



# Rainfall Index and Margin Protection Insurance Plans

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## PRF Insurance: background

- ***Pasture, Rangeland, and Forage*** coverage
- Program of Risk Management Agency (USDA)
- Started as a pilot program in 2007
- Available in Kansas since 2009
  
- Insures land for grazing or haying
  - Established acreage of perennial forage
  - Intended for grazing by livestock OR haying
  - Acreage must be suitable for intended use

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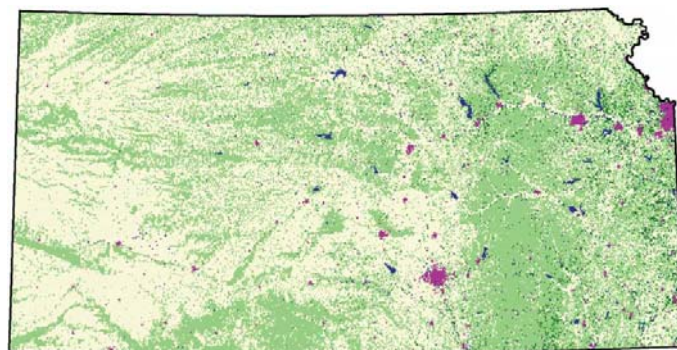
# The PRF numbers for Kansas...

15.5 million acres of permanent pasture

308,000 acres of woodland pastures

2.2 million acres of alfalfa, tame & wild hay

18.0 million acres eligible for PRF



Source: 2012 Census of Agriculture

# How much is 18 million acres?

Crop	Acres planted In 2016	Acres insured In 2016	% insured In 2016
Wheat	8.3 million	7.6 million	92
Grain sorghum	2.8 million	2.5 million	90
Corn	5.0 million	4.7 million	93
Soybeans	4.0 million	3.2 million	81
<b>Total BIG 4 crops</b>	<b>20.1 million</b>	<b>18.0 million</b>	<b>90</b>
Pasture & perennial forages	18.0 million	808,026	4.5

Source: Risk Management Agency, USDA



## PRF Insurance: background

- Sold by private insurance agents
- Significant premium subsidy
  - 51-59% paid by USDA
- Uses dollar coverage per acre
  - Intended to pay for replacement feed
- Area-based: uses a grid system



## PRF Insurance: coverage features

- Single peril: only insures precipitation
- Other perils aren't insured
  - Fire
  - Heat
  - Disease
  - Hail
  - Insects
  - Plant vigor
- Guarantee from 70% to 90% of normal precip

## PRF uses a rainfall index

- Convert precipitation amounts to an index:
  - Simply express actual rainfall amount as a percent of long-term normal rainfall

Example:

- long term normal rain for two-month period is 6 inches
- actual rain is 4.5 inches for that time
- your index is 75 ( $= 4.5/6 \times 100$ )

- If actual rainfall index falls below guaranteed level, the insurance pays an indemnity

## But why insure precipitation?

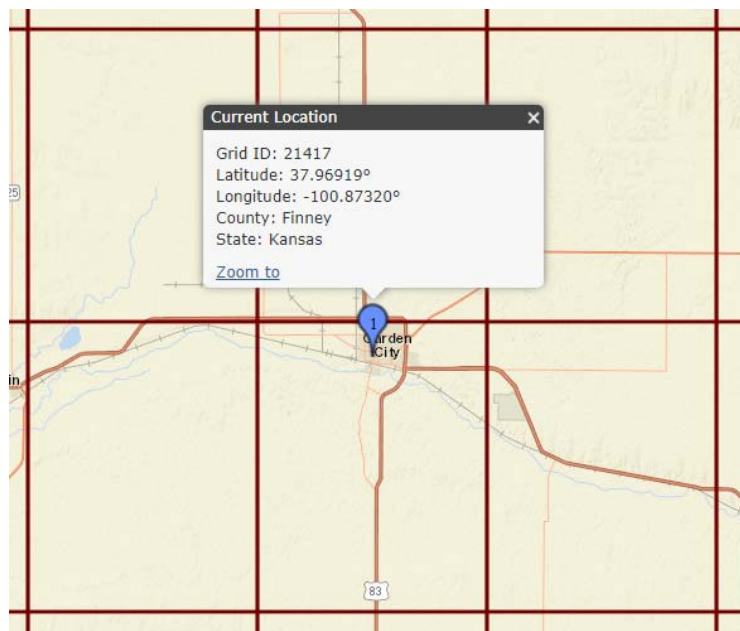
- PROBLEM: how can we insure forage production when we usually don't measure pasture / forage output?
- ANSWER: use another measure as a proxy for forage production
  - "Meaningful" - will closely reflect forage production
  - "Measureable" – feasible to obtain, understandable, even have "official" values

# Whose rainfall?

- Uses NOAA Climate Prediction Center data
  - Minimum of 6,000 stations reporting daily, usually over 15,000 stations report daily across US
- Uses multiple stations to calculate a composite precip value for each grid area
  - 4 closest reporting stations used
  - Don't rely on just 1 station
  - NOAA performs grid calculations

