Quality; Financial and Technical Assistance of 6 V.S.A. Chapter 215, including use of State, federal, and private funds.

COMPANION & COMPLEMENTARY REPORTS

[Water Quality Division – Interactive Data Report](#)

Readers can access the Interactive Data Report for details on program investments, conservation efforts, phosphorus reductions, and other program results in key watersheds.

[Vermont Clean Water Initiative 2024 Performance Report](#)

VAAFAM annually reports clean water efforts to the Agency of Natural Resources (ANR) Department of Environmental Conservation (DEC) who compiles the report on behalf of the Agency of Administration. This report summarizes investments and progress toward state water quality goals across all land use sectors.

[2024 Report on Federal Funding Related to Water Quality Improvement Efforts in Vermont](#)

VAAFAM annually reports this to the ANR DEC who compiles the report on behalf of the Agency of Administration. This report summarizes available federal funding for water quality programs in Vermont.



Highlights SFY2024



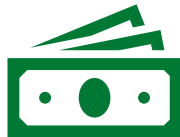
1,274 Visits to VT Farms

On-site technical assistance visits completed to support conservation planning and to ensure accountability with environmental and program standards.



101 Events Held

Outreach and educational events to share information and provide training for Vermont farms to support conservation practices and water quality.



\$18.4 Million Invested

Investment in agricultural water quality through technical and financial assistance programs.



558 Projects Awarded

On-farm clean water projects awarded to reduce runoff from farms and improve water quality.



334 Regulatory Compliance Assessments

Compliance assurance assessments include regulatory inspections, investigations, enforcement, other regulatory reviews and regulatory technical assistance.



30,551 kg Phosphorus Reductions

Total phosphorus reductions achieved as a result of conservation practice installation and production area compliance.



Agricultural Clean Water Initiative Program

The Agricultural Clean Water Initiative Program (AGCWIP) funds organizations, businesses, and individuals working with Vermont farms to improve water quality. Local and regional partners help educate, implement, and verify conservation practices that reduce nutrient runoff. The majority of AGCWIP funds are allocated through a competitive AGCWIP Grant Opportunity which focuses on three areas: Education and Outreach, Technical Assistance, and Organizational Capacity Development. In addition, a portion of AGCWIP funds support Water Quality Division program initiatives and special projects such as mapping, research, and sampling projects.

For more information about the program, visit our webpage:

agriculture.vermont.gov/agricultural-clean-water-initiative-program.

Table 1. AGCWIP Investments Actual and Projected

	State Fiscal Year	Total State Investments	Description
Actual	SFY2023	\$6.6 Million	SFY2023 state investments primarily reflect the SFY2022 AGCWIP funding opportunity, released in Fall 2021, and a special SFY2023 AGCWIP Organizational Capacity Development funding opportunity released in Fall 2022. These funding opportunities resulted in 14 grant awards.
	SFY2024	\$7.4 Million	SFY2024 State Investments primarily reflect the SFY2024 AGCWIP funding opportunity released in Fall 2023. See more information below.
Projected	SFY2025	\$1 Million	SFY2025 AGCWIP activities include smaller than normal funding opportunities that have been/will be released. See more information below.
	SFY2026	\$8 Million	In SFY2026, AAFM anticipates releasing an AGCWIP grant funding opportunity for agricultural



State Fiscal Year	Total State Investments	Description
		partners, as well as investing in strategic initiatives supporting Water Quality Division programs. Activities to be undertaken are based on proposed budgets and are subject to change based on the final SFY2026 budget allocations.

SFY2024 Activities

In SFY2024, reporting for prior AGCWIP agreements resulted in 651 technical assistance visits by partners on 303 farms. These technical assistance visits help farms understand and comply with the Required Agricultural Practices Rule (RAPs), provide educational information about conservation practices, and help farms navigate and apply to private, State, and Federal financial assistance programs.

In SFY2024, the Agency released a new biannual AGCWIP funding opportunity, resulting in a total of \$7.4 million in funding awarded across 10 projects and initiatives to improve water quality in Vermont through technical assistance, analytical support, education and outreach to the agricultural community and organizational development initiatives to increase and improve services to implement clean water projects on farms. Over the next two years, these SFY2024 awards will fund 23 full-time equivalent staff that will conduct approximately 160 educational events and over 1,000 on-site farm technical assistance visits to result in conservation practice adoption on Vermont farms.

Awards provided in SFY2024 are summarized below -

- **University of Vermont (UVM) Extension - \$3,126,268.** This funding supports UVM programs and staff working individually and collaboratively to provide individual technical assistance, deliver group education, develop educational materials, conduct applied research, and assess overall impact of programs and services across Vermont. This work helps VT farms achieve compliance with the RAPs, while improving crop and soil health and enhancing economic viability. UVM Extension’s five delivery teams have developed over many years to build robust relationships with farms of all types and sizes to meet their unique needs. To learn more about UVM Extension: <https://www.uvm.edu/extension>
- **Vermont Natural Resources Conservation Council (NRCC) - \$2,500,000.** Funding to NRCC is sub-awarded to 13 local Natural Resources Conservation Districts, serving producers in all 14 VT counties. Districts have been helping farmers since their inception in the 1940s and are networked closely with their local communities and producers. This funding supports



continued and expanded district agricultural water quality assistance, such as education, outreach, technical assistance, project coordination and case management, and helping producers connect to financial and technical assistance resources available through a range of partners and conservation networks. To learn more and find your local Natural Resources Conservation District: www.vacd.org/contact-nrcds/

