

AFBF DAIRY WORKING GROUP
BACKGROUND ON DAIRY MARGIN COVERAGE TIER LEVELS
AND PRODUCTION HISTORY

Issue:

The Dairy Margin Coverage (DMC) program provides payments to dairy farmers when the national average income-over-feed cost margin falls below a farmer-selected coverage level. Program payments are based on the amount of milk covered in the program and may range from 5% to 95% of a farm's milk production history in 5% increments.

Producers are required to select a margin trigger rate and a percentage of production history to be covered (traditionally capped at 5 million pounds). Coverage is available for margins between \$4 and up to \$9.50 under a Tier I CAT (Catastrophic) level or between \$4 and \$8 for a Tier II level in 50 cent increments. Production history for each operation is established using the highest of the operation's marketings from the 2011, 2012 or 2013 calendar years.

Unprecedented increases in input costs have further pressured dairy farmers' margins. Input costs outside of the scope of feed are not accounted for in DMC calculations. Unaccounted for costs include veterinary and medical services, hired labor, capital recovery on machinery and equipment and energy expenses. Increasing the \$9.50 margin protection limit could allow for more flexibility in hedging against increases in these other production expenses.

Many operations have also continued to increase their milk production. In 2002, 29% of dairy cow inventory was on farms with more than 999 cows. In 2017, this percentage was increased to 55%. The 5-million-pound limitation in tier one enrollments may not provide adequate assistance to the modern dairy farmer. Likewise, a production history baseline that is nearly 10 years old is not reflective of a farm's current operations. Increasing the tier one insurable milk limit and moving to a more current production history baseline will more appropriately protect farmers in times of price volatility.

Background:

Source: [Consolidation in U.S. Dairy Farming](#) James Macdonald, Jonathan Law, and Roberto Mosheim; USDA, ERS

The federal government provides financial support for farmers through a variety of programs. Some of these programs support only dairy farmers while others directly support a range of farmers, including dairy farmers. Over the past decade, Congress has expanded support for dairy farmers, focusing on small and midsized dairy operations.

In 2014, Congress introduced the Margin Protection Program (MPP-Dairy) as part of the Agricultural Act of 2014. The Bipartisan Budget Act of 2018 (BBA of 2018) and the Agriculture Improvement Act of 2018 revised the program, and it was renamed as Dairy Margin Coverage.

Enrollees in MPP-Dairy paid a \$100 annual administrative fee. For that fee, enrollees received base catastrophic coverage. As originally designed under the 2014 act, whenever the margin fell below \$4/cwt for a two-month period (January–February, March–April, etc.), enrollees at the catastrophic level of coverage received payments equal to the difference between the national margin and \$4, applied to 90% of their milk production history. An enrollee’s milk production history was defined as the highest annual quantity of milk marketed during 2011–13, and it was adjusted each year based on the percentage change in national milk production.

Enrollees could purchase additional buy-up coverage for a premium. Buy-up coverage allowed enrollees to cover higher margin thresholds in 50-cent increments, from \$4.50/cwt to \$8/cwt, such that payout would be made in the event of national margins falling below those levels. Premiums varied across two tiers of production: one set of premiums applied to the first 4 million pounds of covered production, while a second, higher set of premiums applied to production in excess of 4 million pounds. Finally, enrollees could also choose how much of the registered production history they wished to cover, in increments from 25 to 90% of production history.

In the initial signup for 2015 coverage under MPP-Dairy, 44% of enrollees —with 62% of covered production — chose catastrophic coverage. MPP-Dairy premiums were scheduled to increase after 2015, and in subsequent years more farms opted to enroll at minimal coverage, with no premiums and coverage limited to margins at the catastrophic level. By 2017, 93% of enrollees and 98% of covered production were enrolled at that minimal level, according to summary data from USDA’s Farm Service Agency, which administers the program. Those choices ensured that total premium payments by enrollees would also be minimal (limited to the annual \$100 fee), but so would government payouts under the program. While the margin between milk and feed prices fell below \$4/cwt for several months in 2009 and 2012, it has not breached the catastrophic level since then, so farmers enrolled at the catastrophic coverage level would have received no payments since the program’s introduction. Total MPP-Dairy payments to farmers amounted to \$10 million in 2016, but only \$19,000 in 2017.