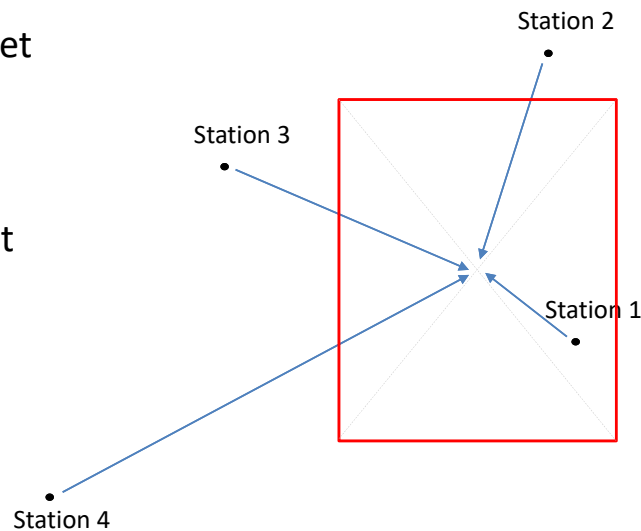
# Area-based coverage: find your grid

- 0.25 degrees longitude x 0.25 degrees latitude
- If your land lies in 2 adjacent grids, you can insure it in one or the other, or split it into both
- Only one composite rainfall value for entire grid



## Precipitation amount weighted by distance from grid center

- Closer stations get bigger weights
- Your location in the grid doesn't matter



## PRF Insurance: time periods

- Policy runs January to December
- Pick time periods you want to insure
  - at least two 2-month intervals (no overlap)
- Allocate \$ coverage across selected intervals
  - maximum allocation of 60%, minimum of 10%

# Online resources

- RMA info on PRF  
[www.rma.usda.gov/policies/pasturerangeforage/](http://www.rma.usda.gov/policies/pasturerangeforage/)
- Grid locator, Decision Support Tool  
<https://prodwebnlb.rma.usda.gov/apps/prf>

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The screenshot shows the USDA Risk Management Agency website. The header includes the USDA logo, the text "Risk Management Agency", and "United States Department of Agriculture". Navigation links include "About RMA", "Field Offices", "Contact Us", and "¡En Español!". A search bar is present on the right. The main content area is titled "Pasture, Rangeland, Forage" and includes a "Popular Topics" sidebar with links to various documents and a "News" section with several articles. A red circle highlights the link "Grid ID Locator, Decision Support Tool, Historical Indices" in the "News" section.

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You are: Home / Crop Policies and Pilots / Pasture, Rangeland, Forage

**Popular Topics**

- ▶ Appendix III/M-13
- ▶ Bulletins and Handbooks
- ▶ Crop Policies and Pilots
- ▶ Federal Crop Insurance Corp
- ▶ Field Offices: ROs | COs
- ▶ Frequently Asked Questions
- ▶ Information Browser
- ▶ Laws and Regulations
- ▶ Livestock Policies
- ▶ Reinsurance Agreements
- ▶ Risk Management Education

**Pasture, Rangeland, Forage**

Pasture, Rangeland, and forages cover approximately 55 percent of all U.S. land. Forage grows differently in different areas, so it's important for farmers and ranchers to know which types and techniques work best for their region. The following insurance program is available for Pasture, Rangeland, and Forage (PRF). Also see [livestock policies](#) or [PRF NAP Table](#).

PRF Archives

**News**

- USDA Expands Forage Crop Insurance Option Nationwide for Livestock Producers (Aug 31, 2015)
- PM-17-049 - Rainfall Index and Vegetation Index Basic Provisions and Rainfall Index Pasture, Rangeland, Forage Crop Provisions Changes Effective for 2018 and Succeeding Crop Years (Aug 25, 2017)
- Pasture, Rangeland, Forage Pilot Insurance Program Fact Sheet
- Summary Overview of Rainfall Index Insurance plan for Pasture, Rangeland, and Forage
- Pasture, Rangeland, Forage FAQs
- Rainfall Index and Vegetation Index Pasture, Rangeland, and Forage General Program Overview
- Rainfall Index Pasture, Rangeland, and Forage Technology
- Rainfall Index and Vegetation Index Pasture, Rangeland, and Forage Shares
- Rainfall Index and Vegetation Index Pasture, Rangeland, and Forage Tools

**Rainfall Index (RI)** - is based on weather data collected and maintained by NOAA's Climate Prediction Center. The index reflects how much precipitation is received relative to the long-term average for a specified area and timeframe.

- County Availability
- Basic Provisions (Aug 2017)
- Policy Provisions (Aug 2017)
- Insurance Standards Handbook (Aug 2017)
- Grid ID Locator, Decision Support Tool, Historical Indices

**Contact Information**

For more information regarding these programs, contact a qualified Crop Insurance Agent.  
For more information regarding the contents of this page, contact RMA.



