

**ANNUAL REPORT ON FINANCIAL AND TECHNICAL ASSISTANCE FOR
AGRICULTURAL WATER QUALITY**

Prepared for the Vermont General Assembly in Accordance with
6 V.S.A. § 4825

Submitted by
Vermont Agency of Agriculture, Food and Markets

January 17, 2018

To: Vermont General Assembly

RE: Vermont Agency of Agriculture, Food & Markets annual report to the Vermont Legislature on financial and technical assistance for water quality.

The Vermont Agency of Agriculture, Food & Markets (VAAFMM) presents this annual report to the General Assembly of Vermont regarding activities in support of the objectives of this subchapter, including use of State, federal, and private funds: (1) undertaken during the preceding fiscal year; (2) in progress during the current fiscal year; (3) projected for the following fiscal year; and (4) remaining to be undertaken after the following fiscal year.

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Introduction

In combination, through fiscal year (FY) 2017, these voluntary conservation programs enabled \$1,174,213.34 in State expenditures to leverage \$1,482,406.38 in Federal expenditures.

Vermont farmers and agricultural landowners invested \$706,440.88 in water quality improvements through cost share contributions for the programs addressed in this report.

Best Management Practices Program

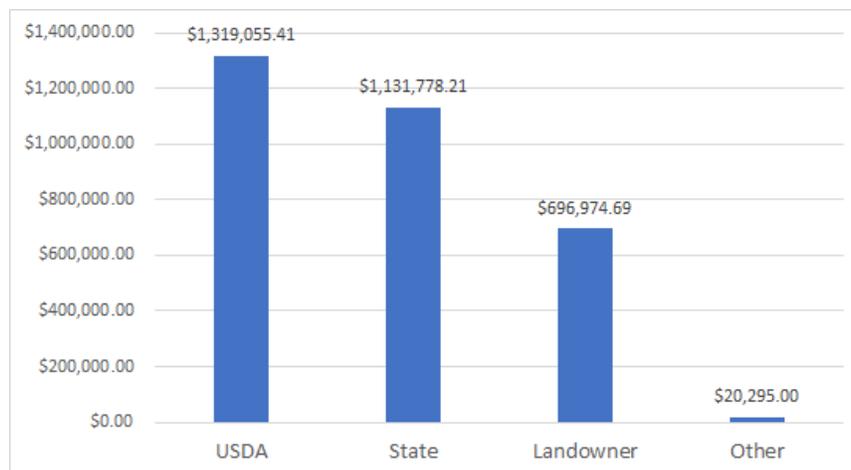
The Best Management Practice (BMP) Program is a voluntary program to assist farmers with on-farm improvements designed to abate nonpoint source agricultural waste discharges into the waters of the State of Vermont. The Program was created to provide State technical and financial assistance to Vermont farmers to improve water quality. The BMP Program identifies and assists in resolving risk of surface and ground water contamination from agricultural wastes. Technical assistance, which includes a combination of agricultural, civil, and environmental engineering consultation and design, is available on a priority basis at no cost to the farmer. Financial assistance is available to help assist the farmer with the construction costs of the designed practice(s).

BMP FY 2017

In the FY 2017, 30 BMP grants to Vermont farmers were completed, resulting in the implementation of 79 conservation Best Management Practices that addressed water quality concerns. Figure 1 below summarizes state, federal, private and other funding spent on practice implementation. Private funding was contributed by the landowner or farmer and represents at least 10% of total funds spent on the cost of construction implementation. Other funding spent represents private grant funding resources used to meet match requirements. Overall, through FY 2017, these voluntary conservation programs enabled \$1,131,778.21 in State expenditures to leverage \$1,319,055.41 in federal expenditure, as well as \$696,974.69 in cost-share contributions from Vermont farmers and agricultural landowners.

Total State expenditure on the construction of BMP practices in FY 2017 amounts to \$1,131,778.21.

Figure 1. Summary of FY 2017 BMP Project Funding



Pertaining to the 30 BMP grants completed, Figure 2 below summarizes the percentage of each grants awarded in each major watershed basin. Most practices were implemented in the Lake Champlain Basin accounting for 90% of practices implemented. Figure 3 Displays number of grants awarded per county; most grants were awarded in Franklin and Addison Counties. In support of planning, development, and implementation of BMP projects in FY 2017, Agency staff made 243 site visits to participant farms.

