

# Dairy Revitalization Plan

Dairy farmers have experienced boom and bust price cycles for decades. These volatile cycles are triggered by an imbalance between supply and demand. When milk prices are high, dairy farmers respond by increasing production to meet the demand. But when prices are low, dairy farmers also respond by increasing production, which floods the market and drives prices down further. The wild price swings that result make it difficult to manage a business and plan for the future. There is a better way.

**The Dairy Revitalization Plan** is a growth management strategy that coordinates milk production growth among all dairy producers to stabilize and improve prices for everyone. Unlike quota, which is often viewed as overly restrictive, growth management offers a series of incentives and disincentives to better align milk production growth with demand growth. The Dairy Together coalition of farmers, farm groups, and dairy industry stakeholders is pushing for this plan to be included in the 2023 Farm Bill.

## Core Tenets

The Dairy Revitalization Plan was designed to meet the following core tenets that outline desirable attributes and outcomes of any growth management program. The program shall:

- Be national in scope and mandatory for all U.S dairy producers.
- Be managed by dairy farmers.
- Improve farm income and reduce price volatility.
- Provide entry for beginning dairy farmers and a strategy for producers to exit the business.
- Assign a base volume to all dairy producers determined by their historic production.
  - Base shall not be sold and does not carry value.
  - Base remains with facilities.
- Provide growth opportunities for dairy producers.
- Cause no significant increase in the cost of dairy products to consumers.
- Reduce or eliminate government subsidies to the dairy industry.
- Be flexible and responsive to market growth and economic factors.
- Allow for dairy exports without conflicting with existing trade agreements.
- Function within any milk pricing system.

## How it Works

The Dairy Revitalization Plan promotes growth in the dairy industry, but in a coordinated way, among all dairy producers, so everyone has the potential to reach their desired levels of production and profitability.

### Implementation

In order for the program to be national and mandatory, it will require Congressional authorization but will not involve government control. A board of elected dairy farmers<sup>1</sup> will serve as directors to implement and oversee the program. The program will be administered through USDA and governed by the board. Agricultural economists and processors will also serve on the board in an advisory capacity.

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<sup>1</sup> The makeup of the dairy farmer board is to be determined upon implementation but should represent all regions of the U.S.

## Base + Allowable Growth

Each farm establishes a **milk production base** determined by historic production<sup>2</sup> and adjusted annually. All farms can increase milk production up to an **allowable rate of growth** above their base without penalty. Demand for milk increases by approximately 1% annually, so allowable growth under this proposal is 1%.

## Market Access Fee

Any dairy farmer that chooses to expand above the allowable rate of growth can do so by paying a **Market Access Fee (MAF)** during the year of expansion. Beginning farmers are exempt from paying the MAF until their base is established.<sup>3</sup> MAFs are tiered so that a larger expansion incurs a higher MAF and a smaller expansion incurs a lower MAF. The fees are also tiered so that a farm with a higher milk production base incurs a higher MAF and a farm with a smaller base incurs a lower MAF. The fee tiers reflect the potential for an expansion to negatively impact prices paid to all farmers.

## Dividend

Market access fees paid by farmers who expanded above the allowable rate of growth are pooled and distributed annually to all farmers who stayed within the allowable rate of growth. The **dividend** is an incentive to grow more intentionally and produce just the right amount of milk to meet the growth in demand.

| <b>Growth Management Program Example</b>        |   |
|---|---|
| <u>Allowable Growth</u>                         | <u>Market Access Fee:</u>                       |
| < 1 million lbs increase over previous year:    | <b>Tier 1</b> (by farm production, on all milk) |
| No market access fee (receive payment)          | < 1 million lbs: \$0.25/cwt                     |
| 1 to 4 million lbs increase over previous year: | 1-5 million lbs: \$0.50/cwt                     |
| <b>Tier 1</b> market access fee                 | 5-20 mil lbs: \$0.75/cwt                        |
| > 4 million lbs increase over previous year:    | > 20 mil lbs: \$1.00/cwt                        |
| <b>Tier 2</b> market access fee                 | <b>Tier 2</b> (by farm production, on all milk) |
|   | < 1 million lbs: \$0.50/cwt                     |
|   | 1-5million lbs: \$1.00/cwt                      |
|   | 5-20 mil lbs: \$1.50/cwt                        |
|   | > 20 mil lbs: \$2.00/cwt                        |

Figure 1: Market access fees under are tiered according to milk production base and rate of milk production increase. Note: This is one example, but many combinations of market access fees and allowable growth rates are possible.