# Pasture, Rangeland, Forage Support Tool

Grid Locator

Historical Indexes

Decision Support Tool

Estimated Indemnities

Clear All Zoom to Grid

Garden City, KS

**Current Pin Information**

**Grid ID:** 21417  
 Latitude: 37.96943  
 Longitude: -100.87320  
 County: Finney  
 State: Kansas  
 Address: 550 N Main St.  
 Garden City,  
 Kansas 67846

1 Grid: 21417

Grid Locator Historical Indexes **Decision Support Tool** Estimated Indemnities

**Location Information**

State: Kansas County: Finney Grid ID: 21417 Search By Grid ID: Enter Grid ID Search

**Protection Information**

Intended Use: Grazing  
 Irrigation Practice: Please Select  
 Organic Practice: Please Select  
 Coverage Level: 90%  
 Productivity Factor: 150%  
 Insurable Interest: 100%  
 Insured Acres: 160  
 Sample Year: 2012

**Policy Information**

County Base Value: \$36.30  
 Dollar Amount of Protection: \$49.01  
 Total Insured Acres: 160  
 Total Policy Protection: \$7,841  
 Subsidy Level: 51.0%  
 Maximum Percent of Value per Index Interval: 60.0%

**Protection Table**

Index Interval	Percent of Value (%)	Policy Protection Per Unit	Premium Rate Per \$100	Total Premium	Premium Subsidy	Producer Premium	Actual Index Value	Estimated Indemnity
Jan-Feb	N/A	\$0	32.52	\$0	\$0	\$0	50.0	\$0
Feb-Mar	N/A	\$0	30.92	\$0	\$0	\$0	130.6	\$0
Mar-Apr	N/A	\$0	24.88	\$0	\$0	\$0	148.1	\$0
Apr-May	N/A	\$0	18.29	\$0	\$0	\$0	57.6	\$0
May-Jun	60	\$4,704	19.35	\$910	\$464	\$446	29.0	\$3,189
Jun-Jul	N/A	\$0	16.49	\$0	\$0	\$0	65.5	\$0
Jul-Aug	40	\$3,136	16.20	\$508	\$259	\$249	62.6	\$955
Aug-Sep	N/A	\$0	17.04	\$0	\$0	\$0	56.4	\$0
Sep-Oct	N/A	\$0	23.80	\$0	\$0	\$0	92.2	\$0
Oct-Nov	N/A	\$0	30.21	\$0	\$0	\$0	63.8	\$0
Nov-Dec	N/A	\$0	33.82	\$0	\$0	\$0	66.1	\$0
Per Acre	N/A	N/A	N/A	\$8.87	\$4.52	\$4.34	N/A	\$25.90
<b>Total</b>	<b>160</b>	<b>\$7,841</b>	<b>N/A</b>	<b>\$1,418</b>	<b>\$723</b>	<b>\$695</b>	<b>N/A</b>	<b>\$4,143</b>

Calculate

This tool is using insurance data from 2015. This tool is for illustration purposes only. Your actual information may differ.





**Protection Information** ?

Intended Use	Grazing
Irrigation Practice	Please Select
Organic Practice	Please Select
Coverage Level	90%
Productivity Factor	150%
Insurable Interest	100%
Insured Acres	1000
Sample Year	2012

**Intended Use:**

- *haying or grazing*

**Coverage Level:**

- *70% to 90%*

**Productivity Factor:**

- *60% to 150%*

**Insurable interest:**

- *100% = full ownership*



**Policy Information** ?

County Base Value	\$36.30
Dollar Amount of Protection	\$49.01
Total Insured Acres	1,000
Total Policy Protection	\$49,005
Subsidy Level	51.0%
Maximum Percent of Value per Index Interval	60.0%

**County Base Value**

= *base \$ value of production per acre; set by RMA*

**Dollar Amount of Protection**

= *County Base Value*  
 x *Productivity Factor %*  
 x *Guarantee Level %*

**Total Policy Protection**

= *Dollar Amount of Protection*  
 x *Total Insured Acres*



Protection Table	
Index Interval	Percent of Value (%)
Jan-Feb	N/A
Feb-Mar	N/A
Mar-Apr	N/A
Apr-May	N/A
May-Jun	60
Jun-Jul	N/A
Jul-Aug	40
Aug-Sep	N/A
Sep-Oct	N/A
Oct-Nov	N/A
Nov-Dec	N/A

### INDEX INTERVALS

- *Time periods* for which you insure rainfall
- Must choose at least two intervals
- Must allocate % of dollar coverage to each (max 60%, min 10%)

**Which periods? What allocation?**



Protection Table						
Index Interval	Percent of Value (%)	Policy Protection Per Unit	Premium Rate Per \$100	Total Premium	Premium Subsidy	Producer Premium
Jan-Feb	N/A	\$0	32.52	\$0	\$0	\$0
Feb-Mar	N/A	\$0	30.92	\$0	\$0	\$0
Mar-Apr	N/A	\$0	24.88	\$0	\$0	\$0
Apr-May	N/A	\$0	18.29	\$0	\$0	\$0
May-Jun	60	\$29,403	19.35	\$5,689	\$2,902	\$2,787
Jun-Jul	N/A	\$0	16.49	\$0	\$0	\$0
Jul-Aug	40	\$19,602	16.20	\$3,176	\$1,620	\$1,556
Aug-Sep	N/A	\$0	17.04	\$0	\$0	\$0
Sep-Oct	N/A	\$0	23.80	\$0	\$0	\$0
Oct-Nov	N/A	\$0	30.21	\$0	\$0	\$0
Nov-Dec	N/A	\$0	33.82	\$0	\$0	\$0
<b>Per Acre</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>\$8.87</b>	<b>\$4.52</b>	<b>\$4.34</b>
<b>Total</b>	<b>1,000</b>	<b>\$49,005</b>	<b>N/A</b>	<b>\$8,865</b>	<b>\$4,521</b>	<b>\$4,343</b>

