Managing disaster through crop insurance in 2023

Raven Spratt- Insurance Consultant
Diamond S Insurance Agency

https://kitchener.ctvnews.ca/field-fire-south-of-kitchener-destroys-38-acres-of-wheat-crops-1.2993396

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Disclaimer

https://texasfarmbureau.org/usda-designates-texas-counties-natural-disaster-areas/

Let's talk about it

- Current conditions
- Policy types & how they work
- Endorsements to know about
- What is new & exciting
- Things to consider

https://media.npr.org/assets/img/2012/07/18/drought18-8b9a6db718dda8f9f968da97316f9c0a2daa3655.jpg

DIAMOND INSURANCE

CHALLENGES

I Expected Times Like This- but Never
Thought They'd Be So Bad, So Long, and So Frequent.

Current Conditions

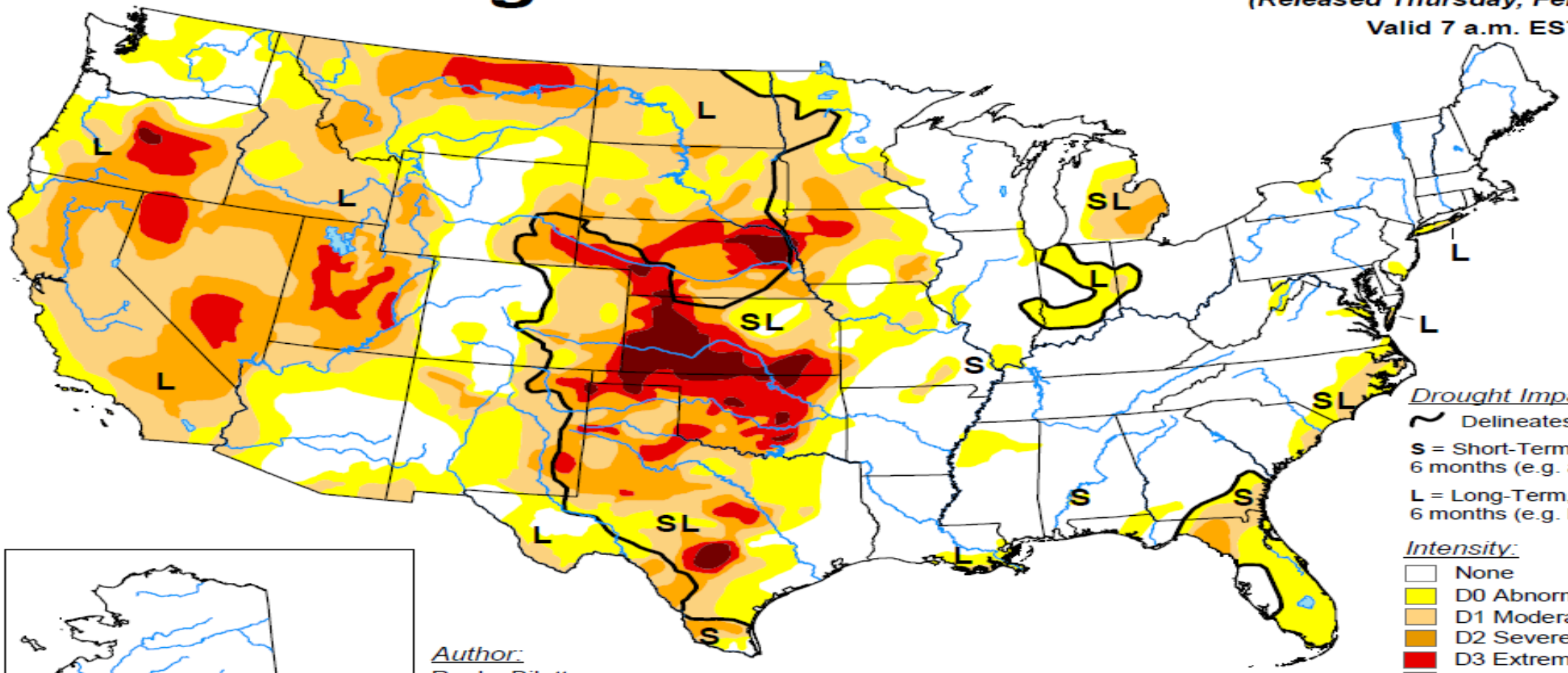
https://farm8.staticflickr.com/7443/11019095526_43fe0d164a_b.jpg

U.S. Drought Monitor

January 31, 2023

(Released Thursday, Feb. 2, 2023)

Valid 7 a.m. EST



Drought Impact Types:

~ Delineates dominant impacts

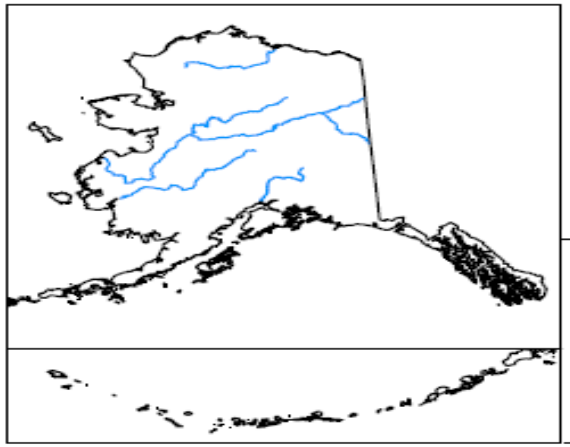
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

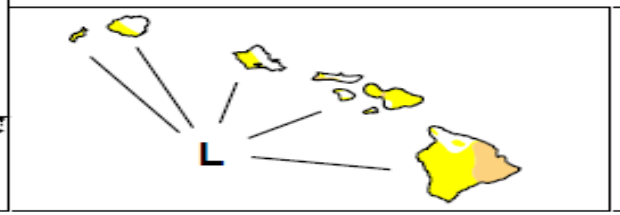
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

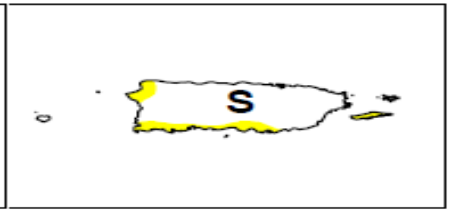
Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

Author:
Rocky Bilotta
NCEI/NOAA



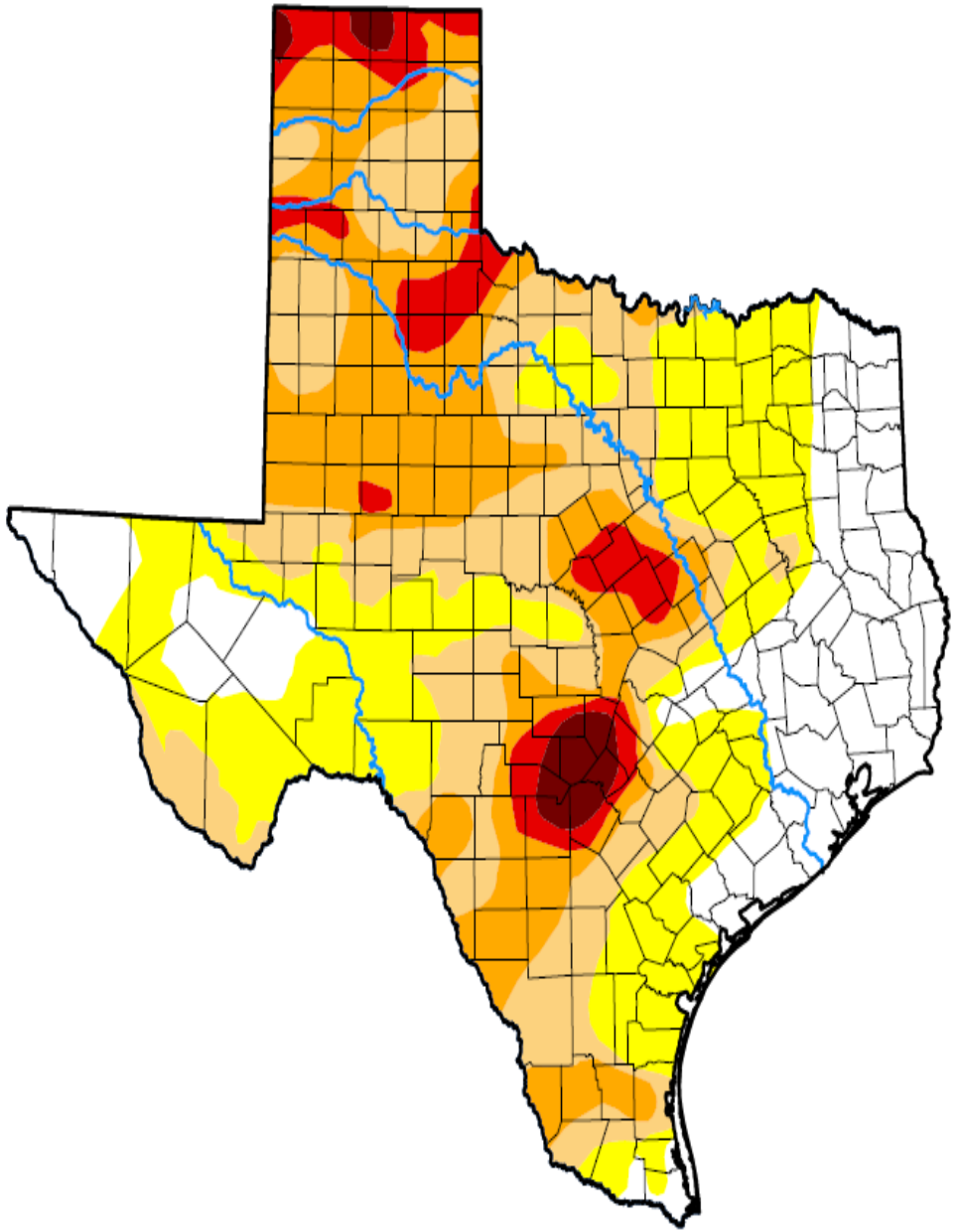




The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

USDA NDMC NOAA

droughtmonitor.unl.edu



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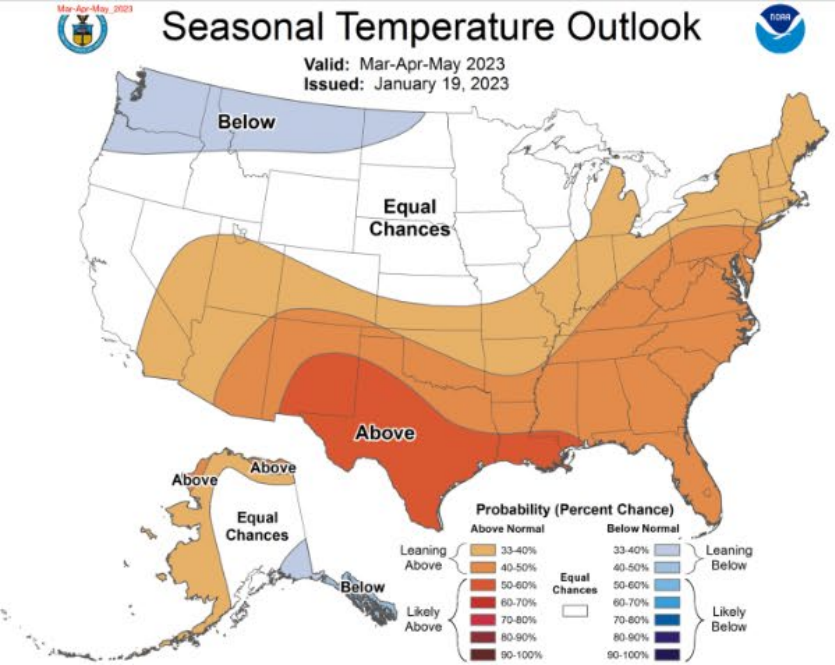
droughtmonitor.unl.edu

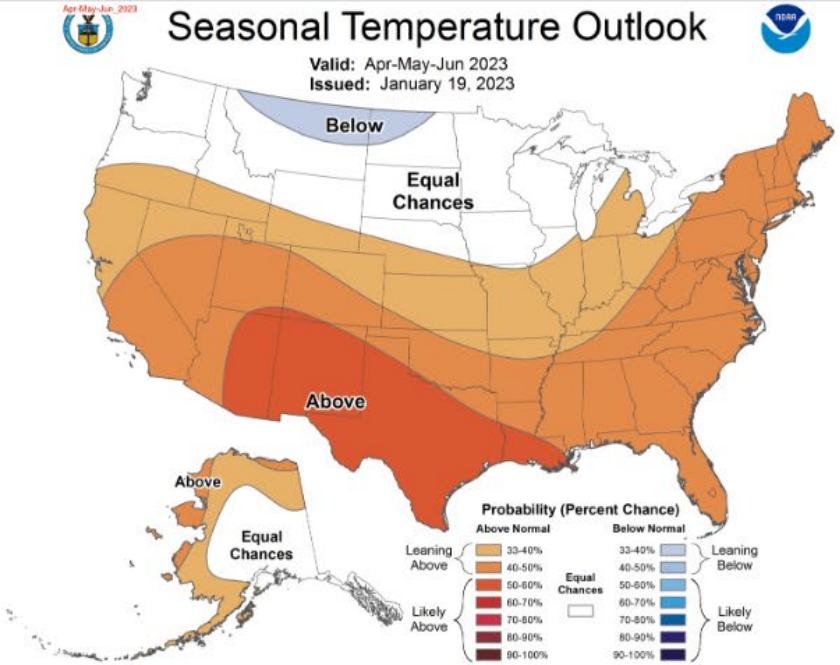
Estimated Population in Drought Areas: **7,077,364**