<sup>2</sup> Base can be established in a number of ways without impacting the effectiveness of the program. Using the prior year's production, highest of the previous three years, or a rolling average are all possibilities to be determined upon implementation.

<sup>3</sup> The Dairy Revitalization Plan includes a 3-year MAF exemption for beginning farmers to establish their base. The program can exempt 60 new producers per year milking up to 5 million lbs. each without having a marked impact on existing producers.

# Impacts

In 2021, University of Wisconsin agricultural economists Mark Stephenson and Charles Nicholson compared the impacts of five variations of a growth management plan (GMP). The researchers used a simulation model of the global dairy supply chain to analyze the impacts of a GMP on US milk prices and other factors between 2014 and 2021 and compared them to a baseline scenario of actual milk prices and economic trends during that time. The following results show the economic impacts of the **Dairy Revitalization Plan** on several areas of interest:

- Milk prices
- Variation in milk prices
- Net farm operating income
- Domestic demand for dairy products
- Government expenditures
- Dairy product trade

## Impact on Prices

Milk prices would have been higher by an average of \$1.41 between 2014 and 2021 under the Dairy Revitalization Plan (Figure 2). While prices fluctuated, they were most often higher than they were without a growth management plan in place, and followed a 12-month cycle that yields lower prices in the Spring and higher prices in the Fall (Figure 3). In addition to elevating milk prices, the Dairy Revitalization Plan would also reduce price volatility that makes it difficult for farmers to anticipate milk revenues from month to month. The degree of variation in prices above or below the average milk price was reduced by approximately 50% under the Dairy Revitalization Plan (Figure 4).

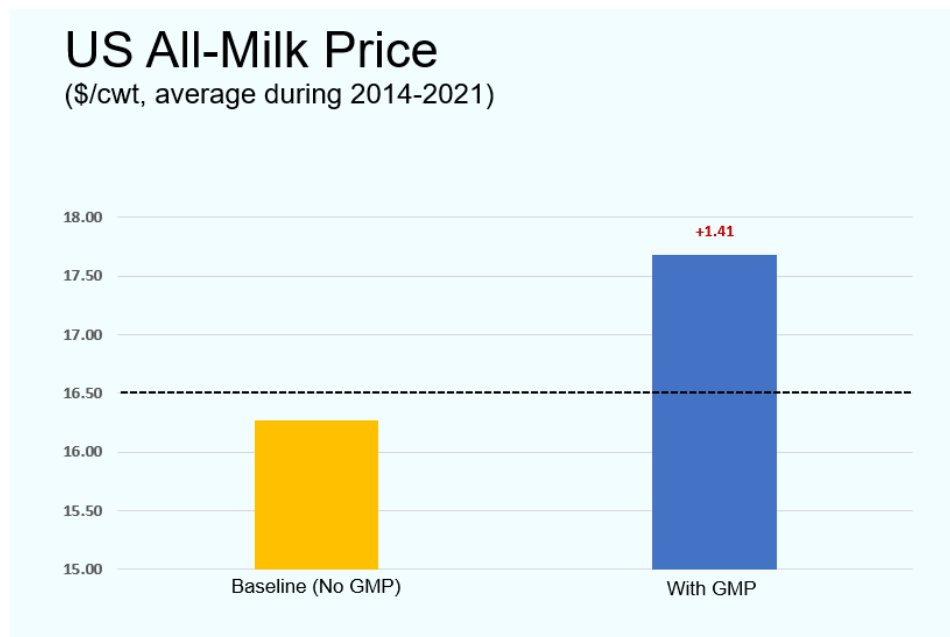


Figure 2: The GMP would have increased milk prices by an average of \$1.41 between 2014-2021