MPP-Dairy and DMC premiums

Margin coverage threshold	Tier 1		Tier 2	
	MPP-Dairy 2016–17	DMC	MPP-Dairy 2016–18	DMC
	<4 million pounds	<5 million pounds	>4 million pounds	>5 million pounds
\$4.00	0.000	0.000	0.000	0.000
\$4.50	0.010	0.0025	0.200	0.0025
\$5.00	0.025	0.005	0.040	0.005
\$5.50	0.040	0.030	0.100	0.100
\$6.00	0.055	0.050	0.155	0.310
\$6.50	0.090	0.070	0.290	0.650
\$7.00	0.217	0.080	0.830	1.107
\$7.50	0.300	0.090	1.060	1.413
\$8.00	0.475	0.100	1.360	1.813
\$8.50	NA	0.105	NA	NA
\$9.00	NA	0.110	NA	NA
\$9.50	NA	0.150	NA	NA

Note: In the 2014 Farm Bill, the threshold for Tier 2 Margin Protection Program for Dairy (MPP-Dairy) premiums was 4 million pounds of production. That was changed to 5 million pounds in the 2018 legislation and was retained in the Dairy Margin Coverage (DMC) legislation. The 2018 legislation also extended Tier 1 coverage to margins in excess of \$8.

NA = not available.

Source: USDA, Economic Research Service

Under the BBA of 2018, the demarcation between the two premium tiers was adjusted from 4 million to 5 million pounds for Tier 1 coverage (with catastrophic coverage available for the administrative fee of \$100). The margin calculation was also made monthly, rather than for every two months. Tier 1 premiums were reduced, while Tier 2 premiums remained unchanged.

With widening concern over dairy farm finances and closures, Congress made some significant changes to the program with passage of the 2018 farm bill. In addition to changing the name to Dairy Margin Coverage, the following significant changes were made:

