

# Seeking to Ensure the Future Viability of Vermont's Dairy Industry

Report of the 33<sup>rd</sup> Grafton Conference  
March 6-7, 2008 &  
December 15-16, 2008

The Windham Foundation, Grafton, Vermont



*Promoting Vermont's rural communities*

## **Seeking to Ensure the Future Viability of Vermont's Dairy Industry**

Grafton Conferences seek to provide a setting, leadership and the resources for decision makers, leaders and policy makers to debate subjects and formulate policies that will beneficially impact Vermonters lives and work. Since its inception in 1984 by my predecessor, Stephan Morse, the Grafton Conference has become a leading public policy forum. I am proud that we are continuing that tradition and look forward to many future conferences.

The Windham Foundation was the proud sponsor and host of this 33<sup>rd</sup> Grafton conference in partnership with the Vermont Agency of Agriculture. I want to thank Secretary Roger Albee and Diane Bothfeld of the Vermont Agency of Agriculture for their help to design the program, identify participants and run the conference. While hoping that the outcomes of our conferences benefit Vermont it is important to emphasize that these reports do not represent the views, recommendations or aspirations of the Windham Foundation or its employees. Our role is to identify critical topics and seek to bring together the right participants to provide an effective forum to exchange ideas and identify critical steps and directions.

We publish these reports electronically and make them available for downloading through our web site at [Windham-Foundation.org](http://Windham-Foundation.org). You can also find reports of many past conferences there. For a listing of the conferences see Appendix 3. If you are seeking an early conference report that is not available on our web site, or have ideas for future conference topics, please contact us.



Dr. John Bramley  
President/CEO

The Windham Foundation  
PO Box 70  
Grafton, VT 05146  
[info@windham-foundation.org](mailto:info@windham-foundation.org)

## Executive Summary

The conference participants reviewed materials on Vermont's dairy farming and dairy processing industry, participated in a series of discussions on trends in global and international trade, national and regional dairying, environment and energy, consumer trends and attitudes and agricultural entrepreneurship. Various topics were identified as being critical for the future of Vermont's dairy industry and warranting further work and discussion. These were:

- Assisting well-qualified new entrants develop equity and identify dairy farming opportunities
- Increasing profitability and lowering farm costs
- Supporting innovation on Vermont's dairy farms
- Seeking greater predictability and stability in milk prices and profitable markets for Vermont milk and milk products
- Developing a unifying and engaging vision for Vermont's dairy industry

For each topic teams were established and developed recommendations during the conference and in subsequent meetings. Participants reconvened in December, 2009 to review the work of the project teams, and finalize a set of recommendations which are detailed in this report. The participants also identified three additional topics worthy of future study.

- Strategies to maintain or expand dairy processing capacity in Vermont
- Developing a clearer sense of the meaning of the phrase "working landscape". What new steps or changes in policy may be needed to better keep Vermont's best land in productive agricultural use?
- Promoting research and information transfer between universities and other organizations and dairy farmers and processors

### *A Vision for the Vermont Dairy Industry*

*We are a vibrant, profitable and diverse agricultural community of producers, processors and suppliers committed to manufacturing the highest quality dairy-based products for our consumers. We are widely recognized for the quality and safety of our products and our sustainable practices which preserve Vermont's working landscape and rural communities. We seek to enhance future profitability and productivity of the industry and develop high value local and regional markets.*

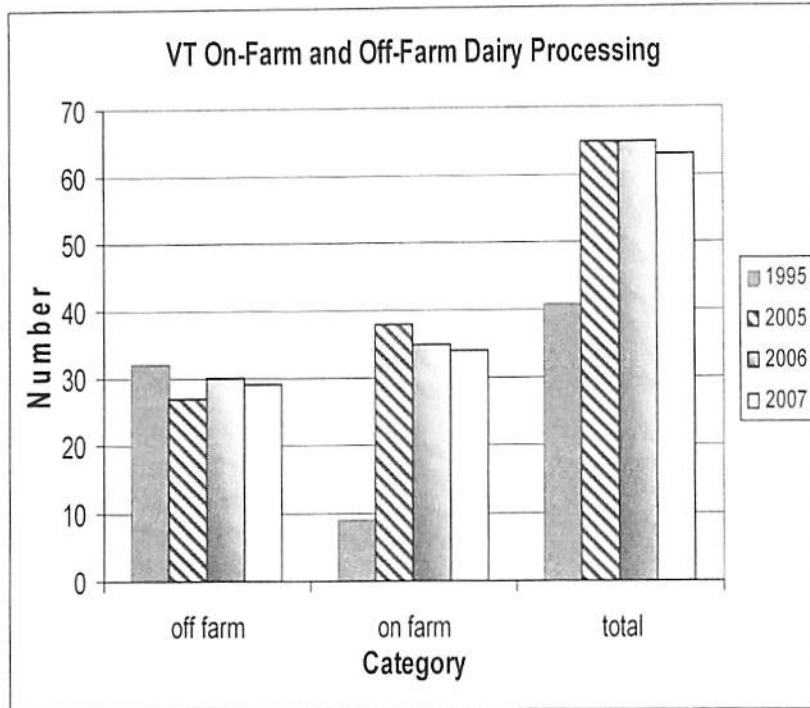
*To ensure our future success we actively promote policies, help secure investments and foster collaborations which provide education, land transfer, and financial programs to develop the next generation of dairy professionals and leaders. Our efforts will provide technical, financial and leadership resources in support of emerging and established dairy enterprises as they seek to expand, develop new products and markets and maintain or secure access to productive farmland.*