- **Champlain Valley Farmer Coalition, Inc. (CVFC) - \$551,470.** CVFC is a non-profit organization with a farmer-member base. Its mission is to assist farmers in implementing innovative agricultural practices that enhance water quality, soil health, climate mitigation and long-term economic resiliency. Funding supports organizational capacity development, education and outreach, and technical assistance to farms primarily in the Champlain Valley as well as coordination efforts among farmer watershed groups across the State. To learn more about the Champlain Valley Farmer Coalition: cvfc-vt.com/
- **Farmer’s Watershed Alliance (FWA) - \$356,910.** FWA is a non-profit organization with a farmer-member base. This funding supports FWA’s initiatives related to organizational capacity development and technical assistance focused on precision agriculture technologies. To learn more about the Farmer’s Watershed Alliance: www.farmerswatershedalliance.org/
- **American Farmland Trust (AFT) - \$242,163.** AFT is a national organization, with this project focused on Vermont farms through their Northeast Regional Team. Funding supports two initiatives: expanding access to climate adaptation and resiliency planning, and comprehensive technical assistance to dairy and livestock farms in the Champlain Valley including on-farm visits, soil, manure, and forage testing and analysis. To learn more about the American Farmland Trust: farmland.org/about/how-we-work/new-england-regional-office/
- **Northeast Organic Farmer Association (NOFA-VT) - \$163,375.** NOFA-VT is a trusted farmer’s association that offers technical assistance and educational offerings to support farmers in adopting conservation practices. Funding supports education, outreach, and technical assistance to organic and non-organic farms in Vermont related to water quality, as well as related to climate resiliency planning on farms. To learn more about the Northeast Organic Farmer Association: www.nofavt.org/
- **Vermont Grass Farmers Association (VGFA) - \$135,759.** VGFA is a non-profit, farmer-led organization supporting pasture-based livestock farms. Funding supports staffing to facilitate and organize education and outreach events for both farmers and technical assistance providers related to grass farming and agronomic grazing practices on Vermont farms. This includes support for annual pasture walks, luminaries, and the northeast grazing conference. To learn more about the Vermont Grass Farmers Association: www.vtgrassfarmers.org/



- **Vermont Geological Survey (VGS) Geological Services - \$25,000.** Funding supports geological services critical for the VAAFM Environmental Surveillance Program and the Groundwater Monitoring Program. Geological services may include bedrock and surficial mapping, borehole camera surveys, spatial analysis of wells using Geographic Information System (GIS) software, groundwater sampling and analysis, analysis of long-term monitoring data, assessment of the fate and transport of nitrates and other agricultural chemicals in groundwater and surface water to identify sources, surface water sampling, surface geophysics, and more.
- **University of Vermont – Rubenstein Perennial Internship Program - \$10,000.** The purpose of this award is to support collaboration with the Rubenstein School of Environment and Natural Resources (RSEN) at the University of Vermont for a summer Student Internship Program to gain workplace experience and contribute to environmental problem solving in the agricultural water quality field in 2024 and 2025.
- **Eastern Research Group, Inc. - \$105,833.** This award provides detailed third-party environmental review and analysis on the subject of reporting and analysis support for agricultural water quality waste export and import activities between a commercial digester and farm operation.

Learn more about current and historic investments and grant-funded practice implementation in the [Water Quality Division – Interactive Data Report](#).



Figure 1. A group of farmers and agricultural technical assistance providers discuss manure injection with the Champlain Valley Farmer Coalition in Addison County.



SFY2025 Activities

The major AGCWIP grant opportunities are released on a bi-annual basis, with the last significant grant opportunity in SFY2024. Therefore, SFY2025 obligations are anticipated to be under \$1 million for discrete Water Quality Division initiatives and programs. The current state fiscal year plans do not include any major grant opportunities to be released in preparation of the next bi-annual grant opportunity and request for applications anticipated in SFY2026.

The following discrete projects are currently in progress or underway within this program:

- **Grazing Education and Outreach for Technical Assistance Providers and Farmers** - Discrete contracted educational programming for rotational grazing efforts.
- **Vermont Pay for Performance Program (VPFP) Social and Economic Analysis** - Outcome assessment and social science research related to the VPFP program.
- **Eco AmeriCorps Program** - Support for hosting an Eco Americorps Service Member.
- **Hosting and Development for the Partner Database and the Water Quality Database** – Mapping and analytical support for conservation practice and water quality regulatory assessment systems.



Best Management Practice Program

The Best Management Practice (BMP) Program helps farmers make on-farm improvements to protect water quality. The program offers technical and financial support to identify water quality issues on farms and implement structural improvements to prevent waste contamination of surface and groundwater. Farmers receive access to engineering consultations, and financial assistance is available to cover a portion of construction costs for these improvements. Funding can also be utilized as match to support USDA Environmental Quality Incentive Program projects.

For more information about the program, visit our webpage: agriculture.vermont.gov/bmp.