Figure 2. BMP Practice Implementation by Watershed

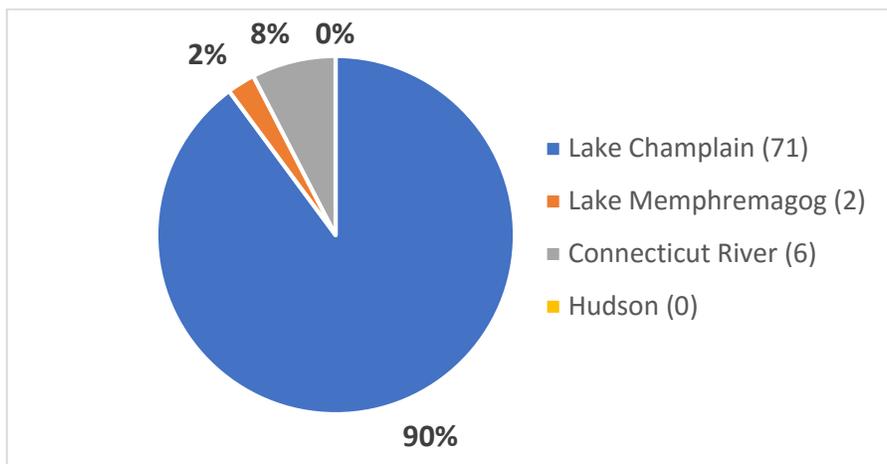


Figure 3. Grants Awarded by County

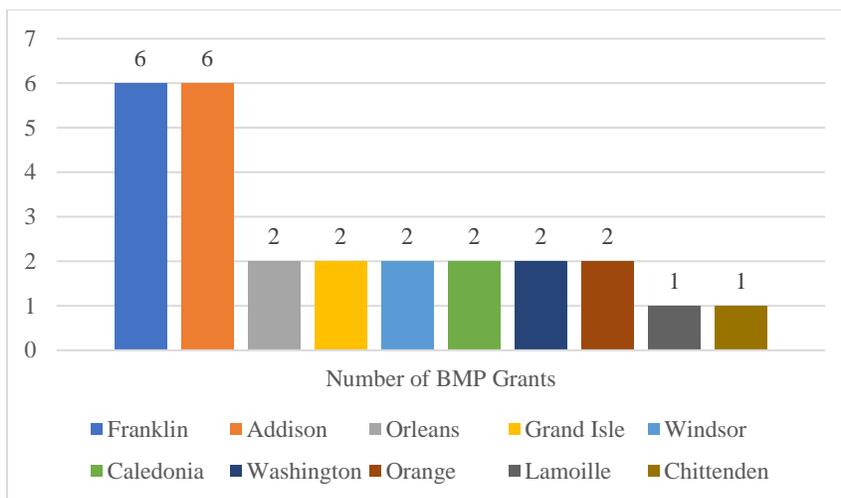
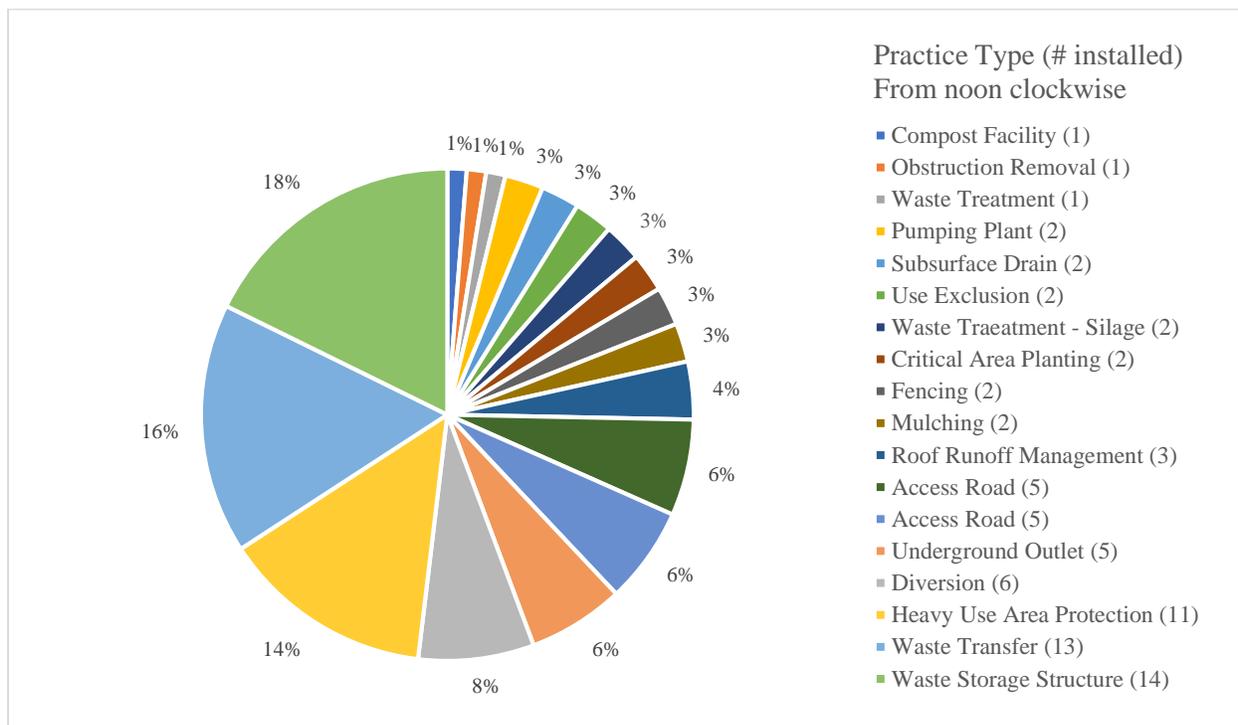


Figure 4 below illustrates each type of practice implemented in FY 2017 and the percentage of implementation for each type of practice. Of the 79 practices implemented, the majority were Waste Storage Structures (18%). Waste Storage Structures include manure pits, silage leachate management systems, solid manure stacking facilities, 'Slurrystores', and in-ground pits lined with clay, concrete, or geosynthetic liner. The second most implemented practice under the BMP Program is Waste Transfer (16%) which includes waste holding tanks, pumps and plumbing installed to transfer waste from a collection point to a storage point. Heavy Use Area Protection was the third most implemented practice (14%), which includes barnyards and improved surfaces that are typically high traffic and are prone to erosion. Descriptions of the conservation practices can be found on the Vermont NRCS website at this site address:

https://efotg.sc.egov.usda.gov/references/public/VT/TABLE_OF_CONSERVATION_PRACTICES.pdf

Figure 4. BMP Implementation in FY 2017 by Conservation Practice Type



To augment VAAFM BMP engineering capacity, additional projects are contracted to external Architecture and Engineering (A&E) consultants. VAAFM engineers facilitate project management and assign projects requiring specific expertise to A&E consultants. During FY 2017, \$230,176.10 was spent on contracting A&E consultants to serve 22 farms. The consultants are hired to produce preliminary plans, final designs including construction documents and specifications, engineering cost estimates, construction oversight and project certification.