### **Context**

Vermont's 1100 dairy farms represent 70% of the economic activity of Vermont agriculture. However, the number of Vermont dairy farms has been declining for many years because of low milk prices, price volatility and rising costs of milk production. Often the price paid to farmers for their milk is below their costs of production. Milk prices to farmers are determined through an old complex formula that many say needs drastic overhaul or replacement. The average price received by dairy farmers for their milk has not increased for 20 years. The industry has become bimodal with herds becoming much larger to obtain increased economies of scale or staying small to avoid additional capital and labor costs. Additionally there has been a significant increase, particularly among small farms, in organic milk production or on-farm product manufacturing.

Over the last decade, the numbers of Vermont off farm dairy processors has remained between 25 and 30. In 2006 these processors employed 1,635 people with an estimated payroll of \$66 million. Contrastingly, on-farm processors have increased threefold since 1995, with the growth being mainly in small scale cheese, yogurt, butter or ice cream manufacturing (Figure 1).

Figure 1. Numbers of Milk processing plants in Vermont 1995-2007.



While on farm manufacturing and organic milk production has been increasing it represents less than 20% of Vermont dairy farms. Most Vermont farms are engaged in commodity milk production and therefore subject to the price fluctuations of the milk order system. Many believe that a competitive future for Vermont dairying increasingly depends upon local manufacture of high quality dairy products, building and capitalizing on Vermont's brand. However, it is uncertain what proportion of farms could constitute the value added/organic dairy sector. Consequently, continued efforts to maintain a viable, conventional dairy industry with its processing and transportation infrastructure is important. While often presented as competing alternatives the reality is that the conventional and "value added" sectors are interdependent and mutually beneficial.

Many external forces potentially impact the Vermont Dairy industry. These include use of crops for bio-fuels, growing public interest in food safety and quality and in local foods in particular, new value-added dairy products, changing demographics, and a volatile global market for milk products.

Some of these trends may favor the Vermont dairy industry while some perhaps do not. Nationally the US dairy industry has become much consolidated. There are two large national milk companies and their dominance has reduced both competition and the influence of dairy farmers and smaller regional dairy co-operatives. Similarly, small changes in the international demand for milk can dramatically, and rapidly, affect milk price to Vermont farmers.

Vermont is losing national influence as the number of dairy farms, allied businesses and milk production decline. Commodity milk production is increasingly concentrated in intensive large dairy herds in the south and west of the country where production costs are lower. This is compounded by an aging population of dairy farmers and many dairy farms that need modernization but are undercapitalized. Vermont's strengths are the relatively large consumer population close by, the attractiveness of the Vermont brand making its products more attractive, the strong tradition and culture of dairy farming, and the growing entrepreneurship in the sector. These issues, and others, have been identified and discussed by the Vermont Milk Commission in their various reports (see data sources). A summary of key Vermont dairy industry statistics are shown in Table 1 below.