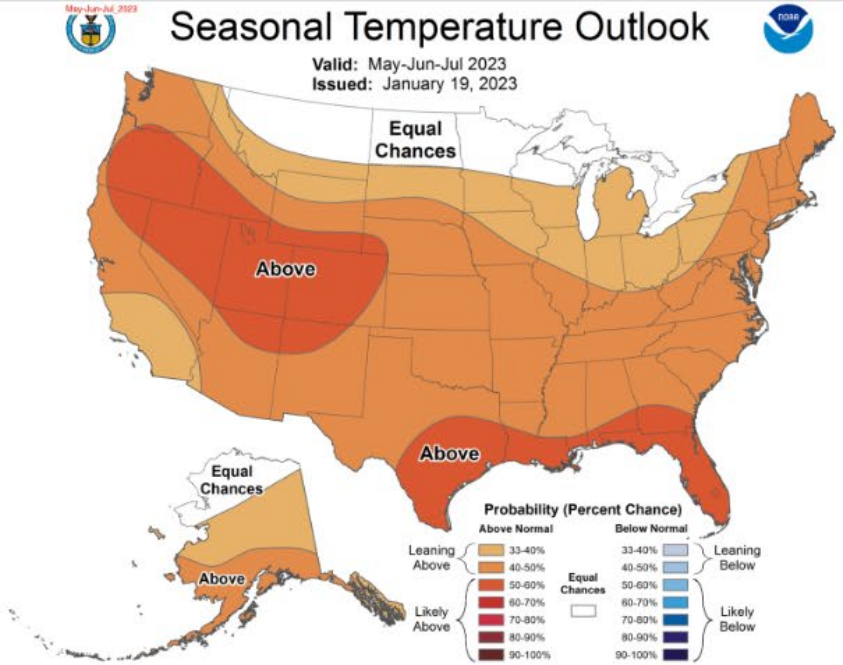
Cumulative Percent Area

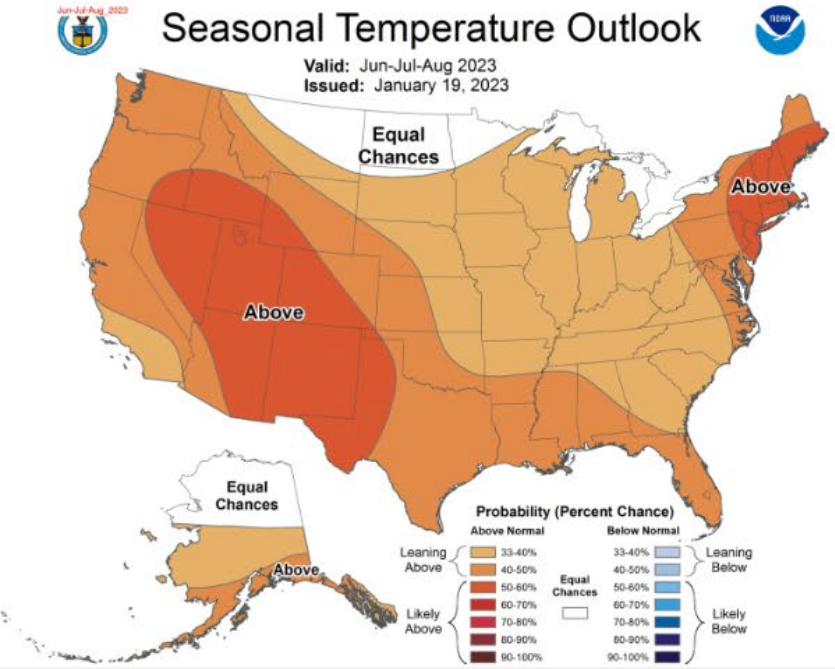
Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2023-01-31	19.54	80.46	53.35	28.62	7.89	1.80
Last Week	2023-01-24	21.06	78.94	54.68	29.79	7.70	1.80
3 Months Ago	2022-11-01	8.10	91.90	69.56	40.13	13.43	1.73
Start of Calendar Year	2022-12-27	27.57	72.43	48.59	25.88	7.13	1.24
Start of Water Year	2022-09-27	14.96	85.04	61.36	31.61	8.82	1.06
One Year Ago	2022-02-01	7.04	92.96	83.79	69.20	31.56	0.00

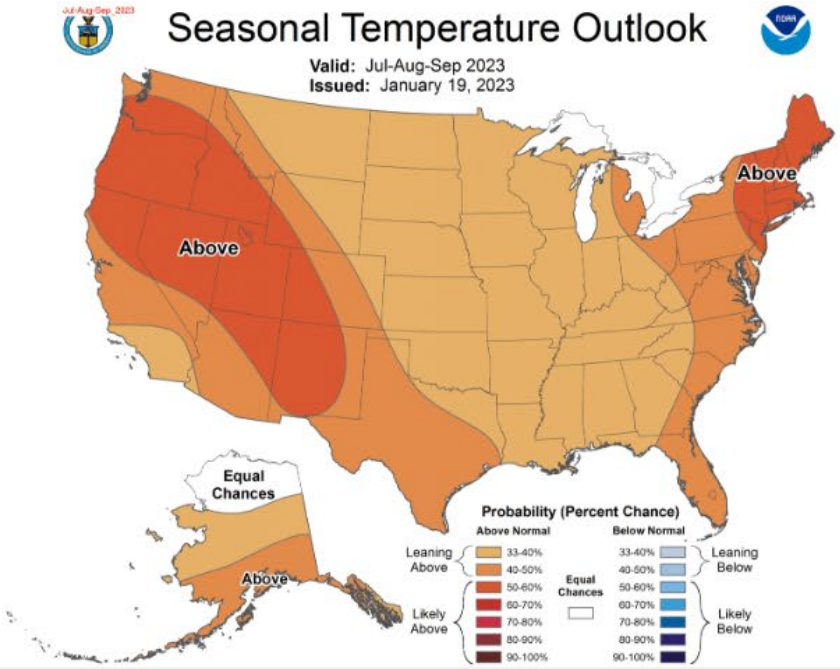
https://i.pinimg.com/736x/bd/46/3f/bd463fef75b462bcb1ad55ac920c53f3--turn-light-farming.jpg

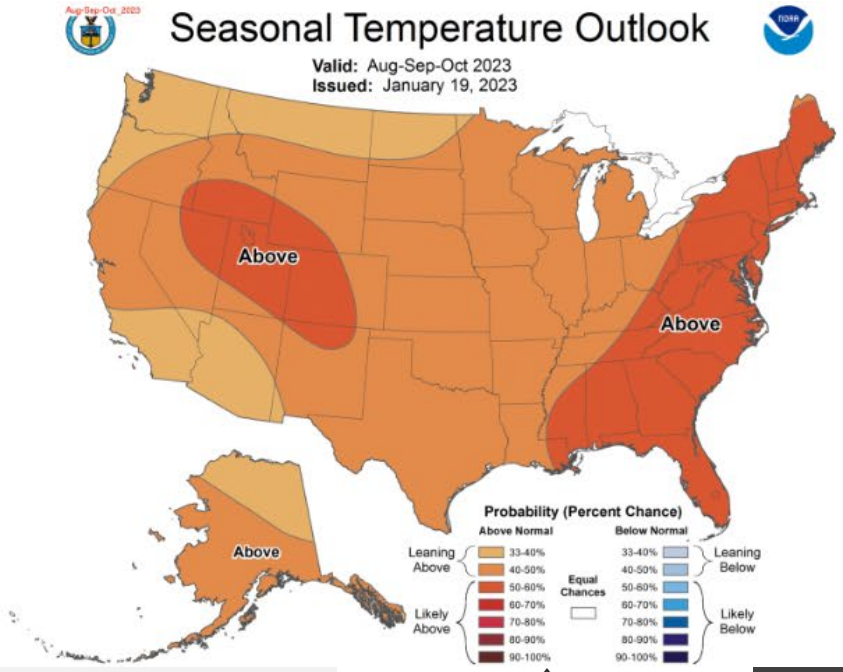








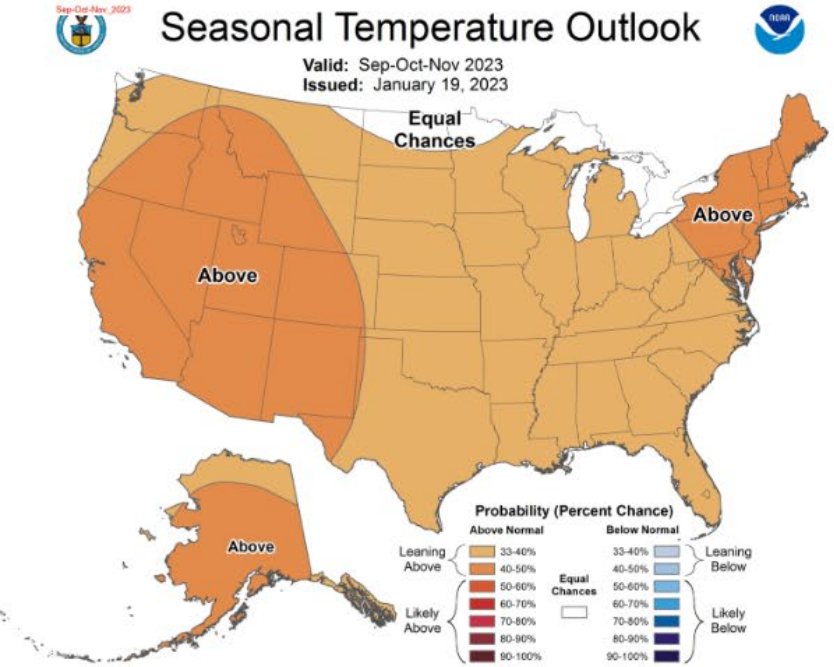


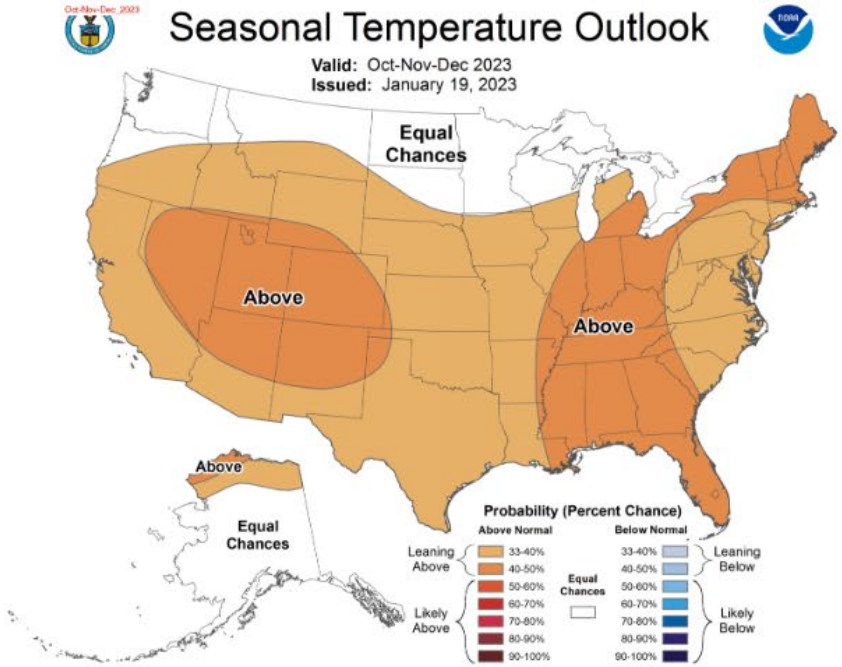


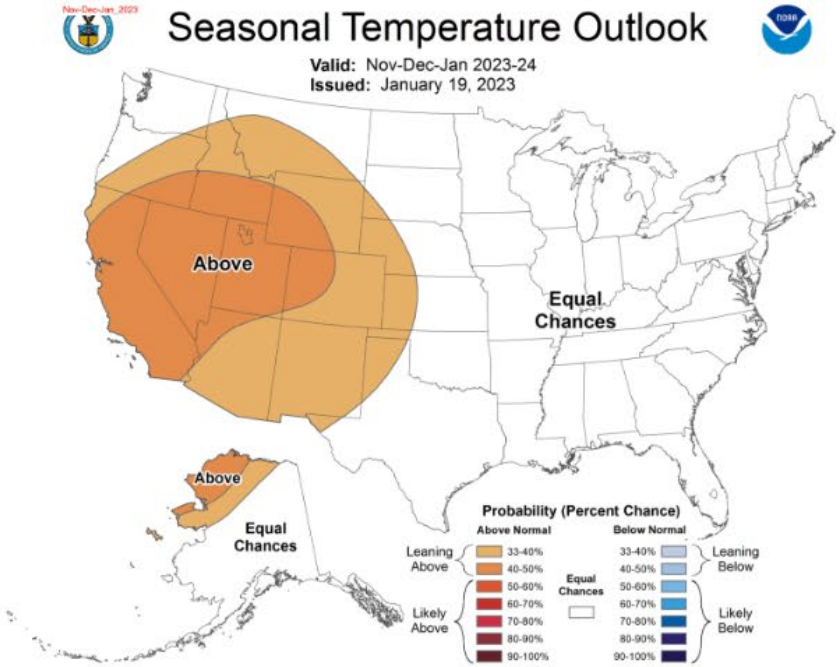
https://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/t.gif