BMP FY 2018

To date in FY 2018 the BMP Program has received 48 applications. From the FY 2017 & FY 2018 applicant pool, 33 farms have already been awarded BMP grants in FY 2018, obligating \$2,165,231.40 of funds to an estimated 92 practices. During FY 2018 a total of \$956,602.00 has been spent on construction costs for practices associated with these and prior year grants. A recent change in the BMP Program is the establishment of a priority due date of April 1st of each year for application ranking. Applications are prioritized utilizing the Prioritization Matrix, a tool that ranks projects on criteria that weights applications pursuant with 6 V.S.A. Chapter 215 shown in Attachment 2.

BMP Program Trends – FY 2019 & Beyond

By looking at recent year metrics as shown in Table 1 and Figure 5, the BMP Program can project future spending by trends in the:

- Number of BMP applications received
- Number of grants awarded indicating the amount of funds obligated
- Amount of funds spent on construction indicating the expenditure of the funds previously obligated by grants
- Percent change in the regional milk price
- The BMP program staff capacity which includes turn over, new hires and cumulative years of staff experience

In FY 2017, a total of 124 BMP applications were received, of which 111 were determined to be eligible for the program. In comparison 95 applications were submitted in FY 2016. The increase in application submission can be partly attributed

to the 2016 revision of the Required Agricultural Practices (RAPs). The RAPs increased the number of farms scheduled for inspections through the Certified Small Farm Operation Program. When water quality issues are identified during the farm inspection process often the farmer elects to submit a BMP application. Of the 124 applications that were received in FY 2017, 83% of them were received between January 1, 2017 and June 30, 2017.

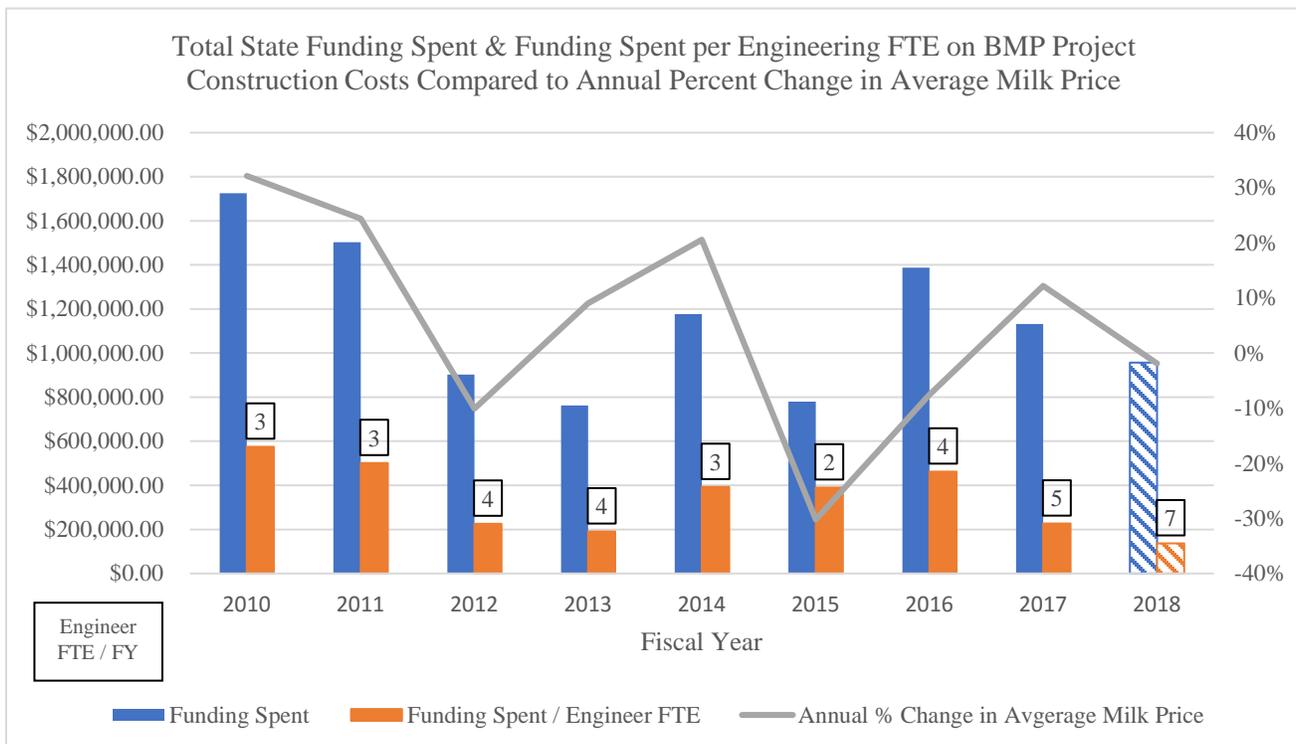
If application submission in FY 2018 follows the FY 2017 trend, the total number of applications submitted in FY 2018 could exceed 200 applicants which would likely result in over \$2,000,000 of funds being obligated per year during FY 2019 and 2020. This remains subject to volatile milk prices which often indicates a farmers' ability to pay for the 10% minimum cost share requirement for the BMP program.

Table 1. BMP Recent Year Metrics

FY	# of Applications	# Grants Awarded (grants obligate funds)	State Funds Spent during FY on Project Construction (funds previously obligated)
2016	95	31	\$ 1,386,728.00
2017	124	30	\$ 1,131,778.00
2018 To Date	48	33	\$ 956,602.00

The most notable correlation between funding spent on the construction of BMP practices is the annual percent change in the milk price as reported by USDA and shown in Figure 5. When milk prices increase from the year prior farmers are more likely to invest in capital water quality improvements that often do not have a financial return on investment.

Figure 5. BMP Program Trends 2010 – 2018



BMP Project Examples

CLEAN WATER DIVERSION

A small farm located in the Well's River watershed took the first step to improve the farm's impacts on water quality. Gutters were installed on the heifer barn in 2016 to capture the water that would otherwise fall on the barnyard. Sometimes solutions are as simple as keeping clean water clean.



