



VHCB & Water Quality

Summary of Accomplishments

2014 – 2016

February 3, 2016
House Fish, Wildlife, and
Water Resources Committee

VHCB Results in FY 2015 and FY 2016

2015

388 affordable housing units

24 farms—3,623 acres

8 natural area projects—
2,695 acres

2 historic projects

82 Viability Program participants

State Investment:
\$10.6M; \$80M leverage

2016

429 affordable housing units

26 farms—3,721 acres

7 natural area projects—
3,638 acres

1 historic project

80 Viability Program participants

State Investment:
\$9.7M; \$60M leverage

For more information see VHCB 2015 Annual Report: [VHCB 2015 Annual Report](#)

In 2012 the Legislature amended the VHCB statute to include **“the protection of lands for multiple conservation purposes, including the protection of surface waters and associated natural resources” —10VSA §303(3)(F).**

Since then, VHCB:

- Adopted Water Quality and Flood Resilience Guidelines;
- Revised Conservation of Agricultural Lands policy to incorporate water quality/flood resilience attributes;
- In partnership with NRCS, now requires an ag management plan (ALE plan) addressing soil health & water quality prior to closing on a farm easement purchase; and
- Includes special easement language protecting surface waters on projects that contain them.

Conservation easements are an important water quality improvement tool. VHCB easements:



- Prohibit industrial development
- Limit commercial and residential development
- Require forest management planning
- Prohibit mining and trash dumping
- Limit % of impervious surfaces (farms)
- Can require wooded buffers near surface waters and unique natural communities
- Limit forestland conversion
- Require agricultural mgt plans (since 2014)

Farmland Protection & Water Quality

In the past 3 years, VHCB has protected:

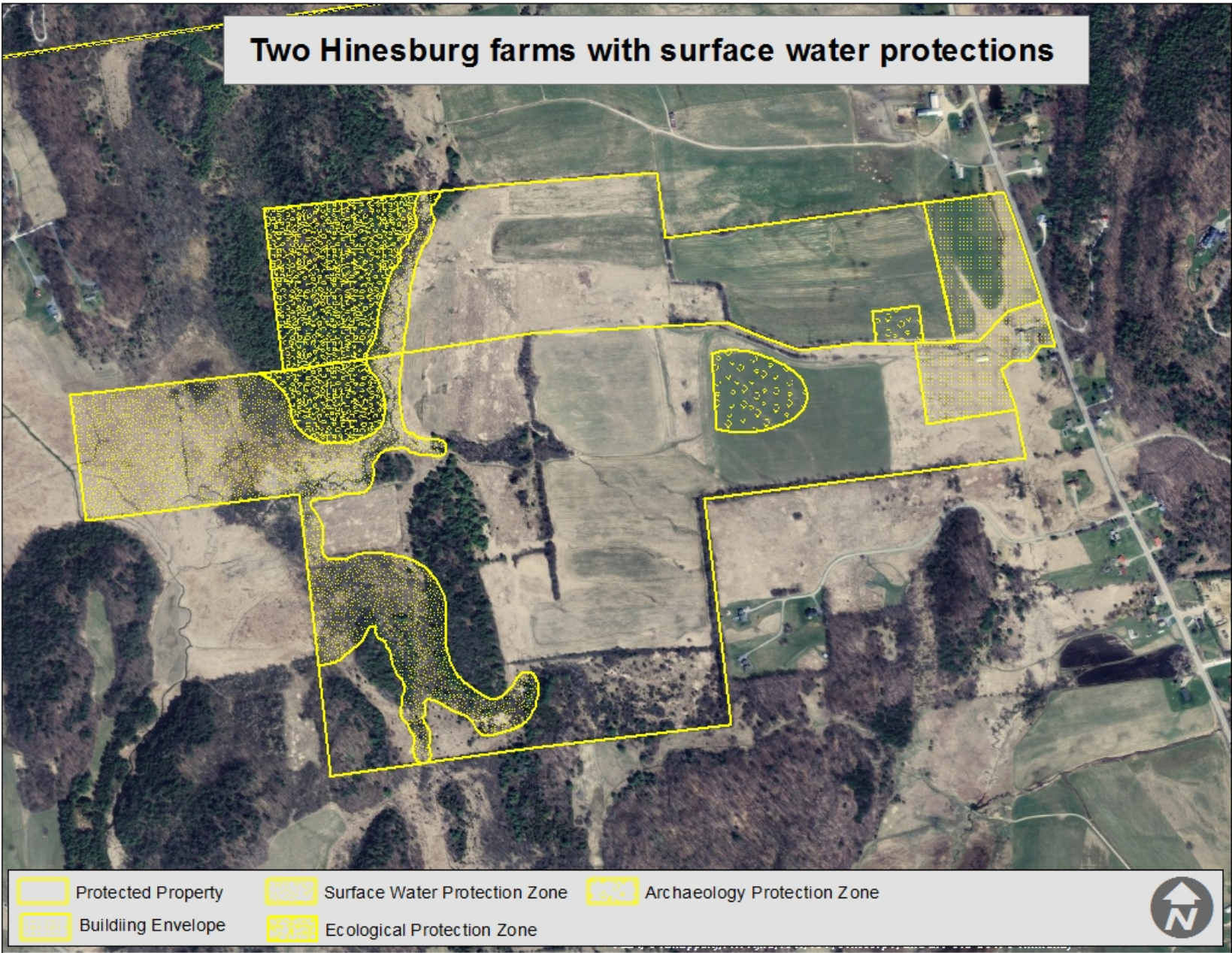
- 74 farms and over 9,600 acres
- 49 farms in the Lake Champlain Basin
- 46 have special water quality easement protections
- 35 have or will have NRCS ag management plans
- In FY 2016, 23 out of 26 farms—all those with surface waters—include special easement protections