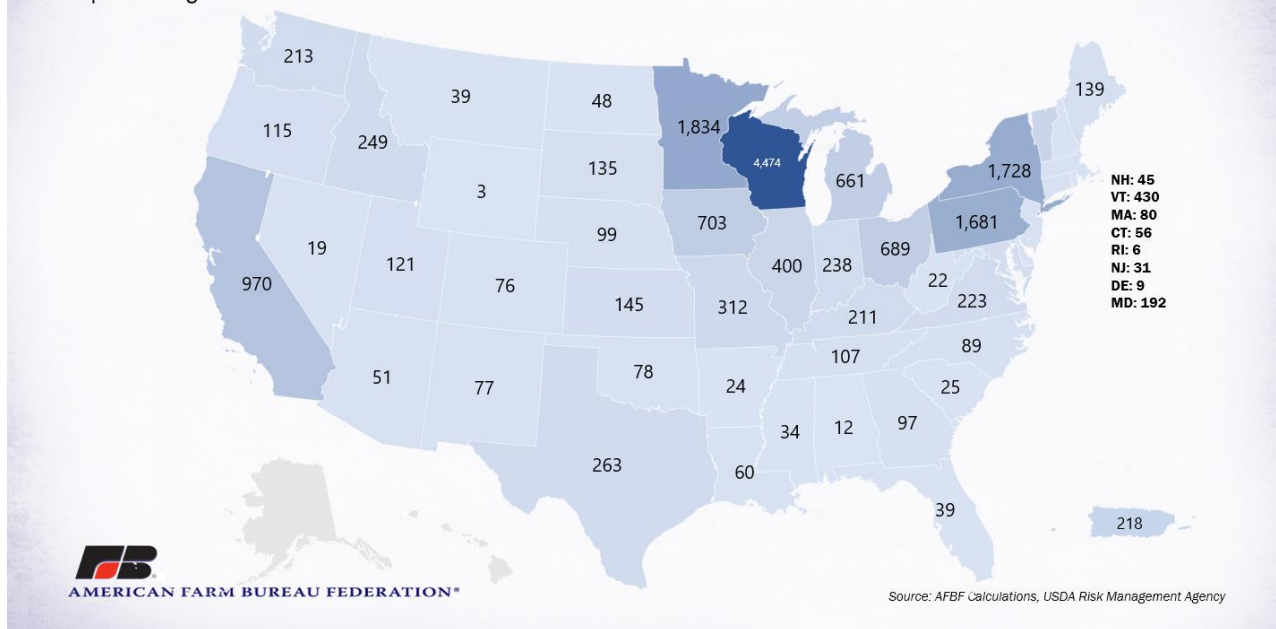
- Catastrophic coverage for both Tier 1 and Tier 2 was set at \$4/cwt, but it was made available on 95% of a farm’s production history, compared with 90% under MPP-Dairy, and remained available for a \$100 enrollment fee.
- Farms could elect to cover between 5 and 95% of their milk production history with buy-up premiums, compared with 25 to 90% under MPP-Dairy.
- Tier 1 premiums were charged for up to 5 million pounds of covered production history, compared with 4 million pounds under the 2014 farm bill.
- Farms could purchase buy-up coverage for margin thresholds ranging from \$4.00/cwt to \$9.50/cwt under Tier 1 coverage, compared with a range of \$4 to \$8 under MPP-Dairy. Tier 2 premiums applied to coverage exceeding 5 million pounds of covered production history, and still provided coverage for margin thresholds ranging from \$4 to \$8/cwt.
- Buy-up premiums were restructured under DMC; Tier 1 premiums were reduced from levels in MPP-Dairy, while Tier 2 premiums were reduced at lower margin coverage levels and increased at higher margin coverage levels (table below).
- The average national margin continued to be calculated monthly, as it had been calculated under the BBA of 2018.
- Registration fees were waived for certain classes of producers, and refunds of MPP premiums were to be paid retroactively to most enrollees.
- An operation’s milk production history in the 2014 farm bill was based on the highest annual volume of milk marketed over 2011–2013 and adjusted upward each year through 2018 to reflect changes in national milk production. The 2018 farm bill made no adjustments for years subsequent to 2018.

--

Year	Prior Year Established DMC Production History (Billion Pounds)	Current Year Established DMC Production History (Billion Pounds)	DMC Production History Insured (Billion Pounds)	% of DMC Production History Enrolled	DMC Operations Enrolled	% of All Farms With Production History	Total DMC Payments (\$ millions)	Average Payment per Enrolled Farm
2019	134.87	250.68	178.34	71.1%	23,386	78%	\$ 452	\$ 19,325
2020	178.34	237.73	121.01	50.9%	13,490	48%	\$ 234	\$ 17,347
2021	121.01	219.02	162.76	74.3%	19,072	74%	\$ 1,190	\$ 62,390
2022 To Date	162.76	205.04	157.18	76.7%	17,570	72%	NA	NA

