

AFBF FARM BILL WORKING GROUP
DECISION MEMO ON DAIRY
MAY 8, 2017

Background:

Dairy farmers have long been challenged by milk price variability and increased uncertainty in input costs such as purchased livestock feed. When input costs rise, the profit margin for many dairy farmers tightens, particularly in times of low milk prices. Due to the increases in milk price risk, a series of farm safety net programs were enacted by Congress to assist dairy farmers in managing price risk. These included the Dairy Market Loss Assistance program in 1999, the Milk Income Loss Contract program in 2002, and the Dairy Economic Loss Assistance Payment program in 2009. These programs provided ad hoc disaster payments and direct payments to dairy farmers based on national milk price or policy triggers.

Following the rapid rise in livestock feed prices in 2007, the 2014 Farm Bill replaced prior dairy programs with an insurance-style safety net program designed to help dairy farmers manage income-over-feed-cost risk (milk price minus feed costs). The Margin Protection Program for Dairy Producers (MPP) began in 2015. Dairy producers may also choose to be covered by the Livestock Gross Margin program for dairy (LGM-D). Because it falls under the Livestock Reinsurance Agreement, it also falls under a \$20 million annual statutory subsidy and administrative fee cap per fiscal year. This cap limits the use of LGM-D.

Neither program manages milk price risk directly. This gap in risk coverage has been exasperated by recent trends in milk prices. In 2016, milk prices fell by nearly 50 percent from their 2014 highs, yet both dairy safety net programs failed to provide an adequate safety net for the \$40 billion industry. Premium payments under LGM-D total \$108 million since 2009 and the average loss ratio is 33 percent, meaning premiums paid into the program are far greater than the indemnities received. An actuarially sound program should be much closer to a 1.00 ratio. That means premiums paid are very similar to costs of the program and indemnities over a multi-year horizon.

Livestock Gross Margin Insurance for Dairy Cattle (LGM-D)

Livestock Gross Margin Insurance for Dairy covers the market value of the Class III milk price minus feed costs of corn and soybean meal, i.e. the gross margin. Farmers may select how much feed to cover, which months to insure (up to 11 months), and the deductible level. Premium costs are market-based, but subsidies are available from 18% to 50% based on the farmer's deductible level—higher deductibles get larger subsidies. The guaranteed margins are based on 3-day average futures prices at the time of purchase, and actual prices used to determine payments are based on 3-day average settlement prices of the milk and feed futures contracts. Payments are made to dairy farmers when the actual margin at the end of the coverage period is below the guaranteed level.

LGM-D margin guarantees and premium rates are designed to be actuarially sound and are updated based on the farmer's elected coverage options at the time of purchase. The farmer elections under LGM-D require several decisions and increase the complexity of use. Under

LGM-D producers must declare a milk production volume, the producer-specified feed ration quantities for corn and soybean meal, the feed equivalent conversion if necessary, the deductible level from \$0 to \$2.00 per hundredweight, and the coverage months up to 11 months out.

The following are challenges related to LGM-D:

- By law, the Livestock Reinsurance Agreement requires that all livestock insurance products (cattle, swine, lamb and dairy) must cost less than \$20 million per fiscal year. The Whole Farm Revenue Program must also fit under this cap.
- LGM-D is only sold on the last Friday of each month and is suspended when funds are exhausted.
- Program complexity under LGM-D is high as farmers must choose from several insurance parameters and contract durations.
- Basis risk is high since LGM-D is based on indexed milk and feed prices and does not align with farmer milk prices or livestock feed costs.
- The 2014 Farm Bill prevents simultaneous use of LGM-D and MPP, and
- farmers must cover feed price risk.

Margin Protection Program

MPP is a voluntary program that makes payments when the national margin falls below a farmer-selected coverage level. Coverage is available from \$4.00 to \$8.00 per hundredweight and farmers may protect up to 90 percent of their farm’s assigned production base in 5 percent increments. Dairy producers pay premiums for coverage and must take an active role in selecting their coverage options each year. Once a dairy farmer is enrolled in MPP, he/she may not exit the program for the life of the Farm Bill.

