# Price, Income, or Margin Risk:

# What are we trying to accomplish?

# What tools do we have?

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8 April 2018

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# What was it we were trying to do?

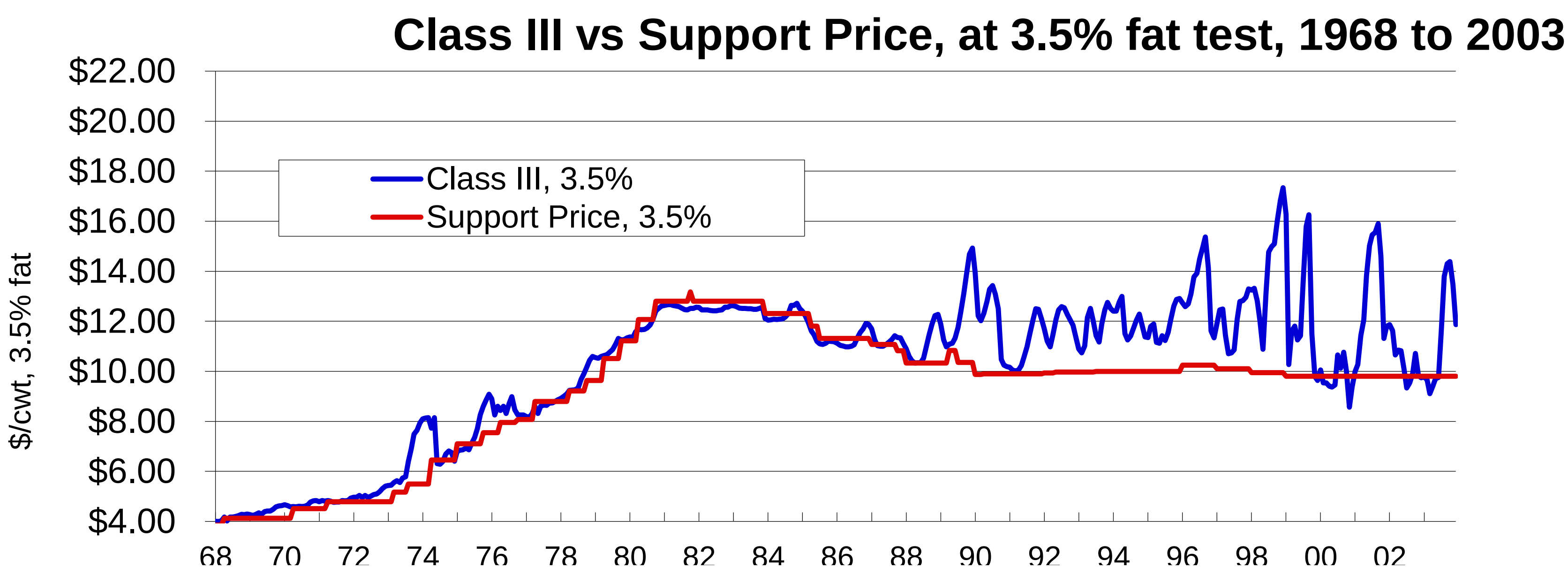
## Improve balance of market power at the farm level.

- Capper-Volstead Act of 1921 allows farmers to <u>cooperate</u> in the marketing of their milk: pricing, selling, market logistics.
- Agricultural Marketing Agreement Act of 1937 (on top of earlier legislation going back to the first farm bill) allows farmers to use government authority to enforce a system of <u>classified pricing with pooling</u> to make milk pricing more transparent, fair, and evenly applied.
- Neither one "fixed" the price of milk.

# What was it we were trying to do?
## Fixing the Price.

Fixing the price of milk.

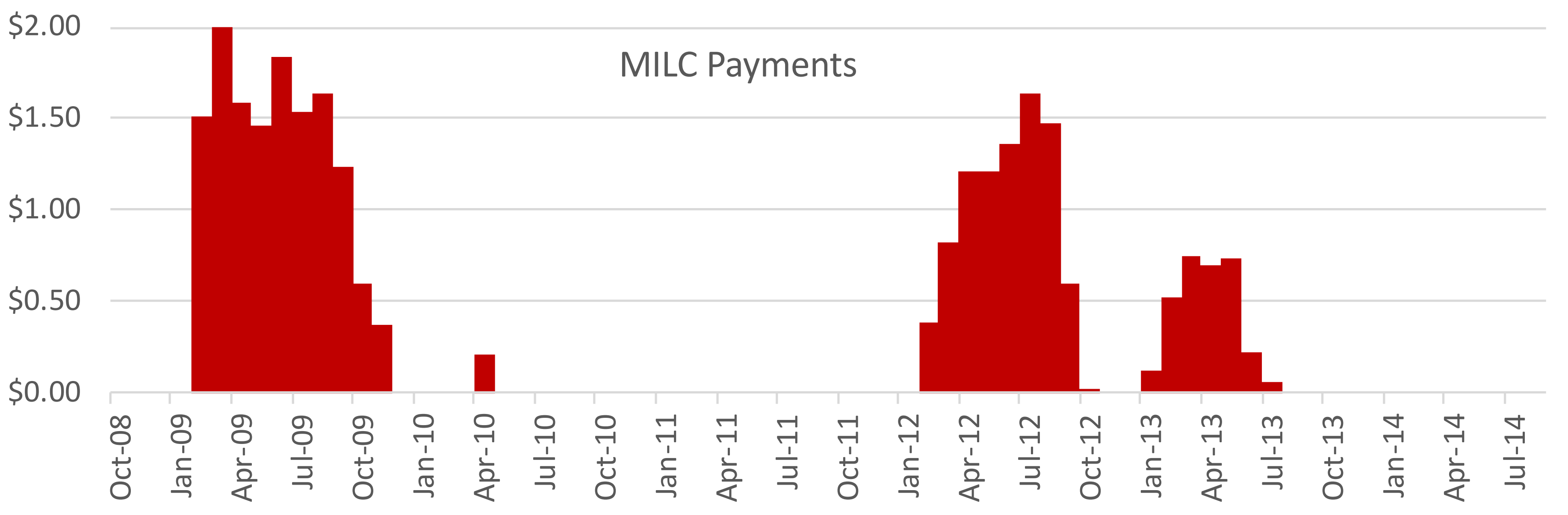
- Milk Price Support Program kept farm milk price above a specified "support price" (1940s to 1990s) – AA of 1949
- Became 1) too expensive and 2) infeasible when we opened dairy markets to world trade in 1996 – Uruguay Round Agreements Act of 1994



# What was it we were trying to do?
# Fixing income.

Making low milk prices more tolerable.