*Table 1. Key statistics of the Vermont Dairy Industry 2005 – 2007*

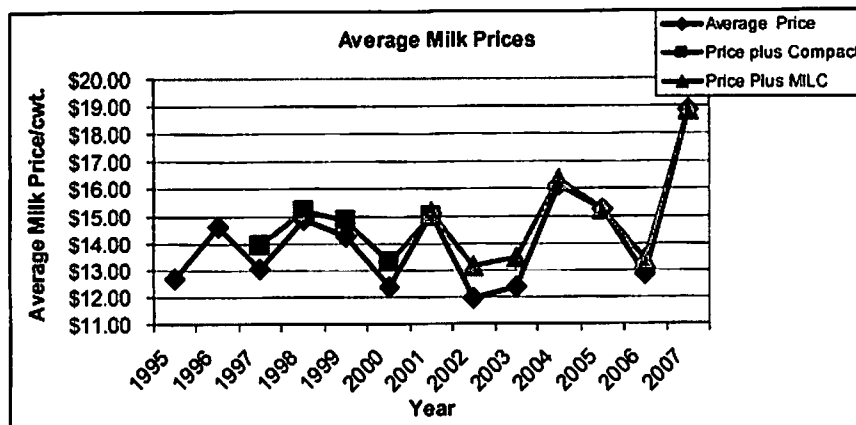
Category	2005	2006	2007	2008
Average Milk Price \$/cwt – through November	\$14.86	\$12.60	\$18.84	\$18.09
Average Number of Vermont Cow Dairy Farms	1,226	1,174	1,118	1,096
Milk Production from USDA	2.640 billion lbs.	2.596 billion lbs.	2.529 billion lbs.	2,575 billion lbs
Average number of cows in Vermont from USDA	143,000	142,000	140,000	139,000
Average Number of cows per farm	117	121	125	127
Certified Organic Cow Dairy Farms	98	126	199	199
Off-Farm Dairy Processors	27	30	29	28
On-Farm Dairy Processors	38	35	34	34

Historically, milk price fluctuates on a 3 year cycle (Figure 1). This volatility makes investment and financing difficult and often leaves Vermont farmers selling their milk for less than it cost to produce. This has led to various political mechanisms to create greater price stability, and boost low milk prices. Examples are the Northeast Dairy Compact created in the mid 1990s and latterly the MILC program. Their effect on prices/cwt is shown in Figure 2.

It is noteworthy that both Table 1 and Figure 1 show an unprecedented increase in milk price/cwt in 2007 and 2008. Numerous factors were at work but one unusual and important influence was the increasing Chinese demand for dairy products. The US dairy exports substantially exceeded imports and that played into the domestic price increases. However, while these higher prices benefitted dairy farmers their costs of production also increased so on many farms profitability remained marginal. Furthermore, as 2008 came to an end milk price was falling and fell to around \$11-13/cwt in early 2009. Additionally, the economy is facing a decline of a magnitude not seen for 70 years.

Further loss of Vermont farms can be anticipated in 2009.

Figure 2. Milk average price/cwt and impact of support programs in Vermont 1995-2007.



While there are encouraging examples of entrepreneurship, new products, and new farmers the underlying industry trends and economic pressures challenge the viability and profitability of Vermont dairy farms. Moreover, as the number of farms declines we lose infrastructure and jobs, the working landscape, local businesses, and the prosperity of rural communities.

For decades, the mission of the Windham Foundation has been to help promote and preserve Vermont's rural communities through its philanthropic and educational programs and businesses. In early 2008 Secretary of Agriculture Roger Albee and Windham Foundation President John Bramley concluded that the viability of Vermont's dairy farming future was an issue of critical importance for Vermont. The goals of the Grafton Conference were to discuss these trends and the underlying issues affecting dairy farmers and their impact on milk volume, farm numbers and land use in Vermont. In particular, the assembled group was asked to examine the relationship between the need for more milk, the effect of price volatility on farmer and investor confidence, ways to increase confidence and reduce volatility, actions we might take to expand opportunities for value added dairy products and ways to resolve disconnects between the desire of young people to farm and their inability to secure land and buildings. At the end it was hoped to have a shared vision and a set of priorities for the future of Vermont dairy that would help guide policies, investments, education and future decision making.

### **Submitted Materials**

Various materials were provided for review by the participants. These are listed below and are available from VT Agency of Agriculture.

- Final Decision and Report of the Proceedings of the Vermont Milk Commission, Jan. 15th 2008.
- Report of the Vermont Dairy Task Force 2005
- Report of the Vermont Dairy Task Force 2006
- Report of the Vermont Dairy Task Force 2007
- Dairy Farmer Focus group Information 2008



## Dairy Conference Outline

The conference was held at The Old Tavern at Grafton on March 6 and 7, and reconvened on December 15, 2008 to follow up on key actions. After introductory remarks, the first morning consisted of brief papers discussing trends or topics that are or will shape the Vermont dairy industry.