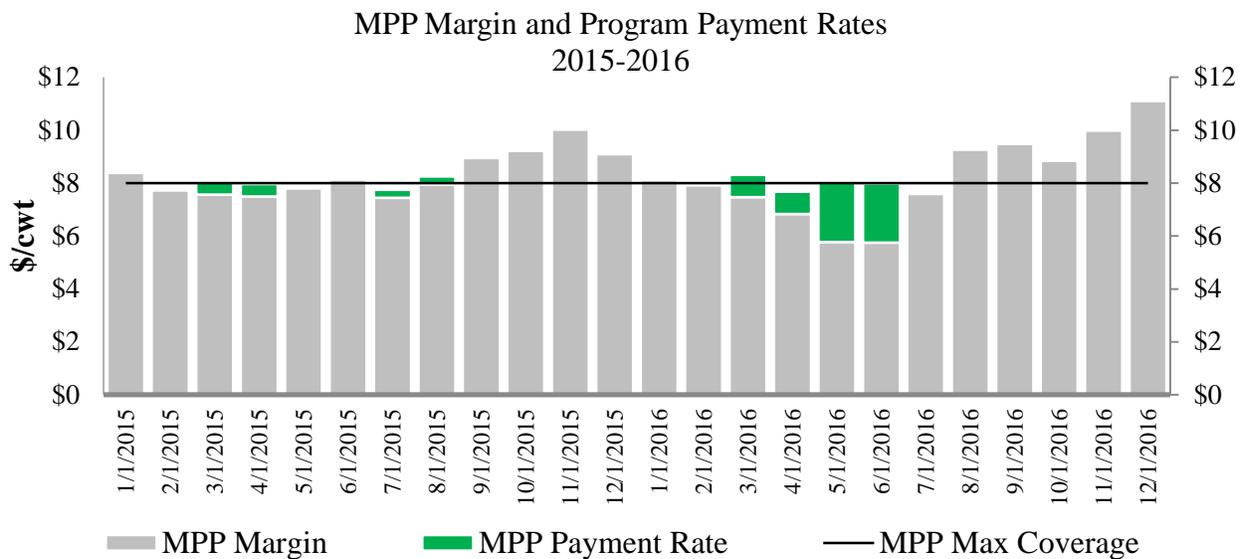
Fixed MPP Premiums and Administrative Fees

MPP-Dairy Coverage Level	Tier 1 Premium	Tier 2 Premium
Administrative Fee in Dollars	\$100	\$100
	\$/hundredweight	
\$4.00	\$0.000	\$0.000
\$4.50	\$0.010	\$0.020
\$5.00	\$0.025	\$0.040
\$5.50	\$0.040	\$0.100
\$6.00	\$0.055	\$0.155
\$6.50	\$0.090	\$0.290
\$7.00	\$0.217	\$0.830
\$7.50	\$0.300	\$1.060
\$8.00	\$0.475	\$1.360

MPP margin guarantees and premium rates are not designed to be actuarially sound and are not updated based on the farmer’s elected coverage options at the time of purchase. Instead, MPP premium rates and coverage options are fixed at predetermined levels for the duration of the farm bill. To benefit smaller farmers participating in MPP, premium rates are lower for the first

4 million pounds of milk covered in the program (Tier 1). During the first year of MPP, the Tier 1 premium rates for the \$4.50 to \$7.50 coverage levels were discounted by 25 percent to incentivize participation.

Under MPP, a program payment is made if the bi-monthly margin falls below the farmer’s coverage level. MPP triggered program payments in the spring of 2015 and again in spring 2016, but for many dairy farmers, the program payments did not exceed the premiums paid into the program. The program never triggered assistance at the \$4.00, \$4.50, \$5.00 or \$5.50 coverage levels. As with the LGM-D program, the loss ratio for MPP does not approach being actuarially sound. Dairy farmers paid \$100 million in premiums during 2015 and 2016 and realized only \$12 million in program payments—a loss ratio of 12 percent.



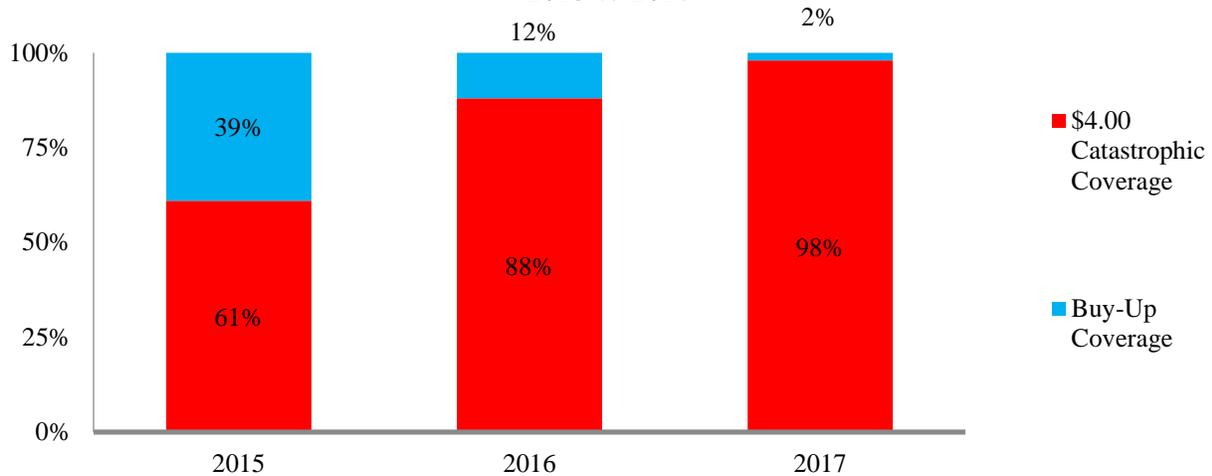
Challenges related to MPP are as follows:

- The MPP feed cost coefficients were reduced by 10 percent prior to the 2014 Farm Bill, which ultimately resulted in a higher margin calculation and lower program payments.
- Basis risk is high since MPP is based on national average milk and feed prices and does not reflect regional farm-level margins.
- Premium rates and coverage options are not based on actuarially sound principals.
- Once enrolled farmers must participate for the life of the farm bill.
- The 2014 Farm Bill prevents simultaneous use of LGM-D and MPP, and
- farmers must cover the feed price risk.

In 2015 (the first full year of enrollment), about 24,000 dairy operations participated in the program. These farms represented about 50 percent of the licensed dairy operations and 80 percent of the U.S. total milk supply. Farms are not allowed to exit MPP once enrolled through the life of the farm bill, so their participation statistics remain mostly unchanged. However, while farmers may not exit the program they may change their buy-up coverage levels. Due to the poor performance of MPP during 2015, a smaller share of the milk supply was covered under

buy-up coverage in 2016. By March 2017, only 2 percent of the milk enrolled in MPP was covered under buy-up coverage.

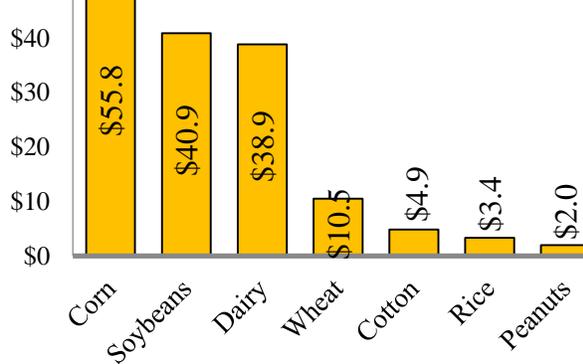
Percent of Milk Enrolled in the Dairy Margin Protection Program at Catastrophic and Buy-Up Levels 2015 to 2017



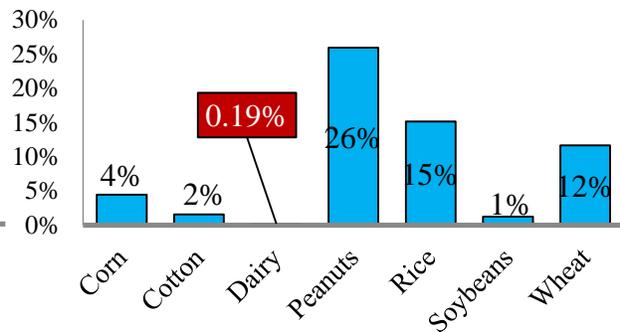
Dairy needs a robust safety net.

The Congressional Budget Office’s (CBO) most recent baseline projected annual farm-level cash receipts in the dairy sector at \$39 billion—behind only the value of corn and soybeans. Yet, a workable safety net for dairy is absent. For example, CBO projected that outlays in dairy from 2018 to 2027 would total \$749 million and the farm value of milk production during this time would be \$389 billion. The ratio of outlays to the farm value of milk production would be less than one-quarter of 1 percent—far below assistance levels for other commodities.

CBO Projected Annual Average Value of Cash Receipts by Commodity in Billion Dollars 2018-2027



Annual CBO Projected Outlays as a Percentage of Projected Annual Average Value of Cash Receipts by Commodity (Left Chart Values) 2018-2027



The poor performance of each safety net program explains the low uptake by dairy farmers and highlights the need to retool, enhance and expand the dairy farm safety net. Dairy farmers may not simultaneously use MPP and LGM-D to manage margin risk. Thus, dairy farmers must choose to participate in either MPP or LGM-D, but not both.

Farm Bureau has already worked on two ways to help the dairy sector prior to the next farm bill:

Dairy-Revenue Protection

Private sector individuals or groups may develop insurance products to be considered for approval by the Federal Crop Insurance Commission (FCIC) Board. The law allows the private sector to submit a Concept Proposal to the FCIC prior to fully developing a 508(h) submission. The American Farm Bureau Federation and American Farm Bureau Insurance Services submitted a Concept Proposal to the FCIC Board in early April 2017.