Table 2. BMP Investments Actual and Projected

	State Fiscal Year	Total State Investments	Federal & Local Match	Description
Actual	SFY2023	\$3.8 million	\$3.9 million	A total of 48 BMP projects were awarded in SFY2023.
	SFY2024	\$5.8 million	\$1.6 million	An increase in funding awards occurred in SFY2024 due to American Rescue Plan Act Funding. Projects recently awarded do not yet have complete match data available. Upon project completion, additional match funding will be reported.
Projected	SFY2025	\$4.3 million	TBD	The current program awards total \$2.5 million and AAFM anticipates an additional \$1.8 million in funding to be awarded to projects in the Spring of 2025.
	SFY2026	\$5.0 million	TBD	Activities to be undertaken are based on proposed budgets and are subject to change based on the final SFY2026 budget allocations.



SFY2024 Activities

A total of \$5.8 million in funding was awarded across 54 projects to improve water quality through structural conservation practices on farms across Vermont. Nine projects, representing 16% of the total, were awarded funding as match for NRCS EQIP contracts. Approximately 38% of SFY24 BMP grant payments went towards supporting NRCS EQIP projects. To date, all SFY2024 projects have leveraged \$1.6 million in matching funds from federal and local sources, with additional contributions expected as more projects are completed. VAAFAM received 105 applications for projects in SFY2024, of which 45 have been competitively selected for engineering and financial assistance. Sixteen of those projects, representing 35% of the total selected projects, are tied to NRCS EQIP project plans or contracts. Program staff including seven engineers and two program coordinators completed 364 site visits to support new and existing projects.

Learn more about current and historic investments and grant-funded practice implementation in the [Water Quality Division – Interactive Data Report](#).

SFY2025 Activities

There continues to be a strong demand for BMP Program assistance and funding. So far in SFY2025, the BMP Program has received 30 applications, with an upcoming application deadline for assistance in April 2025. As of December 16, 2024, in SFY2025, over \$2.5 million of State funding has been awarded in 24 BMP program grants to farmers. An additional 15 projects are currently in the design phase and anticipated to be awarded within SFY2025. These grants will support practices such as Heavy Use Area Protection, Diversion, Waste Storage Facilities, and Waste Transfers. Funds will continue to be awarded throughout the remainder of SFY2025 for implementation in the 2025 and 2026 construction seasons.



Heavy Use Area Protection and Clean Water Diversion Osgood's Organic Farm



Figure 2. (Left) Uncovered barnyard had runoff issues in wet conditions. (Right) New covered barnyard area provides a clean area for manure storage and livestock and eliminates runoff concerns.

Osgood's Organic Farm is a small, grass-fed dairy and beef farm in Corinth, VT owned and operated by George and Mary Osgood. George's father, Robert, started the farm more than 65 years ago. The Osgood's practice rotational grazing to promote pasture health and productivity. They move their cows to a new paddock every 12 hours during the grazing season.

The Osgood's had an unimproved, worn-down barnyard area adjacent to their milking barn that was used to ensure daily outdoor access requirements for livestock under their organic certification. The barnyard regularly turned into a muddy mess during wet conditions. George and Mary had some concerns about agricultural runoff from this barnyard area, so they reached out to the BMP program for help.

BMP program engineers, Rob Achilles and Amer Suvalic, visited the Osgood's farm to look at the site and agreed that improvements to the barnyard would be beneficial for the neighboring stream. In 2021, Osgood's Organic Farm received a BMP grant for \$36,000 to install an improved heavy use area made of asphalt. This provided a clean, non-eroding surface where the cows could safely congregate, and manure could be easily stacked & managed providing less risk of barnyard runoff. A swale was also installed to divert any potential runoff from the barnyard into one of their adjacent pastures.



In the summer of 2024, Osgood's received an additional BMP grant for \$85,000 to install a hoop structure over the heavy use area. This hoop structure will prevent rainwater from mixing with agricultural wastes in the barnyard. The clean rainwater which would otherwise fall on the barnyard and mix with manure, instead, is safely diverted to an adjacent pasture. These barnyard and waste storage improvements represent a win for water quality by preventing agricultural runoff and a win for the farm by enabling improved barnyard management and conditions.



Conservation Reserve Enhancement Program

The Conservation Reserve Enhancement Program (CREP) is part of the Conservation Reserve Program (CRP), the country’s largest private-land conservation program. CREP is administered via a partnership between VAAFM and the United States Department of Agriculture (USDA) Farm Service Agency (FSA) and the Natural Resources Conservation Service (NRCS). The program compensates agricultural landowners who remove environmentally sensitive riparian land from agricultural production and convert it to forested buffers, filter strips, or grassed waterways.

For more information about the program, visit our webpage: agriculture.vermont.gov/crep.

Table 3. CREP Investments Actual and Projected

	State Fiscal Year	Total State Investments	Federal & Local Match	Description
Actual	SFY2023	\$20,432	\$384,813	VAAFM awarded 7 CREP grants supporting riparian buffer installations planned for Spring 2023 and 2024.
	SFY2024	\$18,720	\$310,263	VAAFM awarded 7 CREP grants supporting riparian buffer installations planned for Spring 2024 and 2025.
Projected	SFY2025	\$23,490	TBD	VAAFM anticipates awarding a total of 9 CREP grants supporting riparian buffer installations planned for Spring 2025 and 2026.
	SFY2026	\$30,000	TBD	Activities to be undertaken are based on proposed budgets and are subject to change based on the final SFY2026 budget allocations.