From left to right, before and after photos of clean water diversion implementation.

COVERED MANURE STACKING FACILITY

In 2016, a covered manure stacking facility was installed on a small 20-cow dairy farm in Royalton, VT. Prior to the covered stacking facility, which was installed through the BMP Program, manure had been stacked in a site that posed a risk to a nearby stream. The covered stacking facility enables the farm to manage manure as a solid, prevent runoff from becoming contaminated, and relieves the management burden of spreading the additional volume of rainfall water.



From left to right, before and after photos show solid manure stacking site implementation.

WOODCHIP BARNYARD



In the Fall of 2016, an innovative type of barnyard was installed in Waitsfield that is designed to improve animal comfort and reduce runoff and water quality impacts of winter management. This was a cooperative project, led by the University of Vermont Extension and supported by VAAF. Woodchip heavy-use areas (aka 'woodchip pads') are an improved type of livestock holding area that uses large, screened woodchips as a surface material instead of concrete. Monitoring has shown that runoff volumes and nutrient loads from the pads are much lower than the concrete alternative.

Photo depicts woodchip barnyard installation in Waitsfield, VT.

Conservation Reserve Enhancement Program

The Conservation Reserve Enhancement Program (CREP) is a part of the Conservation Reserve Program (CRP), the country's largest private-land conservation program. CREP is a voluntary program administered by the United States Department of Agriculture (USDA) Farm Service Agency (FSA). This Program incentivizes agricultural landowners to remove high priority environmentally sensitive land from agricultural production and implement conservation practices on the parcel. Landowners are provided upfront financial incentive payments for participating in the Program and are paid an annual rental rate for the 15-year contract period. Federal cost-share provides 90% of the implementation costs for CREP, while in most instances, 100% of implementation costs for forested riparian buffers may be covered with financial assistance from the US Fish and Wildlife Service Partners for Fish and Wildlife (PFW).

The State of Vermont's incentive payments provide up to \$1,905.00 per acre based on land use and cropping history agreement Federal incentive payments provide \$100.00 per acre upon agreement execution. In addition, FSA provides annual rental payments to agricultural landowners in Vermont of on average, \$186.00 per acre for the duration of the contract for removing environmentally sensitive land from agricultural production.



Photo courtesy of Katherine Kain, US Fish and Wildlife Service, Image shows a 50-foot wide CREP riparian buffer planting at Chapman Family Farms with students from nearby Farm-to-School Programs in Tunbridge, VT along the first branch of the White River.

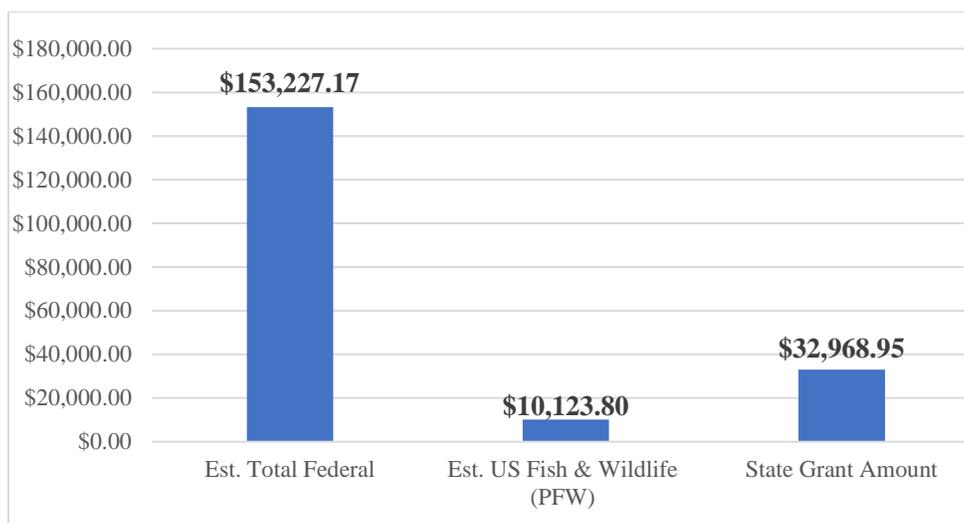
CREP FY 2017

Through FY 2017, a total of 23.89 acres of farmland was contracted into CREP. As a part of this Program, \$32,968.95 in State funding was invested as incentive payments for the implementation of CREP through 5 unique contracts with agricultural landowners. Below is a summary of state, federal, and private funding for FY 2017. Further information regarding this Program can be found in the Annual Performance Report to the FSA for CREP FY 2017, which summarizes expenditures for CREP through the federal FY 2017. In support of planning, development, and implementation of CREP projects in FY 2017, Agency staff made 2 site visits to participant farms.

Estimated federal spending includes federal incentive payments, annual rental payments for the life of the contract, and total cost share payments for practice implementation. Figure 6 below summarizes state, federal, and partner expenditures for the five CREP contracts executed in FY 2017.

Every State dollar leverages \$4.95 federal dollars for planting riparian forest buffers along Vermont’s waterways, and compensation to farmers for removing this environmentally sensitive land from agricultural production.

Figure 6. Summary of FY 2017 CREP Funding Sources



CREP FY 2018

In the State fiscal year 2018, it is anticipated there will be an increase of acreage enrolled in CREP. To date, 5 unique agreements have been finalized with agricultural landowners which will remove 21.62 acres of environmentally sensitive land from agricultural production through establishment of riparian forest buffers. State incentive payments total \$16,597.70 for agricultural landowners upon agreement execution, and the FSA has provided \$2,163.00 in incentive payment expenditures in addition to the annual rental payments to the landowner. Not included in these figures are implementation costs, of which 90% is covered by the FSA and the remaining 10% is covered through the US Fish and Wildlife PFW.