- Global and international trade (china, EU, etc) – Roger Allbee, Vermont Secretary of Agriculture
- National and regional dairy trends – Leon Berthiaume, St Albans Co-operative Creamery
- Environment /energy – Dave Lane, Vermont Agency of Agriculture
- Food distributors/retailers – Christopher Wainhouse, Provisions Int.
- Consumers attitudes – diet, organic, health – Dean Rachel Johnson, UVM College of Agriculture and Life Sciences
- Entrepreneurship - Andrew Meyer, VT Soy and VT Coatings Companies

These presentations were contextualized by the materials circulated and by discussion of Vermont's dairy statistics, including the limited processing capacity in state and the concern that we might lose additional processors in the future. (Note: this subsequently happened with the departure of a major cheese maker in 2009). Small group discussions occurred during the rest of the day based around the following 3 major topic areas and key questions in each area.

### Vermont Milk Production Volume

- Why is it declining
  - Fewer farms, changes in rBST use, more organic farms, challenges over feed quality and cost, lack of investment, poor management
- What are the potential consequences if decline continues
- What are the solutions
  - More cows, increased yield?
  - Where are we in terms of efficiency and productivity?
  - What's the risk of expansion and who bears the risk?
  - What are the best directions for VT?
  - What are the barriers to overcome?
  - How can we create security and stability round price and markets increasing confidence for farmers and investors?
    - Futures, options, forward contracts, new markets, compacts

- Local vs. national competitiveness
  - Can we create more control over our destiny?
- New market models and opportunities

#### Land use and the working dairy farm

- What is happening around land use and conservation?
- How much land is being conserved?
- How much is being actively farmed?
- Are we creating new dairy farms and if so how many?
- What should be the balance between promoting “dairy” and other agriculture?
- Are land owners and potential new farmers connected?
  - How well have various programs worked and been coordinated?
  - What are the obstacles?

#### The next generation of dairy farmers

- Education of future dairy farmers
- Education of existing dairy farmers
- Intergenerational transfer issues
- Recruitment of new farmers to VT
- Incubators for new entrants – funding
- Capital and lending issue

## **Participant Comments on the Current Challenges**

In vigorous discussions many opinions and views were expressed. Some were widely endorsed, others were not. The following statements reflect that debate and the contradictions and challenges faced by the industry. However, they also serve to identify current and future strengths and potential.

#### Competitiveness

*“There is no God given right to success in dairy farming or any other business. We cannot eliminate the economic concepts of efficiency and competitiveness and replace them with protectionism. Some Vermont farms are uncompetitive for all sorts of reasons and will continue to fail. That happens in all industries. However, as farms fail we need programs and steps to ensure that they stay in agriculture and their profitability increases”.*

*“In a national market, artificial support systems that favor Vermont and the northeast may provide short term fixes but in the longer term will create greater incentive to other*

*regions, with lower production costs, to increase produce and depress market price. They help but do not solve the long term problem in which the northeast declines as a milk shed and the south and west grows. In a commodity based competition most Vermont farms will lose."*

*"Many conventional Vermont farms are doing well and we need to understand their recipes for success and help others be as successful."*

*"We should be cautious of assuming that increased yield or increased cow numbers will guarantee economic success for dairy farms. It is really about profitability and margins not production. Nevertheless, IF we fail to increase milk production in Vermont there is the real possibilities of losing some significant processors who, while they might care about Vermont, will not let their businesses fail because of inadequate local milk supply. We conclude that we have the land capacity and demand to increase Vermont's milk supply by 5 – 10% and thereby increase the proportion of the northeast milk supply produced in Vermont."*

*"There are increasing opportunities to generate additional farm income or reduce production costs through energy generation, improved manure management, different products etc."*

#### **The Vermont Brand**

*"Vermont dairy farms have some disadvantages associated with soils, topography, climate, age etc. We also have some advantages – proximity to large population bases, a significant history and culture in agriculture, and a Vermont name or reputation which can be translated into a greater economic return. We need to focus on capitalizing on the advantages and minimizing the negative impacts."*

*"The Vermont name or reputation is strongest in terms of cheese and perhaps some other products. However, for the brand value to persist it has to have substance (quality, value, safety, health) as well as geography and environmental reputation etc."*

#### **New Entrants and Farm Succession**

*"There are talented new entrants who wish to dairy farm but are struggling to find opportunities to do so. With our age structure on farms if we fail here we fail totally. Other states will snap up those young people if we fail to create viable opportunities. There are two major barriers to new entrants. One is the cost of land and the other is the capital investment necessary for a reasonable probability of success (facilities, animals)."*