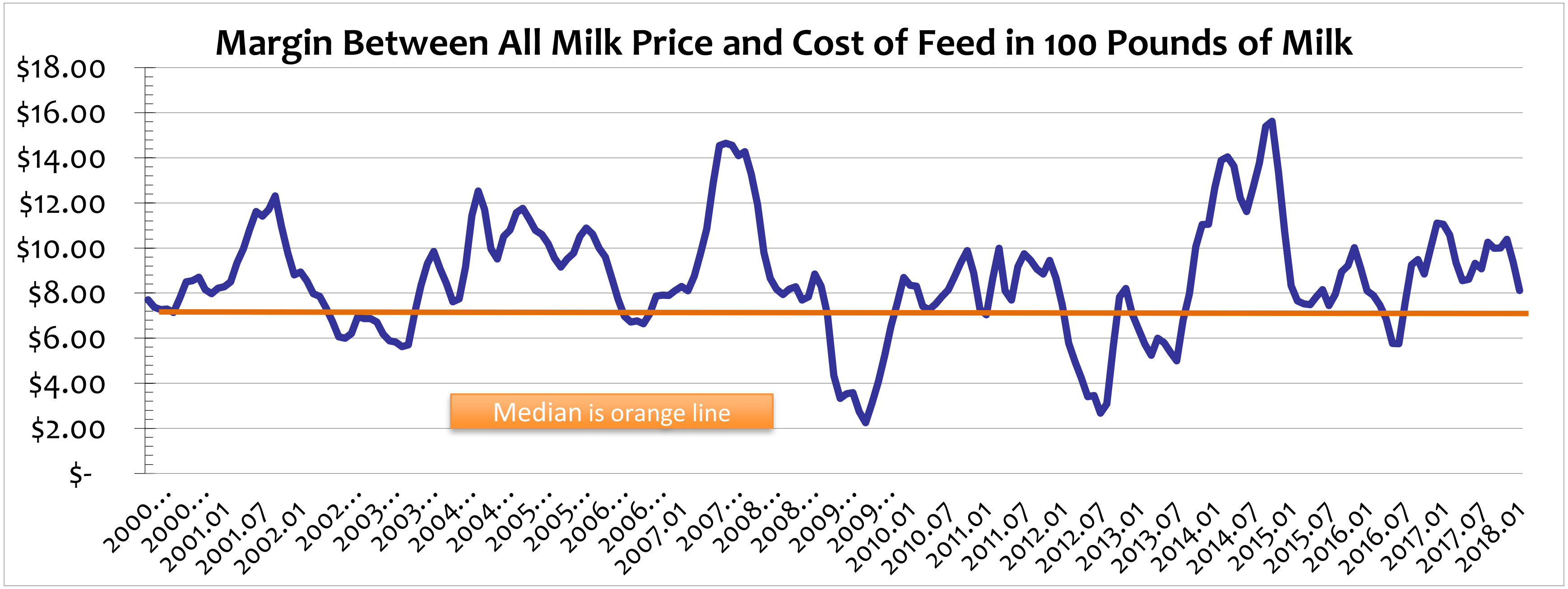
- MILC provided an <u>income subsidy</u> (a price subsidy times a milk volume) when prices fell below a fixed trigger. (2000-2002-2014)
- Terminated because did not 1) do a good job of compensating for high feed costs and 2) provided scant support for larger sized farms who felt just as vulnerable to high feed costs and low prices



# What was it we were trying to do?
# Fixing Margins.

Making low profitability more tolerable.

- MPP-Dairy intended to provide a margin subsidy when the gap between the price of milk and the cost of feed became too narrow.
- Original program design was limited and then further compromised by a ridiculously small budget allowance.
- This small budget necessitated charging farmer’s premiums that increased as margins coverage went from historically catastrophic to close to average.



# Why have we changed programs?

- MPSP, which worked by buying products, became too expensive, especially with open trade.
- MILC would have been even more expensive if we hadn't limited payments by size of farm. It failed because of those limits and because it didn't adequately compensate for high feed prices.
- MPP-Dairy 1.0 was a fresh start on a program to help with a combination of milk and feed prices. It was underfunded from the beginning.

DMaP
Dairy Markets and Policy

# Why have we changed programs?

- MPP-Dairy 1.0 mimicked an insurance program by charging premiums for higher levels of benefits, but ended up not providing benefits when farmers felt they were deserved.
- As enrollment stagnated and enrollees retreated to minimal coverage, USDA allowed farmers to opt out in 2018, the last year, even though that was not strictly allowed by law.
- MPP-Dairy 2.0 improves the funding and is much more accessible to farms of average or smaller size.
- It was possible to legislate because it was written by the committee that deals with money, not the committee that deals with programs.
- Having a “must pass” budget to tie it to helped a lot also.