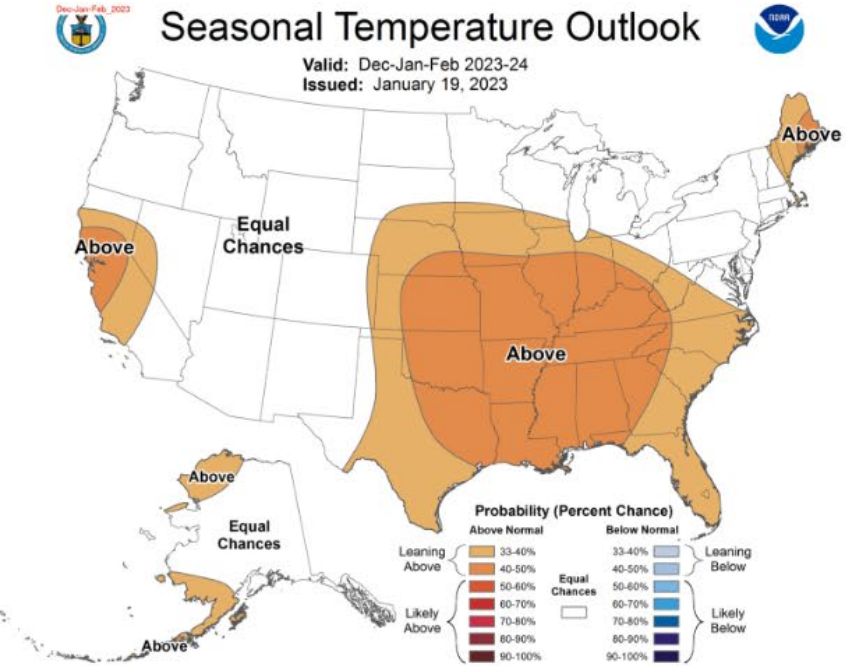
Probability (Percent Chance)

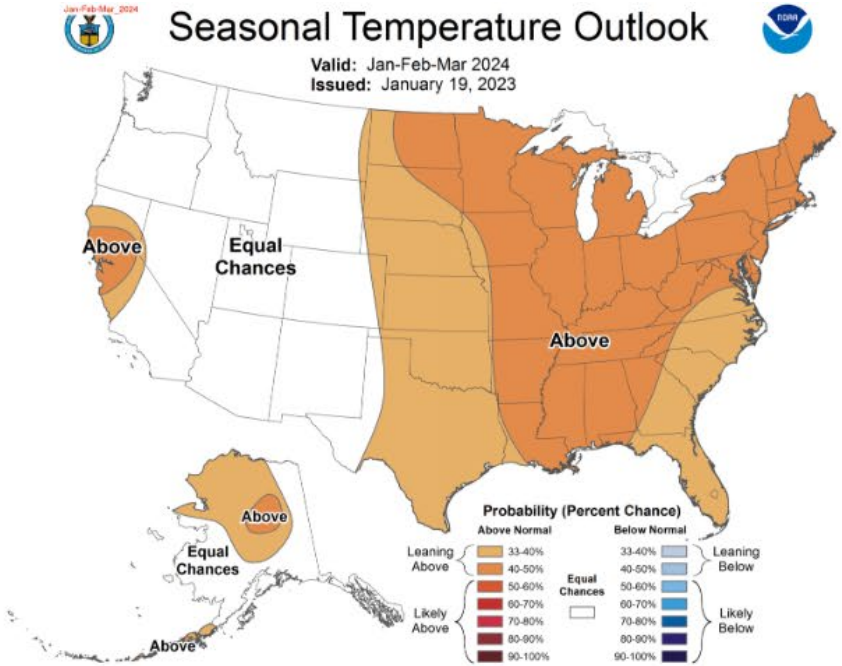
https://www.cpc.ncep.noaa.gov/products/predictions/multi_season/13_seasonal_outlooks/color/t.gif

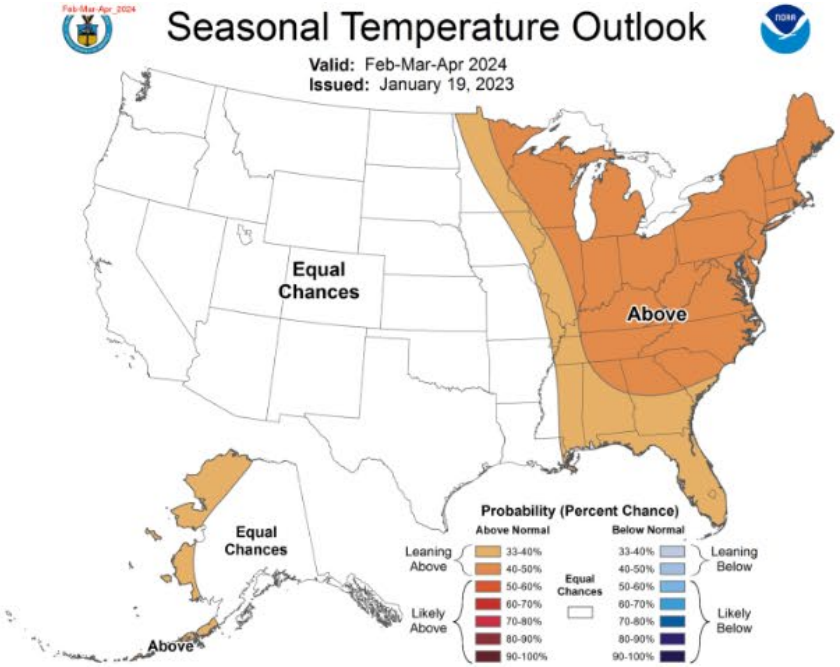












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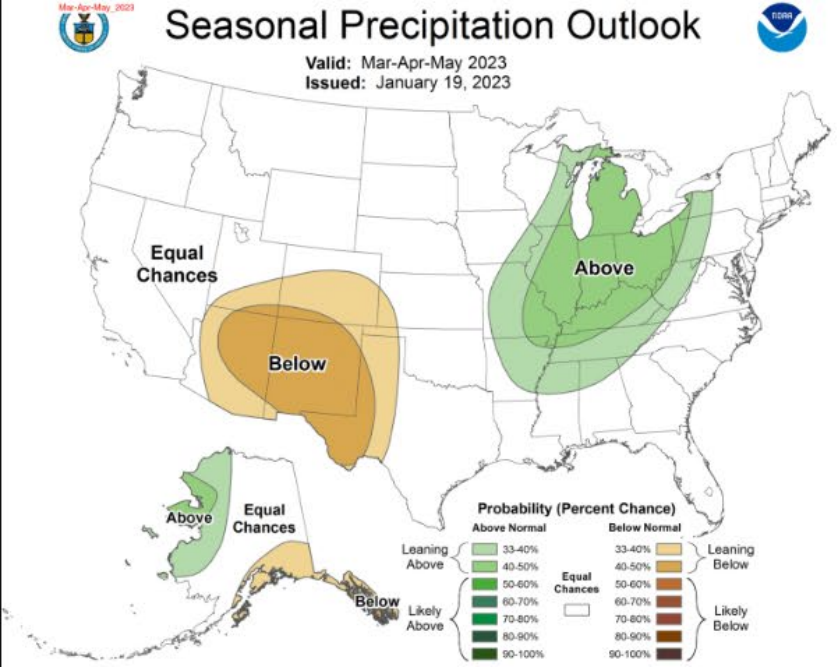