SFY2024 Activities

A total of \$18,720 in funding was awarded to 7 projects to improve water quality through riparian buffer installation. These projects further leveraged \$310,263 in federal match funding. Within the fiscal year, 72 acres of riparian buffers were installed. This includes 44.8 acres of new riparian buffers on 10 farms and 27.2 acres of riparian buffer enhancements for 2 farms re-enrolling in the program. VAAFMM CREP staff completed 103 site visits to 60 farms to support new and existing projects.

Learn more about current and historic investments and grant-funded practice implementation in the [Water Quality Division – Interactive Data Report](#).

SFY2025 Activities

The CREP program is highly impacted by the federal Farm Bill policy. The current 2018 Farm Bill provided program authorization for five years through September 30, 2023. The Further Continuing Appropriations and Other Extensions Act 2024 authorized programs to continue through September 30, 2024. On December 21, 2024, Congress enacted a one-year extension of the current farm bill including authorization for the CRP program through September 30, 2025. Luckily, State of Vermont technical assistance staff are not impacted by federal program authorizations and can continue to complete field work related to project planning and design and support farmers who have existing CREP contracts with implementation.

As of December 1, 2024, VAAFMM has received 9 requests for CREP assistance encompassing 61.21 acres of planned riparian buffers, will be installed in the Spring of 2025 and Spring of 2026. Additionally, 17 acres are planned to be enhanced through program federal contract re-enrollments in the Spring of 2025. CREP Planners continue to work with existing contract holders to steward their existing buffers as well as coordinate with program partners to deliver the program.



Riparian Buffer Planting and Livestock Exclusion from Water Cayden Theberge Farm



Figure 3. (Left) Trees and shrubs planted in the newly established riparian buffer zone. (Right) Stream crossing installed to enable livestock crossing with reduced impacts.

In 2024, Cayden Theberge enrolled in the Conservation Reserve Enhancement Program. In addition to the grazing infrastructure improvements made with the Agency’s Pasture and Surface Water Fencing program, Cayden installed a 6-acre riparian forest buffer on Hungerford Brook which runs through the farm’s pastures. The farm is a beef operation which does rotational grazing on their pastures. A stream crossing was installed to allow livestock to cross safely through the stream while limiting impacts to water quality. A fence is currently being installed to exclude livestock from the stream and protect the planted buffer. The Farm Service Agency and U.S. Fish and Wildlife Service covered 100% of the total project implementation costs and the Agency of Agriculture provided an incentive payment of \$315 per acre to the farm for enrollment in the program. The Agency of Agriculture also provide technical assistance for the project planning and implementation oversight. The new pasture infrastructure will allow for enhanced rotational grazing management to reduce pasture overgrazing, and the riparian forested buffer will reduce runoff from adjacent pastures while providing improved aquatic organism habitat.



Capital Equipment Assistance Program

The Capital Equipment Assistance Program (CEAP) provides financial assistance to Vermont farms, nonprofits, and custom applicators to purchase equipment that helps reduce agricultural runoff, improve water quality, lower manure odors, separate phosphorus, reduce greenhouse gas emissions, and reduce costs for manure application.

For more information about the program, visit our webpage: agriculture.vermont.gov/ceap.

Table 4. CEAP Investments Actual and Projected

	State Fiscal Year	Total State Investments	Federal & Local Match	Description
Actual	SFY2023	\$1.4 million	\$490,660	Investments were made on 42 farms, leveraging significant farm investment in match.
	SFY2024	\$1.6 million	\$761,729	Investments were made on 44 farms, leveraging significant farm investment in match.
Projected	SFY2025	\$1.5 million	TBD	53 applications representing over \$2 million in requested funding were received by the November 1, 2024, deadline and are under review.
	SFY2026	\$1.0 million	TBD	Activities to be undertaken are based on proposed budgets and are subject to change based on the final SFY2026 budget allocations.



SFY2024 Activities

A total of \$1.6 million dollars was awarded through 47 grants to Vermont farmers, organizations, and custom applicators to assist with purchasing conservation equipment. High demand continues for the CEAP program as farmers seek assistance to purchase equipment for increased conservation practice adoption and implementation. These projects have leveraged at least \$722,000 in farmer expenditure toward conservation equipment investments and over \$39,215 in additional support from the Vermont Housing and Conservation Board.

With the equipment acquired through CEAP, farmers, nonprofits, and custom applicators implemented conservation practices and improved nutrient management on more than 21,000 acres of agricultural land in SFY 2024.

Learn more about current and historic investments and grant-funded practice implementation in the [Water Quality Division – Interactive Data Report](#).

SFY2025 Activities

In September of 2024, a CEAP funding opportunity was made available to Vermont farmers, custom operators, and nonprofit organizations. This funding round included a variety of eligible equipment categories with specific funding maximums based on each category correlated to water quality impact as well as relative cost of equipment. Preliminary grant awards will be offered in January of 2024 for at least \$1.5 Million in State funding to be awarded for innovative equipment acquisition enabling conservation practice implementation on Vermont farms.