DMaP
Dairy Markets and Policy

# MPP vs. LGM

## You can still do both but not at the same time, regardless of volumes.

| MPP-Dairy | LGM-Dairy |
| --- | --- |
| Margin is calculated one way (ADPM) | Margin calculation is flexible |
| Levels of margin coverage are fixed from \$4 to \$8, with higher premiums for higher coverage | Coverage level is dictated by formula and expected prices. Deductibles can be applied to calculated margin to reduce premiums |
| Premiums for a given coverage never change | Premiums vary with every contract |
| When expected margins are high (high milk and/or low costs) \$8 will not payout | When expected margins are low (low milk and/or high costs), a high coverage (eg. \$8) is simply not available |
| When expected margins are low, MPP coverage can be very attractive | When expected margins are high, LGM will enable protecting higher levels than \$8 |
| Tends to be better than LGM when expected margins are below average | Tends to be better than MPP when expected margins are above average |

# What happens next?

- MPP-Dairy for 2018 gets a do over, beginning with January and a much better deal.  (Mark will describe the specifics)
- MPP-Dairy 2.0 only amends the AA 2014, but it sets the bar (budget) and a tone (design) for the next farm bill
  - There will be proposals to fiddle the design more but current design starts as the default
- AA 2014 expires 30 Sept 2018, but it is not a stretch to postpone the replacement to Dec 2018 (as we have seen the last couple of times)
- The "Dairy Cliff" looms on 1 Jan 2019, making that a much harder date to avoid.
  - Extensions of AA 2014 can't be dismissed but the closer we get to Spring planting the more pressure there is to set programs for the 2019 crop year.

# Reminders and Caveats

- Most of MPP-Dairy 1.0 is still in 2.0
  - Your production history still goes back to the higher of 2012, 2013 or 2014; unless you began production after 2014.
  - You still can't double enroll in MPP-Dairy and LGM-Dairy
  - The ADPM (margin) formula is unchanged, although it is applied monthly. 2.0 won't do any better job reflecting your actual costs
- It is unclear what might change in 2019. There is a good chance that we won't have a 2019 enrollment period until after 1 January (politics being what it is)

# The Updated Margin Protection Plan–2018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THE UNIVERSITY of WISCONSIN MADISON

# What Did Congress Change?

- Changes were made in the Bipartisan Budget Act of 2018 and not through the more normal Farm Bill legislation.
- Tier 1 volume is increased from 4 million pounds of annual historic production to 5 million pounds.
- Indemnity calculations are no longer based on two-month average values, but will be calculated monthly.
- The cost of Tier 1 premiums are greatly reduced.

# Premium Structure

| | Old Premium | | New Premium | | | |
|---|---|---|---|---|---|---|
| Level | | <= 4 mill | | <= 5 mill | | > 5 mill |
| $4.00 | $ | - | $ | - | $ | - |
| $4.50 | $ | 0.008 | $ | - | $ | 0.020 |
| $5.00 | $ | 0.190 | $ | - | $ | 0.040 |
| $5.50 | $ | 0.030 | $ | 0.009 | $ | 0.100 |
| $6.00 | $ | 0.041 | $ | 0.016 | $ | 0.155 |
| $6.50 | $ | 0.068 | $ | 0.040 | $ | 0.290 |
| $7.00 | $ | 0.163 | $ | 0.063 | $ | 0.830 |
| $7.50 | $ | 0.225 | $ | 0.087 | $ | 1.060 |
| $8.00 | $ | 0.475 | $ | 0.142 | $ | 1.360 |

# FSA Implementation Rules

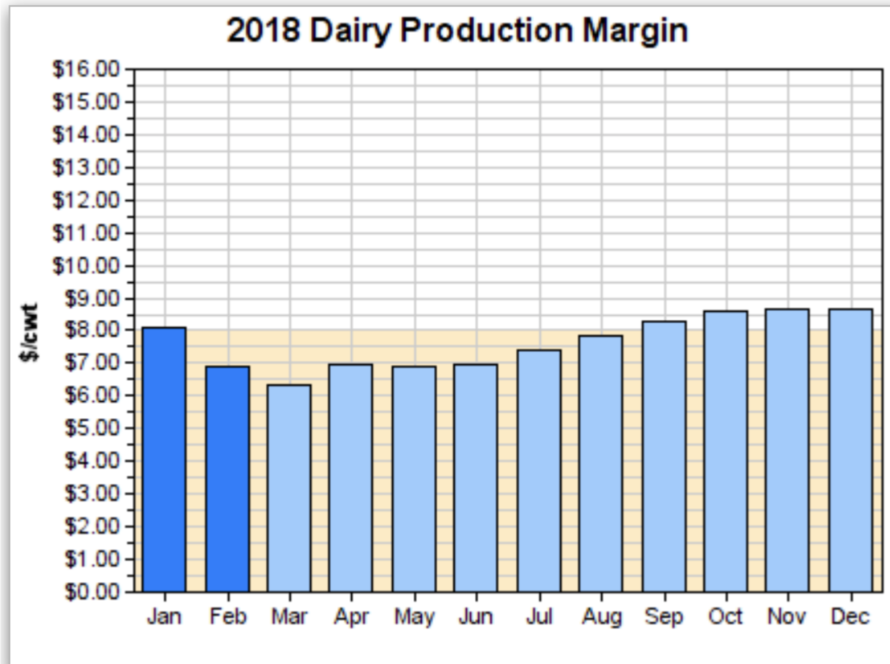
- Producers enrolled for 2018 and who bought up coverage will be refunded premium payments and allowed to re-enroll.
- Producers who dropped MPP coverage and have active LGM coverage are ineligible for any months covered.
  - For example, if you have an active LGM contract for January through March, you cannot get MPP coverage for those months, but you can get MPP coverage for subsequent months.
  - Your premiums will be based on months covered.
- Under-privileged farms can have $100 fee waived.

# FSA Implementation Rules

- MPP coverage is retroactive to cover all months in 2018—including months with known margins (January and February so far)
- New MPP signup will be from April 9 through June 1, 2018.
  - By June 1, we will know MPP margins from January through April with certainty.
- You can still elect the percent of your historic production between 25 and 90 percent
- The coverage level you elect is the same for Tier 1 and Tier 2 milk.