Numerous discussions have occurred regarding the development of an actuarially sound revenue protection program for dairy that would operate similarly to the crop insurance revenue products. We hope the concept we presented to FCIC will be one option dairy producers can consider as a risk management tool in the upcoming discussions on the 2018 Farm Bill. Our initial conclusions are that a Dairy-RP program would work well in tandem with a revised Dairy MPP.

How Dairy-RP Works

- Expected Quarterly Revenue = Average CME futures price multiplied by expected state-level milk production based on USDA's National Ag Statistics Service (NASS) data.
- Revenue Guarantee = (Expected Quarterly Revenue) × (Coverage Level).

A farmer has only four items on which to decide when considering the revenue guarantee he/she wishes to cover:

- (1) The milk price "mix" between Class III and Class IV;
- (2) The amount of milk production to cover;
- (3) The level of coverage (from 60% to 90% of the revenue guarantee); and
- (4) Which quarterly contracts he/she wishes to purchase (contracts may be purchased up to 15 months out).

If a dairy producer's actual revenue falls below the selected guarantee, an indemnity is paid.

- Indemnity = The positive difference between the Revenue Guarantee and the Actual Quarterly Revenue.

It is important to allow a producer to select the milk price "mix" to be used. This will allow a farmer delivering to a cheese manufacturing plant to put more protection on the Class III milk price (cheese milk). Similarly, a farmer shipping to a butter plant may put more protection on the Class IV milk price (butter-powder milk). By allowing coverage to mix between classes of milk the farmer can better capture his farm-level milk price risk exposure. Following is an example where a producer decided to use 75% of the Class III price and 25% of the Class IV price for his/her insurance policy.

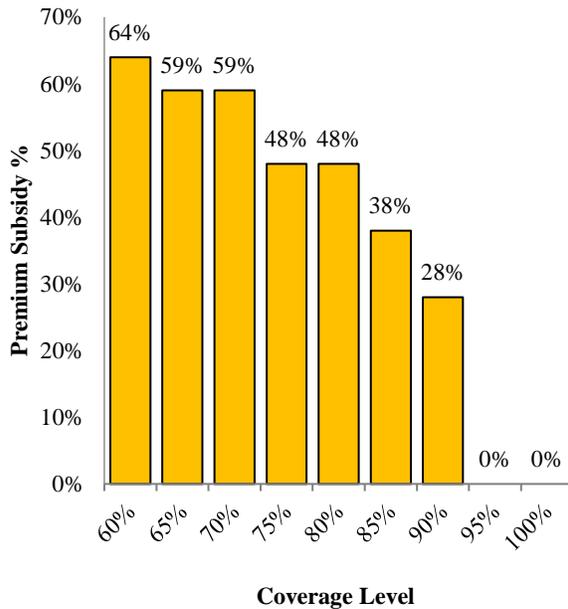
Revenue Guarantee Calculation:



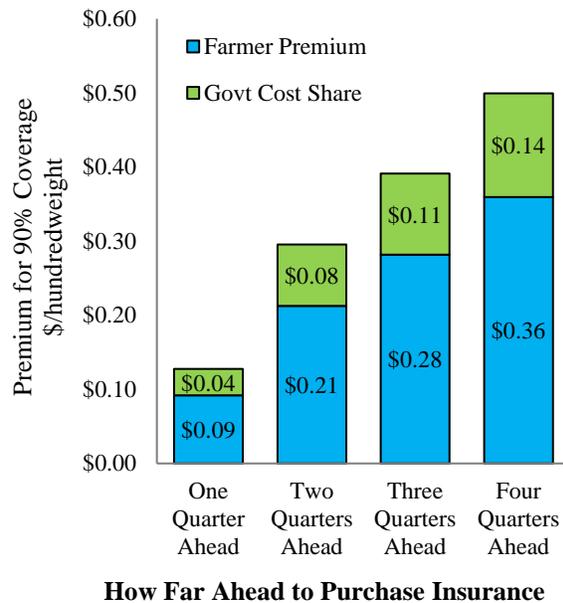
Based on the above revenue guarantee, an indemnity would be triggered if the actual revenue fell below the farmer's coverage option. For example, 90 percent coverage would trigger an indemnity if actual revenue fell below \$582,000 or \$518,000 for 80 percent coverage.