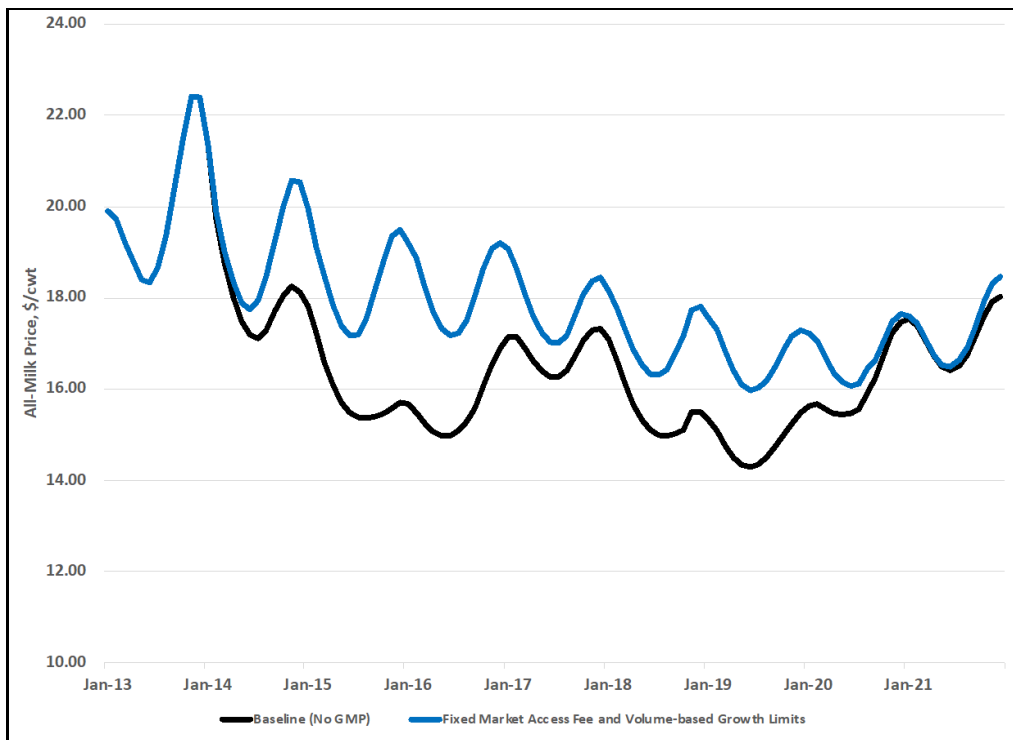


Figure 3: The all-milk price under the proposed growth management plan (blue line) is usually higher