The CEAP program continues to be competitive with 55 applications received in the fall 2024 request for applications. Applicants represented a wide range of farm sizes from all over the state. The total request for funding, limited by the equipment funding cap in each equipment category, was \$2.1 million.



Improving Cover Crops & Hayland on a Diversified Operation Sweetland Farm



Figure 4. Norah Lake, owner and head farmer of Sweetland Farm, and their no till grain drill for cover cropping and no till pasture and hayland renovation.

Sweetland Farm is a highly diversified family farm in Norwich, VT growing 15 acres of mixed vegetables, 10 acres of pasture-raised pork, chicken, and turkey, 120 acres of hayland, 3 acres of orchard crops, and 100 acres of working forest. They sell primarily direct-to-consumer through their 400-member CSA and year-round farm store.

In 2024, Sweetland Farm applied to CEAP for a small no till grain drill that can cover crop individual beds as soon as one crop is harvested. In a mixed vegetable operation, this makes a big difference because it means you no longer need to wait for the full field to be harvested to plant the cover crop.

Sweetland Farm's application was selected for funding and in the spring of 2024, they received a \$27,000 grant to support 90% of the cost of the no till grain drill. Prior to this purchase, Sweetland Farm planted cover crop on about 30% of their vegetable fields. With the



purchase of this specialized drill, in 2024 they were able to plant cover crop on 100% of their vegetable ground. The quality of the cover crop was also improved, according to the farm.

Sweetland Farm purchased a model of grain drill that could also be used to reseed their pastures and haylands without the use of tillage. This was a priority for the farm because they know that reseeding pasture and hayland that has bare soil areas or insufficient stocking of proper species reduces nutrient runoff and increases uptake and utilization of nutrients in place.

“It is a great piece of equipment and helped us get cover crop on the veggie fields right as each bed of crop came out... Plus it works well overseeding the hay fields.”

- Norah Lake, owner & head farmer of Sweetland Farm



Farm Agronomic Practice Program

The Farm Agronomic Practice (FAP) Program provides financial assistance for conservation practices that improve soil, reduce erosion, and enhance water quality on farms. Funding also supports education to help farmers and service providers understand agricultural impacts and water quality regulations. FAP practices are essential for reducing phosphorus runoff to Vermont's waters.

For more information about the program, visit our webpage: agriculture.vermont.gov/fap.

Table 5. FAP Investments Actual and Projected

	State Fiscal Year	Total State Investments	Acres of Conservation	Description
Actual	SFY2023	\$1.0 million	36,830 acres	Investments were made on over 200 total farms in SFY2023.
	SFY2024	\$1.8 million	32,876 acres	Investments were made on over 280 total farms in SFY2024.
Projected	SFY2025	\$1.2 million	TBD	Demand is anticipated to remain high for the FAP program in SFY2025. Investment is already underway on over 180 total farms in SFY2025.
	SFY2026	\$1.2 million	TBD	Activities to be undertaken are based on proposed budgets and are subject to change based on the final SFY2026 budget allocations.

SFY2024 Activities

A total of \$1.8 million dollars has been awarded to support the adoption and implementation of farm agronomic practices on over 280 individual farm operations.



These funds have resulted in 32,876 acres of conservation practices across Vermont. Program staff completed 94 site visits to support farms in the successful implementation of agronomic practices and monitor grant compliance.

Learn more about current and historic investments and grant-funded practice implementation in the [Water Quality Interactive Data Report](#).

SFY2025 Activities

As of December 1, 2024, the FAP program has awarded over \$1.2 million in SFY2025 to support the adoption and implementation of farm agronomic practices on 186 individual farm operations. Currently, program staff are reviewing payment requests and practice verifications associated with Fall 2024 season rotational grazing and cover crops. Applications for additional assistance in 2025 will be accepted through April 1, 2025.

Improving No-Till and Cover Crops Systems Grembowicz Farm



Figure 5. A multispecies cover crop mix of radish and winter rye cover soil and prevent sediment runoff through the winter months while building soil health, sequestering carbon in the soil, and providing additional anti-compaction benefits for the farm.



Ted Grembowicz and his son Jeff farm 1,100 acres in Rutland County, embracing no-till and cover cropping to protect their soil and water. Since first reaching out for assistance from the Farm Agronomic Practices (FAP) program in 2015, they've relied on the program's financial support to sustain and refine these practices. In 2024, they received \$10,000 to plant over 140 acres of no-till crops and 260 acres of cover crops.

The alternating cover cropping, no till soybean and no till rye management system has helped Grembowicz Farm keep the ground covered throughout the year while minimizing soil disturbance, reducing the amount of nutrients they need to apply to their fields.

In recent years, Grembowicz Farm has been experimenting with planting radishes as a cover crop earlier in the growing season. When farms plant 100% no till, over time they run the risk of developing a compacted layer under the soil surface that can reduce crop yield. Radishes' deep taproots are known to naturally create air pockets in compacted soil, improving drainage and nutrient cycling. As a result, Ted and Jeff hope this innovative cover cropping approach will replace the need for even occasional tillage.

"We definitely applaud the funding from the State that has helped us continue and refine these practices."