*"In many cases for retiring dairy farm families the appreciation of their land value is their only retirement income, primarily because their low income has precluded alternative investment strategies"*

*"Land conservation helps protect land from development but has had limited success in creating new or successful farm businesses or allowing existing businesses to expand. Are there ways innovative ways to create retirement income for retiring farmers in these deals with less one time capital cost?"*

#### **Public Image**

*"While there is a public support and appreciation of keeping Vermont land farmed there is limited expression or publicity of the real value of Vermont dairy farms to the economy."*

*"The media image of dairy farming, by and large is of a struggling "way of life" rather than an exciting business. We need to change that and tell our positive stories better."*

*"There are some positive stories and opportunities around the health and nutritional value of dairy products and school food programs which we should exploit to the fullest."*

### **Identification of Critical Areas and Working Groups**

As the discussions continued, five areas were identified as critical to future competitiveness and vitality of the Vermont dairy industry. Study groups were established to identify key actions, responsibilities and time lines. These topics are listed below with their progress reports as of December 15<sup>th</sup> 2008.

#### ***1. Establish a Vermont Incubator Program to assist well-qualified new entrants develop equity and new dairy farming enterprises.***

Creating opportunities for new dairy farmers to enter the business through existing farms or new ones is critical to arrest the decline and aging of the dairy farmer population. There are major practical and financial hurdles to creating succession and a dairy farm incubator program, alongside the existing "2+2" program, is key.

The group concludes that the current VTC farm incubator program has merit and recommends it be expanded. A proposal to that effect has been developed. The group is planning to establish a governance structure and a sub group to be active in soliciting financial support.

#### ***2. Increasing Profitability and Lowering Farm costs.***

The long term sustainability of dairy farms requires milk prices higher than the cost of producing it. The current system is not delivering that and has led to the decline of farming in the northeast. In the absence of a revised federal order system dairy farm profitability and survival depends on reducing farm costs and increasing efficiency.

Helping develop excellent managers and ensuring they have excellent management and decision-making tools has to be a primary focus. Some examples of useful tools include:

- Regular farmer visitors – vets, dairy field staff, nutritionists and feed specialists
- Pennsylvania Dairy Ag Resource and Training
- Discussion Groups
- Dairy Stewardship Alliance
- Dairy Management Groups

Some of the most useful, inexpensive and most accessible data are available on-line.

It is generally agreed that the bimodal distribution into larger farm and small diversified or value added dairy farms will probably increase over the next 5 to 10 years. Information providers need to recognize that trend and ensure they are well-equipped to provide the necessary business and technical information needed.

Turf and competition between programs and organizations over limited resources is common, but counterproductive. Co-operation and collaboration between organizations are needed to making better use of limited resources for the benefit of the industry,

### **3. Support innovation.**

There is potential within the Vermont dairy industry for increased revenue profitability through entrepreneurship and innovation. Examples include biomass and renewable energy projects, on farm processing, new product developed from agricultural materials, and agri-tourism. Critical to success and the generation of more new businesses are access to venture capital, expertise in leverage of assets, creating partnerships, expertise in product development, support and resources in market analysis and business planning

### **4. Milk Prices and Markets.**

The majority of dairy farmers seek to produce milk efficiently but despite their best efforts struggle to be profitable when milk prices fall. Historically, political efforts to support the milk price have generated significant price support for Vermont and regional dairy farmers at such times.

The group expressed frustration at the failure of the current federal order milk pricing systems to create predictable and sustainable milk prices for Vermont dairy farmers. Its limitations have been exacerbated by the structural changes and concentration that has occurred within the milk buying and processing industry. Individual states have no standing in the federal orders and the only tools that have helped Vermont in recent years have been federal political actions and coalitions e.g. the Dairy Compact. However, there is little optimism about the prospects for further success through political coalitions. Nevertheless, it is recommended that the Agency of Agriculture establish a permanent committee available to advice on legislative and regulatory options or strategies that may create better milk prices for Vermont farmers. This committee could also advise on topics such as:

- Anti-trust issues associated with the consolidation of fluid milk processing
- Fair Trade Milk
- Pricing activities within the regional states
- Co-op marketing leverage – local, national and global competition on price
- State and consumer standing within Federal Order System

##### **5. Vermont Dairy Industry vision: quality, profitability and sustainability**

Establishing an exciting, forward looking and comprehensive vision of the Vermont Dairy industry is desirable to help focus future priorities and goals. The following vision statement was approved:

*We are a vibrant, profitable and diverse agricultural community of producers, processors and suppliers committed to manufacturing the highest quality dairy-based products for our consumers. We are widely recognized for the quality and safety of our products and our sustainable practices which preserve Vermont's working landscape and rural communities. We seek to enhance future profitability and productivity of the industry and develop high value local and regional markets.*

*To ensure our future success we actively promote policies, help secure investments and foster collaborations which provide education, land transfer, and financial programs to develop the next generation of dairy professionals and leaders. Our efforts will provide technical, financial and leadership resources in support of emerging and established dairy enterprises as they seek to expand, develop new products and markets and maintain or secure access to productive farmland.*

It was also recommended that additional working groups were needed in the following three areas:

**Dairy Processing and its role in Vermont's Economic Development.**

There is great concern about the loss of dairy processing facilities and the concentration of the "milk market" into a very small number of national companies. This is not serving the interests of Vermont farmers, consumers or communities and it is important to create an environment in which local processing capacity expands dairy infrastructure and options increase and new jobs are created.

**Working Landscape.**

A better definition of the commonly used, but poorly understood, phrase "Vermont's Working Landscape" is needed. This is important to help formulate policy and programs affecting farms, sustainability, land transfer and economic development.

**Research and information transfer.**

Increasingly the funding for dairy and dairy foods related research has declined and become centralized. Resources for locally directed research and extension have relatively stayed level or diminished. However, Vermont has important resources and talent through the University and this has led to significant new business developments. Ensuring that this situation prospers into the future and that we have seamless connections between dairy researchers, farmers and agricultural businesses will be increasingly important.

**Appendix 1**  
**Participants and Affiliations**

Roger Allbee	Vermont Agency of Agriculture
Andrea Asch	Ben and Jerry's
{ Leon Berthiaume	St Albans Co-Operative Creamery
Diane Bothfeld	Vermont, Agency of Agriculture
Dr. John Bramley	Windham Foundation
Jane Clifford	Green Mountain Dairy Farmers
Tricia Coates	Congressman Welch's Office
Dr. Rocki DeWitt	UVM Business School
Greg Dryer	Saputo Cheese Co.
Chris Dutton	Vermont Technical College
Jackie Folsom	Vermont Farm Bureau
Leon Graves	Dairy Marketing Services
Sarah Isham	VEDA
Sara Kittle	Senate Agriculture Committee
Dr. Rachel Johnson	UVM College of Agriculture and Life Sciences
Dave Lane	Vermont Agency of Agriculture
Dr. Doug Lantagne	UVM Extension
Gil Livingston	Vermont Land Trust
Dr. Adam Lock	UVM Department of Animal Science
John McClaughry	Ethan Allen Institute
Andrew Meyer	Vermont Soy Co.
Rob Michalak	Ben and Jerry's
Adam Mueller	Grafton Village Cheese Company
Jenny Nelson	Senator Sanders Office
Dan Normandeau	Windham Foundation
Bob Paquin	Senator Leahy's Office
George Putnam	Yankee Farm Credit
Bill Schubart	Commentator and business person
Gus Selig	Vermont Housing and Conservation Board
Dan Smith	Vermont Milk Commission
Harvey Smith	Farm Services Agency
Dr. Rich Stammer	Agrimark
Bobby Star	Vermont Senate Agriculture Committee
Kyle Thygeson	Vermont Dairy Farmer
Christopher Wainhouse	Provisions International
Bob Wellington	Agrimark
David Zuckerman	Vermont House Agriculture Committee



### **Appendix 3**

#### **Listing of Previous Grafton Conferences**

The First Grafton Conference  
**Economic Development and the  
Environment of Vermont**  
January 22-24, 1984

The Second Grafton Conference  
**The Future of Health Care in  
Vermont**  
June 24-26, 1984

The Third Grafton Conference  
**Education in Vermont: Taking a  
Direction**  
December 2-4, 1984

The Fourth Grafton Conference  
**Economic Development in Vermont  
International Perspectives on Policy  
Issues**  
June 9-11, 1985

The Fifth Grafton Conference  
**Vermont's Cultural Resources**  
July 14-16, 1985

The Sixth Grafton Conference  
**Vermont's Housing Future**  
January 26-28, 1986

The Seventh Grafton Conference  
**Vermont Women in Transition**  
March 23-25, 1986

The Eighth Grafton Conference  
**A Review of Vermont's Tax Policies**  
June 22-24, 1986

The Ninth Grafton Conference  
**Vermont's Fourth Estate and Public  
Policy**  
August 10-12, 1986

The Tenth Grafton Conference  
**The Travel Industry in Vermont**  
December 7-9, 1986