Fournier Farm, Swanton



An organic dairy with 1,200 ft. of Lake Champlain frontage, this farm grows no row crops. When a hayfield is renovated, it is not plowed and left bare over the winter, but is instead seeded to a cover crop. Buffer zones at least 50 ft. wide separate ag land from the lake. The Fourniers have adopted many conservation practices through NRCS's EQIP program and they participate in a water quality initiative sponsored by their conservation district. VHCB conserved the farm in 2015 and it now has an ag management plan (ALE plan).

Two Hinesburg farms with surface water protections



VHCB Forestland Conservation



- Forests are the best form of land use for sustaining water quality and quantity. Studies clearly show that the amount of forestland within a watershed is an indicator of water quality and healthy aquatic ecosystems.
- 9,618 acres of forestland were conserved by VHCB in the last 3 years.
- VHCB forestland easements now contain special restrictions designed to protect surface waters (wetlands, waterways, water bodies).
- VHCB has a new focus on private forest and private sugarbush conservation (these projects require robust management plans that address water quality).



Willoughby Peaks, private conserved forestland

In 2015 VHCB helped conserve this 2,695-acre private forest in Westmore , protecting 199 acres of wetlands, 8 miles of headwater streams, much of the shoreline of 2 ponds, 4 miles of public trails, and 5 peaks over 2,000 ft.



Walloomsac Headwaters Park, Bennington

In 2015 VHCB helped the town of Bennington buy and protect a critical parcel within walking distance of downtown, with recreational trails, the confluence of 2 rivers for in-town paddling, and a high quality forested wetland.