In addition to the 5 CREP agreements executed in FY 2018, there are 4 additional anticipated agreements that will be executed in FY 2018, which will remove an additional anticipated 91.17 acres of environmentally sensitive land from agricultural production for purposes of riparian buffer planting.

CREP Program Trends – FY 2019 & Beyond

The Agency anticipates the continuation of this Program at or above its current capacity into FY 2019 and beyond. Fair, or even attractive, incentive and rental rates set by USDA does not make the CRP an attractive option in Vermont on it's own. The State's "Enhancement" payments are essential tools to ensure CREP is adopted by as many producers as

possible. Conservation planners who can provide outreach and explain the benefits of CREP to a producer, integrate CREP into farms, and engage in conservation planning, are key to increasing enrollment in CREP. For this reason, the Agency and program partners are discussing methods of increasing the boots on the ground through cooperative partnerships that could help provide federal support of a new CREP position. With increasing numbers of farms interested in participating in CREP, additional CREP staff will be necessary to aid farmers as they work towards compliance with the RAPs, as well as helping to identify and solve on-farm resource concerns.

Recent changes to the RAPs will require farms of all sizes to maintain 25' of perennial vegetation adjacent to surface waters and all size farms now need a minimum of 10' of perennial vegetation along ditches in annually cropped fields. In addition, all field-borne gully erosion will have to be addressed with grassed waterways, strip and contour cropping, filter strips, or other agronomic practices. Both of these regulatory changes require an increase in filter strips, grassed waterways and other conservation practice implementation on all farms in Vermont, which will likely generate an increased interest in CREP.

However, many Vermont farms desire to produce the as much of their own feed on their owned and rented land, as opposed to purchasing feed, which is generally less cost effective and leads to greater phosphorus imports. Therefore, the majority of those required to maintain perennial buffers on cropland will likely opt to convert this annually tilled acreage to harvestable hay buffers, in order to continue to keep the land in production.

Despite this general trend, the CREP option for Filter Strips (CP-21), Riparian Forest Buffers (CP-22), and Grassed Waterways (CP-8) installation should be an increasingly attractive option where harvestable buffers are not economically feasible given the configuration of the field, proximity of these acres to other hay land, where these riparian areas are subject to frequent flooding and silt deposition, or are marginally productive/risk prone.

Capital Equipment Assistance Program

The Capital Equipment Assistance Program (CEAP) is voluntary program which offers financial assistance to farms, nonprofit organizations, and custom applicators in Vermont. CEAP assists in the purchase of innovative equipment that will aid in the reduction of surface runoff of agricultural wastes to State waters, improve water quality of State waters, reduce odors from manure application, separate phosphorus from manure, decrease greenhouse gas emissions, and reduce costs to farmers when they apply manure.

CEAP FY 2017

In FY 2017, there was one unique CEAP grant executed. The Program offered rolling applications for 50% cost share up to \$50,000.00 for Flow Meters, GPS Units and the associated cables and hardware, however, with such a limited scope of equipment eligible through CEAP, there was limited interest from agricultural producers in Vermont. Overall, \$9,466.18 in grant funding was awarded to one farmer in Missisquoi Bay for the purchase and installation of a flow meter to be utilized in conjunction with GPS technology. Figure 7 below summarizes State and private funding for the purchase of innovative equipment under CEAP in FY 2017; each State dollar leveraged one dollar from a private agricultural operator.

Figure 7. Summary of FY 2017 CEAP State and Private Expenditures



Flow Meters are a precision agricultural mechanism used in liquid manure application, primarily for measurement, as well as increasing safety of manure application. The meter counts every gallon that passes through to provide an exact measurement of applied nutrients. Flow Meters, in conjunction with a GPS system, provide accurate records for farmers to use with Nutrient Management Plans. The meters and GPS systems can also produce precise maps detailing how the manure was applied across the field area. Monitoring of flow rates provides additional water quality safety measure because a drop-in flow rates or leaks would be immediately visible to the operator through the display screen.

CEAP FY 2018

In October of 2017, CEAP was relaunched with new funding provided by the Vermont Clean Water Fund. The relaunched of this program included multiple new programmatic changes pursuant to 6 V.S.A. § 4828 resulting from the 2017 legislative session. Some new changes included different funding caps allocated to different equipment categories dependent on water quality impact, all with a 90% cost-share opportunity. The number of applications received was substantial, with more than 4 million dollars in requests for a total of 112 pieces of equipment, see Table 2 below. Equipment types ranged from precision agricultural equipment, to manure injection equipment, to dissolved air flotation (DAF) technology. Preliminary grant awards will be offered in January of 2018 with \$1,000,000.00 in funding allocated for innovative equipment implementation on Vermont Farms.

Table 2. Most recent round of CEAP funding in FY 2018.

\$4,509,542.00	Monetary Request for Funding
61	Number of Applicants
112	Pieces of Equipment/Technology

CEAP FY 2019 & Beyond

The Agency anticipates the continuation of this program at or above its current capacity into the FY 2019 forward. The substantial response the Agency received through the most recent round of FY 2018 CEAP prescribes the demand for this program. Specifically, farmers are looking for financial assistance to aid in the transition to no-till, a crop management method that is greatly beneficial for water quality and soil health on farms. Innovative equipment necessary for this transition includes no-till corn planter toolbars as well as no-till grain drills used to plant cover crops once the main crop has been harvested. New requirements for frequently flooded fields require all fields to be cover cropped through the winter months, additionally driving the necessity for no-till grain drills. In addition to these, many farm operators, custom applicators, and organizations are interested in innovative manure application equipment such as injectors, or dragline systems. Manure injectors place manure a few inches below the soil surface to ensure optimum crop uptake of the

nutrients available while reducing the risk of runoff and volatilization. Dragline systems pump manure directly from a waste storage facility through pipelines to the manure spreader or injector as it drives through a crop field. Having a dragline system reduces the truck traffic on the road when manure can be spread right from a manure storage and it reduces compaction by not driving a heavy manure tanker in the fields, a benefit for the community, soil, water quality and the farm operation. In addition to the aforementioned equipment, CEAP funds are also available for physical or chemical methods of phosphorus removal such as dissolved air flotation technology. The CEAP program incentivizes Vermont farmers to voluntarily invest in innovative equipment and technology upgrades that are beneficial for water quality, furthering the reduction of non-point source agricultural pollution.