FIGURE 1: DISTRIBUTION OF DMC ENROLLED FARMS BY STATE

2021 | Including Puerto Rico

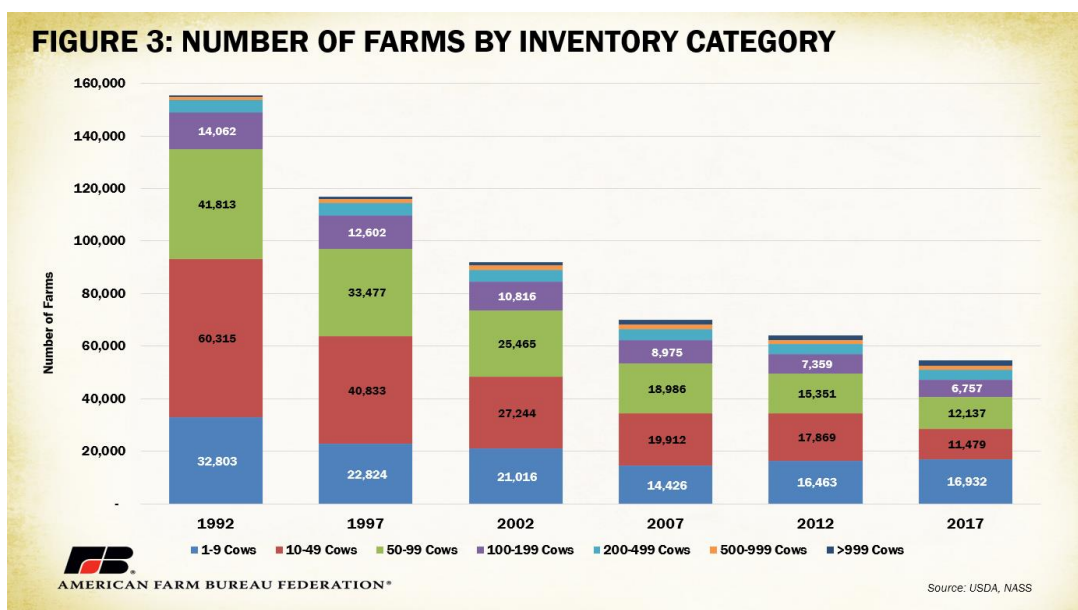
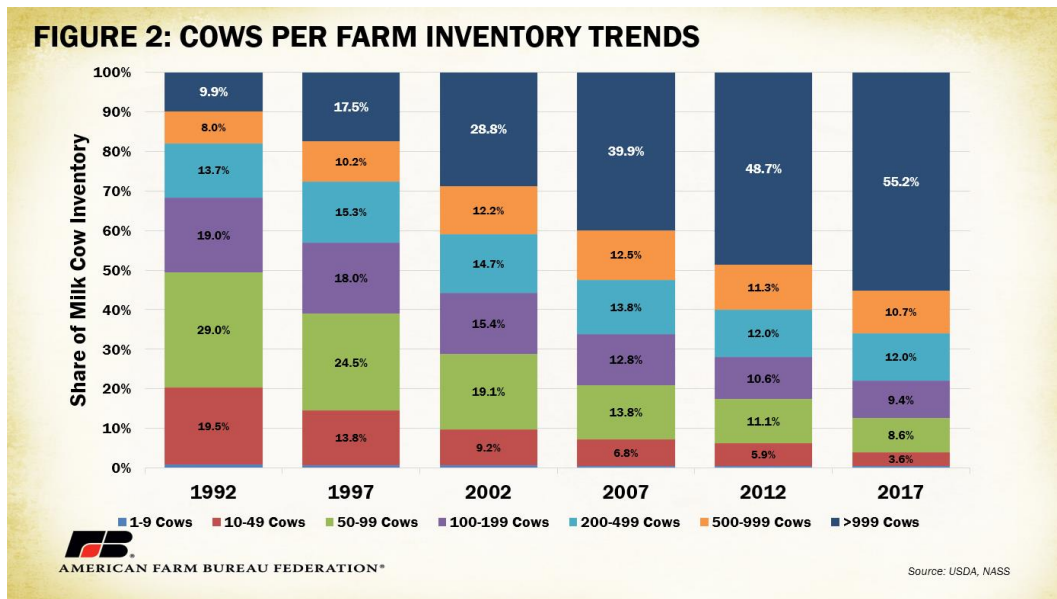


Under the Consolidated Appropriations Act of 2020, Supplemental DMC (SDMC) based on 75% of the difference between 2019 marketings and the old base calculation (2011-2013 milk marketings) number was passed into law. The new policy allows operations to option for higher milk production coverage if changes to herd size were made since the 2011-2013 basis years (within the 5-million-pound limitation). For this expansion of coverage, \$580 million has been set aside. It will apply to the 2021 (retroactively), 2022 and 2023 calendar years. After making any revisions to production history under SDMC, producers were able to apply for 2022 traditional DMC coverage. This means future DMC contracts will include the updated production history figures that account for 2019 marketings. Expansion of this coverage is not in place past 2023.