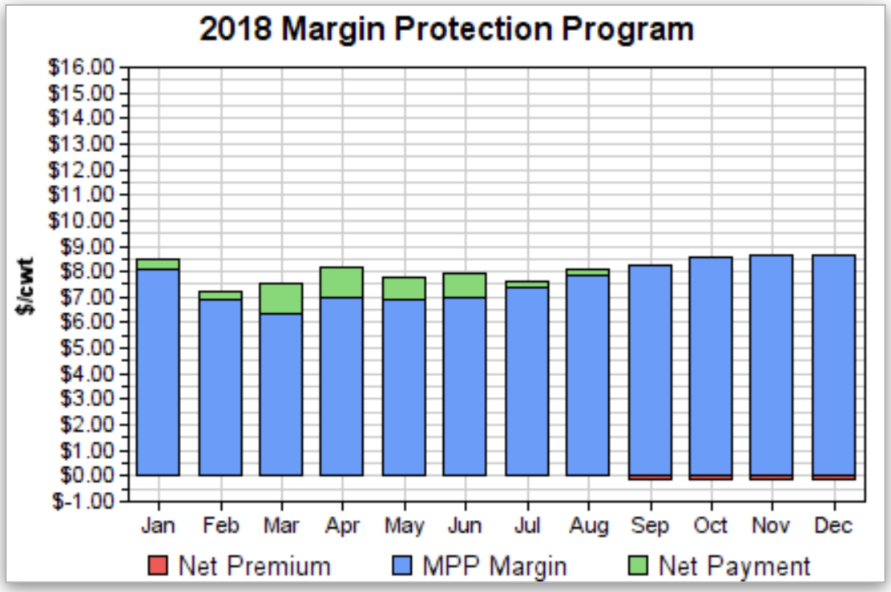
# Expected 2018 MPP Margin

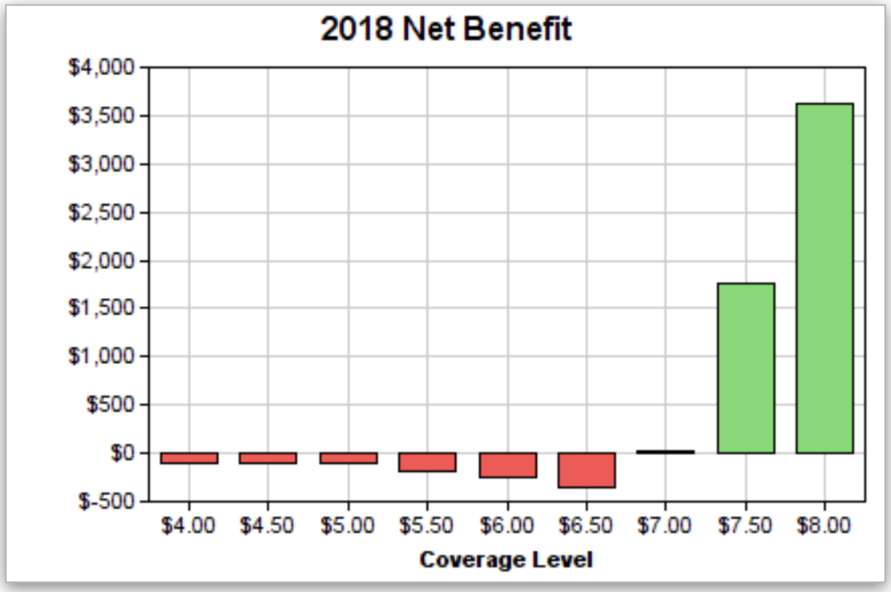
| Paste Values | NASS | | | AMS | | |
|---|---|---|---|---|---|---|
| | All Milk $/cwt | Corn $/bu | Hay $/ton | SBM $/ton | Ration $/cwt | Margin $/cwt |
| Jan-2018 | $16.10 | $3.29 | $152 | $323 | $7.98 | $8.12 |
| Feb-2018 | $15.30 | $3.38 | $155 | $363 | $8.42 | $6.88 |
| *Mar-2018* | *$14.95* | *$3.43* | *$154* | *$380* | *$8.58* | *$6.37* |
| *Apr-2018* | *$15.58* | *$3.48* | *$154* | *$379* | *$8.63* | *$6.95* |
| *May-2018* | *$15.63* | *$3.55* | *$152* | *$389* | *$8.75* | *$6.88* |
| *Jun-2018* | *$15.83* | *$3.61* | *$152* | *$392* | *$8.84* | *$6.99* |
| *Jul-2018* | *$16.30* | *$3.66* | *$151* | *$395* | *$8.90* | *$7.40* |
| *Aug-2018* | *$16.77* | *$3.71* | *$150* | *$393* | *$8.92* | *$7.85* |
| *Sep-2018* | *$17.21* | *$3.74* | *$150* | *$391* | *$8.94* | *$8.27* |
| *Oct-2018* | *$17.52* | *$3.78* | *$150* | *$387* | *$8.95* | *$8.57* |
| *Nov-2018* | *$17.63* | *$3.82* | *$151* | *$385* | *$9.00* | *$8.63* |
| *Dec-2018* | *$17.67* | *$3.83* | *$151* | *$384* | *$9.00* | *$8.67* |



# Expected 2018 Benefit

| Coverage Level | $4.00 | $4.50 | $5.00 | $5.50 | $6.00 | $6.50 | $7.00 | $7.50 | $8.00 |
|---|---|---|---|---|---|---|---|---|---|
| Participation Cost | ($100) | ($100) | ($100) | ($181) | ($244) | ($460) | ($667) | ($883) | ($1,378) |
| MPP Payment | $0 | $0 | $0 | $0 | $0 | $99 | $693 | $2,642 | $5,007 |
| Net Benefit | ($100) | ($100) | ($100) | ($181) | ($244) | ($361) | $26 | $1,759 | $3,629 |




You have elected coverage on 900,000 pounds of milk at the $8.00 level.