-Ted Grembowicz, owner & operator of Grembowicz Farm



Seeding and Filter Strip Program

The Seeding and Filter Strip (SFS) Program provides technical and financial assistance to Vermont farmers for establishing perennially vegetated grassed waterways, filter strips, pasture & hay plantings, and associated infrastructure to address critical source areas, erosion, and surface runoff. Please note that this program was previously referred to as the Grassed Waterway and Filter Strip Program (GWFS).

For more information about the program, visit our webpage: agriculture.vermont.gov/sfs.

Table 6. SFS Investments Actual and Projected

	State Fiscal Year	Total State Investments	Description
Actual	SFY2023	\$0	Limited historic interest in this program has prompted a revamp and rebranding of this program to garner more applicants.
	SFY2024	\$14,250	14 Acres of filter strips were enrolled in this program on one farm in SFY2024.
Projected	SFY2025	\$100,000	29 acres of pasture/hayland plantings across two farms are enrolled in the program. Current investments for these projects total \$23,000.
	SFY2026	\$100,000	Activities to be undertaken are based on proposed budgets and are subject to change based on the final SFY2026 budget allocations.

SFY2024 Activities

A total of \$14,250 was awarded to support installation of 14 acres of filter strips to reduce field runoff on a farm operation in the Memphremagog watershed. VAAFAM staff worked on revising the program to make it more impactful and better aligned with the



needs and interests of the agricultural community. Revisions were made to make the program more administratively efficient, straightforward and easy for farmers, and to refocus the program on supporting the implementation of wide, harvestable filter strips. VAAFAM staff also worked on updating program branding and outreach and educational materials.

Extreme rain events in 2023 and 2024 revealed gaps in the programming and support available for VT farmers impacted by flooding and heavy rains. In consideration of these gaps, VAAFAM staff worked to make the SFS program well-suited to support farmers in seeding down flood-vulnerable annual cropland into perennial vegetation (e.g., pasture or hay fields), renovating flood-damaged pasture/hayland, and implementing wider/improved buffers along ditches and waterbodies.

Learn more about current and historic investments and grant-funded practice implementation in the [Water Quality Division – Interactive Data Report](#).

SFY2025 Activities

As of December 1, 2024, the SFS program invested \$23,000 in SFY2025 to support the adoption and implementation of pasture and hay seedings on two farms operations. Currently, program staff are releasing outreach about the newly revamped program to garner interest for 2025 projects. Several farms have already reached out expressing interest in the program and planning projects for spring 2025 installation is underway.



Filter Strip Establishment Nelson Farms VT, LLC



Figure 6: Newly installed Filter Strip adjacent to cropland currently managed in corn.

In August of 2024, with the help of a Seeding and Filter Strip (SFS) program grant, Cy and Dylan Nelson of Nelson Farms VT planted wide, vegetative filter strips along the edges of three of their corn fields which directly border surface waters in the Lake Memphremagog watershed. These 50-ft wide strips of perennial vegetation will help to capture soil and nutrient runoff from their crop fields and prevent it from entering the neighboring stream. Filter strips can be an extremely effective way to protect and promote water quality; according to a 2021 metanalysis led by K.R. Douglas-Mankin, filter strips, on average, help to reduce sediment runoff by 78% and total phosphorus runoff by 63%. The Nelsons will regularly harvest the vegetation growing in the filter strips in the coming years, a practice which will both help them feed their cows and help to improve the filtering performance by encouraging vigorous plant growth and preventing any accumulation of excess nutrients in the filter strip. These vegetated filter strips will help the Nelson's protect local water quality for the next 10+ years.



Pasture and Surface Water Fencing Program

The Pasture and Surface Water Fencing (PSWF) Program provides technical and financial assistance to Vermont farmers to improve and expand managed rotational pasture management, as well as livestock exclusion from water. This program works with livestock operations of all sizes to improve pasture management practices for water quality and identify water quality improvement projects in pastures.

For more information about the program, visit our webpage: agriculture.vermont.gov/pswf.

Table 7. PSWF Investments Actual and Projected

	State Fiscal Year	Total State Investments	Description
Actual	SFY2023	\$213,716	A total of 23 grants were awarded in SFY2023.
	SFY2024	\$253,666	A total of 27 grants were awarded in SFY2024.
Projected	SFY2025	\$250,000	See summary below.
	SFY2026	\$250,000	Activities to be undertaken are based on proposed budgets and are subject to change based on the final SFY2026 budget allocations.

SFY2024 Activities

A total of \$253,666 was awarded to 27 individual farms to support exclusion fencing and rotational grazing infrastructure. Grant awards provide technical and financial assistance for fencing, water pipelines, water pumping plants, trails and walkways, water wells, stream crossings, and watering facilities. The program prioritizes practices that exclude livestock from surface waters. Technical assistance for farms interested in



the PSWF program is provided by one VAAFM grazing specialist, partly by two other VAAFM’s program staff, and partly by partner organizations supported through AGCWIP. VAAFM staff conducted 51 technical assistance visits on 38 farms related to the PSWF program.

Learn more about current and historic investments and grant-funded practice implementation in the [Water Quality Division – Interactive Data Report](#).