Protection Table			Export to CSV	
Index Interval	Percent of Value (%)	Policy Protection Per Unit	Actual Index Value	Estimated Indemnity
Jan-Feb	N/A	\$0	50.0	\$0
Feb-Mar	N/A	\$0	130.6	\$0
Mar-Apr	N/A	\$0	148.1	\$0
Apr-May	N/A	\$0	57.6	\$0
May-Jun	60	\$29,403	29.0	\$19,929
Jun-Jul	N/A	\$0	65.5	\$0
Jul-Aug	40	\$19,602	62.6	\$5,968
Aug-Sep	N/A	\$0	56.4	\$0
Sep-Oct	N/A	\$0	92.2	\$0
Oct-Nov	N/A	\$0	63.8	\$0
Nov-Dec	N/A	\$0	66.1	\$0
Per Acre	N/A	N/A	N/A	\$25.90
Total	1,000	\$49,005	N/A	\$25,896

## RESULTS FOR 2012

Coverage level = 90%

May-Jun:

Actual Index = 29.0

Payment Factor =

$$\frac{(90 - 29.0)}{90} = .6778$$

Indemnity =

Payment Factor  
x \$ Policy Protection

$$= .6778 \times \$29,403$$

$$= \$19,929$$

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## Insuring Haying Lands

- Perennial hay crops can be insured
  - Alfalfa
  - Grass hay meadows
  - Much higher \$ value per acre
- Irrigated or non-irrigated
  - Non-irrigated dollar coverage based on value of forage, like pasture
  - Irrigated dollar coverage based on additional cost of pumping needed to obtain ordinary production

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# Would PRF be a good risk management tool for me?

- How accurately do the PRF indices reflect actual drought in my location?
- Which index intervals and coverage allocations should I use? Which guarantee levels? Dollar amount per acre?
- Would PRF provide adequate funds to purchase replacement feed during bad years?



## Historical Index Values: do they reflect your drought experience?

Index Values - Percent of Normal [?](#) [Export to CSV](#)

Year	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec
2016	35.3	17.6	174.9	136.8	97.0	189.5	168.4	64.9	14.0	3.1	36.5
2015	112.0	52.1	29.4	184.2	161.2	128.2	156.9	80.6	137.7	232.9	173.5
2014	29.0	20.5	30.3	27.0	153.7	201.4	107.7	109.4	135.4	88.7	39.9
2013	58.5	21.9	18.2	32.8	54.5	63.3	138.1	208.6	126.0	96.1	78.4
2012	50.0	130.6	148.1	57.6	29.0	65.5	62.6	56.4	92.2	63.8	66.1
2011	54.6	52.4	75.7	52.9	37.0	37.4	57.7	71.0	49.5	72.4	171.0
2010	142.5	157.0	134.4	110.1	70.0	55.5	80.5	64.8	29.0	28.5	21.7
2009	14.0	102.2	217.1	131.2	100.0	129.6	99.5	86.2	161.9	187.6	46.8
2008	71.9	38.3	51.8	81.4	89.0	74.3	89.5	99.6	212.5	290.4	33.1
2007	178.0	128.2	167.8	99.2	60.3	62.0	68.4	120.4	114.2	26.8	92.8
2006	31.0	68.1	69.3	53.9	64.5	89.4	116.1	103.9	127.6	134.7	495.3
2005	176.2	80.5	58.2	88.8	86.1	82.3	87.8	86.1	141.6	142.7	10.4
2004	52.8	132.2	151.5	68.1	128.1	203.8	179.3	191.6	157.4	138.7	147.5
2003	51.2	107.5	92.7	98.2	126.8	96.1	83.0	102.1	35.2	3.9	27.5
2002	51.8	23.9	58.2	55.7	42.2	62.3	84.8	100.9	129.0	106.0	37.9
2001	162.6	107.0	97.1	199.5	156.2	87.6	85.5	58.5	38.2	9.9	23.5

# Index intervals? Allocation?

- When does the pasture need the rain?
  - Pasture composition: warm season vs. cool season
- Selecting more periods: reduces chances of collecting no indemnity
- Premium cost
  - Rainfall is least variable (in % terms) in warmer months → lower premiums

## Premium costs

- Rates vary by month and guarantee level
  - Figures shown are pre-subsidy rates

Premium rates for grid 21413

	90%	85%	80%	75%	70%
Jan-Feb	32.52	30.73	28.76	26.55	24.21
Feb-Mar	30.92	29.07	27.20	25.38	23.44
Mar-Apr	24.88	23.17	21.41	19.63	18.23
Apr-May	18.29	16.68	14.82	12.73	10.66
May-Jun	19.35	17.59	15.81	14.04	12.31
Jun-Jul	16.49	14.54	12.71	10.67	8.72
Jul-Aug	16.20	14.55	13.00	11.55	9.73
Aug-Sep	17.04	15.41	13.86	12.36	10.61
Sep-Oct	23.80	22.23	20.62	18.99	17.42
Oct-Nov	30.21	28.54	26.77	24.95	23.15
Nov-Dec	33.82	32.21	30.43	28.62	28.86