The Eleventh Grafton Conference  
**Vermont's Cultural Resources: Two  
Years Later**  
May 31-June 1, 1987

The Twelfth Grafton Conference  
**Vermont: Who Are We Becoming?**  
July 19-21, 1987

The Thirteenth Grafton Conference  
**Growth in Vermont: Under Control?**  
November 8-10, 1987

The Fourteenth Grafton Conference  
**Governing Small Vermont Towns**  
March 20-22, 1988

The Fifteenth Grafton Conference  
**The Judicial System in Vermont:  
Purpose and Performance**  
February 26-28, 1989

The Sixteenth Grafton Conference  
**Global Competence in Vermont:  
An Educational and Economic  
Imperative**  
May 7-9, 1989

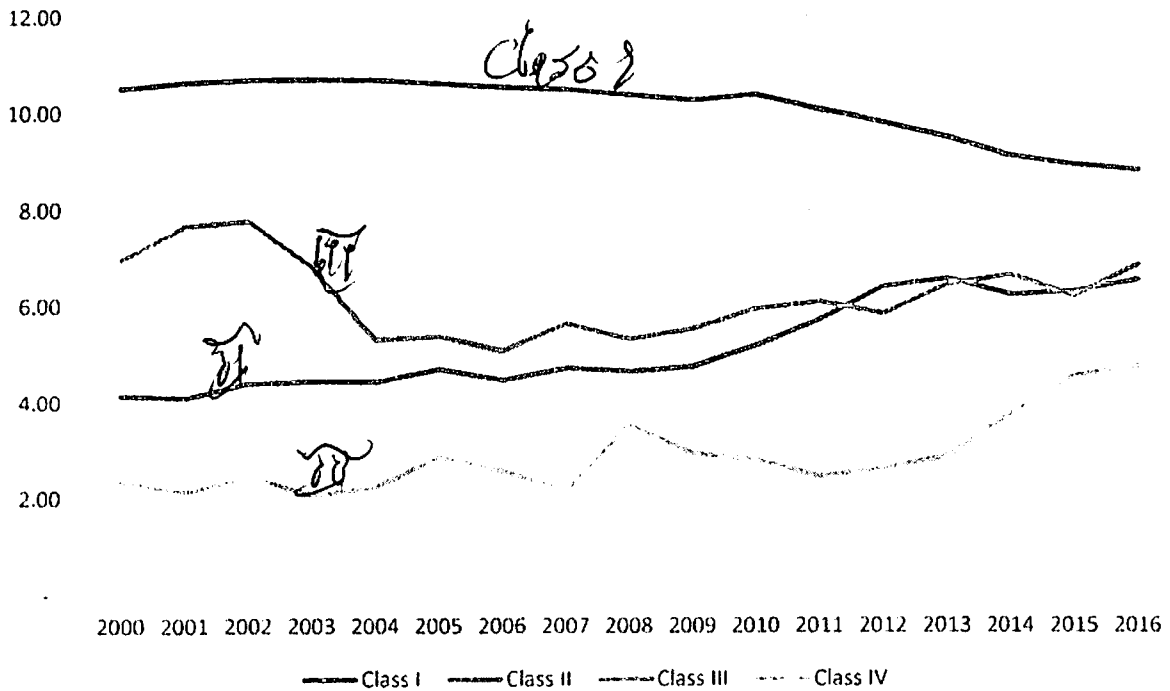
The Seventeenth Grafton Conference  
**A Strategy for Providing Maternal  
and Infant Care in Vermont**  
June 4-6, 1989

The Eighteenth Grafton Conference  
**Addressing Vermont's Solid Waste  
Crisis**  
January 7-9, 1990