We proposed the government provide the same premium subsidies provided to the crop sectors. For example, for a revenue guarantee of 90%, the farmer would pay 72% of the premium and the government would subsidize 28%. Those levels are shown in the chart below and the amount of premiums that would have been paid on average from 2008-2016 are depicted in the chart on the right. For example, on average a policy covering two quarters ahead with a 90% revenue guarantee would cost the farmer \$0.21 per hundredweight and the government cost-share would be \$0.08 per hundredweight. The premiums would vary based on the market risk and the hedging horizon, with more nearby insurance policies being cheaper to purchase.

Proposed Subsidy Level for Dairy-RP



Average Dairy-RP Premium Rates, 2008 to 2016



Milk as a Commodity

In late March 2017, Farm Bureau, the National Farmers Union, and the National Milk Producers Federation sent a letter to Acting USDA Secretary Michael Young, asking that milk not be defined as livestock under the Federal Crop Insurance program:

While the Risk Management Agency has historically interpreted ‘livestock’ to include livestock products like milk, the statute does not mention or make reference to any livestock products in the definition. It reads (7USC1523(b)): the term “livestock” includes, but is not limited to, cattle, sheep, swine, goats, and poultry. The clear statutory language only includes the animals themselves and makes no reference to products produced by livestock or poultry such as milk or eggs. Therefore, USDA would be well within its authority to determine that livestock and the products that livestock produce are two distinct and different types of commodities.

Additionally, the board of the Federal Crop Insurance Corporation has broad discretion to offer crop insurance on any agricultural commodity and recognize additional commodities for coverage (see 7USC1518). Since milk is recognized in many other contexts as an agricultural commodity, there is existing authority for USDA to offer additional crop insurance products related to milk production either through private submission or developed by the Risk Management Agency after appropriate review by the FCIC Board.

There should be no restriction on the definition of a commodity as it relates to the kingdom(s) of the biological processes that lead to its production. In fact, most commodities are created from a variety of animal, plant, and other biological processes. For example, many grains are fertilized

and produced in conjunction with manure, bacteria and other organisms in the soil that are critical to producing grain commodities. Likewise, milk is produced from a complex animal/plant/bacteria ecosystem. There is no restriction on the definition of a commodity that dictates only plant commodities be insurable under the conventional rules for the FCIC program. Indeed, some currently insured as commodities are explicitly not plants.

Issue #1: MPP should be made more flexible and provide better coverage options for dairy farmers.

The National Milk Producers Federation (NMPF) has proposed modifications to MPP including restoring the 10 percent feed cost adjustment, lowering the premium rates for buy-up coverage, changing the sources of feed prices to better reflect prices paid by dairy farmers for feed ingredients, extending the enrollment period, making payments monthly, allowing simultaneous participation in MPP and crop insurance tools like LGM-D, and raising the \$20 million cap on livestock insurance.

Of the proposals made by NMPF, raising the cap on livestock insurance, restoring the 10 percent feed cost adjustment, changing the sources of feed prices, and permanently extending the enrollment period are the most likely to raise expected program outlays above the current baseline projections. These options are explored below. Farm Bureau has reviewed some of those options and is proposing that some be considered.

Option A: Raising the \$20 million cap on livestock insurance

While we hope the Administration will remove milk from the livestock cap of \$20 million, those efforts may not be successful. If milk is not reclassified as a commodity, we will propose lifting the livestock cap in the next farm bill to a higher threshold. This would allow the use of LGM-D and the proposed Dairy-RP to expand and be offered to more dairy farmers. While raising the cap would benefit all of animal agriculture through additional funding for LGM, Livestock Revenue Insurance, and Whole Farm Revenue, the Congressional Budget Office (CBO) baseline for dairy will reflect the higher cap. The amount of increase in the baseline will be related to how much the current cap is raised. This baseline change would very likely need to be offset by savings elsewhere.

Option B: Extending the enrollment period

Permanently extend the enrollment period until the end of the year prior to the MPP coverage year.

During the first three years of MPP, implementation of the enrollment deadline was extended from September until November/December. The impact of this extension allowed farmers to better evaluate market conditions in milk and feed markets prior to choosing an MPP coverage level (i.e. the likelihood of MPP triggering and at what coverage levels). However, since these extensions also coincided with favorable crop conditions, the risk to MPP triggering was at low levels during each sign-up period. This will not always be the case.

In years when planting is delayed, crop conditions are poor, production is below expectations, demand is above expectations or stock levels are low, old-crop prices that drive MPP margin expectations prior to the close of enrollment could point to a higher probability of MPP triggering during the first half of the coverage year.