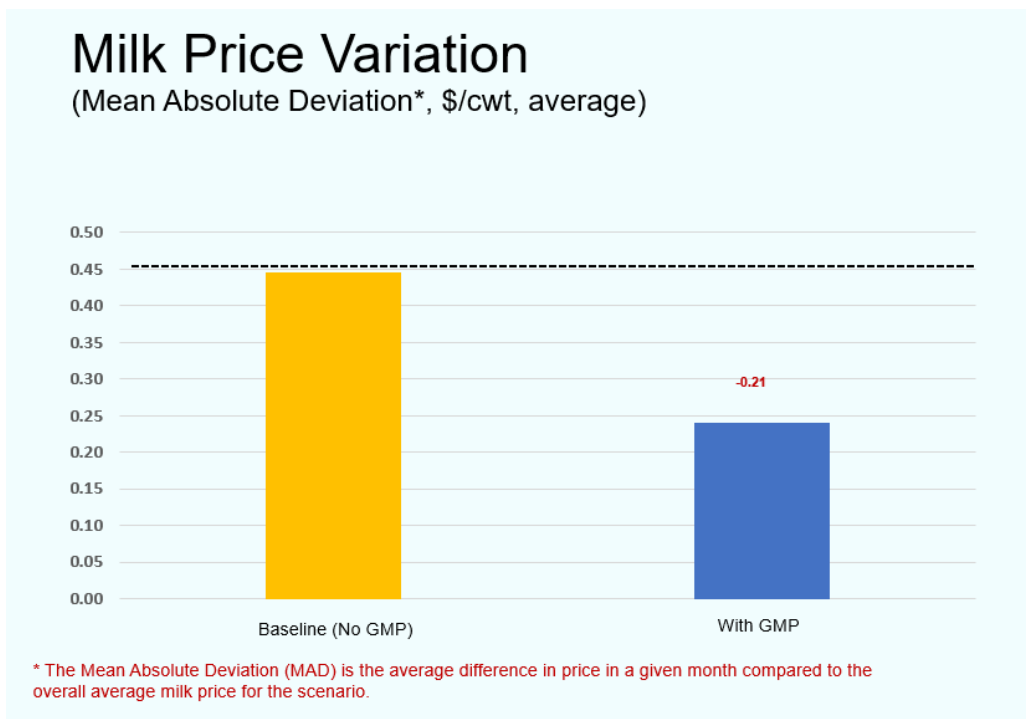


Figure 4: The proposed GMP reduces variation in milk prices by an average of \$0.21

## Impact on Farm Income

The Dairy Revitalization Plan pays a dividend to farms that stay within allowable growth, in addition to higher prices paid to *all* producers, resulting in a significant boost in farm income. Figure 5 shows the change in average Net Farm Operating Income (NFOI) for farms shipping between 1-5 million lbs. per year. NFOI is much higher for farms that stay within allowable growth, slightly higher for farms that expand by 1-4% (tier 1) and relatively the same for farms that expand beyond 4% (tier 2). **The analysis showed that NFOI was always higher for farms that stayed within allowable growth across all levels of production.** It was often lower for farms with a higher base that expanded beyond 4% (tier 2), but only in the first year of expansion as a result of paying a MAF during that year. Again, the MAF is meant to either deter farmers from producing above demand growth or offset the negative impact that expansion might have on prices paid to all producers.

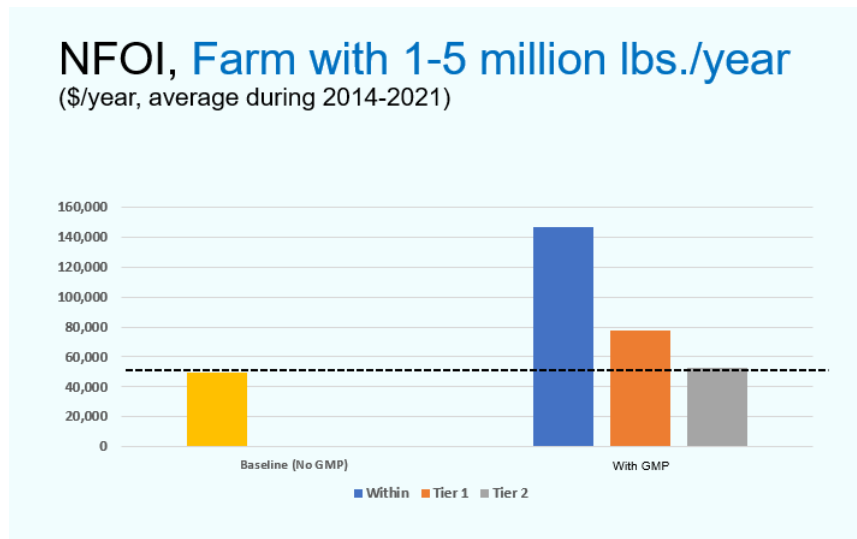


Figure 5: Average NFOI for farms that stay within allowable growth or expand into tiers 1 or 2, compared to the baseline scenario

Figure 6 compares milk revenues for a farm shipping 4 million lbs. that either expands by 25% (tier 2) or stays within allowable growth. Because they pay an MAF in the first year and do not receive a dividend, revenue is lower under the expansion scenario, creating an incentive to stay within allowable growth. A calculator tool is available at [www.dairymarkets.org](http://www.dairymarkets.org) for farmers to estimate milk revenue under a variety of expansion scenarios.