Looking Ahead

Moving forward, and looking ahead to FY 2019, the Agency anticipates an increase in program demand and will need to increase capacity to serve customer needs for the BMP, CREP and CEAP Programs. As implementation of the revised RAPs occurs across Vermont, farms previously not required to have scheduled farm water quality inspections are actively working toward RAP compliance. In many instances this requires conservation practice implementation and/or management changes for the farm operation. While some resource concern remediation may be required through regulatory inspections or enforcement, some BMPs such as riparian forested buffers are voluntary. There are farms that are waiting for an inspection to trigger their engagement in a conservation practice due to their financial challenges of implementing these necessary projects. In the current climate of low milk prices and threatened livelihoods for Vermont dairy farmers, funding for education and outreach is essential in helping farmers identify pathways to implement the necessary practices and to support voluntary conservation on private agricultural land.

Currently, the Agency supports financial and technical assistance for implementation of conservation practices through the programs described in this report: BMP Program, CREP, and CEAP, as well as through the Farm Agronomic Practices (FAP) Program. Outside of these programs, the main funding available to farmers to help offset conservation practice implementation cost is the federally funded Environmental Quality Incentives Program (EQIP), which requires a 'whole farm approach', or requires farmers to address all potential resource concerns at once, an often-challenging financial burden for Vermont farms facing economic uncertainty.

The BMP Program, CREP, and CEAP provide opportunities to significantly offset costs for Vermont farmers and agricultural landowners to implement conservation practices and best management practices that improve water quality on farms in the State of Vermont.

For more information on the Agency of Agriculture, Food & Markets Water Quality Division grant opportunities, regulations, or educational opportunities visit Agriculture.Vermont.gov, or call 802-828-2431.

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Attachment 1. List of BMP Applicants from FY 2017 to Date

	A	B	C	D
1	Size	County	Practice(s) Applied for	Date App Recv'd
2	MFO	Addison	WSF, waste transfer, clean water diversion, +	7/9/2016
3	MFO	Addison	Clean water diversion	7/14/2016
4		Addison	WSF, Waste xfer, waste treatment	7/27/2016
5	SFO		Manure/Waste Storage/Silage leachate	9/19/2016
6	SFO		Holding area, Covered Stack Pad, MHW treatment	9/29/2016
7	LFO	Addison	WASCOB - stormwater	10/11/2016
8	LFO	Addison	WSF	10/11/2016
9	SFO	Addison	Milking parlor & milkhouse water water problems	12/22/2016
10	SFO	Franklin	Bedded pack	12/28/2016
11	SFO	Franklin	Manure/waste storage, waste transfer,waste wash water storage,barnyard runoff,clean water diversion	1/3/2017
12	MFO	Addison	Manure/waste storage	1/3/2017
13	SFO		Barnyard or heavy use runoff control	1/6/2017
14	SFO	Orleans	Manure Leakage/Silage runoff	1/6/2017
15	SFO		Manure/waste storage	1/10/2017
16	SFO		Manure/waste storage/Waster transer/Water storage treatment/silage or feed leachate/access road/barnyoard heavy use runoff/clean water diversion	1/10/2017
17	SFO	Franklin	Waste facility closure	1/12/2017
18	MFO	Rutland	Manure/wast storage/waste transfer/silage or fee leachate/barnyard or heavy use runoff/clean water diversion/exclusion	1/20/2017
19	SFO	Orleans	Manure/wast storage/barnyard heavy use runoff	1/23/2017
20	SFO		Manure/waste storage/waste transfer/waste, wash water storage/access rd for storage/stacking/barnyard or heavy use runoff/clean water diversion	1/23/2017
21	MFO	Rutland	Access road/Laneway/Exclusion	2/6/2017
22	SFO	Orleans	Manure/waste storage/waste transfer/access road/barnyard or heavy use area runoff/clean water diversion	2/9/2017
23	MFO	Orleans	Manure/waste storage/Waster transfer/waste/wash water storage/Silage/barnyard/clean water diversion/laneway	2/13/2017
24	SFO	Franklin	Manure/waste storage/waste transfer/waste/wash water storage/treatment/silage or feed leachate	2/14/2017
25	LFO	Franklin	Silage leachate	2/14/2017
26	SFO	Franklin	Manure/waste storage/barnyard or heavy use runoff	2/15/2017
27	cSFO		Barnyard/HUA Runoff Control	2/15/2017
28	LFO	Addison	WSF, bunker collection system, waste xfer	2/17/2017
29	SFO	Orleans	Manure/waste storage	2/21/2017
30	LFO	Franklin	Manure/waste storage/Access rd	2/23/2017

