Examining Vermont State Spending on the Dairy Industry from 2010 to 2019

A report from the Office of the Vermont State Auditor

## **Investigative Report Highlights**

## 10 May 2021

### Introduction

The Vermont State Auditor's Office published an investigative report to provide a contextualized view of Vermont State spending related to dairy farming. The goal of the report is to inform policymakers, program managers, and the public as they consider the future of Vermont's dairy industry and what role public funds should play. From State fiscal year (FY) 2010 to 2019, we estimate that Vermont spent more than \$285 million on programs and policies that support the dairy industry and/or address detrimental environmental impacts of dairy farming. In FY19, the most recent year of our analysis, spending totaled more than \$35 million (see Figure 1).

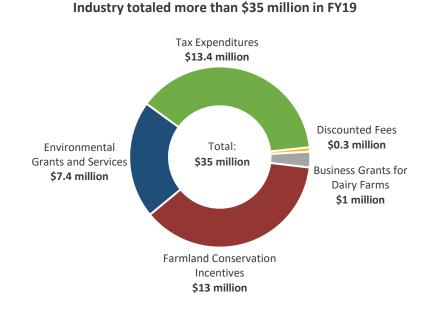
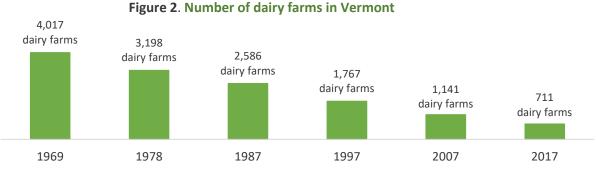


Figure 1. Estimated State Spending on the Dairy

### Background

Dairy farming has been a central part of Vermont's agricultural economy for more than 100 years, with milk sales accounting for 65% of Vermont's total agricultural sales in 2017.<sup>1</sup> In recent decades, however, many dairy farms have struggled to break even, contributing to the collapse of thousands of small and mid-sized dairy farms (see Figure 2).



Source: USDA National Agricultural Statistics Service (NASS), 1969 to 2017 Census of Agriculture.

#### To access the full report, please visit:

https://auditor.vermont.gov/sites/auditor/files/documents/Dairy%20Spending%20final.pdf

Many of the remaining farms have consolidated into larger operations to leverage economies of scale. By 2017, for example, just 59 dairy farms with more than 500 cows accounted for nearly half of Vermont's milk cows and milk sales (see Figure 3).<sup>1</sup>

Herd size	1978	2017
1-49 cows	29% of cows	5% of cows
50-99 cows		
100-499 cows		34% of cows Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ Æ
500+ cows	1% of cows	47% of cows
	Total: 187,424 cows	Total: 128,742 cows

#### Figure 3. Distribution of cows in Vermont by herd size

Source: USDA NASS, 1978 and 2017 Census of Agriculture.

As farmers adopt new technologies and farming practices, milk production per cow has more than doubled since 1969.<sup>1</sup> Farming practices not only impact milk production but also the level and type of impact that dairy farming has on the environment. Larger conventional farms tend to confine their cows in large barns and lots. When farmers confine their cows and increase their herd sizes, it concentrates manure production, which can create manure management and storage challenges. Notably, some agricultural practices used in dairy farming cause phosphorus pollution and water quality degradation<sup>2</sup> to the detriment of human health, wildlife, and Vermont's economy.

# A Word from Auditor Hoffer

As the State's accountability officer, my job is to provide information to policymakers, program managers, and the public regarding the allocation and cost-effective use of taxpayer dollars. Dairy has played an important role in shaping Vermont's economy, landscape, and identity. The industry is facing longstanding challenges, though, in terms of market conditions and environmental expectations. Therefore, we must all think critically about what role dairy will play in Vermont's future and the nature and extent of taxpayer contributions to long-term solutions.

## **Estimated Dairy-related Expenditures**

The State has implemented a series of programs and policies to support and regulate the dairy industry, many of which work in tandem with their Federal counterparts. We examined Vermont State spending from 2010 to 2019 used to 1) support and subsidize dairy farming and 2) mitigate detrimental environmental impacts of dairy farming. This report is primarily focused on dairy farms that produce milk from cows. We defined State expenditures as the use of State funds collected through State taxes or State issued bonds, or the loss of revenue due to an exemption or reduction in State taxes or fees. **From FY10 to FY19, we estimate that the State spent more than \$285 million on the dairy industry.** 

State Expenditure	Description	Dairy-related Expenditures FY10-FY19
Agricultural Tax Expenditures	Foregone revenue from tax credits and exemptions, called "tax expenditures," provides a financial benefit to specific groups of taxpayers and has the same fiscal effect on the State's budget as direct appropriations. Vermont has several tax expenditures that promote and subsidize agriculture and, therefore, dairy farming. For example, Agricultural Inputs and Agricultural Machinery and Equipment are exempted from the Sales and Use Tax.	\$152.2 million
Farmland Conservation Incentives	To incentivize farmers to keep their land in agricultural use, Current Use reduces the taxable value of farmland, thus lowering property taxes for farmers. The Farmland Conservation Program at the Vermont Housing and Conservation Board (VHCB) purchases development rights on farms to permanently prevent non-agricultural development.	\$98.8 million
Grants and Services to Address Environmental Impacts	The Agency of Agriculture, Food and Markets (Agency of Agriculture), the Agency of Natural Resources, and VHCB offer grants to farms and service providers to make water quality improvements. The launch of the Vermont Clean Water Initiative increased interagency coordination and funding for water quality initiatives.	\$30.3 million
Business Grants to Support Dairy Farms	The Agency of Agriculture and VHCB offer grant programs that support dairy farm businesses directly or fund third parties to provide services to dairy farms. The largest programs are the Working Lands Enterprise Initiative and the Farm and Forest Viability Program.	\$3.7 million
Discounted Fees	Farms benefit from fee discounts and exemptions, including reductions to farm truck and anaerobic digester registration fees.	\$0.3 million
	\$285.4 million	

#### Table 1. Estimated Dairy-related State Spending, FY10-19

About Investigative Reports: This investigative report is intended to inform citizens and State government leaders. It is not an audit and is not conducted under generally accepted government auditing standards. Therefore, its conclusions are more limited, and it does not contain recommendations. As the State of Vermont's constitutional officer charged with holding state government accountable, the Auditor utilizes investigative reports to supplement the performance and financial audits regularly produced each year.

#### Sources:

- 1. USDA National Agricultural Statistics Service. 1969 to 2017 Census of Agriculture, Vermont.
- 2. Environmental Protection Agency. *Phosphorus TMDLs for Vermont Segments of Lake Champlain*, June 2016.