Additionally, the Farm Service Agency adjusted the calculation of alfalfa within the factored average feed costs figure using 100% premium alfalfa hay rather than 50% in hopes of making future DMC payments more reflective of dairy expenses. This change reduced DMC milk margins by an average of 22 cents/cwt a month linked to an average \$15.95/ton increase in alfalfa prices under the updated formula for 2021. For example, in October 2021, the DMC margin dropped from \$8.77/cwt to \$8.54/cwt under the adjustment. This will allow enrolled producers to retroactively recoup payments they would have qualified for under the feed cost formula change – if the difference was large enough to trigger a higher payment level covered under their plan. FSA estimates that the formula change will result in additional payouts of \$108.47 million for the January 2020 through September 2020 payment period. The payment estimate for fiscal years 2021 through 2023 is \$335.43 million and the 10-fiscal year (2021 through 2030) payment estimate is \$705.32 million. FSA will use the adjusted alfalfa prices when calculating future SDMC and DMC payments and will reimburse producers retroactively through January 2020.

Other Considerations:

Figures 2 and 3 display farm size inventory trends and the quantity of U.S. dairy farms by farm size between 1992 and 2017. The average cow in 2021 produced 23,948 pounds of milk. To reach the threshold of 5 million pounds insured, a farm would need only 208 cows. More than 75% of cattle inventory and milk production occurs on farms with more than 200 cows (Figure 2).



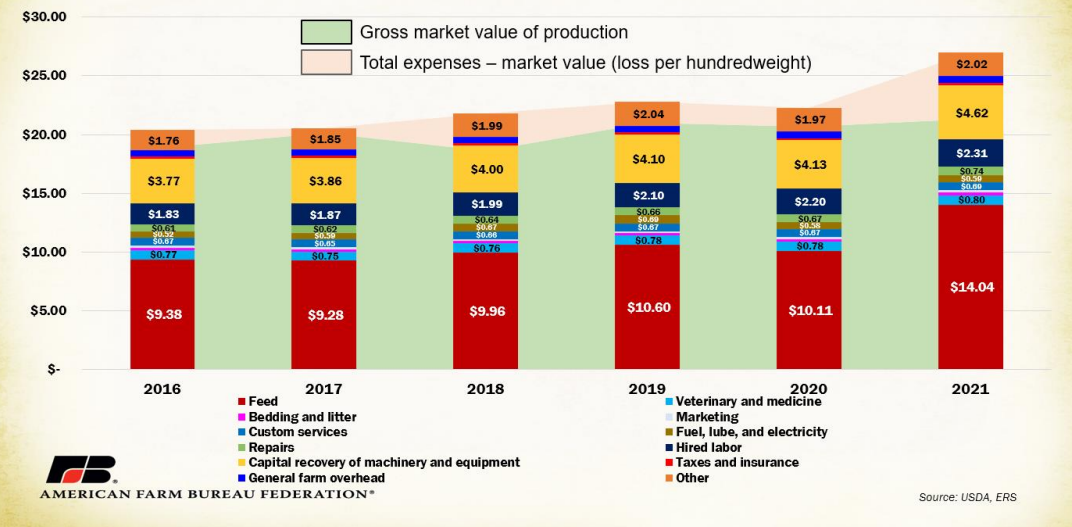
Increasing DMC tier level options requires consideration of current dairy production costs. USDA's Economic Research Service runs biannual milk cost of production estimates nationally and for

about 20 states. Though numbers for 2022 will not be available for some time, 2021 can serve as a proxy for showing the extent to which operating costs have largely outpaced market values of dairy production under more recent market conditions. Figure 4 displays common dairy farm expenses between 2016 and 2021 in dollars per hundredweight of milk produced. Feed, including purchased feed, homegrown feed and grazed feed makes up the largest portion of expenses, ranging from \$9.28/cwt in 2017 to \$14.04/cwt in 2021- a shift from 45% of total expenses to 52%. By state, West Coast dairies experienced the largest increase in feed costs, with Oregon feed costs up 46% (\$5.43/cwt), California feed costs up 45% (\$4.28/cwt) and Washington feed costs up 26% (\$4.75/cwt) year-over-year. Exceptional drought in these states throughout much of last year was a likely culprit. The second-highest category is capital recovery of machinery and equipment, which includes investments in housing, manure handling, feed storage structures and the breeding herd. Capital recovery refers to the earning back of initial funds put into an investment, which will be considered negative until that investment is recouped. In 2021 capital recovery cost dairy farmers an average of \$4.62/cwt or 17% of all expenses. Hired labor, another costly piece of the equation, has increased by 12% since 2016 (\$1.83/cwt to \$2.31/cwt) and is highest in Oregon, Maine and Vermont, states with comparatively stringent farm labor regulations.

