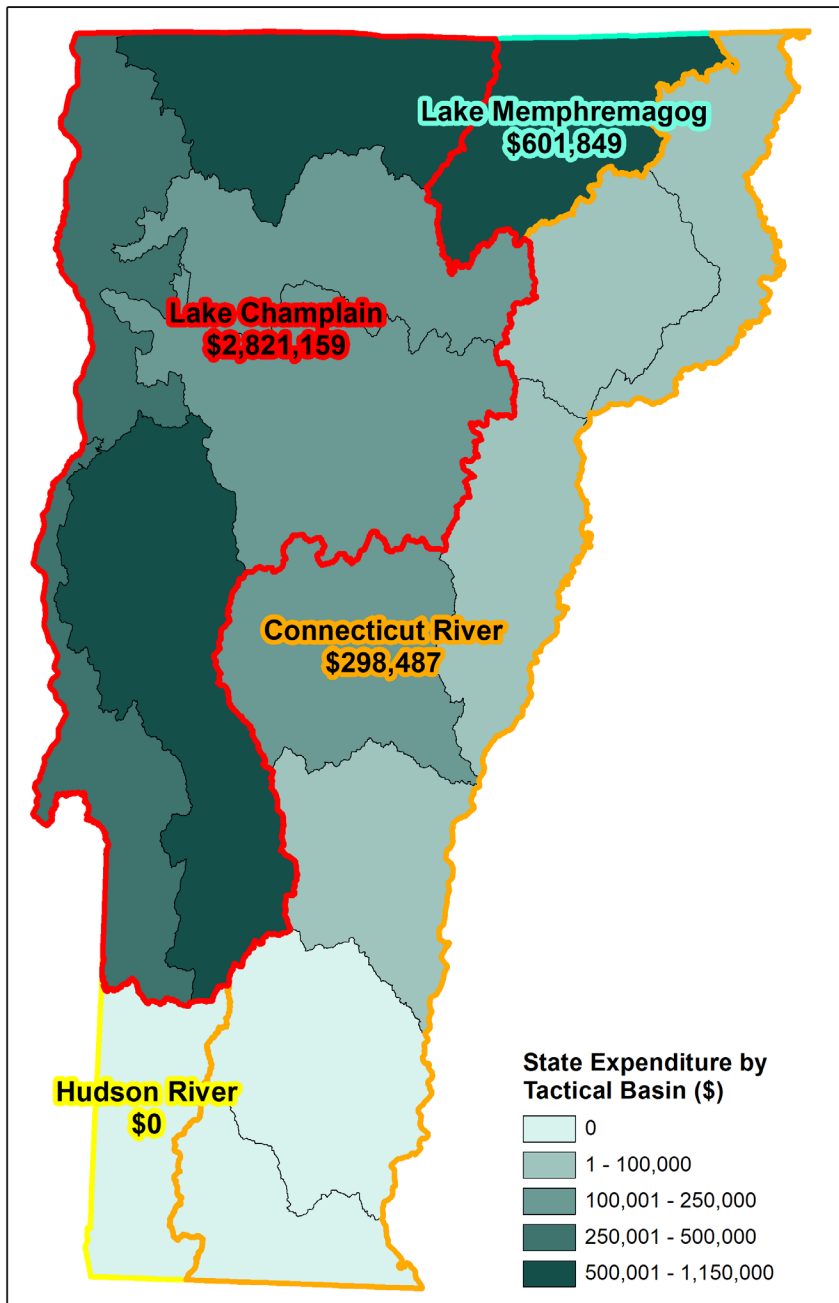


# Vermont Agency of Agriculture, Food and Markets Water Quality Division FY2019 Financial Assistance for Farmers Summary

While regulation of agricultural operations provides a legal mechanism for oversight of farms, the goal is to improve water quality in Vermont and reduce nonpoint source nutrient loading from agriculture. The Water Quality Division administers multiple financial assistance (FA) opportunities for farmers in Vermont.

In State Fiscal (FY) 2019, the Water Quality Program invested more than \$3.7 million of State funds and leveraged over \$2.5 million in Federal expenditure to fund on-farm implementation of conservation practices to improve water quality in the state of Vermont. Vermont farmers invested just under \$1 million of private funds in cost-share contributions towards implementation of these projects.