### Example: Farm Expands from 4 to 5 million lbs. per year

| Growth Strategy, Year                                | Milk Production, cwt/year | Increase in Milk Production, cwt/year | % Increase in Milk Production | Tier for GMP | MAF Payment, \$/cwt | MAF Payment, \$/farm | MAF Receipt, \$/cwt | MAF Receipt, \$/farm, year | Milk Revenue including MAF, \$/cwt |
|--|---------------------------|---------------------------------------|-------------------------------|--------------|---------------------|----------------------|---------------------|----------------------------|------------------------------------|
| <b>Expansion of 1 million lbs per year in Year 1</b> |                           |                                       |                               |              |                     |                      |                     |                            |                                    |
| Initial  | 40,000                    |                                       |                               |              |                     |                      |                     |                            |                                    |
| Year 1   | 50,000                    | 10,000                                | 25.0%                         | Tier 2       | 1.50                | 75,000               | 0.00                | 0                          | 16.20                              |
| Year 2   | 50,000                    | 0                                     | 0.0%                          | Within       | 0.00                | 0                    | 0.60                | 30,000                     | 18.30                              |
| Year 3   | 50,000                    | 0                                     | 0.0%                          | Within       | 0.00                | 0                    | 0.60                | 30,000                     | 18.30                              |
| Average  |                           |                                       |                               |              |                     |                      |                     |                            | 17.60                              |
| <b>No Expansion</b>                                  |                           |                                       |                               |              |                     |                      |                     |                            |                                    |
| Initial  | 40,000                    |                                       |                               |              |                     |                      |                     |                            |                                    |
| Year 1   | 40,000                    | 0                                     | 0.0%                          | Within       | 0.00                | 0                    | 0.60                | 24,000                     | 18.30                              |
| Year 2   | 40,000                    | 0                                     | 0.0%                          | Within       | 0.00                | 0                    | 0.60                | 24,000                     | 18.30                              |
| Year 3   | 40,000                    | 0                                     | 0.0%                          | Within       | 0.00                | 0                    | 0.60                | 24,000                     | 18.30                              |
| Average  |                           |                                       |                               |              |                     |                      |                     |                            | 18.30                              |

Figure 6: Average milk revenue over 3 years for a farm that expands from 4 to 5 million lbs. is \$17.60/cwt, compared to \$18.30/cwt if that same farm stayed within allowable growth

## Impact on Domestic Demand

A common concern about various forms of production controls is the potential to raise retail prices to consumers and thus decrease demand for dairy products. The Dairy Revitalization Plan would increase the average retail price of a gallon of milk by \$0.15, and the wholesale price of a pound of American cheese by \$0.11 above the baseline (Figures 7 and 8). The increases on retail and wholesale prices for dairy products under the Dairy Revitalization Plan would decrease domestic demand. However, we would still see positive demand growth across all types of dairy products, but at a lesser rate than without price enhancement or stabilization for farmers. It is possible that through dairy product promotion we can educate consumers about where the additional \$0.11 to \$0.15 is going, and they might feel better about paying a little bit more to support dairy farmers.

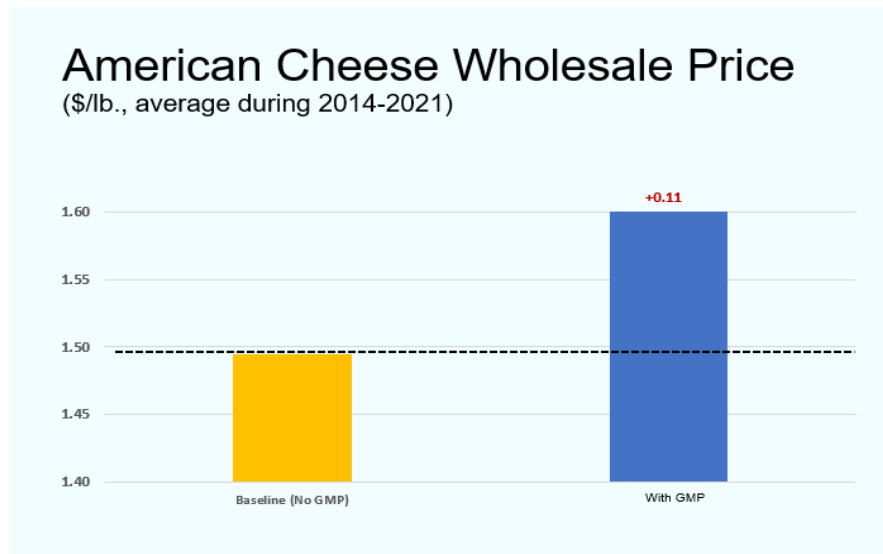


Figure 7: The proposed GMP would increase the retail price of a gallon of milk by an average of \$0.15