Figure 4 also displays the average gross market value of production in green to represent the market value of goods produced and sold by dairy farms. This includes income from milk sales, cattle sold, leasing stock, renting space to other operations, cooperative patronage dividends and the fertilizer value of manure. In red is the difference between the total average production expenses and average gross market value of production, i.e., the loss per hundredweight dairy farmers, on average, have had to absorb each year to remain in business. In 2021, for each \$27.02/cwt spent, dairy farmers received only \$21.33/cwt, a loss of \$5.69/cwt. This is the largest loss within the timeframe analyzed. Between 2020 and 2021 the loss increased by 233%, going from -\$1.60/cwt to -\$5.69/cwt. These estimates can also be broken down by farm size and, for 2021, yielded a negative margin across all size categories, ranging from fewer than 50 cows to over 2,000 cows. For farms with fewer than 50 cows the magnitude of loss was far greater at -\$19.90/cwt vs -\$3.18/cwt for farms with over 2,000 cows. A comprehensive breakdown of dairy farm production cost estimations by farm size can be accessed [here](#). These estimates do not include income from government programs.

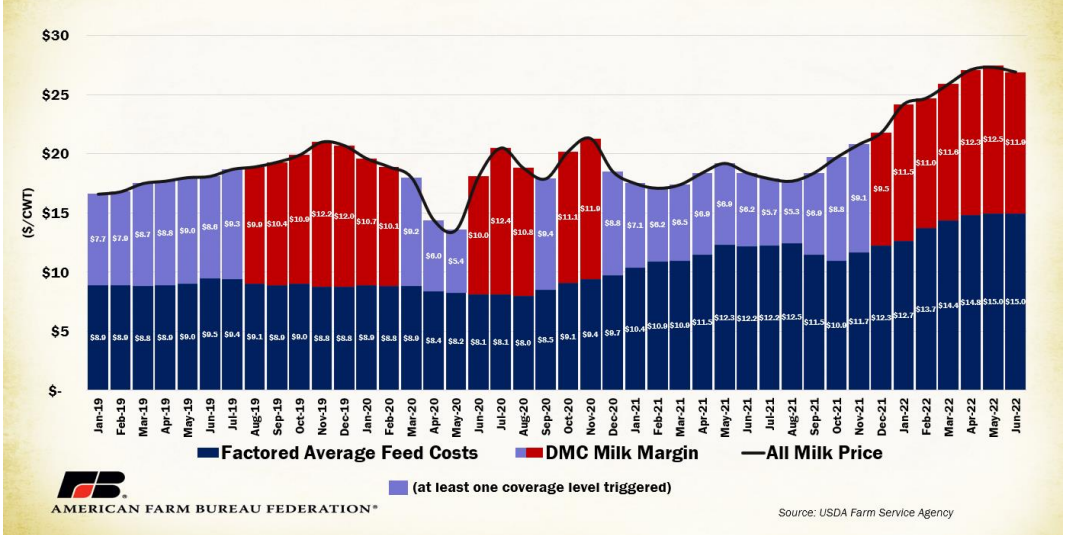
FIGURE 4: DAIRY FARM EXPENSES VS VALUE OF PRODUCTION

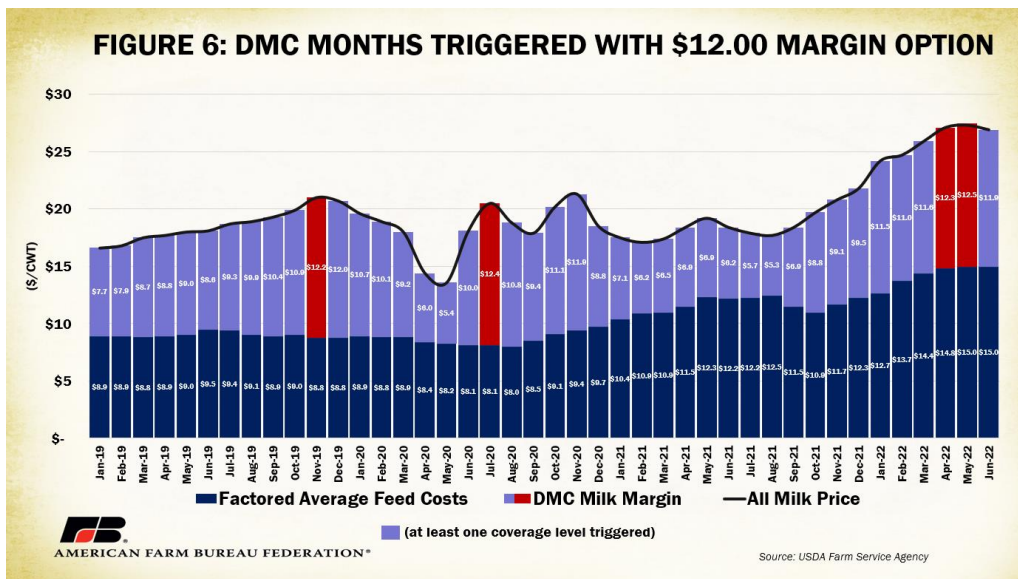
Dollars per hundredweight | National Average



The Dairy Working Group recommends lifting the \$9.50 level to \$12.00. If the margin options were lifted to \$12.00 only four months since the program began would have not triggered at least on margin level (November 2019, July 2020, April 2022 and May 2022), meaning 90% of the time period would have provided payments to those with the highest coverage options selected. This is compared to the \$9.50 maximum option, which triggered 24 out of the past 42 months (57%). (See Figures 5 and 6.)

FIGURE 5: DMC MONTHS TRIGGERED WITH \$9.50 MARGIN OPTION