## FY19 ON-FARM IMPLEMENTATION BY MAJOR AND MINOR BASIN



**11,490 ACRES**

IMPROVED THROUGH FUNDED PRACTICES

**85 PRACTICES**

STRUCTURAL PRACTICES FUNDED AND INSTALLED

**\$3.7 MILLION**

STATE EXPENDITURE FOR IMPLEMENTATION

**\$2.5 MILLION**

FEDERAL EXPENDITURE LEVERAGED

**NEARLY \$1 MILLION**

INVESTED BY VERMONT FARMERS



Above - Waste Storage Facility implemented voluntarily on a beef CSFO in Benson through Vermont's BMP Program. Below - Clean Water Project Sign displayed adjacent to farm sign during



Implementation (below) of manure injection equipment acquired through the CEAP Program.



## FINANCIAL ASSISTANCE PROGRAM DESCRIPTIONS

### FARM AGRONOMIC PRACTICES - FAP:

Financial assistance to Vermont farms for implementation of soil-based agronomic practices that improve soil quality and reduce erosion.

### BEST MANAGEMENT PRACTICES - BMP:

Technical and financial assistance program to assist farmers with on-farm improvements designed to abate agricultural waste discharges into state waters.

### CAPITAL EQUIPMENT ASSISTANCE PROGRAM - CEAP:

Financial assistance for new or innovative equipment that will aid in the reduction of surface runoff of agricultural wastes to state waters, improve water quality of state waters, improve manure management, separate phosphorus (P) from manure, and decrease greenhouse gas emissions.

### GRASSED WATERWAY AND FILTER STRIP PROGRAM - GWFS:

Technical and financial assistance to Vermont farmers for in-field agronomic best practices to address critical source areas, erosion, and surface runoff through establishment of perennially vegetated grassed waterways, filter strips, critical source area seeding, and associated infrastructure.

### PASTURE AND SURFACE WATER FENCING PROGRAM - PSWF:

Pasture management technical and financial assistance to Vermont farmers to improve water quality and on-farm livestock exclusion from surface waters statewide.

### 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.



*Before (above) and after (below) installation of a perennial vegetated filter strip in the Lake Memphremagog watershed to filter field runoff from the adjacent agricultural field and reduce sediment and nutrient runoff to nearby surface water.*



## SUMMARY OF FY2019 FINANCIAL ASSISTANCE PROGRAMS

PROGRAM	EXPENDITURE	AWARDS	IMPACT
FAP	\$265,076.76	\$326,433.06	11,468 Acres Improved
Sample FAP Practices Installed	7087 Acres : Cover Crop		Average 28% reduction in total P per acre <sup>1</sup>
	1671 Acres : Conservation Tillage		Average 27.5% reduction in total P per acre <sup>1</sup>
BMP	\$2,238,469.51	\$3,331,677.26	76 Practices Installed
Sample BMP Practices Installed	34 Waste Storage Structures		42% reduction in total P <sup>2</sup>
	36 Heavy Use Area Protection & 16 Clean Water Diversion		53% reduction in total P for barnyard runoff management <sup>2</sup>
CEAP	\$1,187,417.05	\$1,138,700.00	34 Pieces of Equipment/Technology
Sample CEAP Equipment Acquired	17 Cover Crop Equipment		Average 28% reduction in total P per acre <sup>1</sup>
	4 Silage Management Equipment		1 acre of feed storage can lose as much nutrients as 120 acres of cropland <sup>3</sup>
PSWF	\$24,533.33	\$50,922.73	9 Practices Implemented
GWFS	\$17,850.00	\$21,950.00	21.83 Acres Improved
CREP	<b>*No new contracts due to FSA National Office determination that land subject to environmental regulations is ineligible. CREP should be available to VT Farms in FY20.</b>		

<sup>1</sup>Vermont Agency of Natural Resources, Department of Environmental Conservation - Current Methods to Measure Nutrient Pollutant Reductions

<sup>2</sup>A tool for estimating best management practice effectiveness for phosphorus pollution control. MW Gitau, WJ Gburek, AR Jarrett - Journal of Soil and Water Conservation, 2005.

<sup>3</sup>Evaluation of silage leachate and runoff collection systems on three Wisconsin dairy farms. A Wunderlin, E Cooley, B Larson, C Herron, D Frame, A Radatz, K Klingberg, T Radatz, and M Holly - Discovery Farms Wisconsin, 2016.