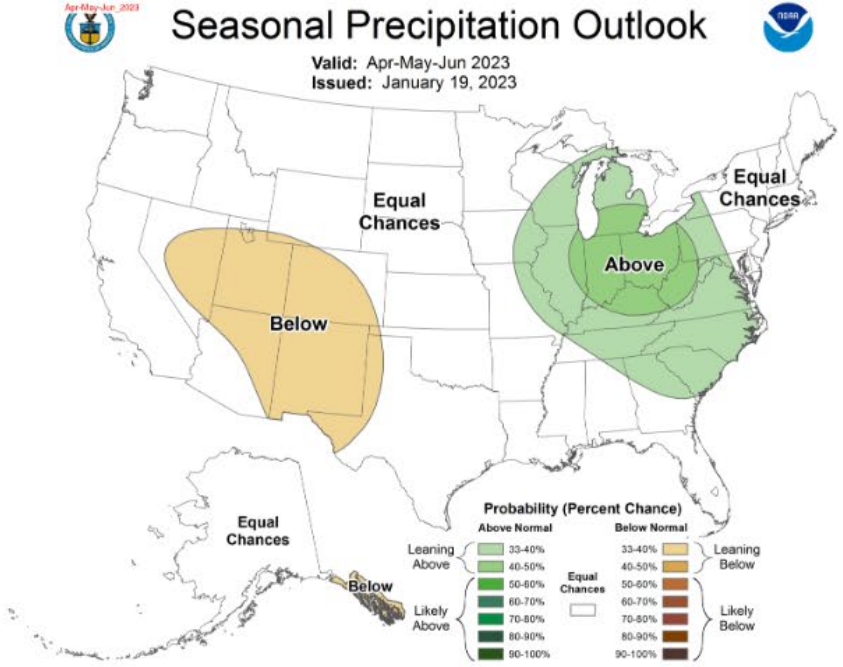

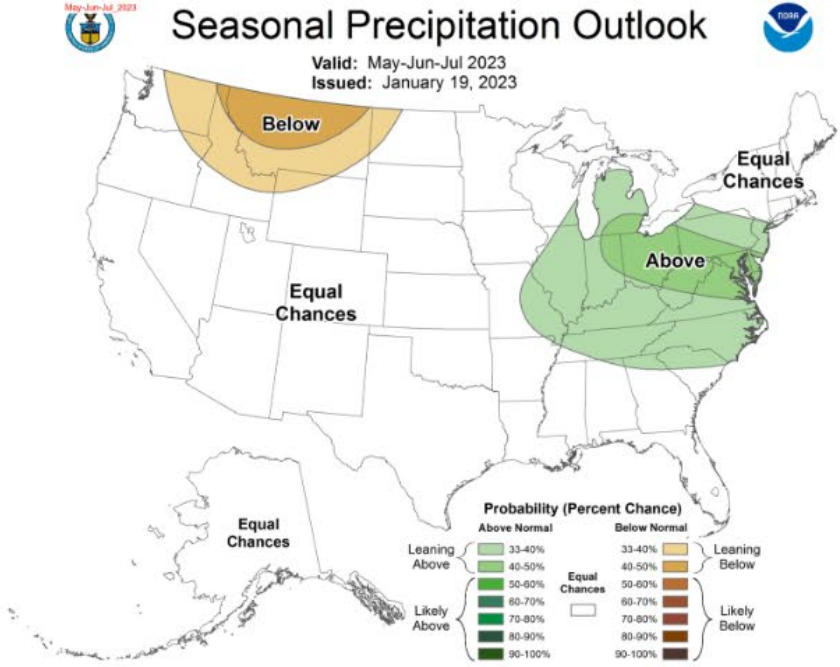

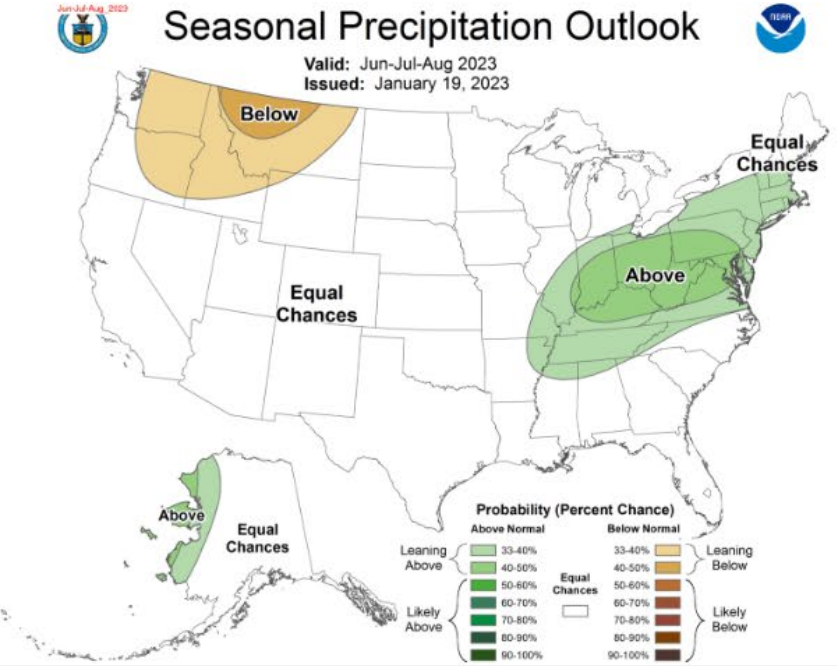

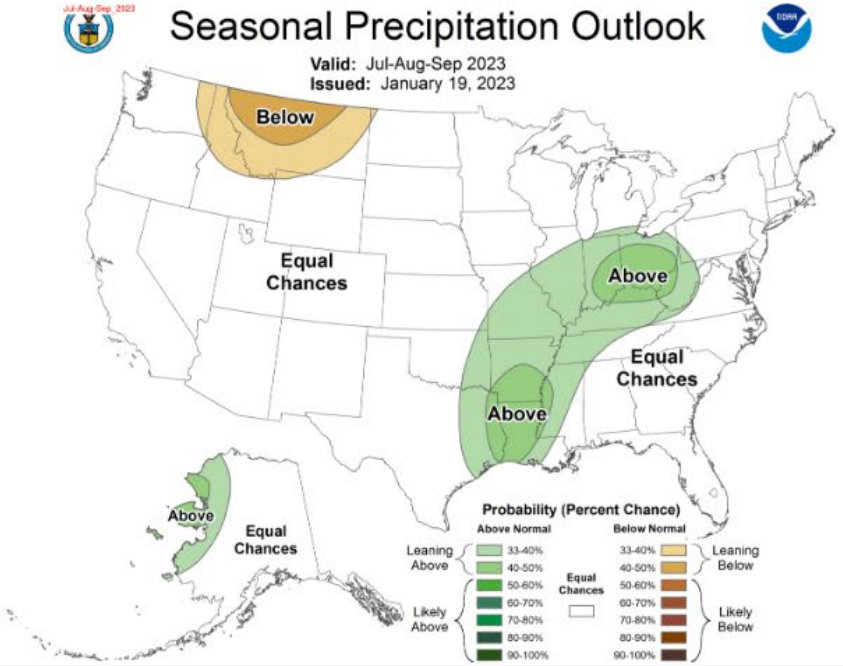

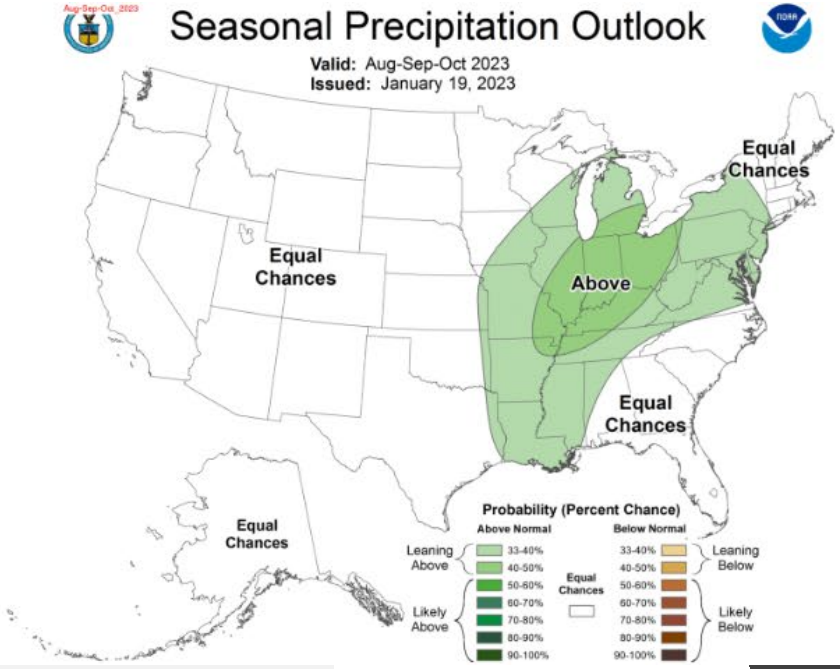

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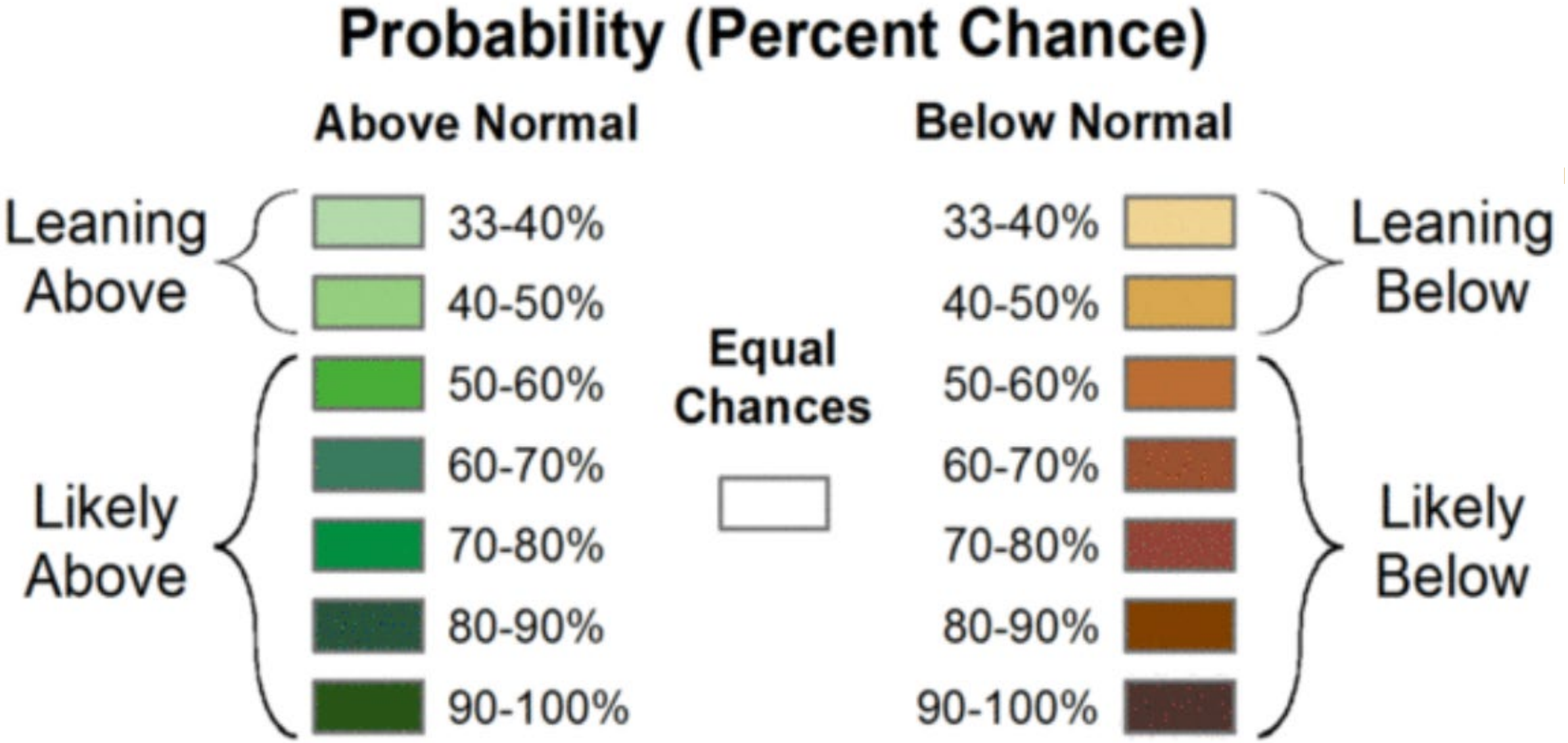

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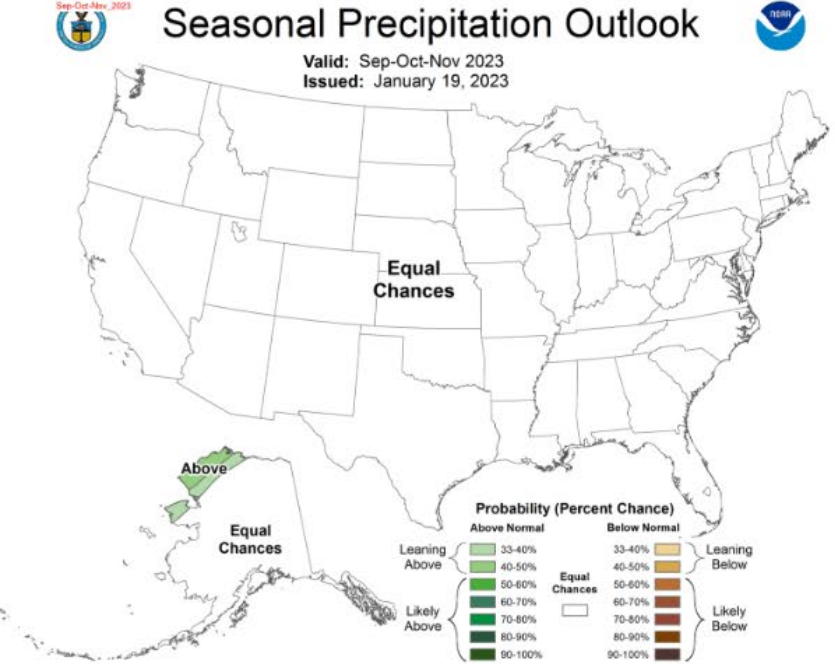