	A	B	C	D
31	MFO		Manure/waste storage/Waster transfer/Access road/Barnyard heavy use/Clean water diversion	2/23/2017
32	SF	Grand Isle	Manure/waste storage/waste/wash water/barnyard or heavy use/laneway	2/27/2017
33	Non-RAP	Grand Isle	Barnyard or heavy use runoff/laneway development/exclusion	2/27/2017
34	MFO		Heavy use runoff/manure pit pipe	2/27/2017
35	SFO		Manure/waste storage/Access rd/ Barnyard heavy use/Exclusion	2/28/2017
36	SFO		Manure/waste storage/barnyard or heavy use runoff	2/28/2017
37	LFO	Addison	Asst W/ EQIP Project	2/28/2017
38	SFO	Orleans	Barnyard or heavy use runoff/Clean water diversion	3/1/2017
39	SFO	Addison	Manure/waste storage/Access road/Barnyard or heavy use/Clean water diversion/Exclusion	3/1/2017
40	SFO	Addison	Access Rd	3/2/2017
41	MFO	Bennington	Manure/waste storage/waster transfer/access road	3/3/2017
42	MFO		MHW collection	3/3/2017
43	SFO	Addison	Barnyard expansion/laneway development	3/3/2017
44	MFO	Franklin	Waste transfer system	3/13/2017
45	SFO	Bennington	Manure/waste storage/barnyard or heavy use runoff/Clean water diversion/Exclusion fencing	3/14/2017
46	LFO	Orleans	Barnyard or heavy use runoff/Clean water diversion	3/14/2017
47	SFO	Franklin	Manure/waste storage/Clean water diversion	3/17/2017
48	LFO	Addison	Manure/waste storage/waste tranfer/waste/wash water storage/branyard or heavy use/clean water diversion	3/17/2017
49	CSFO		Manure/waste storage/New barn/Barnyard or heavy use/Exclusion	3/21/2017
50	LFO		Barnyard / HUA runoff control	3/21/2017
51	SFO	Addison	Waste transfer system/Waster/wash water storage/Irrigation equipment	3/21/2017
52	CSFO	Addison	Barnyard or heavy use runoff	3/21/2017
53	MFO	Addison	Waster transfer/Silage or leachate treatment	3/21/2017
54	CSFO		Manure/waster storage/Waster transfer/Waste/wash water storage/Access Rd	3/21/2017
55	MFO		Manure/waste storage/Waster transfer	3/23/2017
56	CSFO		Barnyard or heavy use/Silage or feed leachate	3/24/2017
57	CSFO		Silage or feed leachate/Barnyard or heavy use	3/24/2017
58	CSFO	Franklin	Reel irrigation for leachate pond	3/24/2017
59	CSFO		Manure/waster storage/Clean water diversion	3/29/2017
60	MFO	Rutland	WSF, waste xfer, +	3/29/2017
61	CSFO	Addison	Manure/waste storage/Waste transfer/Silage/Barnyard	3/30/2017
62	CSFO	Rutland	Manure/waste storage/Barnyard/clean water diversion	3/31/2017
63	MFO	Franklin	Manure/waste storage/Access road/Animal mortality/fuel tanks	3/31/2017
64	MFO	Addison	Manure/waste storage/Waste Transfer/Clean water diversion	4/4/2017
65	SFO		Manure/waste storage/Silage or feed leachate/Access rd/Waste food	4/5/2017
66	CSFO		Laneway /Exclusion	4/6/2017

	A	B	C	D
67	CSFO	Franklin	Barnyard or heavy use/Clean water diversion	4/6/2017
68	MFO		Maure/waste storage/Silage or feed leachate/barnyard/heavy use/clean water diversion	4/7/2017
69	SFO	Franklin	Barnyard or heavy use	4/7/2017
70		Franklin	Manure Pit/Heavy use/barnyard	4/7/2017
71	CSFO	Franklin	Water Transfer/Waste wash water storage/Barnyard for heavy use	4/12/2017
72	MFO	Orleans	Manure/waste storage/Waste wash water treatment	4/12/2017
73	CSFO	Addison	Barnyard or heavy use	4/12/2017
74	LFO	Orange	Manure/waste storage/waste transfer/waste/wash water storage	4/12/2017
75	CSFO	?	Manure/waste storage/transter/wash water/Leachate	4/17/2017
76	CSFO	Rutland	Manure/waste storage/transfer/wash water storage/access rd/heavy use area/clean water diversion etc.	4/19/2017
77	SFO	Franklin	Manure/waste storage/access rd/heavy use area/clean water diversion	4/19/2017
78	SFO	Grand Isle	Composting Facility	4/20/2017
79	SFO	Orange	Manure/waste storatge/barnyard or heavy use runoff/clean water diversion	5/15/2017
80	MFO	Addison	HUA runoff, bunker runoff pump station	5/15/2017
81	SFO	Rutland	Barnyard or heavy use runoff/laneway development/stream crossing	5/15/2017
82	MFO	Orleans	Manure/waste storage/barnyard or heavy use/clean water diversion	5/15/2017
83	MFO	Franklin	Construct pad for leachate flow to storage area	5/15/2017
84	CSFO	Chittenden	Manure/waste storage/Waste transfer/Waste wash water storage/treatment/Silage leachate/	5/15/2017
85	CSFO		waste transfer system	5/17/2017
86	CSFO	Addison	Silage leachate	5/24/2017
87	CSFO	Orleans	EQIP assist, Waste Storage	6/2/2017
88	SFO	Orange	Manure/waste storage/acdcess rd/runoff control/clean water diversion/laneway/streem crossing	6/19/2017
89	CSFO	Addison	Barnyard or heavy use area runoff	6/19/2017
90	MFO	Windham	Silage or feed leachate/Barnyard or heavy use/clean water diversion	6/19/2017
91	CSFO	Orleans	Manure/waste storage/access rd/runoff contral/clean water diverson/laneway/stream crossing	6/19/2017
92	CSFO	Orleans	leachate treatment/runoff control/clean water diversion/laneway stream crossing/exclusion	6/22/2017
93	CSFO	Orange	Waster/wash water storage	6/29/2017
94	CSFO	Franklin	Barnyard or heavy use runogg	6/29/2017
95	CSFO	Washington	Clean water diversion	7/7/2017
96	MFO	Franklin	Manure/waste storage/waste strasfer system/silage leachate/access road for stacking/barnyard HOA runoff	7/13/2017
97	LFO	Orange	barnyard runoff control/clean water diversion	7/18/2017
98	SFO	Orleans	waste storage/wash water storage/barnyard runoff/clean water diversion	7/19/2017
99	CSFO	Orleans	barnyard runoff/laneway development	7/20/2017