Farm & Forest Viability Dairy Grants

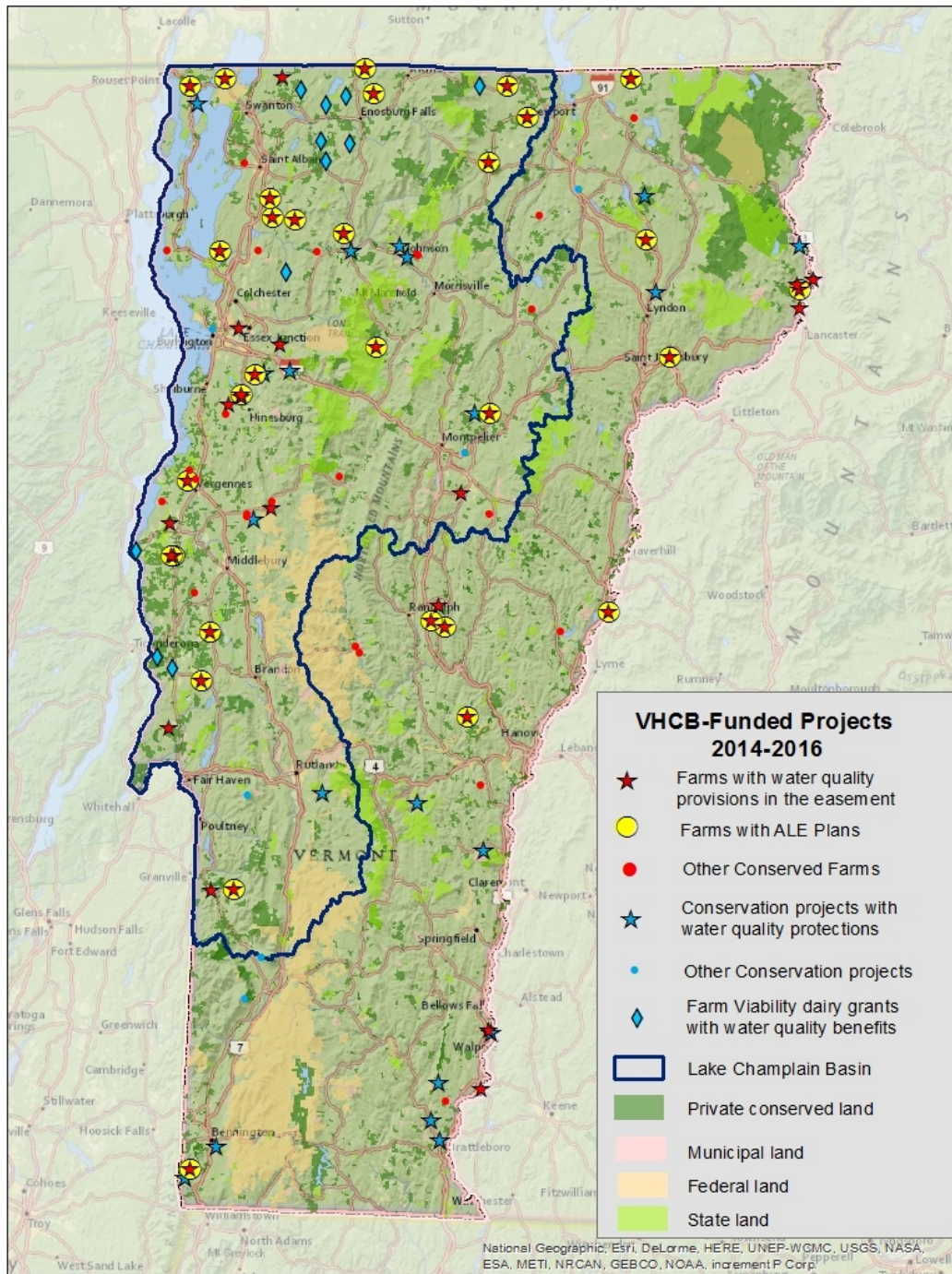
- In 2015 VHCB awarded over \$700,000 from Commonwealth Dairy to 27 dairy farmers for capital and infrastructure investments:
 - \$335,000 (48%) of the awarded grant funds were for water quality-related improvements, leveraging an additional \$567,000 in matching funds.
- The 2016 grant round will be focused exclusively on investments in soil health and water quality. Proposals are due in February and the grants will be announced in April.



Don Pouliot and his sons operate Pouliot Dairy on the Browns River in Westford. The farm is interested in transitioning to no-till for reasons related to both water quality and production efficiency. The Pouliots used Dairy Improvement Grant funds to purchase a minimum-till vertical tillage implement to help them move toward that goal. According to Don, without VHCB funding, the farm would have put off this investment, and their transition toward no-till, until dairy prices recovered.



