2021 REPORT VERMONT AGRICULTURAL WATER QUALITY PARTNERSHIP

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

Vermont Agricultural
Water Quality Partnership

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 AGENCY OF NATURAL RESOURCES, 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

- *\$24.3 million dollars invested for implementation of agricultural water quality and conservation projects on Vermont Farms
- 36.6 metric tons estimated phosphorus load reduction from agricultural sector
- 16% of Lake Champlain Basin and 12% of Lake Memphremagog Basin Total Maximum Daily Load required phosphorus reductions met through clean water programs
- Agriculture contributed over 95% total reported phosphorus reductions for VT across all land use sectors in both the Lake Champlain and Lake Memphremagog Basins of VT

ON-FARM IMPLEMENTATION

Best Management Practice Implementation

95.000 ACRES ANNUAL CROPLAND IN VT

- 40,7789 acres of cover crop (pictured above) and 12,017 acres of conservation tillage to reduce erosion and improve soil health
- *16 waste storage facilities, and 34 heavy use area protection practices installed to properly store agricultural waste and prevent runoff from farm production areas
- 21 farm conservation easements with 13.5 miles of permanent 50-foot riparian buffers
- 244 acres of riparian forest buffers installed
- 235 acres of wetlands conserved and restored through easements

VERMONT FARMS

Commitment from Vermont Farms

6.800 TOTAL FARMS INCLUDING 576 DAIRY FARMS IN VT

- *\$6.3 million estimated farmer investment in agricultural conservation practice implementation
- *722 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 2021 (October 1, 2020 to September 30, 2021) and the total state program investments and results from the State Fiscal Year (July 1, 2020 to June 30, 2021). All other results included in this report are based on the State Fiscal Year 2021.



SOIL HEALTH EQUALS FARM HEALTH

Guy Choiniere believes the health of the soil is the health of the farm. This "land ethic" drives all actions on the dairy farm which has been in his family since 1945. The Choiniere Family Farm, a 100% grass-fed, organic dairy in Highgate Center, is located four miles from the Canadian border. The farm includes 242 acres of farmland and 70 acres of woodland with the Rock River and its tributaries flowing through it.

Their outstanding efforts and long-term commitment to conservation earned the family several awards in 2021. They received the New England Leopold Conservation Award, a prestigious award given in honor of influential conservationist Aldo Leopold which recognizes those who inspire others with their dedication to land, water and wildlife resources. They also received the Hugh Hammond Bennett Award for Conservation Excellence. This award is named in memory of soil conservation pioneer Hugh Hammond Bennett, the first chief of the Soil Conservation Service (now U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS)) who led nationwide efforts to raise awareness about the critical importance of soil conservation and help farmers recover after the Dust Bowl. Bennett believed that real and lasting change on the land comes from developing and following a conservation plan that is designed to meet the unique needs of that land and based on the available resources, natural resource concerns and producer goals.

"Most farmers in this state know Guy Choiniere, or they know the Choiniere Family Farm. Their leadership and commitment to the land has continuously provided an example for other farmers across Vermont. We are so proud to see one of our own Vermont family dairy farms be recognized as a leader in conservation across New England," said Anson Tebbetts, Vermont Secretary of Agriculture.

During the 1990s, the Choiniere Family ensured the land would forever remain in agriculture by protecting it with a conservation easement. With the farm transfer from Henry and Raymonde Choiniere to their son Guy and his wife, their conservation efforts blossomed as Guy began to address environmental issues. The family has worked with many of the entities that comprise the Vermont Agricultural Water Quality Partnership (VAWQP) including the NRCS. They assisted the family in crafting a conservation plan – focused on protecting and improving soil and water resources - that is still in use today.

The Choinieres planted 5,000 trees along the banks of the impaired Rock River and installed a permanent 50-foot naturally vegetated buffer along 12,000 feet of the river's bank. They also switched from conventional manure storage to a system which facilitates winter feeding of cows in large hoop barns designed to mimic the comfort and atmosphere of being on pasture. Guy is an ambassador to help other dairies manage bedded pack systems. The Choinieres also use conservation practices like rotational grazing, cover crops, no-till and streamside plantings. They were Vermont's Conservation Farmers of the Year in 2009 and are now the first New England Leopold Conservation Award recipients from the Green Mountain State.