SFY2025 Activities

As of December 1, 2024, a total of \$146,840 of State funding has been awarded in SFY2025 through 14 grant awards to farmers across the State. VAAFM and partner organizations are currently providing technical assistance to approximately 62 farms that have expressed interest in the PSWF Program and improving grazing on their farms. Technical assistance may result in farms accessing federal funding programs, such as EQIP, and some may result in participation in the State PSWF program. The PSWF program prioritizes leveraging federal funding as applicable to each farm’s unique needs and as federal funds are available.

Sheep Grazing Management Plan and Infrastructure Hands and Heart Farm



Figure 7. (Left) Perimeter pasture fence and water pipeline. (Right) Sheep grazing in a paddock as part of the farm’s rotational grazing management plan in September 2024.

In 2023, UVM Extension Grazing Specialist Amber Reed (funded in part through AGCWIP) worked with Hands and Heart Farm in Charlotte Vermont to develop a rotational grazing plan and



application to the VAAFMM Pasture and Surface Water Fencing (PSWF) Program. A \$8,500 grant was awarded to Hands & Heart Farm, a small sheep farm in the Otter Creek watershed. The PSWF grant provided cost-share for the implementation of perimeter fencing, temporary paddock fencing, water tubs, and water pipeline to improve and enhance rotational grazing of the farm's sheep. The project was completed in November 2023 and has allowed the farm to move the animals more frequently following a rotational grazing plan. The new pasture infrastructure and enhanced rotational grazing management has provided the ability for the farm to adapt more readily to weather and pasture conditions, reducing risks of runoff from saturated or over grazed pastures.

“It has been a huge help to have all these permanent fences in place... it has made it so much easier to move the sheep around and follow the grazing plan Amber helped me make.”

- **Katherine Knox**



VT Farmer Ecosystem Stewardship Program

The Vermont Farmer Ecosystem Stewardship Program (VFESP) offers supplemental incentive payments to farmers who enroll in the USDA-NRCS Conservation Stewardship Program (CSP). These payments are meant to encourage more participation in the CSP program, to motivate farmers to increase their level of conservation and to build a cohort of Vermont farmer-advocates with experience engaging in comprehensive, farm-wide ecosystem stewardship. This program design follows the recommendations of the [Vermont Payment for Ecosystem Services and Soil Health Working Group](#), a coalition of farmers, non-profit organizations, technical service providers, policy makers and others that met from 2019 to 2022.

For more information about the program, visit our webpage: agriculture.vermont.gov/CSP-assist.

Table 8. VFESP Investments Actual and Projected

	State Fiscal Year	Total State Investments	Description
Actual	SFY2023	\$155,000	31 grants were awarded for a total of \$155,000 to Vermont farmers seeking CSP enrollment.
	SFY2024	\$459,000	54 grants were awarded for a total of \$459,000 to Vermont farmers seeking CSP enrollment.
Projected	SFY2025	\$475,000	21 grants have been awarded thus far in SFY2025 for a total of \$173,000 in incentive payments for Vermont farmers seeking CSP enrollment.
	SFY2026	\$375,000	This program was initially supported through one-time appropriations in SFY21 and SFY23, and these appropriations are anticipated to be available to support participants through SFY2025. An additional \$375,000 will be available to support this program in SFY2026, but eligibility will be limited to the Lake Champlain Basin only.



SFY2024 Activities

A total of \$459,000 was awarded to 54 individual farms to incentivize engagement and enrollment in the USDA NRCS CSP program. Applications for the NRCS CSP program closed on August 23rd, 2024. Incentive applications through the VFESP program continued on a rolling basis.

SFY2025 Activities

As of December 1, a total of \$173,000 of State funding has been awarded in SFY2025 through 21 grant awards to farmers across the State. Under the USDA CSP Program, existing program recipients are currently receiving ongoing technical and financial assistance through USDA NRCS staff. VAAFAM is expecting an increase in applications toward the end of SFY2025, in advance of the USDA CSP application deadline in August 2025.

Incentive for Conservation Practices Trillium Hill Farm, LLC



Figure 8. Fall evening view of mulched crop beds at Trillium Hill Farm in Hinesburg

In June of 2024, James Donegan of Trillium Hill Farm, LLC worked alongside planners from the United States Department of Agriculture Natural Resources Conservation Service (USDA NRCS) to enroll their 67 acres of agricultural land into the Conservation Stewardship



Program (CSP), for the installation of conservation practices on the farm. The enrollment into CSP was incentivized through a \$9,500 payment from the Vermont Agency of Agriculture, Food and Markets for the completion of a CSP assessment and contract that would enroll the farm into a 5-year contract for conservation practices and ecosystem stewardship across the whole farm.

The diversified vegetable farm and farmstand located in the heart of Hinesburg will be engaging in practices such as mulching, conservation cover for pollinators, and forage management for wildlife that will encourage the retention of nutrients, reduce tillage, and improved ecosystem services. For Trillium Hill Farm, enrolling in CSP meant that they could expand their beds to include an additional fall rotation of garlic where the mulch would retain soil and nutrients through the next year, and the incentive payments could go towards important infrastructure needs through their property, such as drainage systems and farm road improvements.