Pouliot Dairy, Westford – 2015 Dairy Grantee

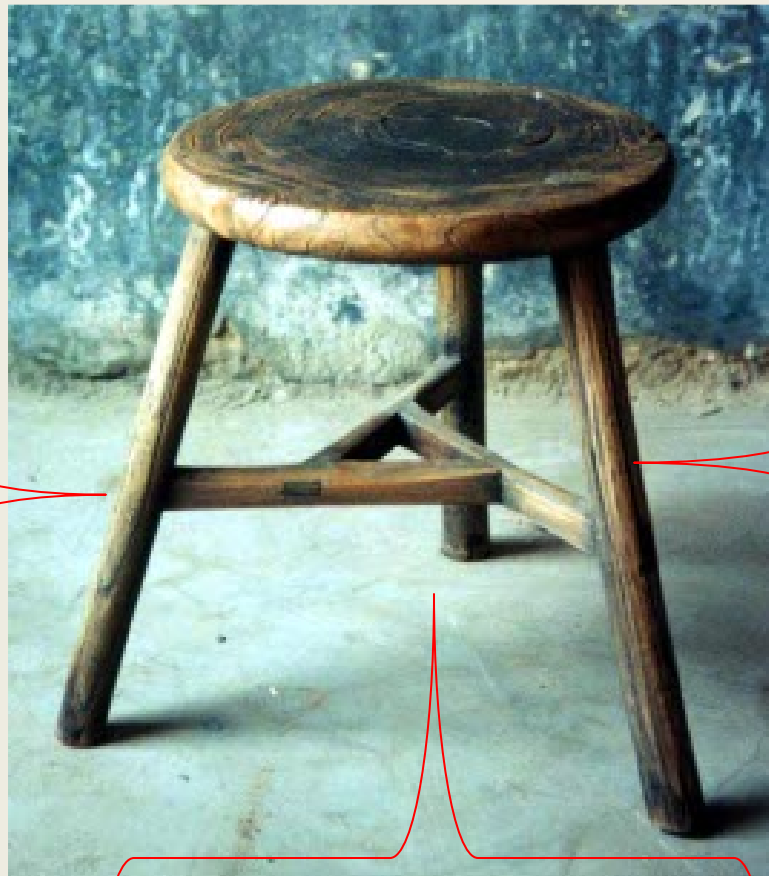


VHCB's Water Quality Partners

- VT Agency of Agriculture, Food & Markets
- Natural Resources Conservation Service
- Dept. of Environmental Conservation/ANR
- Vermont Land Trust, Upper Valley Land Trust, TNC and other conservation non-profits
- Conservation Districts
- UVM Extension
- Watershed groups
- Municipalities
- Lenders, business planners

VHCB Co-Sponsored Water Quality Cross-Trainings in April 2015

for professionals working with farmers to steward soil and water resources:



Business planners & financial advisors
(VHCB/Farm Viability, UVM Ext., IC, NOFA-VT, private consultants, FSA, VEDA/VACC, YFC, other lenders)

Conservation easement project developers & stewards
(VHCB, VLT, UVLT, VAAFM)

Technical service providers
(NRCS, VACD, VAAFM, UVM Ext. , DEC, Watershed groups, private consultants)

Regional Conservation Partnership Program (RCPP)

- VHCB pledged over \$5 million match to the state's \$16 million RCPP award from NRCS, focused on improving water quality in the Lake Champlain Basin.
- To date, VHCB has committed \$370,000 in state funds to four RCPP farm projects.
- These projects will receive additional technical assistance and implementation funds for water-quality related conservation practices.
- VHCB and its partners—VLT, VACD, DEC, and VAAF— are working on another 7 possible RCPP farm projects for FY17.

Marquis Farm, Newport

90-COW ORGANIC DAIRY ON ROUTE 100 IN MISSISQUOI WATERSHED

- Fields identified as critical source areas for potential phosphorous loading
- At least 35' buffers on all ditches and wet meadows specified in easement
- FY16 RCPP project – VHCB committed RCPP & WQ Bond funds for easement on 120 A of cropland purchased to support organic dairy operation
- Farmers working with NRCS through EQIP on new manure pit, paved barnyard and fencing on home farm
- Home farm (126A) – potential RCPP project in 2017
- Conserving cropland parcel and home farm will reduce debt and cover EQIP cost share

Water Quality in the 2015 Capital Bill:

“Sec. 18 VERMONT HOUSING AND CONSERVATION BOARD

(a) The following amounts are appropriated in FY 2016 to the Vermont Housing and Conservation Board.

- | | |
|------------------------------------------------------------------------------------------|-----------------|
| (1) Statewide, water quality improvement projects: | \$1,500,000.00 |
| (2) Housing: | \$1,800,000.00 |
| (3) Statewide, water quality improvement or other conservation and agriculture projects: | \$1,250,000.00” |