Select Coverage Level: $8.00

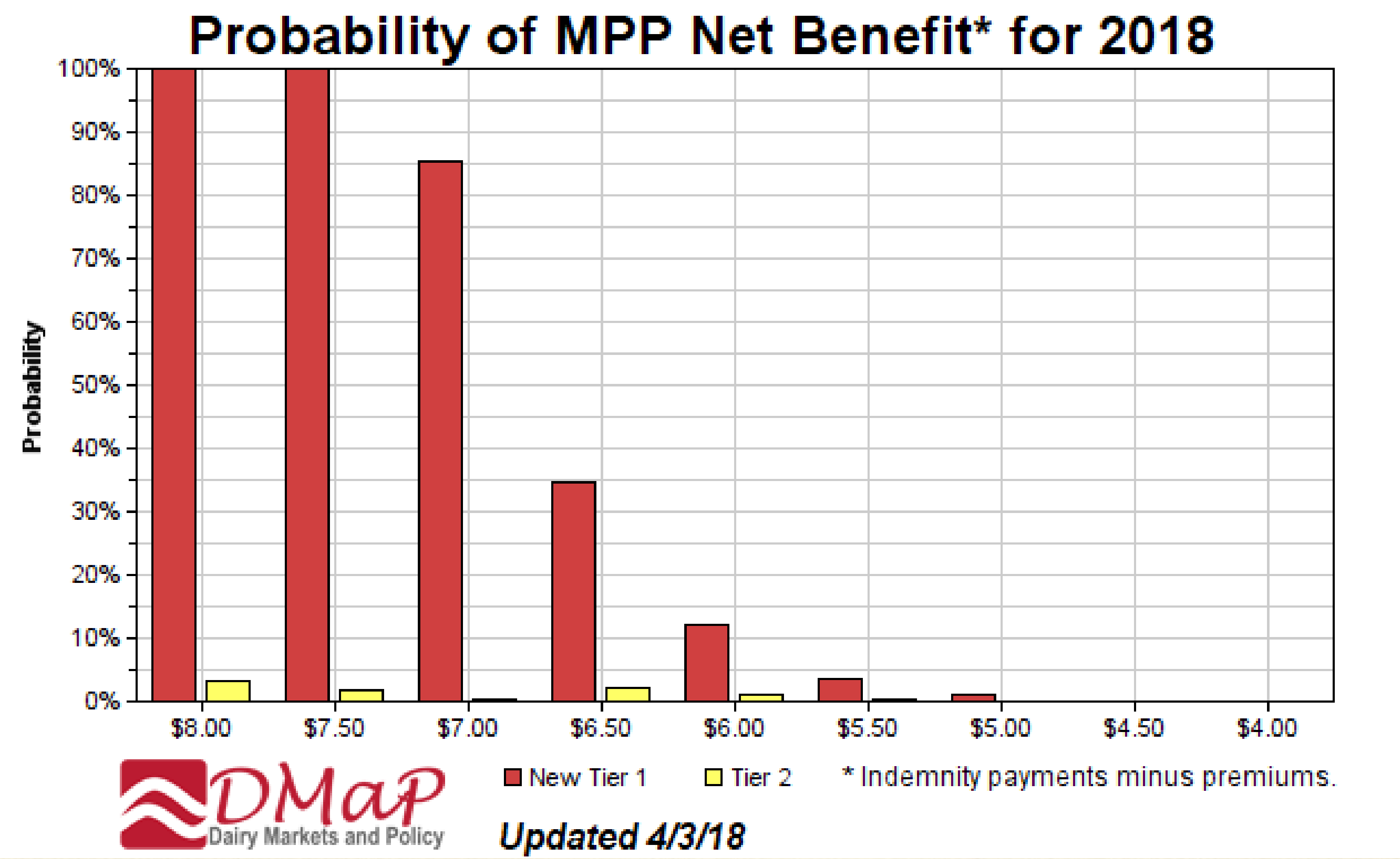
Select Coverage Percentage: 90%

Select Coverage Year: 2018

Production History: 1,000,000

Show Margin Page

# Probability of Net Benefit in 2018



# Suppose You have LGM

| Month | Margin | Indemnity |
|---|---|---|
| Jan-18 | $ 8.1100 | $ - |
| Feb-18 | $ 6.8800 | $ 1.1200 |
| Mar-18 | $ 6.3700 | $ 1.6300 |
| Apr-18 | $ 6.9500 | $ 1.0500 |
| May-18 | $ 6.8800 | $ 1.1200 |
| Jun-18 | $ 6.9900 | $ 1.0100 |
| Jul-18 | $ 7.4000 | $ 0.6000 |
| Aug-18 | $ 7.8500 | $ 0.1500 |
| Sep-18 | $ 8.2700 | $ - |
| Oct-18 | $ 8.5700 | $ - |
| Nov-18 | $ 8.6300 | $ - |
| Dec-18 | $ 8.6700 | $ - |

- Start with last indemnity and work backwards
- With August expected payment you have covered 3¢ of 14.2¢ premium.
- With July & August, you have covered 12.5¢.
- With June, July & Aug, you have 25¢.
- If your LGM is done in May, then enroll.

# Suppose Your Production History is Above 5 Million Pounds

- Get as close to 5 million pounds covered
  - Eg: PH is 12.5 million pounds, choose 40% to get to 5 million pounds covered
- If your PH is > 20 million, then you will be buying some Tier 2 protection.
  - Eg., 25 million @ 25% = 6.25 million covered @ $8.00
    - 5 million at Tier 1 & 1.25 million at Tier 2
    - Net benefit = $10,572 or 17¢ per cwt on covered milk
- This strategy will work this year for less than 30 million pounds of production history (about 1,200 cows). Beyond that, your premiums will cost more than the indemnities.

# Updated MPP Decision Tool

## Margin Protection Program for Dairy Producers (MPP-Dairy)

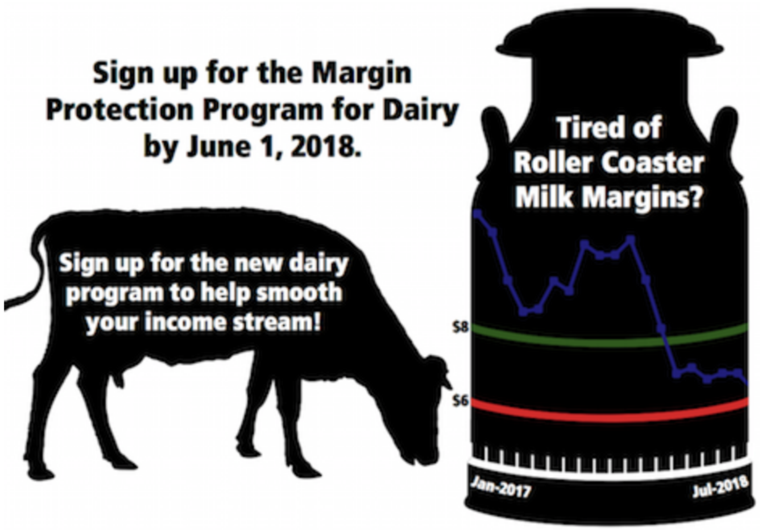
In response to requests from producers, Congress made changes to MPP-Dairy. On Feb. 9, 2018, the Bipartisan Budget Act was signed into law, and included substantial changes to MPP-Dairy for the 2018 coverage, including a new signup for 2018, beginning April 9, 2018, and ending on June 1, 2018.