The impact of permanently extending the sign-up period is that farmers may have an opportunity to make MPP participation decisions when the program is certain to make program payments. This could allow farmers to strategically select MPP coverage to maximize program payments. Research has demonstrated that permanently extending the sign-up deadline could lead to single-year MPP payments in the billions of dollars. This same research would suggest maintaining the three-month sign-up gap and ending enrollment in September prior to the coverage year. Of course, the Secretary of Agriculture would still retain the authority to delay the sign-up period on an ad hoc basis.

Option C: Restoring the 10 percent feed adjustment

Requiring a 10 percent increase in the MPP feed ration formula would restore the MPP feed ration to the value prior to the 10 percent reduction required due to budget restrictions during consideration of the 2014 Farm Bill.

MPP Feed Ration in the 2014 Farm Bill and if 10 Percent Higher

	Corn Price (\$/bushel)	Soybean Meal Price (\$/ton)	Alfalfa Hay Price (\$/ton)
10% Higher Ration	1.1920	0.00817	0.0152
Farm Bill MPP Ration	1.0728	0.00735	0.0137

Note: Values are multiplied by the feed prices to determine the national average MPP feed costs.

If the MPP ration formula had been 10 percent higher, MPP margins would have been about \$1.00 per hundredweight lower than those announced by USDA. Increasing the feed ration coefficient by 10 percent will improve farmers’ ability to manage risk by increasing the likelihood of program payments. For example, using the higher feed ration coefficients would have reduced MPP margins in 2015 and the first half of 2016 by a range of \$0.88 to \$1.01 per hundredweight. In turn, this would have increased total program payments. Estimates using 2015 and 2016 sign-up data indicate program payments would have been about \$17 million higher and \$36 million higher (respectively) if the 10 percent increase had been in effect.

CBO estimated earlier this spring that a 10 percent adjustment in the feed ration formula would increase total outlays by \$2.3 billion over ten years. The rationale for such a dramatic increase in outlays is that the changes to the feed ration would change the MPP participation incentives. By adjusting the MPP feed ration the average MPP margin from 2015 to 2016 drops from \$8.35 to \$7.42.

By changing the ration, the maximum MPP coverage level of \$8.00 becomes equivalent to 108 percent of the historical average margin—effectively allowing dairy farmers to buy coverage above the historical average margin. This significantly changes the participation incentives at buy-up levels of coverage.

For example, by adjusting the MPP feed ration by 10 percent, and using 2015 to 2016 participation data, the maximum net program payments (indemnities minus premiums) could have been as high as \$428 million during 2015 and 2016 if more farmers had elected buy-up coverage options. To qualify for these program payments farmers would have had to make large premium payments. For example, using the proposed margin adjustments, a dairy farm covering 400 million pounds of milk at a \$6.50 coverage level would have paid \$1.2 million in MPP premiums, received program payments totaling \$1.7 million, for a net benefit of more than \$500,000. Benefit maximizing behavior similar to above example is possible, but a farmer's risk preferences may result in a lower level of MPP coverage—and as a result lower USDA outlays. For all participating farms, lower participation at the buy-up coverage levels would reduce these outlays below those estimated as the maximum exposure.

Outlays over a ten-year period would vary based on the milk and feed prices along with the enrollment of milk at the various coverage levels.

Option D: Changing the source of feed prices

Another option is changing the source of the feed prices to better reflect the cash prices farmers pay for soybean meal, alfalfa hay, and corn to Agricultural Marketing Service price data instead of NASS data.

Changing the sources of feed prices could have reduced the MPP margin by an average of 17¢ per bi-monthly period and would have increased the frequency of MPP triggering program payments.

By using 2015 and 2016 participation data, one can estimate the cost of changing the source of feed prices. The maximum net program payments could have been as high as \$184 million during 2015 and 2016 if more farmers had elected buy-up coverage options. Lower participation at the buy-up coverage levels would reduce these outlays.

Option E: Changing the source of feed prices and restoring the 10% feed adjustment

Changes to the feed prices used would further boost outlays if the 10% were restored to the feed ration coefficients. The net impact would have reduced the MPP margin by an average \$1.12 per hundredweight during 2015 and 2016, falling to below \$4.50 per hundredweight in May-June 2016.

Using alternative (higher) prices for corn and soybean meal, when combined with the 10 percent adjustment to the ration, the maximum net program payments could have been as high as \$639 million during 2015 and 2016 if more farmers had elected buy-up coverage options. Lower participation at the buy-up coverage levels would reduce these outlays.

Option F: Enhance MPP for small farms and institute a minimum 10 percent deductible

There are several ways MPP can be enhanced for small farms while reducing the financial exposure. These policy options are meant to outline modifications that can achieve cost savings while also enhancing MPP. Under this policy option, the benefits for each farm size category are enhanced.