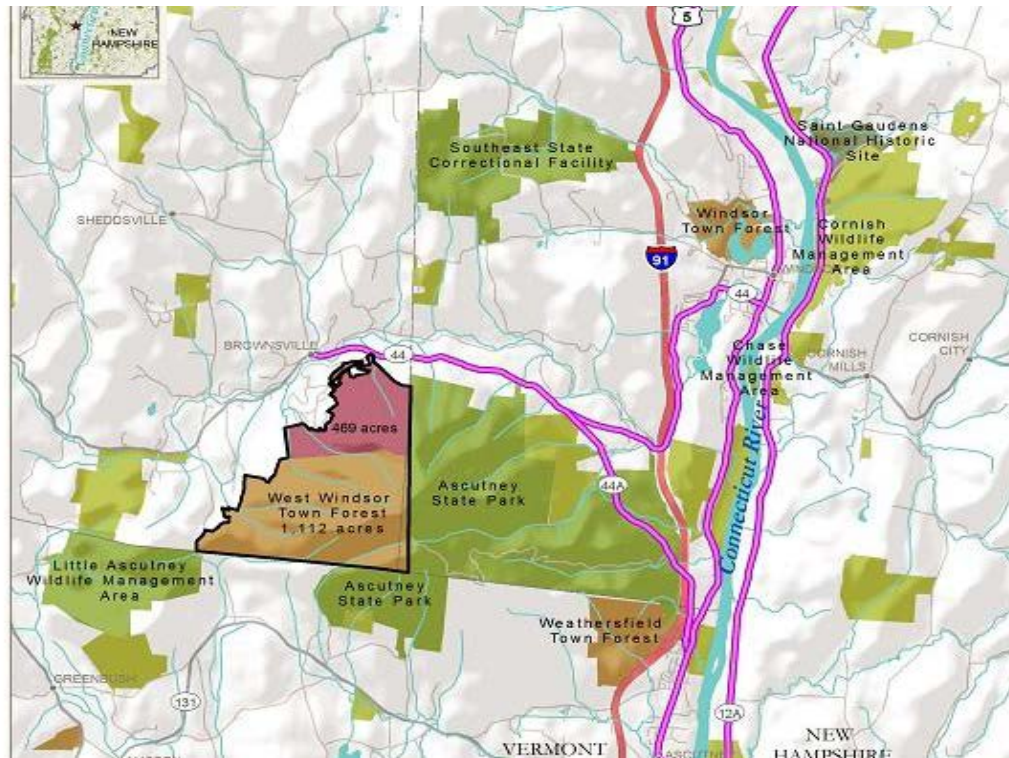
FY16 Water Quality Bond Funds

In FY16, VHCB committed approximately \$1.5M in bond funds to conservation projects targeted to improve water quality:

- 13 Lake Champlain basin farm projects:
 - All have special easement provisions to protect surface waters
 - 4 RCPP projects
- 2 other conservation projects—Ascutney Mtn. and Mendon Brook/Jim Jeffords State Forest—fee purchases of large woodland tracts by public entities (both have special water quality protection in the easement)

In FY16, VHCB also committed approximately \$1.25M in bond funds for 15 additional conservation projects around the state; 10 of these (all that had surface waters on site) had special easement provisions to protect surface waters.

Mt. Ascutney Addition to West Windsor Town Forest



VHCB funds helped the Town of West Windsor acquire 469 acres of the former Mt. Ascutney Ski Area, permanently protecting part of a 49-mile mountain bike trail network, 17 miles of hiking trails, and contributing to the economic revitalization of the area. The Town also donated an easement on an existing 1,112-acre town forest that protects headwater streams and biodiversity.



Harrison & Kilby-Harrison Farms, Addison

The Harrisons enrolled in conservation programs to protect tributaries of Dead Creek flowing into Dead Creek Wildlife Management Area, and then conserved the 2 farms with VHCB. The easement ensures that the riparian buffers are permanent. Proceeds from the sale of development rights will help fund infrastructure improvements that enhance both water quality and herd health.

VHCB and Vermont's Quality of Life

Population-Level Outcomes

Vermont's Environment is Clean and Sustainable

Vermont Has A Prosperous Economy

Population-Level Performance Indicators

Cumulative Number of Waters Subject to TMDLs or Alternative Pollution Control Plans