The new signup allows dairy producers, including those that previously signed up and those that did not, an opportunity to make new elections for 2018. Coverage begins January 1, 2018. If you previously elected coverage for 2018, you must make a new coverage election for 2018. If you do not make a new election you will not have coverage for 2018.

All producers who want coverage for 2018 must register by completing for CCC-782, elect a coverage level, and pay the $100 administrative fee, unless you qualify for a waiver, by June 1, 2018. If the dairy operation participated in MPP-Dairy for 2018, the dairy operation's production history will be increased by a factor of 1.0186.

Payments under MPP-Dairy may be reduced by a certain percentage due to a sequester order required by Congress and issued pursuant to the Balanced Budget and Emergency Deficit Control Act of 1985. Should a payment reduction be necessary, FSA will reduce the payment by the required amount.

To continue, read the disclaimer and click "Agree".




**What's New:** 4/5/2018 (Version 1.5)
- Updated premium costs for Tier 1
- Increased Tier 1 volume from 4 to 5 million pounds
- Indemnities are now determined monthly

## Disclaimer

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The National Program on Dairy Markets and Policy is working with the University of Illinois led consortium National Coalition for Producer Education, which is supported by the U.S. Department of Agriculture, Farm Service Agency, under Agreement No. 58-0210-4-002 N.

Disagree Agree

Version 1.5.0

# Updated MPP Decision Tool

MPP | MPP Advanced | LGM

## Margin Protection Program Decision Tool

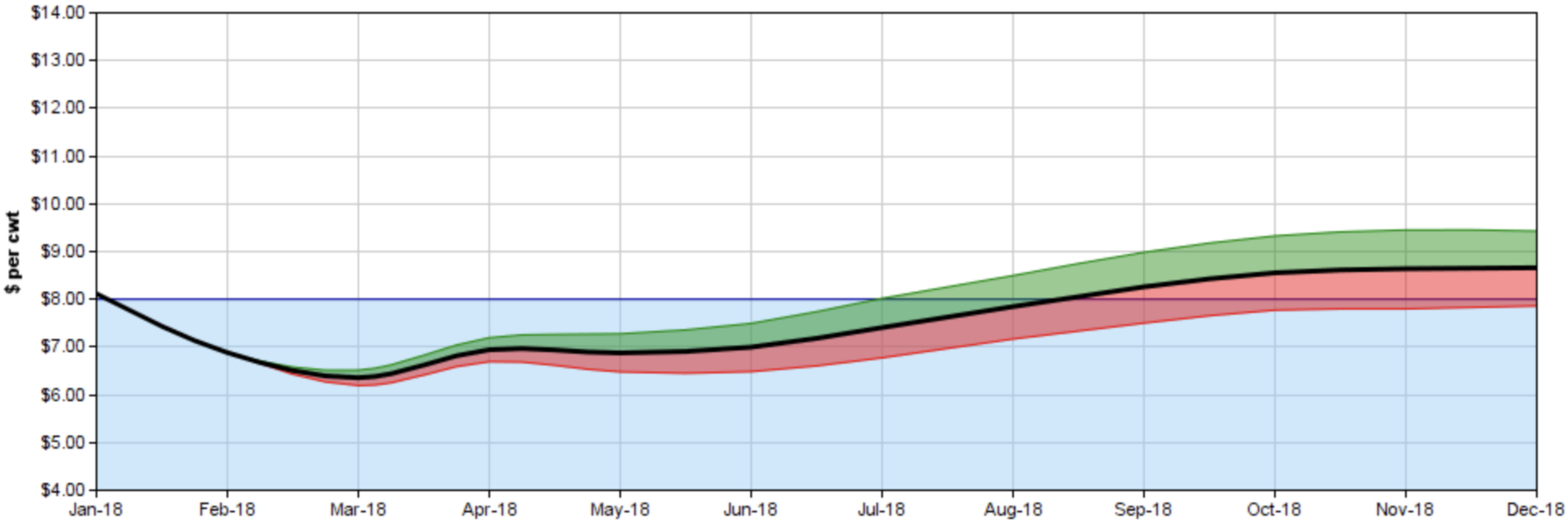
www.DairyMarkets.org

Farm Name: Operation Name    Coverage Year: 2018 (Current, Calculated On 04/03/2018)    Annual Production History (From Form CCC-781) 1,234,567 lbs ?

Forecast Margin | Select Coverage

Probability Table    Forecast Graph

Include Actual Margins




The colored bands show the middle 50% probability interval for forecast margins. There is a 25% chance that the margin could be above the green band and a 25% chance that the margin could be below the red band. The graph data and probabilities are calculated from futures market data available on 04/03/2018.

# Updated MPP Decision Tool

MPP | MPP Advanced | LGM

## Margin Protection Program Decision Tool

www.DairyMarkets.org

Farm Name: Operation Name    Coverage Year: 2018 (Current, Calculated On 04/03/2018)    Annual Production History (From Form CCC-781) 1,234,567 lbs ?