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	A	B	C	D
100	CSFO	Franklin	Manure/waste storage/Waste/wash water treatment/Barnyard or heavy use runoff/laneway development	8/7/2017
101	Non-RAP/SFO	Windsor	Barnyard or heavy use runoff/Access road/Laneway Development	8/7/2017
102	CSFO	Addison	Manure/waste storage/waste transfer/waste/wash water/leachate treatment,access rd/clean water diversion	8/8/2017
103	LFO	Franklin	Silage or feed leachate treatment/curtain drain around bunk	8/28/2017
104	CSFO	Grand Isle	Manure/waste storage/waste/wash water/clean water diversion	9/1/2017
105	MFO	Bennington	Manure/waste storage/Covered barnyard	9/7/2017
106	CSFO	Addison	Silage or feed leachate treatment	9/7/2017
107	CSFO	Addison	clean water diversion	9/7/2017
108	SFO	Addison	Barnyard or heavy use runoff/Heifer barn	9/18/2017
109	SFO	Rutland	Manure/waste storage/Barnyard or heavy use	9/18/2017
110	SFO	Addison	Manure/waste storage/barnyard or heavy use/clean water diversion/laneway development/exclusion	9/18/2017
111	CSFO	Washington	Manure/waste storage/Waste/wash water treatment/	9/18/2017
112	SFO	Orleans	Waste/wash water storage	9/18/2017
113	CSFO	Orleans	Manure/waste storage/Waste/waste water treatment/Access road/Barnyard or heavy use/Clean water diversion/Exclusion	9/18/2017
114	CSFO	Orleans	Waste/wash water treatment/Barnyard or heavy use/Laneway development	9/18/2017
115	MFO	Essex	Manure/waste storage/barnyard or heavy use/clean water diversion	9/21/2017
116	MFO	Addison	Farm access rd & culvert or bridge	10/12/2017
117	CSFO	Caledonia	Clean Water diversion/Exclusion fencing	10/20/2017
118	SFO	Windsor	Manure/waste storage	10/23/2017
119	LFO	Addison	Silage or feed leachate	10/30/2017
120	MFO	Addison	Manure/waste storage	10/30/2017
121	CSFO	Franklin	Clean water diversion	11/1/2017
122	MFO	Franklin	Manure/waste storage/waste transfer system	11/13/2017
123	LFO	Orleans	Manure/waste storage/Clean water diversion	11/13/2017
124	MFO	Addison	Waste/wash water storage & treatment	11/22/2017
125	MFO	Addison	Manure/waste storage/Access road/Barnyard or heavy use	11/22/2017
126	MFO	Windsor	Manure/waste storage/Barnyard or heavy use/Clean water diversion	11/28/2017
127	CSFO	Orange	Manure/waste storage/Access road/Barnyard or heavy use	12/4/2017
128	SFO	Windsor	Unsure	12/6/2017
129	CSFO	Franklin	Laneway development/stream crossing	12/7/2017
130	SFO	Windsor	Waste Water Treatment	12/7/2017

	A	B	C	D
131	CSFO	Franklin	Manure/waste storage/Waster transfer system/Access road/Barnyard or heavy use/Clean water diversion/Laneway development	12/11/2017
132	CSFO	Addison	Waste transfer/Waste/wash water treatment/Silage or feed leachate treatment	12/12/2017
133	CSFO	Franklin	Manure/waste storage/Waste/wash water treatment/Access road/Barnyard or heavy use/Clean water diversion/Laneway development	12/14/2017
134	SFO	Washington	Manure/waste storage/Waste/wash water treatment	12/19/2017
135	CSFO	Rutland	Laneway development/stream crossing	12/21/2017
136	CSFO	Addison	Waste transfer system/Access road/Clean water diversion	12/21/2017
137	CSFO	Orleans	Laneway development	12/28/2017
138	CSFO	Essex	Slab to stack solid manure/Access rd/Barnyard or heavy use runoff/Clean water diversion/Laneway development	1/2/2018
139	CSFO	Orleans	Manure/waste storage/Access rd/Barnyard or heavy use/Clean water diversion/Laneway development/Exclusion	1/2/2018

Attachment 2. BMP Applicant Prioritization Matrix

BMP Prioritization Matrix
 Vermont Agency of Agriculture
 Engineer:

Date of Application:

Last, First - Farmname

In which watershed is this farm located?	Champlain	Memphremagog	Connecticut	Hudson	Points
	30	20	15	10	
Is the water quality concern due to physical site constraints?			Yes 20	No 0	
What is the severity of the water quality concern that the project is proposing to mitigate?	Low Severity	Ex. in order of severity: No improved waste storage Clean water contamination Potential for discharge Failed waste storage facility	Low	0	
	↓		Moderate	10	
	High Severity		High	20	
Does this farm have adequate waste storage?			Yes 0	No 10	
Is this farm under VAAFM or ANR enforcement?			Yes 20	No 0	
Have the resource concern been documented in an inspection report?			Yes 15	No 0	
Does the farm have a business or viability plan?			Yes 10	No 0	
Does the proposed project present innovative opportunities?			Yes 10	No 0	
Has the farm received a BMP grant of similar size and scope?			Yes 0	No 10	
Is the project receiving technical assistance from additional source(s)?			Yes 15	No 0	
Is the project receiving funds from additional source(s)?			Yes 15	No 0	
Is this applicant willing and able to construct?			Yes 10	No 0	
Rate the project based on the complexity of construction?	Low Complexity	Gutters and swales Cast in place slabs Infiltration / treatment areas Geomembrane lining Pour in Place Concrete	Low	15	
	↓		Moderate	10	
	High Complexity		High	5	
Total			Possible	200	0