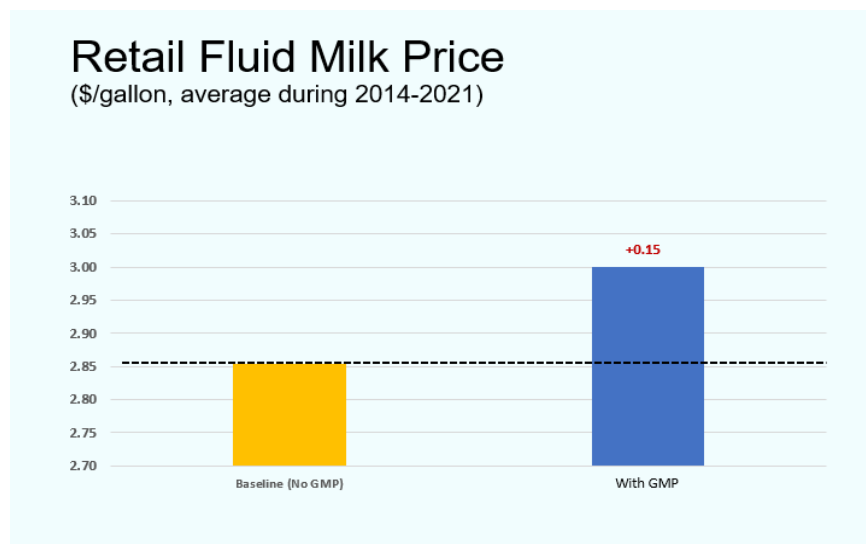


Figure 8: The proposed GMP would increase the wholesale price of a lb. of American cheese by an average of \$0.11

## Impact on Exports

The impact of price enhancing programs on dairy product exports is a concern for many dairy industry stakeholders. The Dairy Revitalization Plan would reduce the value of dairy exports compared to the baseline scenario, however exports would still see *positive growth* under this program (figure 9). Because international buyers purchase more when US milk prices are low and less when prices are high, milk price volatility produces greater fluctuations in export sales. Thus, more stable prices paid to farmers will produce more stable and predictable export growth.

