

# 2020 REPORT VERMONT AGRICULTURAL WATER QUALITY PARTNERSHIP

*Farm field planted with a fall cover crop in Addison County, VT*



**LAKE CHAMPLAIN BASIN  
PROGRAM**

**UNITED STATES FISH &  
WILDLIFE SERVICE**

**UNIVERSITY OF VERMONT  
EXTENSION**

**USDA NATURAL RESOURCES  
CONSERVATION SERVICE**

**USDA FARM SERVICE  
AGENCY**

**VERMONT AGENCY OF  
AGRICULTURE, FOOD &  
MARKETS**

**VERMONT ASSOCIATION OF  
CONSERVATION DISTRICTS**

**VERMONT DEPARTMENT OF  
ENVIRONMENTAL  
CONSERVATION**

**VERMONT HOUSING AND  
CONSERVATION BOARD**

## INVESTMENTS AND IMPACTS

### State and Federal Commitment to Water Quality

AGRICULTURAL PROJECT INVESTMENTS AND PHOSPHORUS REDUCTION PROGRESS

- \*\$28.2 million dollars invested for implementation of agricultural water quality projects on Vermont Farms
- 27.1 metric tons estimated phosphorus load reduction from agricultural sector
- 13% of Lake Champlain Basin Total Maximum Daily Load required phosphorus reductions met through clean water programs
- Agriculture contributed 96% of total reported phosphorus reductions for VT across all land use sectors

## ON FARM IMPLEMENTATION

### Best Management Practice Implementation

95,000 ACRES ANNUAL CROPLAND IN VT

- 26,748 acres of cover crop (pictured above) and 14,304 acres of conservation tillage to reduce erosion and improve soil health
- \*30 waste storage facilities to properly store agricultural waste
- \*69 heavy use area protection practices implemented to prevent runoff from farm production areas
- 13 farm conservation easements with water quality protections
- 9 miles of permanent 50 foot riparian buffers

## VERMONT FARMS

### Commitment from Vermont Farms

6,800 TOTAL FARMS INCLUDING 625 DAIRY FARMS IN VT

- \*\$5.8 million estimated farmer investment in agricultural conservation practice implementation
- \*702 individual contracts and grants with Vermont farms

*\*These figures are based on the total federal program investments and corresponding results during the Federal Fiscal Year 2020 (October 1, 2019 to September 30, 2020) and the total state program investments and results from the State Fiscal Year (July 1, 2019 to June 30, 2020). All other results included in this report are based on the State Fiscal Year 2020.*



## CONSERVATION AT WORK WITH ANDRE MORIN

Andre Morin's farm is in the town of Holland within the Stearns Brook watershed. In coordination with a dedicated group of conservation partners, Andre Morin and his family have measurably improved water quality conditions in the watershed by implementing best management practices (BMPs) across their farm.

Andre Morin bought his 116-acre farm from his parents in 1992 who purchased it in 1984. In 2016, he started working with the Vermont Land Trust and the Vermont Housing & Conservation Board to establish a permanent conservation easement on his farm. As part of the easement terms Andre agreed to address all of Vermont's Required Agricultural Practices (RAPs).

In 2016, Andre also voluntarily agreed to cooperate with Orleans County Natural Resources Conservation District (OCNRCD) and the VT DEC LaRosa Volunteer Water Quality Monitoring program to determine the effectiveness of BMPs as they were implemented. This collaborative monitoring effort discovered elevated levels of phosphorus in the unnamed waterway that runs through the Morin farm.

In 2019, with funding from the VT Agency of Agriculture, Food and Markets' BMP program, Andre completed a new barn yard project for a heavy use area adjacent to the waterway running through the farm. He also installed exclusion fencing, alternative watering, stream crossings and laneway projects with funding from the OCNRCD USDA Regional Conservation Partnership Program to bring the farm into compliance with the RAPs. The installation of these BMPs in summer of 2019 appears to have dramatically reduced the phosphorus loading from the farmstead and pasture areas. Analysis suggests that there was an 85% reduction in phosphorus levels. Andre sold his cows in the winter of 2020 because of his personal health limitations but his brother John will continue to use the facilities, pastures and crop fields so the conservation benefits will continue.

Andre believes that farm conservation work that helps water quality "is good because everybody uses rivers and lakes and if we don't keep them clean then we will all pay the price. When one farm here and another farm there does a project like this it adds up to have a bigger effect and I am proud to be a part of that work."

Conservation on farms can be a bit like completing a puzzle, taking one piece at a time and finding the best fit. OCNRCD played an essential role in working with Andre to assemble the puzzle and achieve improved water quality. The Vermont Agricultural Water Quality Partnership is proud to work with conservation stewards like Andre who are dedicated to protecting and improving natural resources for a more sustainable future.

*By Sarah Damsell, OCNRCD*