# Guarantee levels?

- Probability of loss varies by month and guarantee level
- Probability of payment: Grid 21417

Index											
Value	Jan-Feb	Feb-Mar	Mar-Apr	Apr-May	May-Jun	Jun-Jul	Jul-Aug	Aug-Sep	Sep-Oct	Oct-Nov	Nov-Dec
< 90	0.565	0.580	0.464	0.449	0.449	0.464	0.464	0.435	0.449	0.551	0.536
< 85	0.551	0.536	0.464	0.420	0.420	0.435	0.391	0.377	0.435	0.507	0.536
< 80	0.551	0.493	0.435	0.391	0.391	0.406	0.304	0.319	0.406	0.493	0.536
< 75	0.551	0.464	0.406	0.333	0.362	0.348	0.275	0.290	0.391	0.464	0.478
< 70	0.493	0.449	0.391	0.319	0.319	0.304	0.246	0.246	0.348	0.420	0.464

Source: Historical Indices, PRF Decision Support Tool  
 Years 1948-2016, checked September 2017



# \$\$\$ for feed

- Risk reduction: less need for culling herd in bad years
- Hay price, transportation cost are both factors
- How much extra feed might I need?
  - Feed price
  - Number of head, daily consumption
  - Days of feed provided by insurance indemnity





# How much feed could I buy?

Insurance indemnity	\$25,896			
No. of acres	1,000			
Stocking rate: acres/head	11			
No. of head	91			
Daily lbs consumed / head	30			
Hay price per ton	\$75	\$100	\$125	\$150
Tons of hay purchased	345.3	259.0	207.2	172.6
Days of feed provided	253	190	152	127

# Long-term perspective on PRF

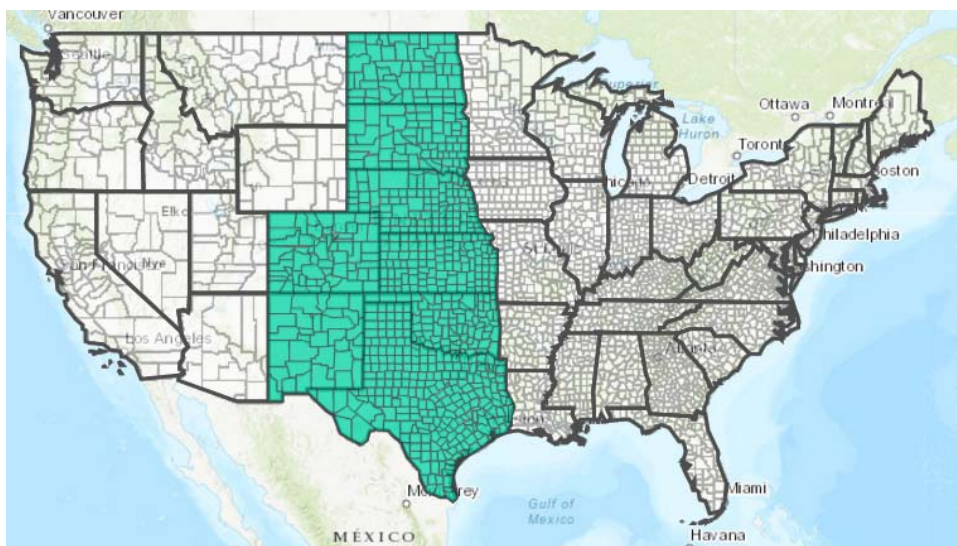
- Most KS locations will have good protection in widespread drought, may have hit-or-miss experience in spotty years
- Will come out ahead in long run due to premium subsidy
  - Most grids: about \$1.50 - \$2.00 back for every \$1.00 paid in

## Use the Decision Support Tool to evaluate your options

- Compare your experience with the historical indices
- Consider \$\$ needed for replacement feed
- Compare coverage options
- November 15 is sales deadline

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## Annual Forage Rainfall Index coverage available here in 2018



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## Annual Forage coverage

- Crop's intended use is feed or fodder, including:
  - Grazing, haying, silage, green chop
  - Any other method that results in livestock feed
  - Required to cover all insurable acres (unlike PRF)
  - Don't need yield history
- Similar product to PRF
  - Uses same grid areas, index values, premium rates, guarantee levels, etc.



## Annual Forage: coverage features

- Coverage levels
  - Rainfall guarantees: 70% to 90% of normal
  - County Base Values: higher \$\$\$ amounts (>\$200/a)
- Also has a low level “catastrophic” level
  - Called CAT coverage (vs. buy-up)
  - Trigger is 65% of normal rainfall over entire growing season
  - \$\$\$ coverage = CBV x 65% covg level x 45% prod factor
  - Fee is \$300 per county
  - No CAT coverage for grazing

# Growing seasons and dates

Sales Closing Date is July 15 each year

Index intervals and allocations must be selected at this time

Growing Season	Planting Dates	Rainfall months	Acreage reporting date
1	Jul 16 – Oct 15	September to March	Oct 15
2	Oct 16 – Jan 15	December to June	Jan 15
3	Jan 16 – Apr 15	March to September	Apr 15
4	Apr 16 – Jul 15	June to November	Jul 15