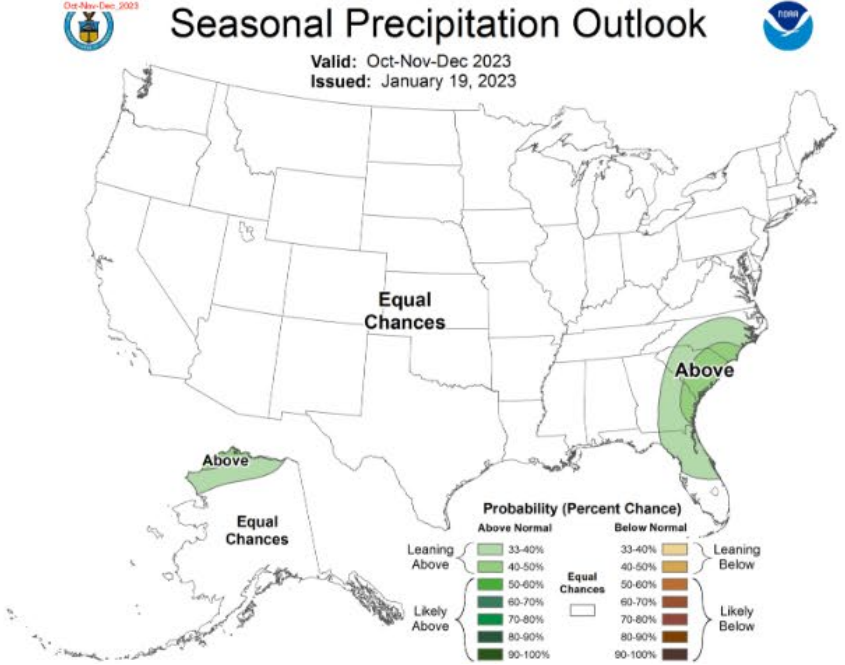

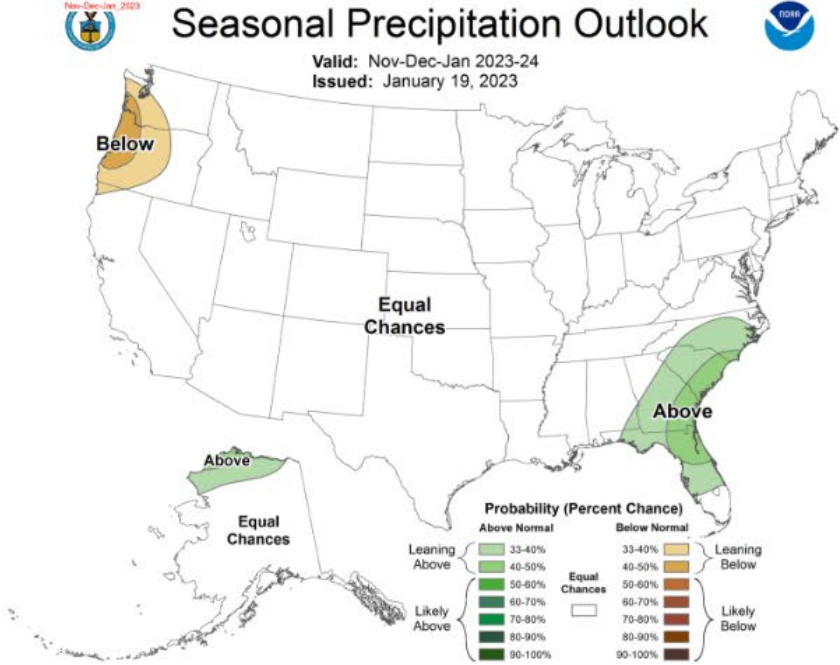

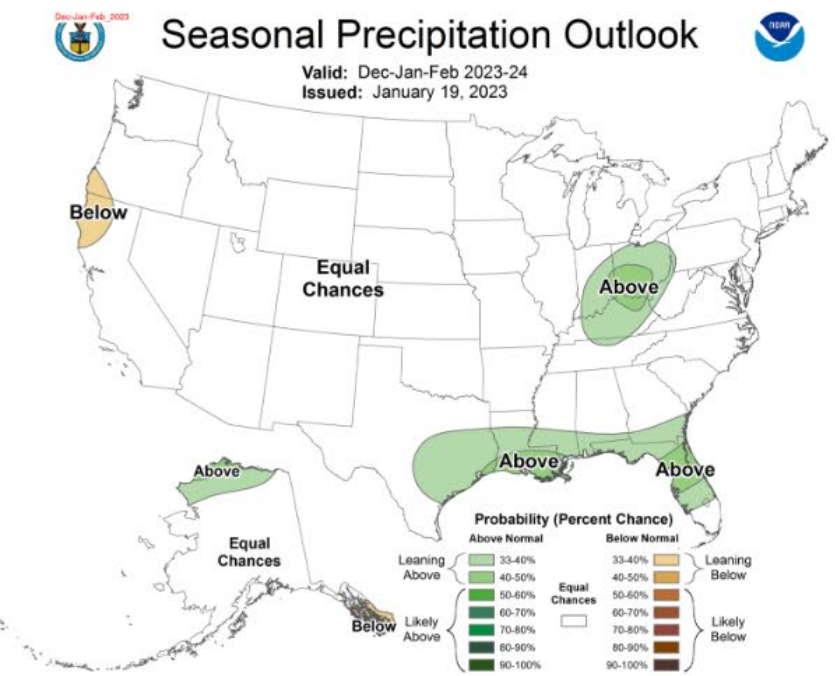

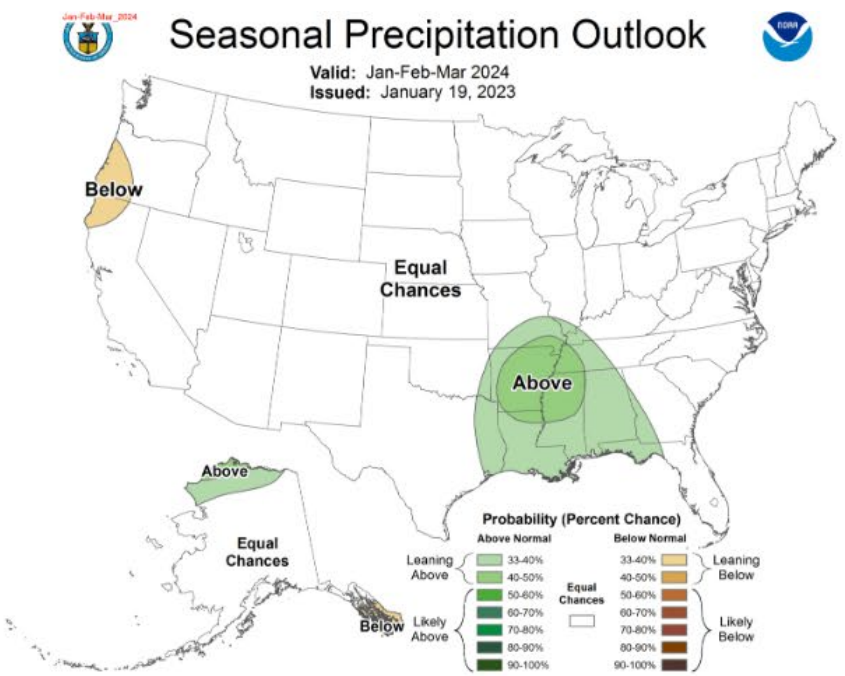

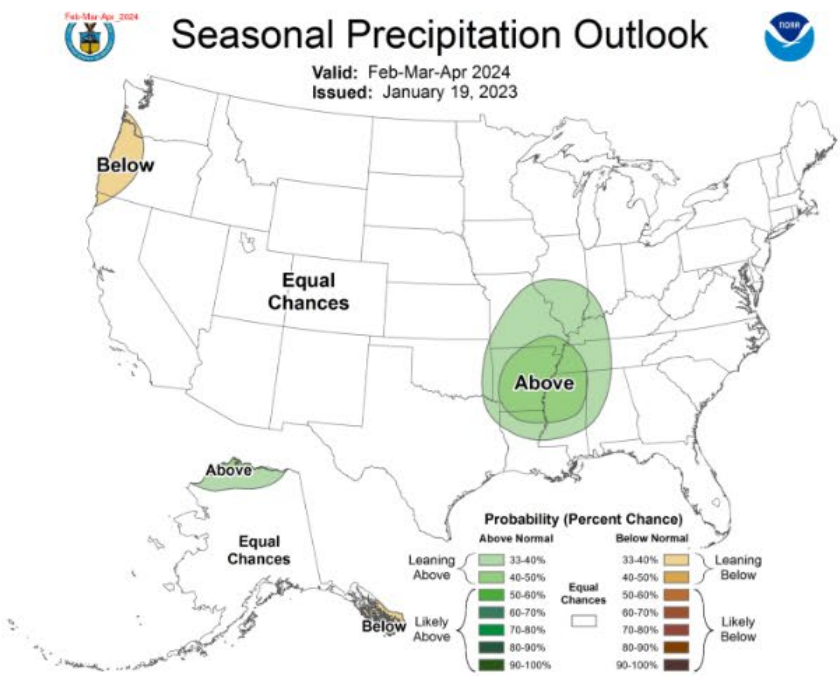

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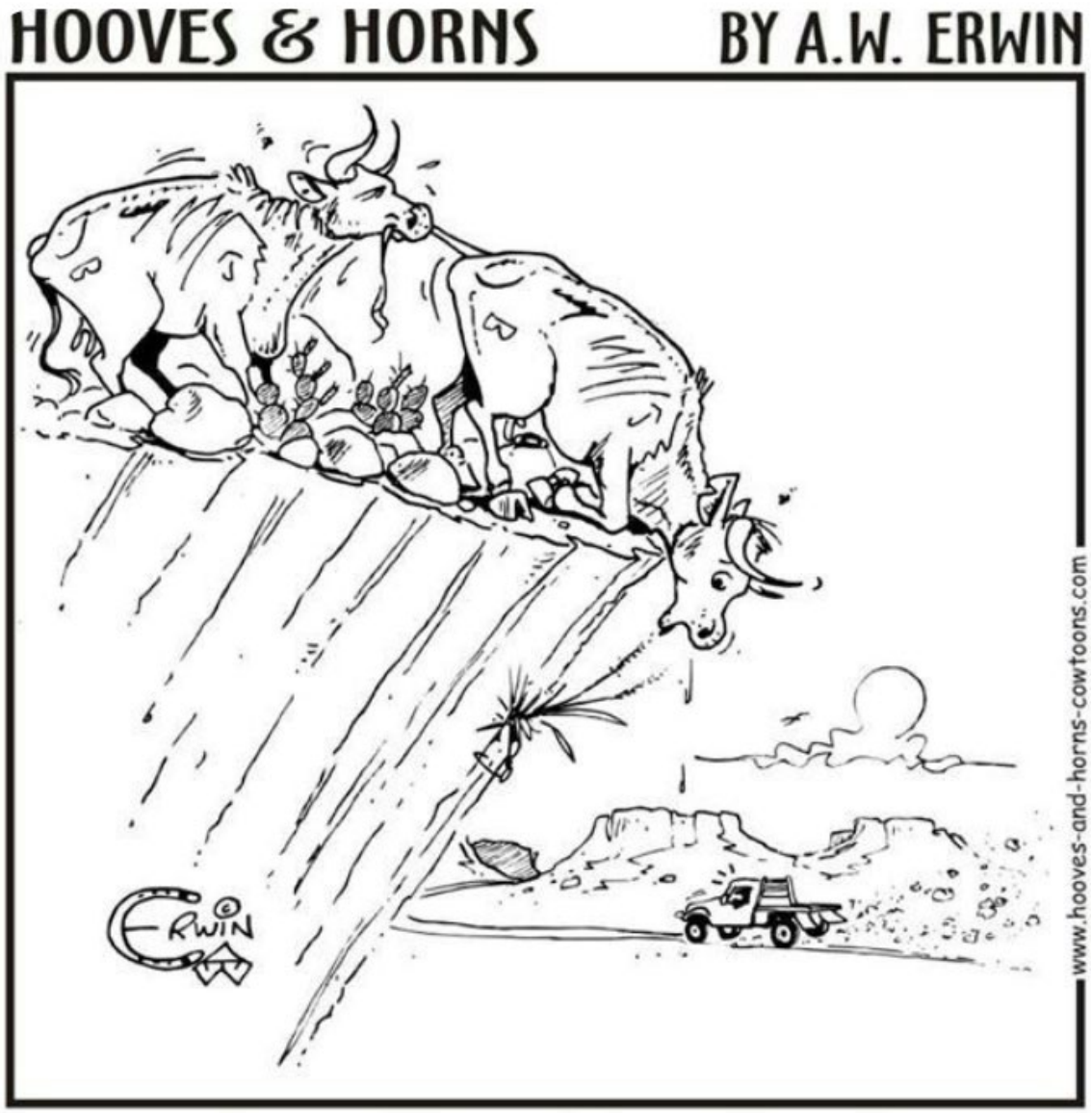


"The grazin' looks a lot better this year."

https://www.pinterest.com/pin/hooves-and-horns-drawings--484488872392948999/

Policy types & how they work

https://scontent-ord5-1.xx.fbcdn.net/v/t1.18169-9/10494808_716959581702310_4066622051856645172_n.jpg?_nc_cat=103&ccb=1-7&_nc_sid=8bfeb9&_nc_ohc=urd76hDWTE4AX_t8Heg&_nc_ht=scontent-ord5-1.xx&oh=00_AfA5TTzcTofYCUzdgRdm-MRqt6XzzxtbahGC7CfqX2JX1w&oe=6404CBE0

Multi-Peril (MPCI)

- Covers natural losses such as adverse weather, fire, insects, plant disease, wildlife damage, earthquake, volcanic eruption & irrigation water supply failure due to a natural event.
  - RP, YP, APH, WFRP, STAX
  - Fall & spring SCDs

Rule of Thumb

- Crop insurance doesn't cover your "happy little accidents!"

http://www.quickmeme.com/img/33/33e13e4370112662e71895e3e89c033757513194bd10e0e63ca850225e26a3bf.jpg

Revenue Protection (RP)

- Insures producers against a loss of revenue caused by a price decrease, a loss of production or a combination of the two.
- Projected Price & Harvest Price

RP Guarantee Worksheet

Step 1: Calculate Minimum Revenue Guarantee

18 BPA APH (Actual Production History)	x	80% Coverage Level	=	14.4 BPA Bushel Guarantee
	x	$ 8.79 Projected Price	=	$ 127 Minimum Revenue Guarantee

Step 2: Calculate Revised Revenue Guarantee

18 BPA APH (Actual Production History)	x	80% Coverage Level	=	14.4 BPA Bushel Guarantee
	x	$ 7.50 Harvest Price	=	$ 108 Revised Revenue Guarantee

Step 3: Calculate Actual Crop Insurance Farm Revenue and Indemnity per Acre

10 BPA Actual Farm Yield	x	$ 7.50 Harvest Price	=	$ 75 Actual CI Farm Revenue
$ 127 Revenue Guarantee (Higher of Minimum or Revised)	-	$ 75 Actual CI Farm Revenue	=	$ 52 Revenue Loss = Indemnity per Acre

RP Guarantee Worksheet

Step 1: Calculate Minimum Revenue Guarantee

18 BPA APH (Actual Production History)	x	80% Coverage Level	=	14.4 BPA Bushel Guarantee
	x	$ 8.79 Projected Price	=	$ 127 Minimum Revenue Guarantee

Step 2: Calculate Revised Revenue Guarantee

18 BPA APH (Actual Production History)	x	80% Coverage Level	=	14.4 BPA Bushel Guarantee
	x	$ 9.00 Harvest Price	=	$ 130 Revised Revenue Guarantee

Step 3: Calculate Actual Crop Insurance Farm Revenue and Indemnity per Acre

10 BPA Actual Farm Yield	x	$ 9.00 Harvest Price	=	$ 90 Actual CI Farm Revenue
$ 130 Revenue Guarantee (Higher of Minimum or Revised)	-	$ 90 Actual CI Farm Revenue	=	$ 40 Revenue Loss = Indemnity per Acre

EU:
75%: $8.43
80%: $14.20
85%: $24.41

Yield Protection (YP)

- Insures producers against a loss of production.
- Projected Price

YP Guarantee Worksheet

Step 1: Calculate Yield Guarantee

18 BPA APH (Actual Production History)	X	80% Coverage Level	=	14.4 BPA Bushel Guarantee

$ 8.79 Projected Price

Questions to ask before starting calculations:

1. Did the farm have a bushel loss (< coverage level % times APH)? If so, there will be a claim.
2. Did the farm have a bushel gain? If so, there will not be a claim.

Step 2: Calculate Yied Loss

14.4 BPA Bushel Guarantee	-	10 BPA Actual Yield	=	4.4 BPA Yield Loss

Step 3: Calculate Indemnity per Acre

4.4 BPA Yield Loss	X	$ 8.79 Projected Price	=	$ 39 Indemnity Payment

EU:
75%: $6.80
80%: $11.58
85%: $19.99

Actual Production History (APH)

- Insures producers against a production loss based on their production history (APH).
- Projected Price
- Crop price established annually by RMA

Rainfall Index Policies

- Insures against a lack of rainfall
- Grid system
- Two different policies
    1) Pasture, Rangeland & Forage (PRF)
        - Perennial grass intended for haying/grazing
    2) Annual Forage (AF RI)
        - Annually planted crops intended for feed/fodder

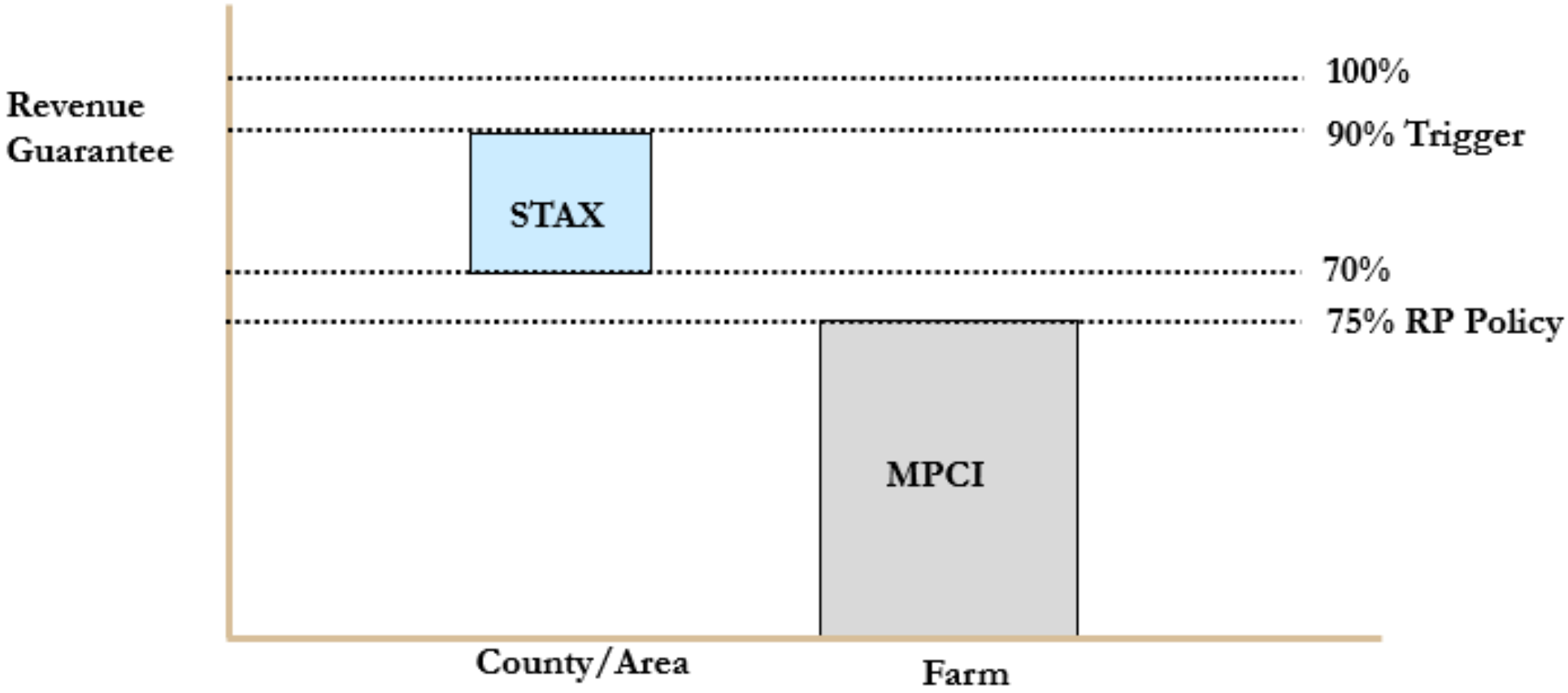
Stacked Income Protection Plan (STAX)

- Area based revenue coverage for upland cotton
- Coverage from 90% down to the underlying level of crop insurance (up to 20%)
- Projected Price & Harvest Price
- Expected Area Yield & Final Area Yield

Stacked Income Protection Plan (STAX)

- Seed cotton acreage enrolled in the ARC or PLC programs are not eligible for STAX coverage as of the 2019 crop year.
- Can be purchased on its own or as a companion policy to your MPCI policy.
- Will most likely benefit if: 1) your county/area has a strong average yield and/or 2) the projected price is high.