Vermont Pay for Performance Program

The Vermont Pay for Performance (VPFP) Program is a new and innovative program that provides performance-based payments to Vermont farmers for reducing phosphorus (P) losses from their agricultural fields. While most current conservation programs pay cost-share for practice implementation, VPFP pays for the outcomes of practices: it recognizes that conservation practices generate different levels of value to the public and directly compensates farms for that value. This approach also allows VAAFMM to target our water quality resources towards the highest impact farms and fields with respect to reducing phosphorus and improving water quality. Participating farmers use the Farm Phosphorus Reduction Planner (FarmPREP), a web-application tool that integrates farm management information, agronomic and hydrologic science, and numerical modeling to evaluate field-by-field reductions of average annual phosphorus losses.

This program is supported by the U.S. Department of Agriculture, under the Regional Conservation Partnership Program Alternative Funding Arrangement (RCPP AFA) Partnership Agreement 2145.

For more information about the program, visit our webpage at agriculture.vermont.gov/VPFP.

Table 9. VPFP Investments Actual and Projected

	State Fiscal Year	Total State Investments	Acres of Conservation	Description
Actual	SFY2023	\$3.7 million	50,141 acres	A total of 53 Phosphorous Reduction Grants were awarded in SFY23
	SFY2024	\$448,240	TBD	A total of 9 Phosphorus Reduction Grants were awarded in SFY 24.



	State Fiscal Year	Total State Investments	Acres of Conservation	Description
Projected	SFY2025	\$358,233	TBD	A total of 15 Phosphorous Reduction Grants have been awarded in SFY 25.
	SFY2026	\$0	TBD	VAAFAM will not be opening this program for new applicants in 2025. The funding available for this program is limited and our current federal grant budget is fully subscribed until we can secure additional funding for this program; therefore, no additional Phosphorous Reduction Grants will be awarded in SFY26.

SFY2024 Activities

A total of \$448,240 was awarded to 25 individual farms to support performance-based conservation agreements. The VPFP program enrolled 15 new participating farms who were awarded a total of \$49,300 in Management Planning and Data Entry grants. During this first phase, farms work with an assistance provider to enter all their field boundaries, manure and fertilizer rates, soil data, crop management, and conservation practices into FarmPREP on a field-by-field basis. This data entry and planning process is the first phase of the program and provides the information necessary for FarmPREP to model both their current and baseline phosphorus losses so improvements in management can be accurately measured and compared.

The VPFP program supported 48 farms in Phosphorus Reduction Payment grants. These participants were able to show through their FarmPREP Planned Assessments that they could achieve more than a 40% reduction in phosphorus loss when compared to the baseline and are thus eligible to receive \$100 per pound of phosphorus reduced above that threshold per year, up to an annual cap of \$50,000. Additionally, farms that show that they have a low average annual phosphorus loss of 1 lbs. P/acre or 0.5 lbs. P/acre are also eligible to receive a stewardship payment of \$3 or \$8/enrolled acre, respectively.

SFY2025 Activities

As of December 1, 2024, a total of \$358,233 has been obligated to 15 new program participants to support their performance-based conservation practices in 2024 and 2025 field seasons. The average grant amount for these new Phosphorus Reduction



Payment agreements is \$23,882 per year. Final phosphorus-reduction payments are dependent on updated and verified assessments accounting for actual farm management.

Rotational Grazing Choiniere Family Farm



Figure 9. Rotational grazing of dairy herd at Choiniere Family Farm in Highgate Center.

Since early 2022, VAAFAM has contracted the Vermont Association of Conservation Districts to provide local and regional technical assistance under the VPFM Program. The Franklin County Natural Resources Conservation District (FCNRCD) has partnered with 32 farms in Franklin and Grand Isle counties to implement the Vermont Pay for Performance Program. FCNRCD provides key technical assistance, helping farmers with data entry, verification, and ensuring their practices align with program requirements. This partnership has strengthened the district's relationships with farmers, including those new to the district, and supports them in maintaining and implementing up-to-date Nutrient Management Plans through regular sampling and farm visits.



Throughout the growing season, FCNRCD meets with farmers to review plans, assess land use changes, and adjust for factors like weather, ensuring the VFPF program reflects actual farm conditions. This approach has led to significant successes, and increased engagement year over year. As of the 2024 season, 46% of all VFPF Farms were located in Franklin County. Additionally, across the first three seasons of the program, 97% of all Franklin County farms that applied for the program moved from Phase 1: Data Entry Grant to Phase 2: Phosphorous Reduction Grant. This progression through phases is based on their phosphorus reduction efforts, with 90% of Franklin County farms surpassing the program’s 40% phosphorous reduction threshold.

The use of the FarmPREP tool has further enhanced the program by providing localized, site-specific data on phosphorus runoff. As the tool evolves to include pasture and grazing, it offers a more comprehensive view of land management practices. The Pay for Performance Program not only supports water quality but also promotes farm viability by incentivizing sustainable practices that benefit both the environment and the economy, ensuring Vermont’s working landscapes remain vibrant, productive, and profitable.

“The PFP program has been a pleasant surprise! Even though we have an all-grass farm, this program provides much incentive and rewards for using best management practices such as nutrient management planning and rotational grazing.”

- Guy Choiniere, owner and operator of Choiniere Family Farm