	Current Law for producers with a 4 million pound or less production history	Current Law for producers with more than 4 million pounds of production history	New proposal for producers with a 4 million pound or less production history	New proposal for producers with more than a 4 million pound production history
Premium Rates	Lower for the first 4 million pounds of production covered	Premium rates are higher after the first 4 million pounds of production is covered	Premium rates <u>reduced</u> from current levels by 25%	Premium rates for all coverage options <u>increase</u> by 25%
CAT Coverage	CAT level is \$4.00	CAT level is \$4.00	CAT level remains at \$4.00	Same as the previous column
Cost of CAT Coverage	\$100/operation	\$100/operation	\$300/operation	Same as previous column
Feed ration adjustment	Set in law	Set in law	Feed ration adjustment increased by 10% from current law and new price sources used	Same as the previous column
Maximum MPP Coverage Level	\$8.00 coverage	\$8.00 coverage	\$7.00 coverage	Same as the previous column

Modified Feed Prices with Coverage Level Modifications

Based on the current MPP formula, the average margin since the program was introduced in September 2014 until December 2016 has been approximately \$9.03 per hundredweight. The maximum coverage available under MPP is \$8.00 per hundredweight and roughly corresponds to a 10% deductible level ($90\% \times \$9.03 = \8.13 per hundredweight). The following table identifies deductible and CAT coverage options under proposed modifications to the MPP margin formula.

	Current MPP Margin	AMS Feed Prices and Restoring the 10%
	\$/hundredweight	
Sep 2014 to Dec 2016 Average	\$9.03	\$7.91
Change from Current Margin		-\$1.12
Maximum MPP Coverage Level Under Alternative Deductible Levels (Rounded to Nearest 50¢)		
No Deductible	\$9.00	\$8.00
10% Deductible	\$8.00	\$7.00
Suggested CAT Coverage Level, i.e. 50% of Average MPP Margin		
	\$4.50	\$4.00

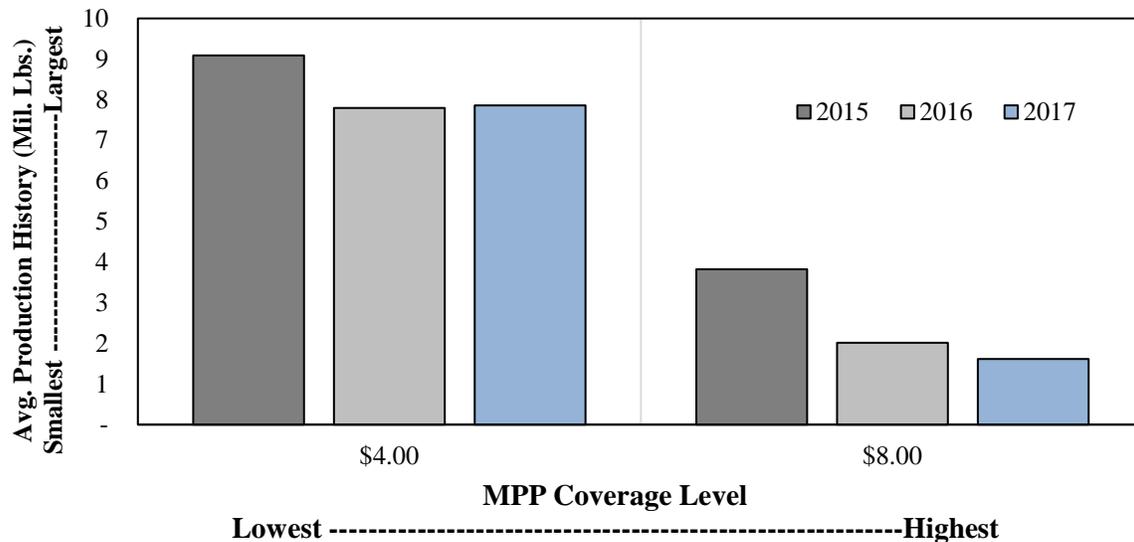
Enhancing MPP for Farms with Less than Four Million Pounds of Production History

Of the 24,000 dairy operations enrolled in MPP, 16,000 or nearly 75 percent commercially market less than four million pounds of milk annually. These smaller dairy operations account for 25 billion of the 163 billion pounds enrolled in MPP—approximately 17 percent. MPP can be enhanced for these farms and the additional outlays will apply to a small portion of the milk enrolled in the program.

MPP can be significantly enhanced for most participating farms by enhancing coverage for farms with a production history at or below four million pounds. The cost of improving MPP, as noted above, would cost significantly less than increasing it for all operations because only 17 percent of the milk enrolled in MPP would be eligible for the program payment increase and would have a lower premium schedule.