Stacked Income Protection Plan (STAX)



STAX Indemnity Worksheet

NAU Country
A QBE Insurance Company

Coverage Calculation

Gray County Irrigated

Base Price	$0.85	Harvest Price	$1.00	STAX Top Coverage Trigger	90%
Expected County Yield	992			STAX Bottom Coverage Trigger	80% (Min 70% for STAX)
times protection factor	1.20			STAX Coverage	10%
equals Expected Crop Value	$1,190				

Expected Crop Value	$1,190
STAX Coverage	10%
STAX $ Protection	$119.04

Loss Calculation

Expected County Yield	992	Final County Yield	850.0	Final County Revenue	$850.00
times higher of Base Price/Harvest Price	$1.00	times Harvest Price	$1.00	divided by Expected County Revenue	$992.00
equals Expected County Revenue	$992.00	equals Final County Revenue	$850.00	equals % of Expected Revenue Realized	85.69% (Cannot be below RP coverage level), rounded 10 decimals

Payment Factor Calculation

STAX Top Coverage Trigger	90%				
minus % of Expected Revenue Realized	85.69%				
equals % Revenue Loss	4.31%	divided by STAX Coverage	10%	equals STAX Indemnity Factor	43.15% (Cannot exceed 100%)

Premium: $10.46/ac irrigated, $6.64/ac dryland lint
$1.34/ac irrigated, $1.20/ac dryland SE

Indemnity Calculation

STAX $ Protection	$119.04	times STAX Indemnity Factor	43.2%	equals STAX Combined Indemnit	$51.37

Yellow boxes must be filled in.

NAU Country
A QBE Insurance Company

STAX Indemnity Worksheet

Coverage Calculation

Gray County Irrigated

Base Price	$0.85	Harvest Price	$1.00	STAX Top Coverage Trigger	90%
Expected County Yield	992			STAX Bottom Coverage Trigger	80%
					(Min 70% for STAX)
times protection factor	1.20			STAX Coverage	10%
equals Expected Crop Value	$1,190				

Expected Crop Value	$1,190
STAX Coverage	10%
STAX $ Protection	$119.04

Loss Calculation

Expected County Yield	992	Final County Yield	900.0	Final County Revenue	$900.00
times higher of Base Price/Harvest Price	$1.00	times Harvest Price	$1.00	divided by Expected County Revenue	$992.00
equals Expected County Revenue	$992.00	equals Final County Revenue	$900.00	equals % of Expected Revenue Realized	90.73%
				(Cannot be below RP coverage level), rounded 10 decimals	

Payment Factor Calculation

STAX Top Coverage Trigger	90%				
minus % of Expected Revenue Realized	90.73%				
equals % Revenue Loss	0.00%	divided by STAX Coverage	10%	equals STAX Indemnity Factor	0.00%
				(Cannot exceed 100%)	

Indemnity Calculation

STAX $ Protection	$119.04	times STAX Indemnity Factor	0.0%	equals STAX Combined Indemni	$0.00

Yellow boxes must be filled in.

Private Insurance Products

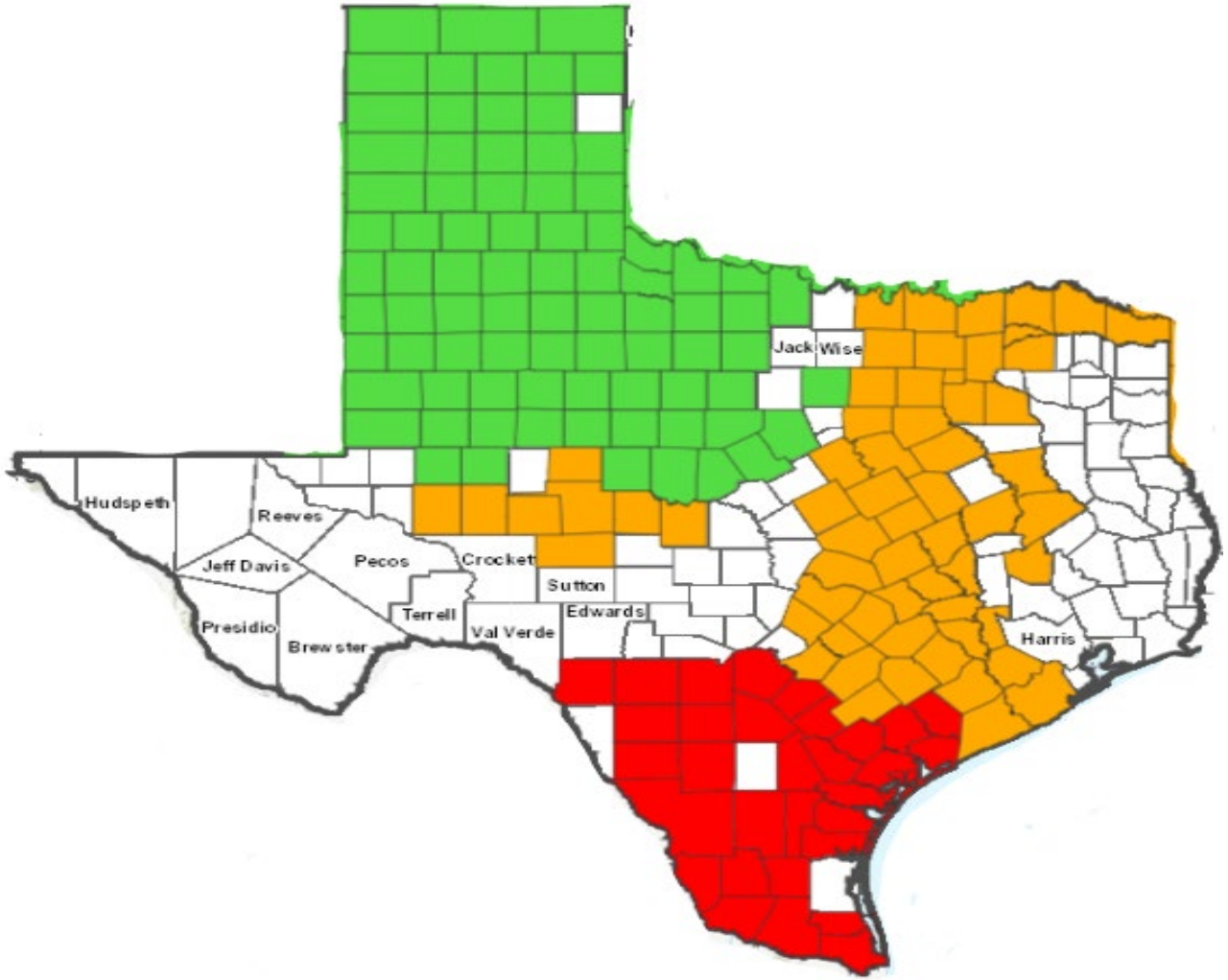
- Unsubsidized, not part of the federal crop insurance program
- Insurance companies set the price
- Separate liability from MPCI
- Crop hail, wind, buy-up replant, single peril coverage etc.

Crop Insurance Prices

- Projected Price
- Harvest Price

Price Averaging Periods

Dryland cotton



03/15/2023

02/28/2023

01/31/2023

https://public-rma.fpac.usda.gov/apps/MapViewer/index.html

Price Averaging Periods

				Projected Price Discovery Period		Harvest Price Discovery Period	
Crop	Commodity Exchange	Contract Commodity	Contract Month	Beginning Date	Ending Date	Beginning Date	Ending Date
Corn	CBOT	Corn	December	2/1	2/28	9/1	9/30
Cotton	ICE	Cotton	December	2/1	2/28	10/1	10/31
Grain Sorghum	CBOT	Corn	December	2/1	2/28	9/1	9/30
Peanuts	CBOT & ICE	Wheat, Cotton, Soybean Oil & Soybean Meal	December	2/1	2/28	10/1	10/31
Soybeans	CBOT	Soybeans	November	2/1	2/28	10/1	10/31
Wheat	KCBT	HRW	July	8/15	9/14	6/1	6/30

Price Averaging Periods

*2023 3/15 SCD spring crops are still in discovery

Year	Commodity	Type	Practice	State	Sales Closing Date	Projected Price Date Range	Projected Price	Price Volatility	Harvest Price Date Range	Harvest Price
2023	Wheat	Winter	Conventional	Texas	09/30/2022	08/15 - 09/14	$8.7900	0.31	06/01 - 06/30	$0.0000
2023	Cotton	All	Conventional	Texas	03/15/2023	02/01 - 02/28	$0.8500	0.25	10/01 - 10/31	$0.0000
2023	Corn	All (Non-High Amylose)	Conventional	Texas	03/15/2023	02/01 - 02/28	$5.9600	0.18	09/01 - 09/30	$0.0000
2023	Grain Sorghum	All	Conventional	Texas	03/15/2023	02/01 - 02/28	$5.8900	0.18	09/01 - 09/30	$0.0000
2023	Peanuts	Runners	Conventional	Texas	03/15/2023	02/01 - 02/28	$0.2677	0.16	10/01 - 10/31	$0.0000
2023	Peanuts	Spanish	Conventional	Texas	03/15/2023	02/01 - 02/28	$0.4177	0.16	10/01 - 10/31	$0.0000
2023	Peanuts	Valencia	Conventional	Texas	03/15/2023	02/01 - 02/28	$0.3025	0.16	10/01 - 10/31	$0.0000
2023	Peanuts	Virginia	Conventional	Texas	03/15/2023	02/01 - 02/28	$0.3025	0.16	10/01 - 10/31	$0.0000
2023	Soybeans	All	Conventional	Texas	03/15/2023	02/01 - 02/28	$13.6700	0.15	10/01 - 10/31	$0.0000

https://prodwebnlb.rma.usda.gov/apps/PriceDiscovery/GetPrices/ManyPrices

Price Averaging Periods

*2023 3/15 SCD spring crops are still in discovery

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Crops Currently in Price Discovery - March 15 Sales Closing

	Corn (CZ23)	Sorghum (CZ23)	Barley (CU23)	Soybeans (SX23)	Canola (RSX23)	Sunflower Oil (BOZ23)	Sunf Confect (BOZ23)	Spr Wheat (MWU23)	Durum (MWU23)	Oats (ZWU23)	Cotton (CTZ23)
1-Feb	$5.9625	$5.9625	$6.1075	$13.6025	$807.8	$0.5956	$0.5956	$8.9500	$8.9500	$7.7975	$0.8526
2-Feb	$5.9500	$5.9500	$6.0900	$13.7050	$807.9	$0.5952	$0.5962	$8.9425	$8.9425	$7.8325	$0.8600
3-Feb	$5.9600	$5.9600	$6.1050	$13.6975	$810.9	$0.5839	$0.5839	$8.9075	$8.9075	$7.8025	$0.8515
6-Feb	$5.9775	$5.9775	$6.1300	$13.6725	$811.1	$0.5827	$0.5827	$8.8650	$8.8650	$7.7575	$0.8373
7-Feb	$5.9350	$5.9350	$6.0800	$13.7050	$810.2	$0.5940	$0.5940	$8.8700	$8.8700	$7.7625	$0.8582
8-Feb											
9-Feb											
10-Feb											
13-Feb											
14-Feb											
15-Feb											
16-Feb											
17-Feb											
21-Feb											
22-Feb											
23-Feb											
24-Feb											
27-Feb											
28-Feb											
Base Avg Price	$5.96	$5.89	$5.41	$13.68	$0.278	$0.306	$0.327	$8.91	$10.15	$4.29	$0.85
Last Year	$5.90	$5.88	$5.35	$14.33	$0.303	$0.324	$0.405	$9.19	$9.44	$3.70	$1.03
RP Volatility (est)	19%	19%	18%	15%	16%	23%	23%	17%	17%	22%	25%

2023 Projected Prices (still in discovery)

- What does that mean for me?
  - Higher minimum revenue guarantees
  - Higher premium costs

https://cdn-blog.seedly.sg/wp-content/uploads/2020/09/26222913/giphy-downsized-1.gif

Endorsements to know about

https://scontent-ord5-1.xx.fbcdn.net/v/t1.18169-9/10494808_716959581702310_4066622051856645172_n.jpg?_nc_cat=103&ccb=1-7&_nc_sid=8bfeb9&_nc_ohc=urd76hDWTE4AX_t8Heg&_nc_ht=scontent-ord5-1.xx&oh=00_AfA5TTzcTofYCUzdgRdm-MRqt6XzzxtbahGC7CfqX2JX1w&oe=6404CBE0

Endorsements

- Add-ons to the underlying policy
  - Contract Pricing (CP), Enhanced Coverage Option (ECO), Hail & Fire Exclusion (HF), Level by Practice (LP), Prevented Planting +5% (PF), Quality Loss (QL), Supplemental Coverage Option (SCO), Seed Endorsement (SE), Trend Adjustment (TA), Yield Adjustment (YA), Yield Cup (YC) & Yield Exclusion (YE)
  - Some have additional costs when applied

Farm Bill Programs

- March 15th deadline to make annual ARC/PLC elections at the FSA office.
- Use your crop insurance policy options to help guide you- will impact your insurance eligibility for certain policies.