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## Annual Forage: coverage decisions

- 6 or 7 months in growing season
- 5 or 6 index intervals in each growing season
- Maximum allocation of 40% to any interval (in Kansas)
  - Must select at least 3 intervals (e.g., 40-40-20)
  - All or nearly all growing season months will be covered

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# Online resources

- RMA info on Annual Forage  
[www.rma.usda.gov/policies/ri-vi/annualforage.html](http://www.rma.usda.gov/policies/ri-vi/annualforage.html)
- Grid locator, Decision Support Tool  
<http://maps.agforceusa/af/ri/>

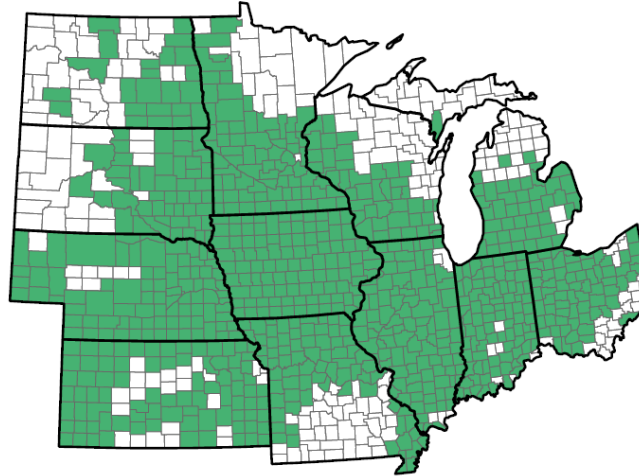
## Margin Protection Plan: BACKGROUND

- Authorized by the 2014 Farm Bill
- RMA pilot program: stage of testing and refinement
- Sold by private insurance companies, subsidized premium
- Area-based: uses county yields
- Offered for first time in 2016
  - CORN and SOYBEANS: only available in Iowa
  - WHEAT (spring wheat areas of Northern Plains; not in KS)
  - RICE
- Major expansion for 2018 crop year
  - Available for corn and soybeans in KS for most counties



# Corn Expansion in 2018

Corn Expansion Area

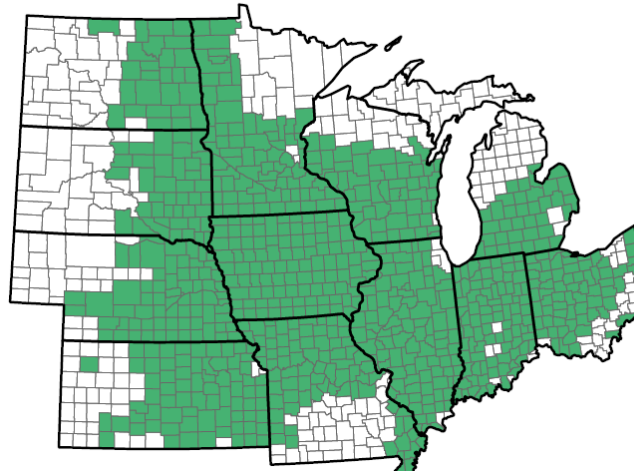


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# Soybeans Expansion in 2018

Soybeans Expansion Area



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# What is Margin Protection?

- MP is an insurance plan that provides coverage against an **unexpected decrease in operating margin**

$$\text{Margin} = \text{revenue} - \text{input costs}$$

- Loss could be triggered by:
  - decline in crop price
  - decline in yield
  - increase in costs
  - some combination of these



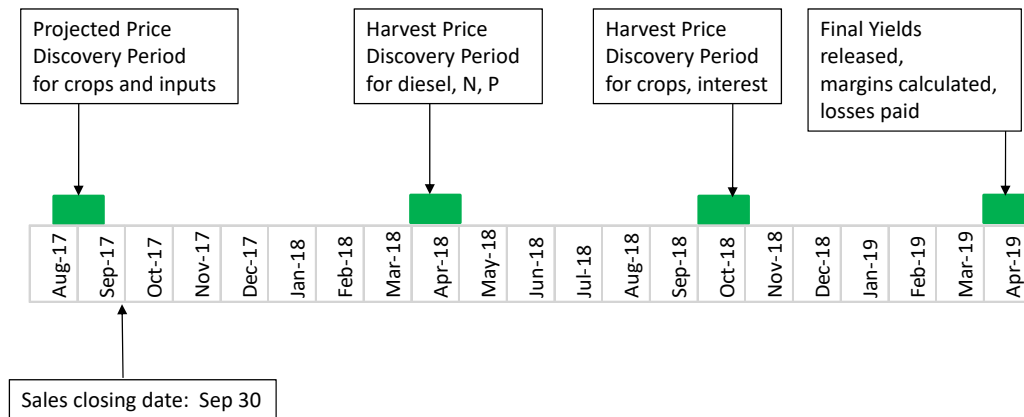
# Some MP coverage features

- Guarantee levels: 70% to 95%
  - Very low deductible is available
- Protection Factors: 0.80 to 1.20
  - Similar to area coverage plans (Area Yield Protection or Area Revenue Protection)
- Harvest Price Option available
  - If October (Harvest) price is higher than Projected Price, use Harvest Price in calculating Expected Margin