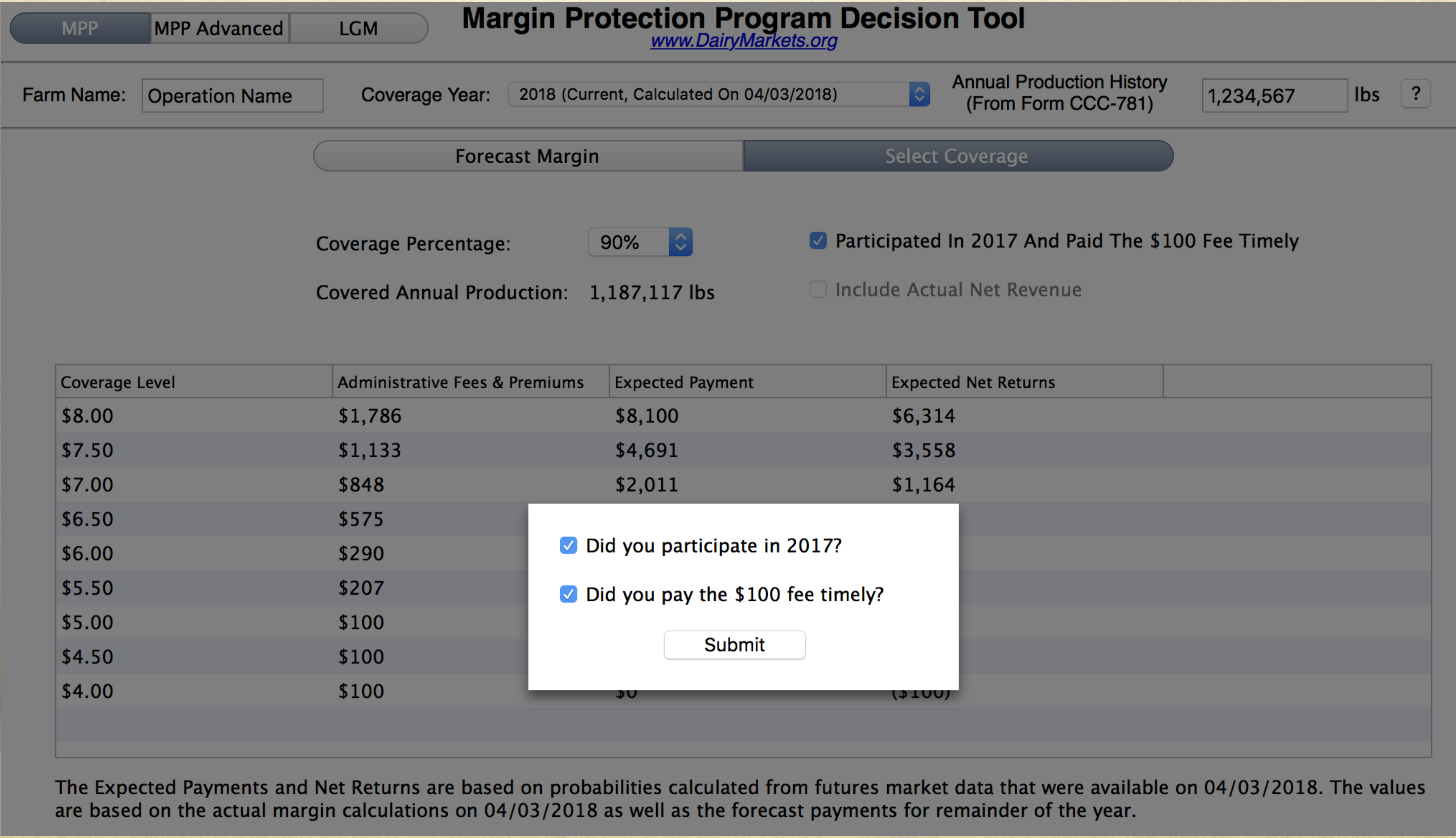
Forecast Margin | Select Coverage

Probability Table    Forecast Graph

| Margin Level | Jan 2018 | Feb 2018 | Mar 2018 | Apr 2018 | May 2018 | Jun 2018 | Jul 2018 | Aug 2018 | Sep 2018 | Oct 2018 | Nov 2018 | Dec 2018 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Expected | $8.12 | $6.88 | $6.36 | $6.94 | $6.88 | $7.0 | $7.41 | $7.85 | $8.26 | $8.55 | $8.64 | $8.66 |
| < $8.00 | – | 100% | 100% | 100% | 97% | 91% | 74% | 57% | 41% | 32% | 30% | 29% |
| < $7.50 | – | 100% | 100% | 94% | 86% | 75% | 54% | 37% | 25% | 18% | 18% | 16% |
| < $7.00 | – | 100% | 100% | 56% | 58% | 51% | 34% | 20% | 13% | 9% | 8% | 8% |
| < $6.50 | – | – | 73% | 12% | 26% | 26% | 16% | 9% | 5% | 4% | 3% | 3% |
| < $6.00 | – | – | 7% | – | 7% | 9% | 6% | 3% | 2% | 1% | 1% | 1% |
| < $5.50 | – | – | – | – | 1% | 2% | 2% | 1% | 1% | – | – | – |
| < $5.00 | – | – | – | – | – | – | – | – | – | – | – | – |
| < $4.50 | – | – | – | – | – | – | – | – | – | – | – | – |
| < $4.00 | – | – | – | – | – | – | – | – | – | – | – | – |

This table shows the expected margin and probability of a Payment in the two-month intervals protected by the insurance levels in the Margin Protection Plan. The Expected Margin and Probabilities are calculated from futures market data available on 04/03/2018.