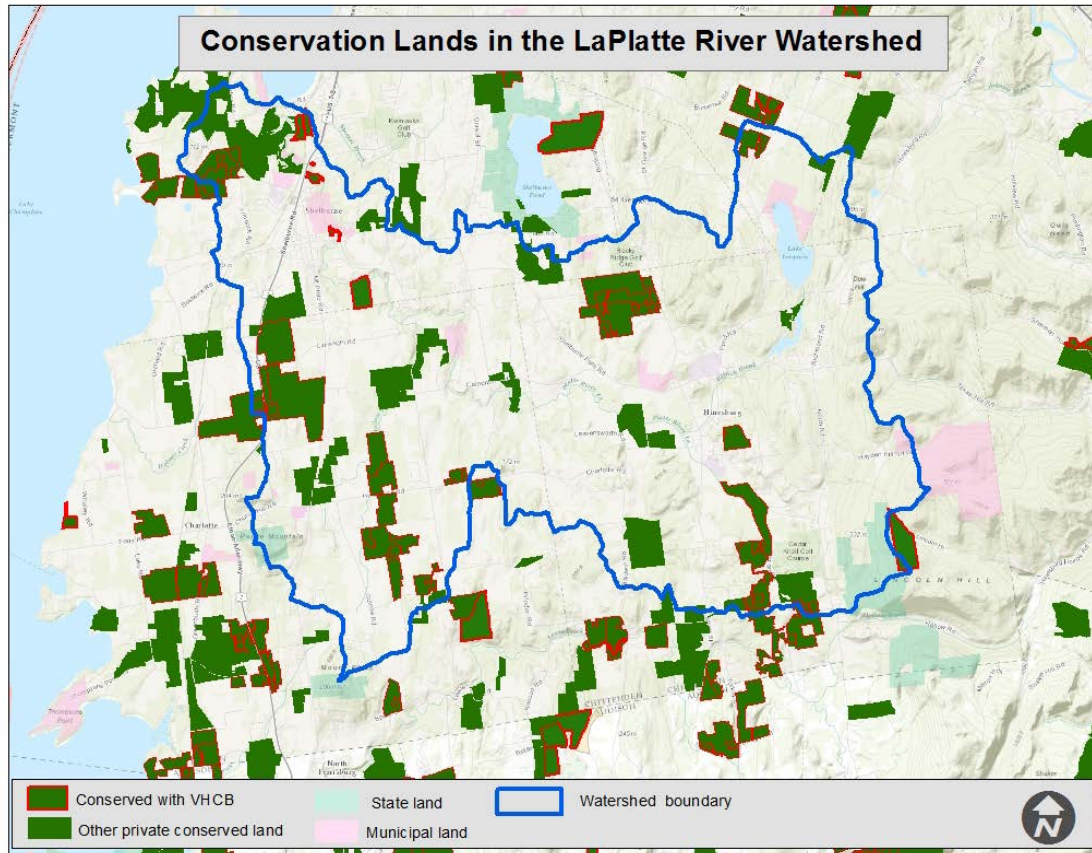
Percent of River Miles with Water Quality that Meet Designated Uses

Percent of Watersheds in Vermont Where Pollutant Loads are Declining

Percent of Farm Sales

Increase in Gross Working Lands Income for Grantees of Working Lands Program

Percent or Rate per 1,000 jobs of Nonpublic Sector Employment



Success Story #1—The LaPlatte River Watershed

For years, DEC and local conservation partners had recommended preservation of undeveloped portions of the LaPlatte River watershed as an important action to support water quality goals. In total, VHCB has now funded 17 conservation projects in the watershed totaling over 2,200 acres.



Decline of Phosphorous in the LaPlatte River

According to the U.S. Geological Survey, between 1990 and 2012, total phosphorous loading in the LaPlatte decreased 2.6% as a result of improvements in nonpoint source management and upgrades to wastewater treatment facilities.



Harrington Village, Shelburne

This VHCB-funded housing project features 13 acres of conserved natural area on the LaPlatte River as well as a fully engineered stormwater retention facility.



Choiniere Family Farm, Highgate - 1999

Success Story #2—The Choiniere Farm in Highgate

Located on the Rock River in the Missisquoi Bay Watershed, VHCB conserved the Choiniere Farm in 1999, facilitating an intergenerational transfer. Guy Choiniere then transitioned to certified organic and completed a business plan through VHCB's Farm & Forest Viability Program.



Choiniere Family Farm, Highgate - 2015

The Choinieres implemented numerous conservation practices: installed buffers along the river, installed cattle lanes and fencing, and kept manure under cover using bedded pack barns. The farm now produces milk without feeding grain. The Choinieres are in the process of purchasing a neighboring conserved farm.

Gus Seelig
Executive Director

Ethan Parke
Director of Conservation Assessment and Analysis

Vermont Housing & Conservation Board
58 East State Street, Montpelier, Vermont

www.vhcb.org

802-828-3250