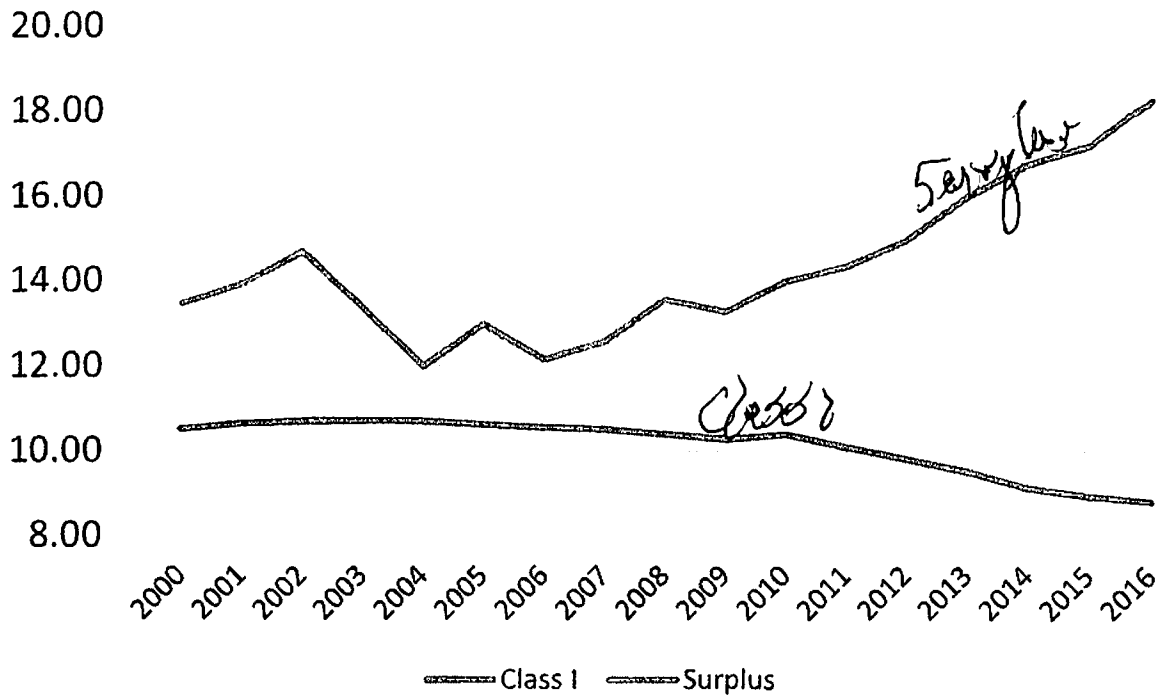
**Boston/NE FMMO Class 1 % Utilization**

	Bos Order	FMMO 1	
	<u>1979</u>	<u>2000</u>	<u>2016</u>
CL I	58%	44%	33%
II		17%	24%
III	42%	29%	26%
IV		10%	18%

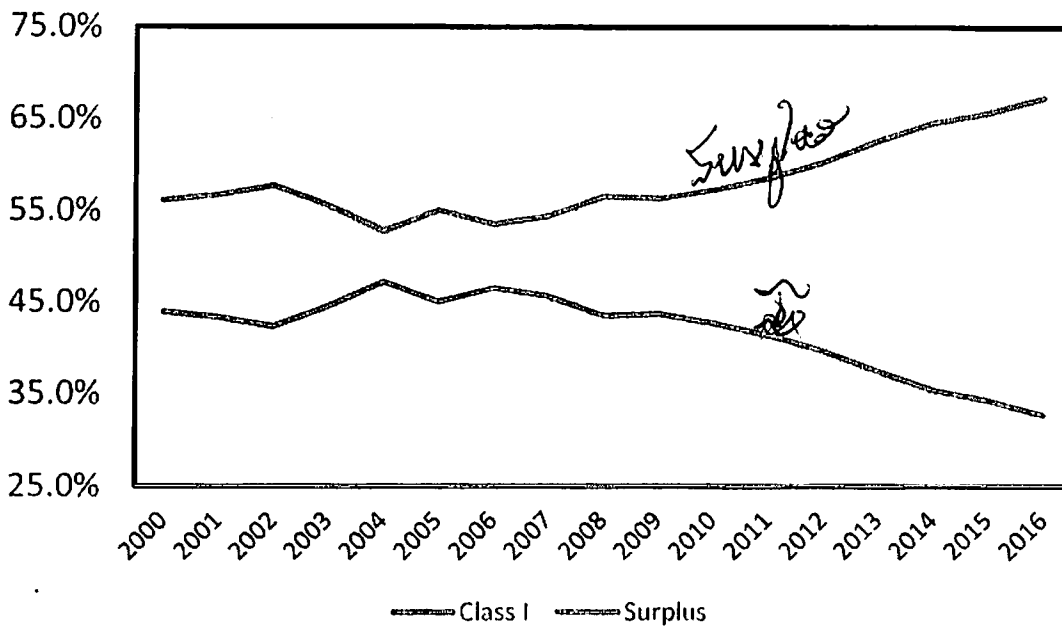
**FMMO Class Pool Usage, Bil Lbs**



**FMMO 1 Fluid and Surplus Utilization (Bil lbs)**



**FMMO 1 Fluid and Surplus Utilization (%)**



CL II Price with CPI; Average