# Updated MPP Decision Tool



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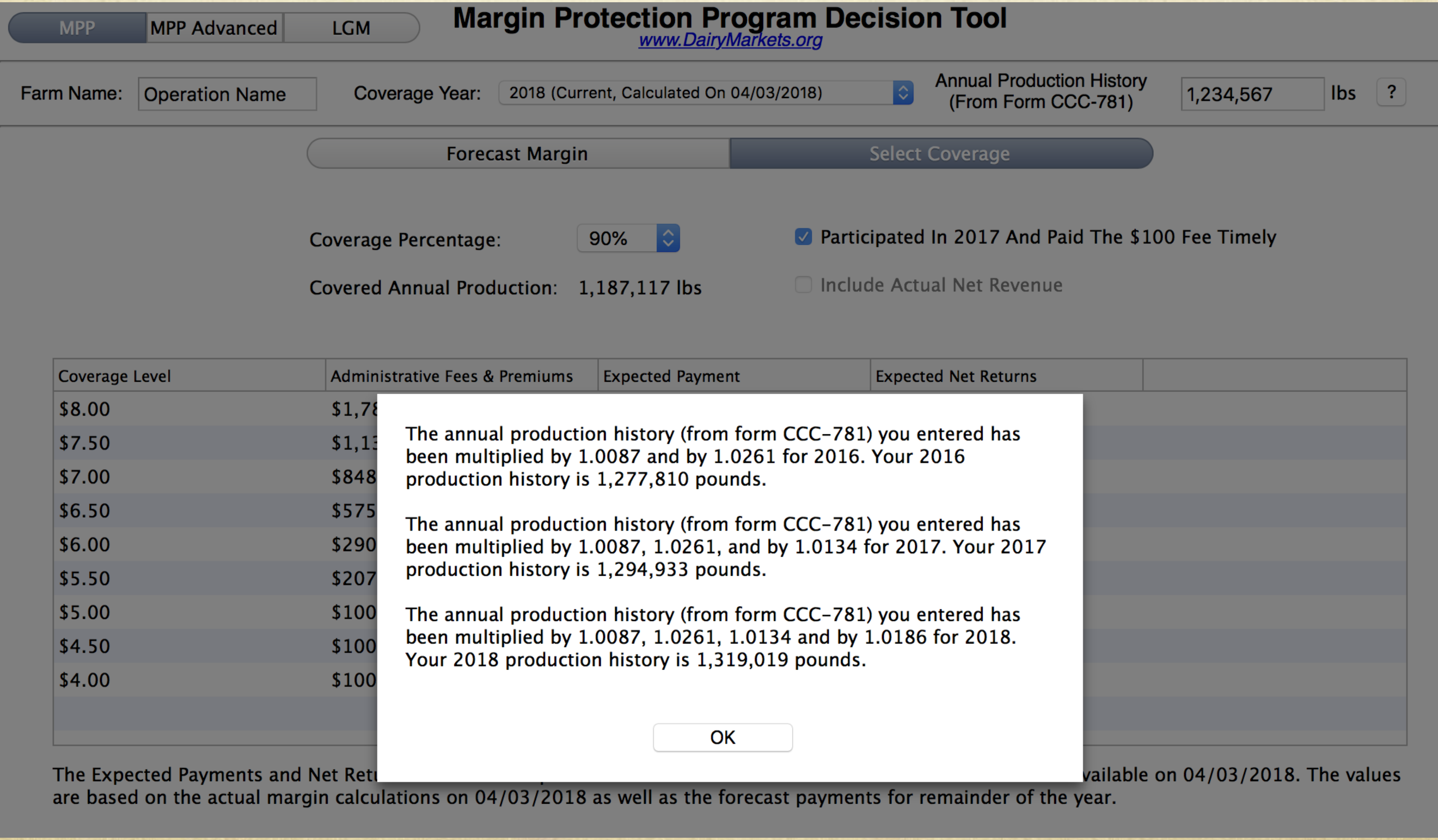

# Updated MPP Decision Tool

MPP | MPP Advanced | LGM

## Margin Protection Program Decision Tool

www.DairyMarkets.org

Farm Name: Operation Name

Coverage Year: 2018 (Current, Calculated On 04/03/2018)

Annual Production History (From Form CCC-781): 1,234,567 lbs ?

Forecast Margin | Select Coverage

Coverage Percentage: 90%

Participated In 2017 And Paid The $100 Fee Timely

Covered Annual Production: 1,187,117 lbs

Include Actual Net Revenue

| Coverage Level | Administrative Fees & Premiums | Expected Payment | Expected Net Returns |
|---|---|---|---|
| $8.00 | $1,786 | $8,100 | $6,314 |
| $7.50 | $1,133 | $4,691 | $3,558 |
| $7.00 | $848 | $2,011 | $1,164 |
| $6.50 | $575 | $581 | $6 |
| $6.00 | $290 | $106 | ($184) |
| $5.50 | $207 | $19 | ($188) |
| $5.00 | $100 | $2 | ($98) |
| $4.50 | $100 | $0 | ($100) |
| $4.00 | $100 | $0 | ($100) |

The Expected Payments and Net Returns are based on probabilities calculated from futures market data that were available on 04/03/2018. The values are based on the actual margin calculations on 04/03/2018 as well as the forecast payments for remainder of the year.

# Updated MPP Decision Tool

MPP | MPP Advanced | LGM

## Margin Protection Program Decision Tool

www.DairyMarkets.org

Farm Name: Operation Name

Coverage Year: 2018 (Current, Calculated On 04/03/2018)

Annual Production History (From Form CCC-781): 5,200,000 lbs ?

Forecast Margin | Select Coverage

Coverage Percentage: 90%

Participated In 2017 And Paid The $100 Fee Timely

Covered Annual Production: 5,000,140 lbs

Include Actual Net Revenue

| Coverage Level | Administrative Fees & Premiums | Expected Payment | Expected Net Returns |
|---|---|---|---|
| $8.00 | $7,202 | $34,117 | $26,915 |
| $7.50 | $4,451 | $19,759 | $15,308 |
| $7.00 | $3,251 | $8,472 | $5,221 |
| $6.50 | $2,100 | $2,445 | $345 |
| $6.00 | $900 | $447 | ($454) |
| $5.50 | $550 | $81 | ($469) |
| $5.00 | $100 | $8 | ($92) |
| $4.50 | $100 | $0 | ($100) |
| $4.00 | $100 | $0 | ($100) |

The Expected Payments and Net Returns are based on probabilities calculated from futures market data that were available on 04/03/2018. The values are based on the actual margin calculations on 04/03/2018 as well as the forecast payments for remainder of the year.

# Live Demo of Decision Tool

You can access the tool at:

https://DairyMarkets.org/MPP/Tool/

Or

https://www.fsa.usda.gov/programs-and-services/farm-bill/farm-safety-net/dairy-programs/mpp-decision-tool/index