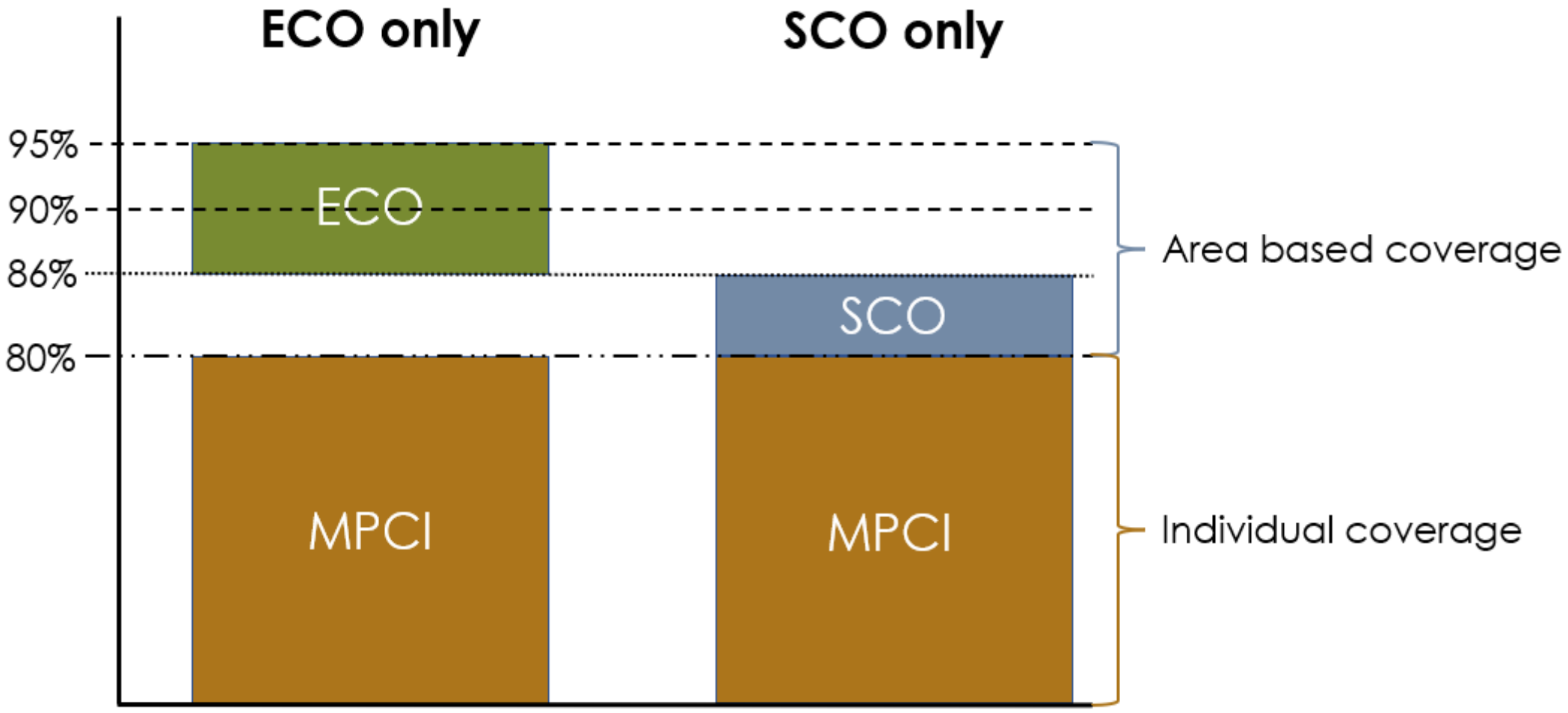
Supplemental Coverage Option (SCO)

- Area based coverage
- Uses crop insurance prices and producer's APH to set dollars of coverage.
- Uses crop insurance prices and area expected and final yields to determine claim.
- Only available for producers/crops/farms enrolled in PLC or on farms with no base.
- 86% trigger- begins to pay when county revenue falls below 86% of its expected level.

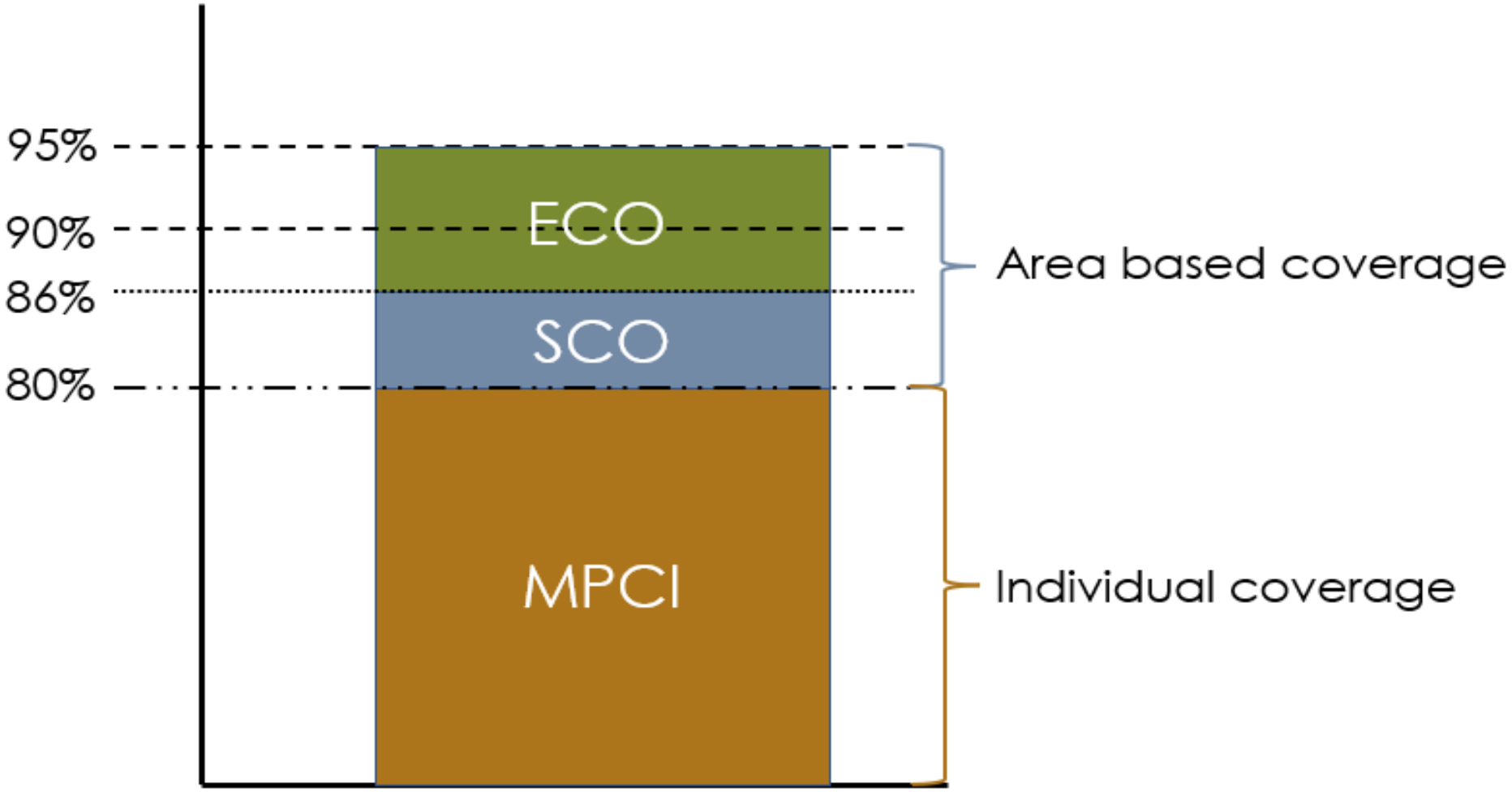
Enhanced Coverage Option (ECO)

- Area based coverage
- Uses crop insurance prices and producer's APH to set dollars of coverage.
- Uses crop insurance prices and area expected and final yields to determine claim.
- Does not take ARC/PLC into consideration
- 90% or 95% trigger- pays when county revenue falls below 90% or 95% of its expected level.

SCO & ECO


ECO only
SCO only
95%
90%
86%
80%
ECO
SCO
MPCI
MPCI
Area based coverage
Individual coverage

SCO & ECO


95%
90%
86%
80%
ECO
SCO
MPCI
Area based coverage
Individual coverage

SCO & ECO

- Both area-based coverages that essentially stack on top of individual MPCI coverage.
- Appeal: they extend higher than the highest individual coverage, gaining more dollars of protection, and they cost less than the high-level individual coverages due to higher subsidy levels.
- Can be used independently of each other or together (depending on ARC/PLC election).

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Supplemental Coverage Option (SCO) & Enhanced Coverage Option (ECO) Indemnity Worksheet

Coverage Calculation — Carson County

Base Price	$5.96	Harvest Price	$5.50	ECO/SCO Top Coverage Trigger	95%
Higher Price times Farm APH	168			minus RP Coverage	75%
				(or 86% if SCO not purchased)	
equals Expected Crop Value	$1,001			equals ECO + SCO Coverage	20%

Expected Crop Value	$1,001		
ECO + SCO Coverage	20%		
Preliminary ECO + SCO $ Protection	$200.26		
Select Coverage Percentage: 50% - 100%		100%	
(reduces coverage and premium proportionally)			
Selected ECO + SCO $ Protection		$200.26	

Loss Calculation

Expected County Yield	223.7	Final County Yield	190.0	Final County Revenue	$1,045
times higher of Base Price/Harvest Price	$5.96	times Harvest Price	$5.50	divided by Expected County Revenue	$1,333
equals Expected County Revenue	$1,333	equals Final County Revenue	$1,045	equals % of Expected Revenue Realized	78.4%
				(Cannot be below RP coverage level)	

Payment Factor Calculation

ECO/SCO Top Coverage Trigger	95%				
minus % of Expected Revenue Realized	78.4%				
equals % Revenue Loss	16.60%	divided by ECO + SCO Coverage	20%	equals ECO/SCO Indemnity Factor	83.0%
				(Cannot exceed 100%)	

Indemnity Calculation

ECO + SCO $ Protection	$200.26	times ECO/SCO Indemnity Factor	83.0%	equals ECO/SCO Combined Indemnity	$166.22

Yellow boxes must be filled in.

This worksheet has been designed to Estimate Potential Losses Only and is not a guarantee of any loss payment. The Enhanced Coverage Option (ECO) has not been finalized by the Risk Management Agency (RMA) yet, nor have final rating, prices, and calculatiois been released at this time. Again this worksheet is based on how we believe it will work and is subject to change.

SCO & ECO

- Corn in Carson County
  - 168 bushel APH
  - 75% BU policy

Quote Summary	Marketable Production	Cost Per Unit	Acres	Coverage Per Acre	Guarantee Per Acre	Premium Per Acre	Weighted Avg Yield Per Acre	Total Coverage	Total Premium
Corn - TX - Carson - RP - BU - Vol 0.18 - Price $5.96									
75% - PF/QL/TA/YA/YC/YE	16,075 BU	$0.1902 BU	200.0	$479.05	113.3 BU	$15.29	151.0 BU	$95,809	$3,058
ECO - 95% ALT / 9% CR / 100% PF				$57.49	9.6 BU	$16.87	----------	$11,497	$3,374
SCO - 86% ALT / 11% CR / 100% PF				$70.26	11.8 BU	$6.50	----------	$14,052	$1,299

NAU Country
A QBE Insurance Company

Supplemental Coverage Option (SCO) & Enhanced Coverage Option (ECO) Indemnity Worksheet

Coverage Calculator — Carson County

Base Price	$5.96	Harvest Price	$5.50	ECO/SCO Top Coverage Trigger	90%
Higher Price times Farm APH	168			minus RP Coverage	75%
				(or 86% if SCO not purchased)	
equals Expected Crop Value	$1,001			equals ECO + SCO Coverage	15%

Expected Crop Value	$1,001
ECO + SCO Coverage	15%
Preliminary ECO + SCO $ Protection	$150.19
Select Coverage Percentage: 50% - 100% *(reduces coverage and premium proportionally)*	100%
Selected ECO + SCO $ Protection	$150.19

Loss Calculation

Expected County Yield	223.7	Final County Yield	190.0	Final County Revenue	$1,045
times higher of Base Price/Harvest Price	$5.96	times Harvest Price	$5.50	divided by Expected County Revenue	$1,333
equals Expected County Revenue	$1,333	equals Final County Revenue	$1,045	equals % of Expected Revenue Realized	78.4%
				(Cannot be below RP coverage level)	

Payment Factor Calculation

ECO/SCO Top Coverage Trigger	90%				
minus % of Expected Revenue Realized	78.4%				
equals % Revenue Loss	11.60%	divided by ECO + SCO Coverage	15%	equals ECO/SCO Indemnity Factor	77.3%
				(Cannot exceed 100%)	

Indemnity Calculation

ECO + SCO $ Protection	$150.19	times ECO/SCO Indemnity Factor	77.3%	equals ECO/SCO Combined Indemnity	$116.10

Yellow boxes must be filled in.

This worksheet has been designed to Estimate Potential Losses Only and is not a guarantee of any loss payment. The Enhanced Coverage Option (ECO) has not been finalized by the Risk Management Agency (RMA) yet, nor have final rating, prices, and calculatiois been released at this time. Again this worksheet is based on how we believe it will work and is subject to change.