# What input costs are covered?

- Diesel
- Urea (N)
- Diammonium phosphate, or DAP (P)
- Potash (K)
- Interest
- Other costs: includes seed, lubrication, herbicides, machinery

# Margin Protection timeline



# MP is area-based

- MP does not use your own yield and input information
- For yield, MP uses the county yield
  - Effective coverage: how well does your yield track with the county average yield?
- Input amounts for diesel, N-P-K are a function of the county yield
  - Plug your Expected County Yield into formulas to get input quantities
  - All growers in a county are assumed to have the same input costs

# Example cost calculations: CORN

## Non-irrigated corn

Expected County Yield = 140 bu/a

INPUT	QUANTITY	PRICE	COST
Diesel	8.1 gal	\$1.507 /gal	\$12.20/a
Urea	252.6 lbs	\$175.00 /ton	\$22.10/a
DAP	106.5 lbs	\$315.00 /ton	\$16.78/a
Potash	58.3 lbs	\$327.25 /ton	\$9.54/a
Other costs	-----	-----	<u>\$206.90/a</u>
Sub-total			\$267.53/a
Interest		7.49%	<u>\$10.02/a</u>
TOTAL			\$277.55/a

# Example cost calculations: SOYBEANS

## Non-irrigated soybeans

Expected County Yield = 40 bu/a

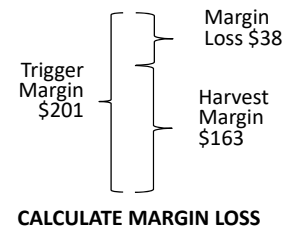
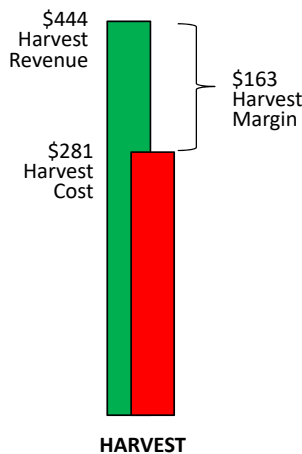
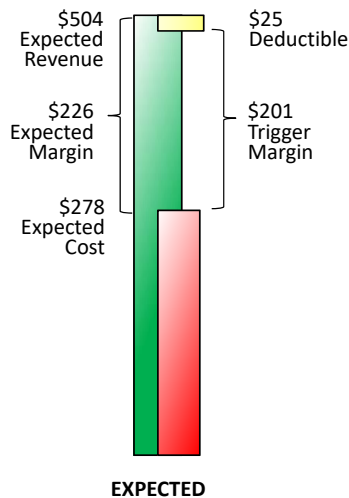
INPUT	QUANTITY	PRICE	COST
Diesel	6.5 gal	\$1.507 /gal	\$9.79/a
Urea	-----	-----	-----
DAP	63.5 lbs	\$315.00 /ton	\$10.00/a
Potash	73.3 lbs	\$327.25 /ton	\$12.00/a
Other costs	-----	-----	<u>\$111.50/a</u>
Sub-total			\$143.29/a
Interest		7.49%	<u>\$5.37/a</u>
TOTAL			\$148.66/a

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## MP, graphically (no HPO)

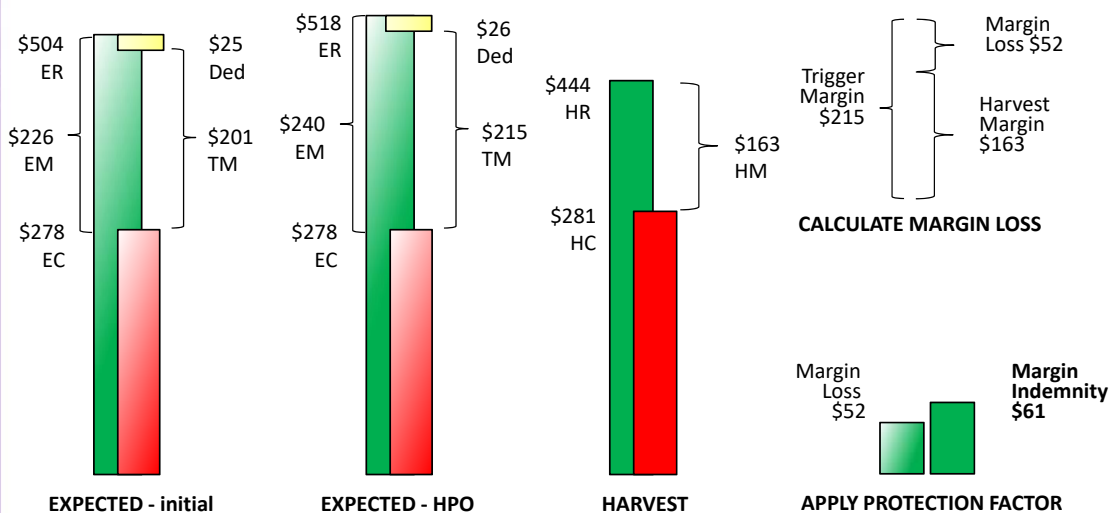
Expected Yield = 140 bu/a  
 Projected Price = \$3.60/bu  
 Expected Cost = \$278/a