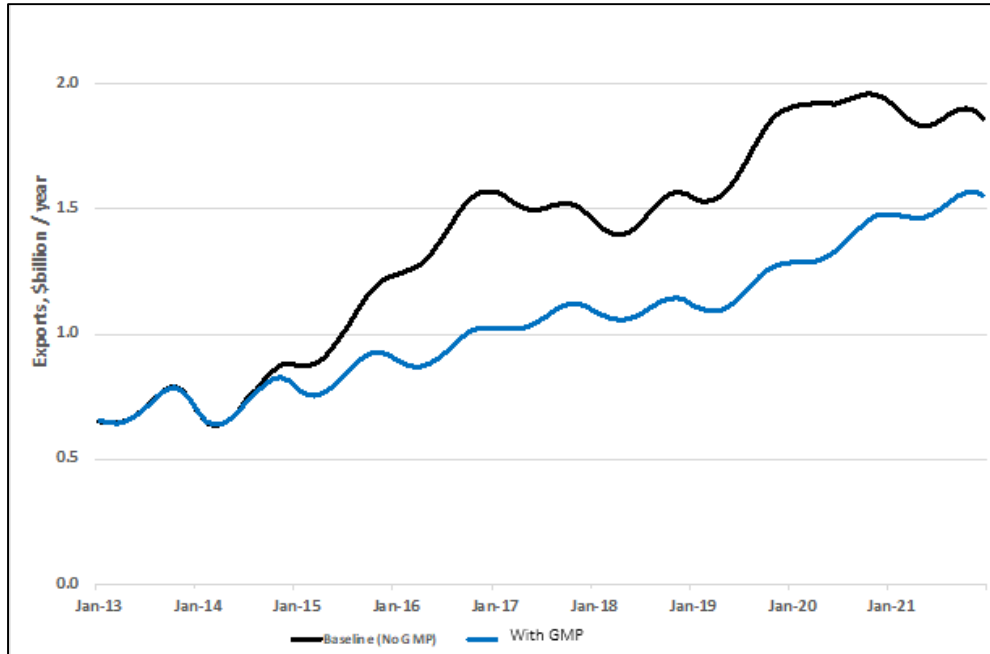


Figure 9: Export value of dairy products with and without growth management

## Impact on Government Expenditures

Because dairy farmers receive a higher price from the marketplace under the Dairy Revitalization Plan, it could cut government spending on federal dairy programs like Dairy Margin Coverage in half. The analysis showed a \$2.6 billion reduction in government expenditures on DMC between 2014 and 2021 (Figure 10).

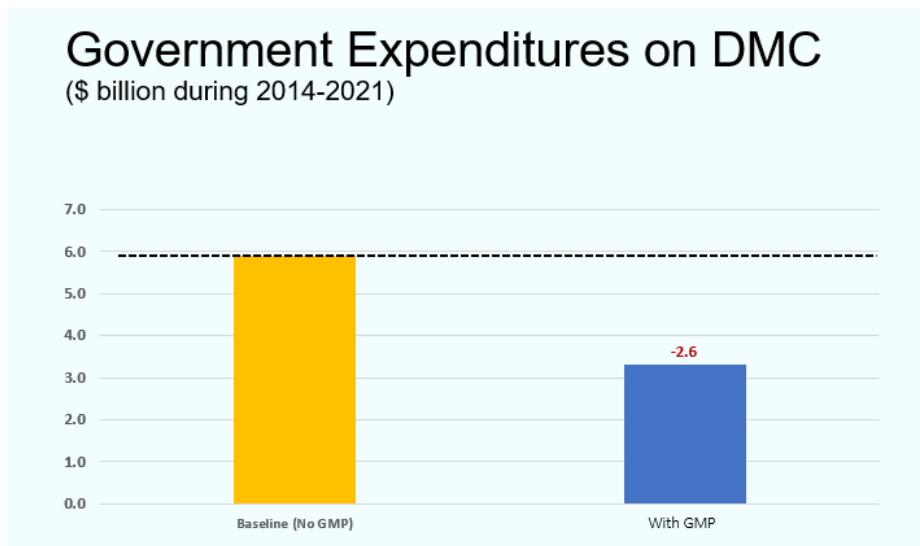


Figure 10: Government expenditures on Dairy Margin Coverage (DMC) were reduced by \$2.6 billion between 2014-2021

## Summary

Growth management strategies such as the Dairy Revitalization Plan can:

- Increase milk prices and farm incomes
- Reduce milk price volatility
- Slightly increase dairy product prices
- Maintain growth in domestic demand, but at a lesser rate than without growth management
- Maintain growth in US dairy exports, but at a lesser rate than without growth management
- Significantly reduce government expenditures on federal dairy programs

The Dairy Revitalization Plan would stabilize prices and improve farm income, allowing more farmers to continue operating or begin successful dairy businesses. Dairy farmers would receive more of their income from the marketplace, reducing their reliance on taxpayer subsidies. While these benefits come with tradeoffs in the form of slightly higher product prices and reduced growth in dairy exports, the program was designed to minimize these impacts to balance the needs of everyone involved in the dairy industry. Prioritizing the viability of family dairy farms will generate more wealth in rural communities and promote greater food security and economic resilience now and into the future.

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The Dairy Revitalization Plan was developed through a committee process involving leaders from the Wisconsin Farmers Union and Wisconsin Farm Bureau and convened by the University of Wisconsin Center for Integrated Agricultural Systems. The proposal was analyzed in a 2021 study, “Analyses of Proposed Alternative Growth Management Programs for the US Dairy Industry,” by University of Wisconsin agricultural economists Charles Nicholson and Mark Stephenson. All figures in this document were taken from that study, and the full report is available at [www.dairymarkets.org](http://www.dairymarkets.org). That study was funded by the UW Baldwin Wisconsin Idea program, the Grassland 2.0 project, the Wisconsin Cover Crops Research and Outreach Program, and the UW Center for Integrated Agricultural Systems.