Premiums for large farms for buy-up level coverage should increase with an enhanced MPP.

MPP utilization by large farms has historically been at the catastrophic coverage levels. The program payments have not exceeded the costs of participation. For example, the average production history for farms at the \$8.00 coverage level is less than four million pounds. Farms under the CAT \$4.00 coverage level are, on average, twice as large as those with buy-up coverage. The use of CAT coverage under MPP by large farms is due to the higher premium rates applied to these operations.



Instead of purchasing buy-up MPP coverage, large dairy operations purchase CAT and layer market-based risk management tools such as milk and feed futures, or forward pricing contracts, on top. Those farms not in MPP may utilize futures contracts and LGM-D to manage milk price or margin risk. Additionally, the proposed Dairy-RP would offer an additional market-based risk management tool to the dairy industry.

However, changing the MPP feed ration or sources of feed prices would make MPP more attractive to larger operations by making the benefits of participation at buy-up levels greater relative to the current premium levels. Premiums could be adjusted higher to be more in line with the expected benefits of participation and reduce potential outlays.

Estimate of Maximum Outlays and Cost Savings

Based on actual farm enrollment, the suggested modifications to MPP would have changed the participation incentives for dairy operations participating in MPP. By increasing the program payments, the following table identifies maximum outlays assuming current enrollment with coverage levels based on maximizing net benefits. These maximum outlays could be higher if farms not currently participating in MPP decided to enroll due to the higher program payments. Alternatively, lower participation at the buy-up coverage levels would reduce these outlays.

The proposed modifications to MPP in this section could achieve costs savings greater than 50 percent relative to the current proposals. The cost savings are achieved through higher premium rates for select dairy operations and a reduction in the maximum coverage level available for purchase. The coverage levels are reduced such that a margin decline of at least 10 percent relative to the historical average must be experienced before program payments are triggered.

The estimated maximum outlays associated with these policy options, and those proposed by NMPF, during 2015 and 2016 are explored in the following table.

Farm Bureau Policy supports:

- The availability of crop yield and/or revenue insurance for all producers of all crops, aquaculture livestock and poultry in the country;
- Changes to the Dairy Margin Protection Program (MPP) to provide producers more flexibility and better coverage; and
- Expansion of the current Livestock Gross Margin (LGM) dairy program.”

Maximum MPP Financial Exposure Based on 2015-2016 MPP Participation and Announced Prices

Lower participation at buy-up coverage would reduce these outlays.

Simulation based on 24,000 farms and 169 Billion Pounds of Milk		2015 1/	2016	Total
Thousand Dollars				
<i>Actual MPP</i>	Program Payments	\$700	\$11,640	\$12,340
	Farmer Cost	<u>\$72,869</u>	<u>\$22,786</u>	<u>\$95,655</u>
	Net Benefit	-\$72,141	-\$11,146	-\$82,287
<i>Maximum MPP Outlay Under Current Design</i>	Program Payments	\$0	\$141,031	\$141,031
	Farmer Cost	\$2,511	\$124,107	\$126,618
	Net Benefit	-\$2,511	\$16,925	\$14,414
<i>AMS feed prices adjustment suggested by NMPF</i>	Program Payments	\$220,754	\$502,874	\$723,628
	Farmer Cost	<u>\$197,102</u>	<u>\$341,852</u>	<u>\$538,954</u>
	Net Benefit	\$23,652	\$161,021	\$184,673
<i>Restore 10% Feed adjustment</i>	Program Payments	\$358,117	\$660,609	\$1,018,726
	Farmer Cost	<u>\$223,266</u>	<u>\$367,411</u>	<u>\$590,677</u>
	Net Benefit	\$134,851	\$293,197	\$428,048
<i>Restore 10% Feed adjustment and use AMS feed prices suggested by NMPF</i>	Program Payments	\$475,256	\$892,940	\$1,368,196
	Farmer Cost	<u>\$258,819</u>	<u>\$470,825</u>	<u>\$729,644</u>
	Net Benefit	\$216,437	\$422,116	\$638,553
<i>Option F: Use NMPF suggested feed ration and AMS prices/25% Lower Premiums for PH <4 Mil Lbs./25% Higher Premiums/ 10% Deductible = \$7/\$300 Admin</i>	Program Payments	\$131,362	\$634,206	\$765,568
	Farmer Cost	<u>\$72,679</u>	<u>\$397,610</u>	<u>\$470,289</u>
	Net Benefit	\$58,682	\$236,593	\$295,275

Simulation Based on FSA Freedom of Information Act Data

1/All simulations include the premium discount of 25% to Tier 1 rates below \$8