Final Yield = 120 bu/a  
 Harvest Price = \$3.70/bu  
 Harvest Cost = \$281/a



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# MP, with Harvest Price Option



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## Finney County: irrigated corn, MP + RP

	95%	90%	85%	80%	75%	70%
<b>MP premiums, \$/a</b>	\$35.84	\$27.10	\$18.13	\$11.29	\$7.86	\$5.06
<b>RP* premiums, \$/a</b>	\$34.53	\$23.19	\$15.83	\$10.90	\$7.99	
<b>Premium credits, \$/a</b>	\$6.56	\$3.57	\$1.69	\$0.69	\$0.25	
85%	\$6.20	\$3.51	\$1.69	\$0.69	\$0.25	
80%	\$5.07	\$3.02	\$1.52	\$0.63	\$0.22	
75%	\$3.82	\$2.40	\$1.27	\$0.55	\$0.20	
70%	\$3.17	\$2.06	\$1.15	\$0.52	\$0.19	
65%	\$2.38	\$1.58	\$0.91	\$0.44	\$0.17	

Assumes farm yield of 182 bu/a, Expected County Yield = 170.7 bu/a, 2018 corn price of \$3.95\*;  
 RP premiums estimated using RMA Cost Estimator\*, other values downloaded from  
*MarginProtection.com* on September 26, 2017

$$75\% \text{ RP} + 85\% \text{ MP} = \$15.83 + \$18.13 - \$1.52 = \$32.44$$

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## How does MP stack up vs. other plans?

- Very low deductible available
- More frequent payouts
- Protects against rising input costs
  
- More expensive
- Based on county yield
- Longer coverage period
- Price changes for only a few inputs covered

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## For more information...

- Risk Management Agency, USDA:  
Margin Protection page  
[www.rma.usda.gov/policies/mp/](http://www.rma.usda.gov/policies/mp/)
  
- MarginProtection.com: price discovery,  
estimates for premiums, credits  
[www.marginprotection.com](http://www.marginprotection.com)

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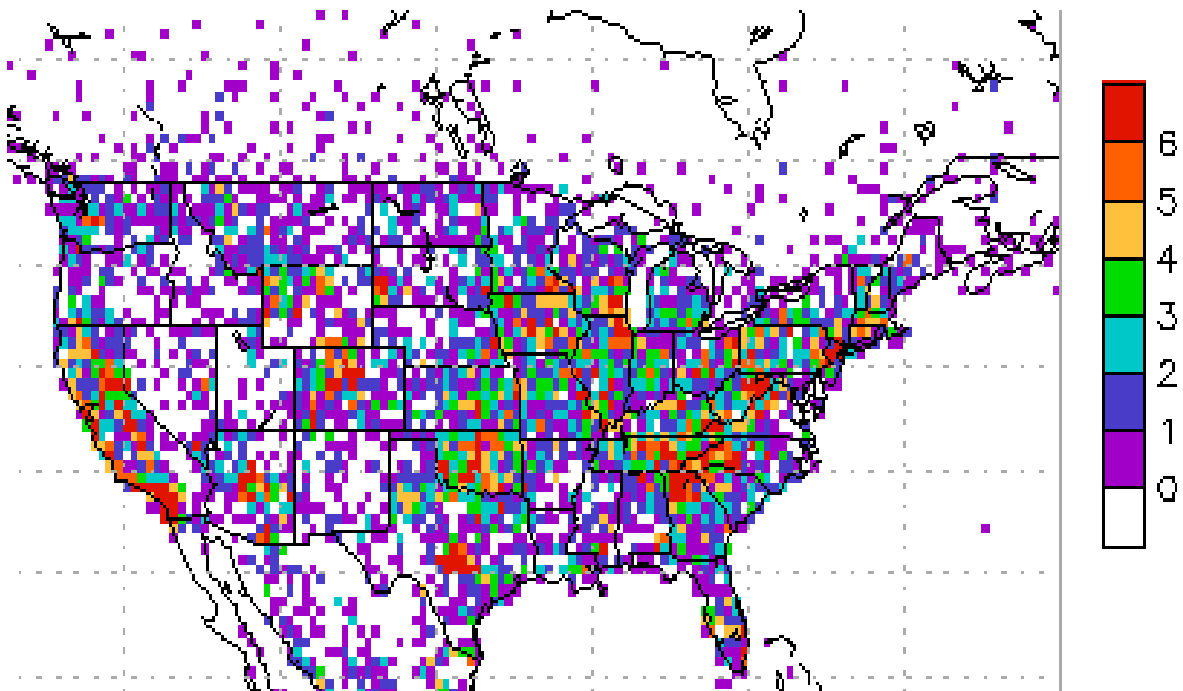
**Questions?  
Comments?  
Thank you!**



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Number of Gauges Inside Each 0.5x0.5 Grid Box on 27SEP2016

**Location of reporting NOAA CPC weather stations**  
[http://www.cpc.ncep.noaa.gov/products/Precip\\_Monitoring/figures/NAMS/NAMS\\_curr.p.gnum.gif](http://www.cpc.ncep.noaa.gov/products/Precip_Monitoring/figures/NAMS/NAMS_curr.p.gnum.gif)



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