Increasing tier one coverage options, production enrollment limitations and production history baselines would all significantly impact the CBO score (cost to taxpayers) of the DMC program. Political viability of a 2023 farm bill may restrict significant funding allocations for programs like DMC and must be considered in policy discussions.

Current Farm Bureau Policy:

239 National Farm Policy

8. We support including the Dairy Margin Coverage (DMC) improvements in the next farm bill.

9.2.3. Dairy:

- 9.2.3.4.2.1. Adjusting the program trigger to function monthly;
- 9.2.3.4.2.2. Increasing Tier 1 coverage from 5 million pounds of milk up to 10 million pounds of milk for all dairy producers;
- 9.2.3.4.2.3. Making tier levels more affordable;
- 9.2.3.4.2.4. Increasing the catastrophic margin level from \$4.00 to \$5.00 and maintaining the ability to buy up to \$8.00 margin coverage;
- 9.2.3.4.2.5. Making strategic adjustments to the feed formula;
- 9.2.3.4.2.6. Allowing enrolled farms the option to use a three-year rolling production average or current

production for payment calculations; and

9.2.3.4.2.7. Using the regional or state level all milk and feed price rather than national level price estimates in the calculation of margin over feed cost for the purpose of calculating DMC program payouts.

10.2.42. Allowing dairy farms to update their historical production numbers on **a rolling five-year average;**

Tentative Dairy Working Group Recommendation:

Edit Policy 239.9.2.3.4.2.4 to:

Increasing the catastrophic margin level from \$4.00 to \$5.00 and maintaining the ability to buy up to **\$12.00** margin coverage;

Strike policies 239.8, 239.9.2.3.4.2.6, and 239.10.2.42 and replace with

We support:

Updated production history once every five years based on the highest of a prior three-year history, until then we support supplemental DMC production history changes.

(not unanimous – some members support keeping production limits in place to protect smaller farms)

Premium alfalfa milk cost updates being incorporated in DMC perpetually.

Strike

9.2.3.4.2.1. Adjusting the program trigger to function monthly;
(This was addressed in 2018 BBA)