SCO & ECO

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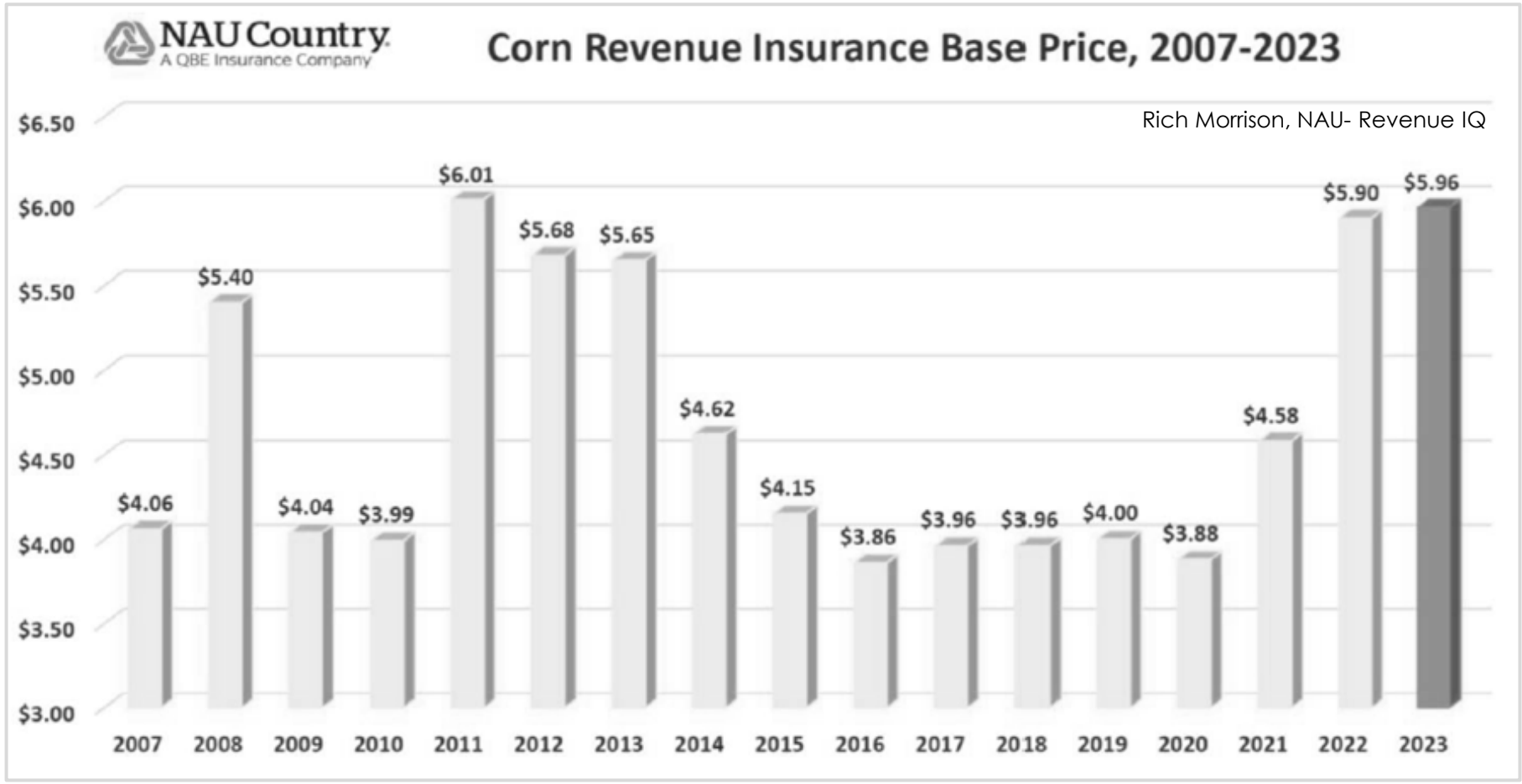
75% - PF/QL/TA/YA/YC/YE	16,075 BU	$0.1902 BU	200.0(	$479.05	113.3 BU	$15.29	151.0 BU	$95,809	$3,058
ECO - 95% ALT / 9% CR / 100% PF				$57.49	9.6 BU	$16.87	----------	$11,497	$3,374
ECO - 90% ALT / 4% CR / 100% PF				$25.55	4.3 BU	$6.42	----------	$5,110	$1,284
SCO - 86% ALT / 11% CR / 100% PF				$70.26	11.8 BU	$6.50	----------	$14,052	$1,299



IF we're able to hold the $5.96 price through month end, it would be the second highest base price ever, and more than likely provide a profit opportunity for many producers.

Annual Forage Rainfall Index

https://www.wearewoodruff.com/blog/agriculture/natural-disasters-impact-agriculture-production/

Rainfall Index Policies

- Insures against a lack of rainfall
- Grid system
- Two different policies
    1) Pasture, Rangeland & Forage (PRF)
        - Perennial grass intended for haying/grazing
    2) **Annual Forage (AF RI)**
        - Annually planted crops intended for feed/fodder

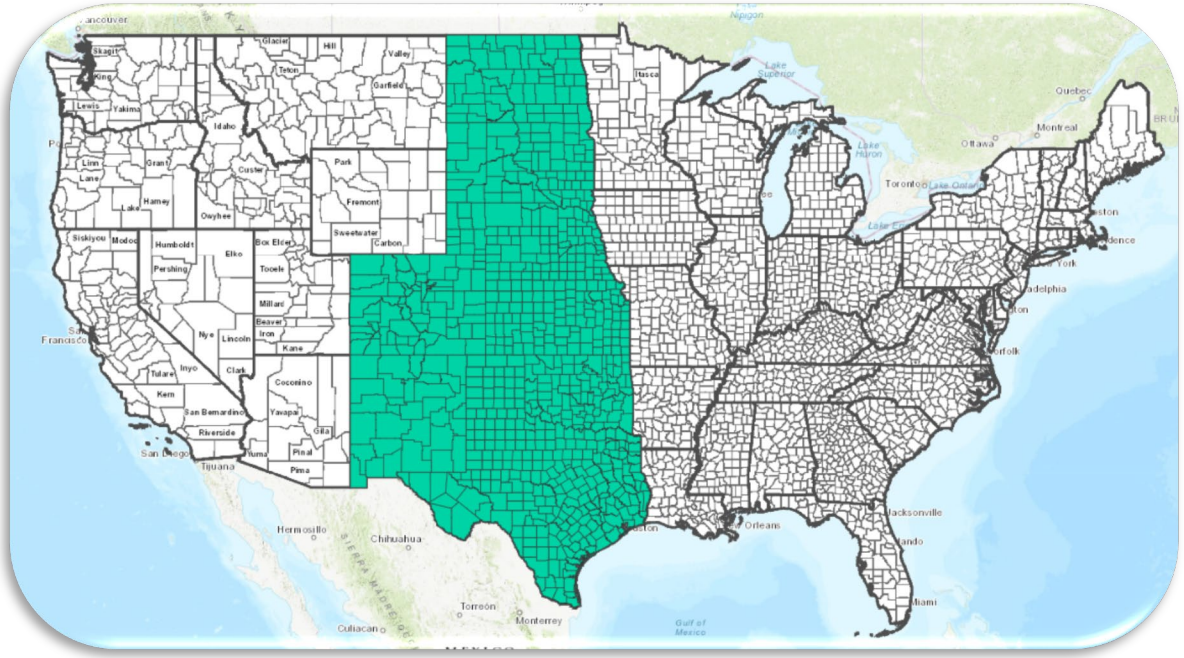
Eligible Crops

- Annually planted crops intended for feed and/or fodder
- Including, but not limited to:

  Alfalfa, barley, beans, beets, birds foot trefoil, buckwheat, chicory, clover, corn (field, popcorn, sweet), grass, kochia/prosrata, kohlrabi, lentils, lespedeza, millet, mixed forage, oats, peanuts, peas, perennial peanuts, rapini, rye, sorghum (dual purpose, grain, non-grain), soybeans, spelt, sugar beets, teff, triticale, turnips, vetch, wheat, woodland/native understory, or an unlisted commodity.

States Available

- Colorado, Kansas, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota & Texas.



https://public-rma.fpac.usda.gov/apps/MapViewer/index.html

Policy Details

- Coverage Levels: 70-90%
- Productivity Factor: 60-150% of County Base Value
- Maximum percentage of value allowed in any one index interval is 40%, except for GS4, which is 50%.
- Deadlines: July 15th SCD & four different ARDs
- Highly subsidized
  - 51% @ 90% CL, 55% @ 85% CL
- Does not take irrigation practices into consideration

Growing Seasons

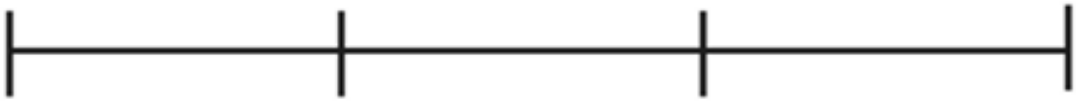
- Divides the year into four different growing seasons
- Each growing season is divided into three two-month intervals*
- Two-part policy; if you take out a policy, you are agreeing to insure ALL applicable forage crops throughout the year.

Growing Seasons 1 & 2- Fall planted crops

GROWING SEASON 1

PLANT DATE: JUL 16-OCT 15
ARD: OCT 15

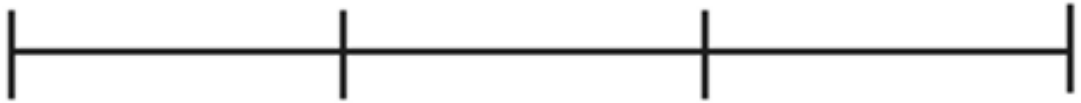
SEP-OCT NOV-DEC JAN-FEB



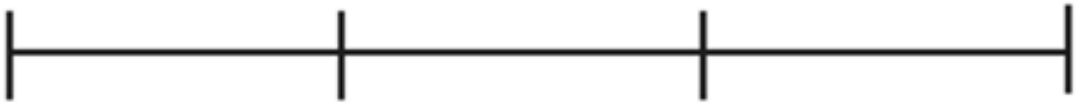
OCT-NOV DEC-JAN FEB-MAR

GROWING SEASON 2

PLANT DATE: OCT 16-JAN 15
ARD: JAN 15



DEC-JAN FEB-MAR APR-MAY

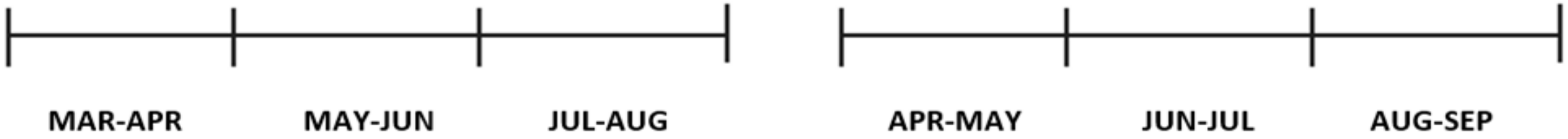


JAN-FEB MAR-APR MAY-JUN

Growing Seasons 3 & 4- Spring planted crops

GROWING SEASON 3

PLANT DATE: JAN 16-APR 15
ARD: APR 15



GROWING SEASON 4

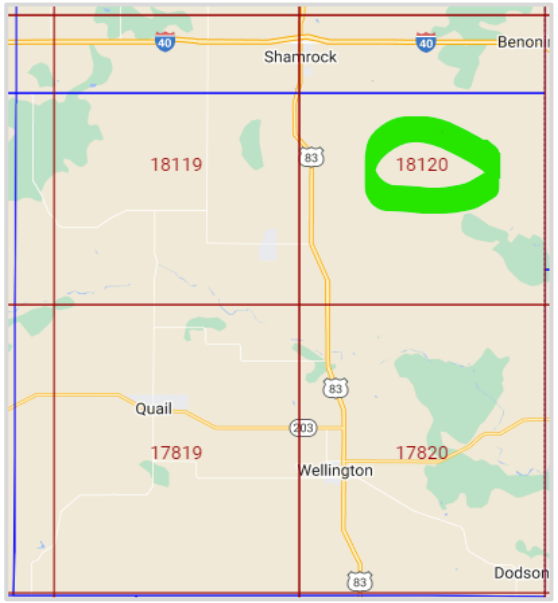
PLANT DATE: APR 16-JUL 15
ARD: JUL 15

Growing Seasons

Growing Season	Planted on or after	Planted on or before	Acreage Reporting Date	Intervals
1	July 16th, 2022	October 15th, 2022	October 15th	Sep-Oct, Oct-Nov Nov-Dec, Dec-Jan Jan-Feb, Feb-Mar
2	October 16th, 2022	January 15th, 2023	January 15th	Dec-Jan, Jan-Feb Feb-Mar, Mar-Apr Apr-May, May-Jun
3	January 16th, 2023	April 15th, 2023	April 15th	Mar-Apr, Apr-May May-Jun, Jun-Jul Jul-Aug, Aug-Sep
4	April 16th, 2023	July 15th, 2023	July 15th	Jun-Jul Aug-Sep Oct-Nov

Collingsworth County GS1 Example- 2022

- 85% CL, 100% PF
- 281.32 acres of wheat for grazing
- 100% share
- Sep-Oct 34%, Nov-Dec 33%, Jan-Feb 33%
- Grid 18120



http://maps.agforceusa.com/af/ri/

Collingsworth County GS1 Example- 2022

Rainfall Index Indemnity Estimation

County	Interval	Grid	Type	Trigger Index- Coverage Level	Final Index- % of Normal Rainfall	Insured Acres	Percent Insured	Protection Per Acre	Protection Per Unit	Payment Factor	Share	Estimated Amount Payable
Collingsworth	Sep-Oct	18120	Wheat	85%	58.0%	281.32	34%	$ 192.43	$ 18,406	0.318	100%	$ 5,853
Collingsworth	Nov-Dec	18120	Wheat	85%	2.4%	281.32	33%	$ 192.43	$ 17,864	0.972	100%	$ 17,364
Collingsworth	Jan-Feb	18120	Wheat	85%	62.0%	281.32	33%	$ 192.43	$ 17,864	0.271	100%	$ 4,841

**Some rainfall numbers are only estimates at this time; final numbers have not yet been released.*

*Final Index: < 85.0% = Claim > 85.0% = No Claim

*Estimates only; numbers are subject to change. Accuracy not warranted.

Total $ 28,058

Less Premium $ 6,428

$22.85/acre

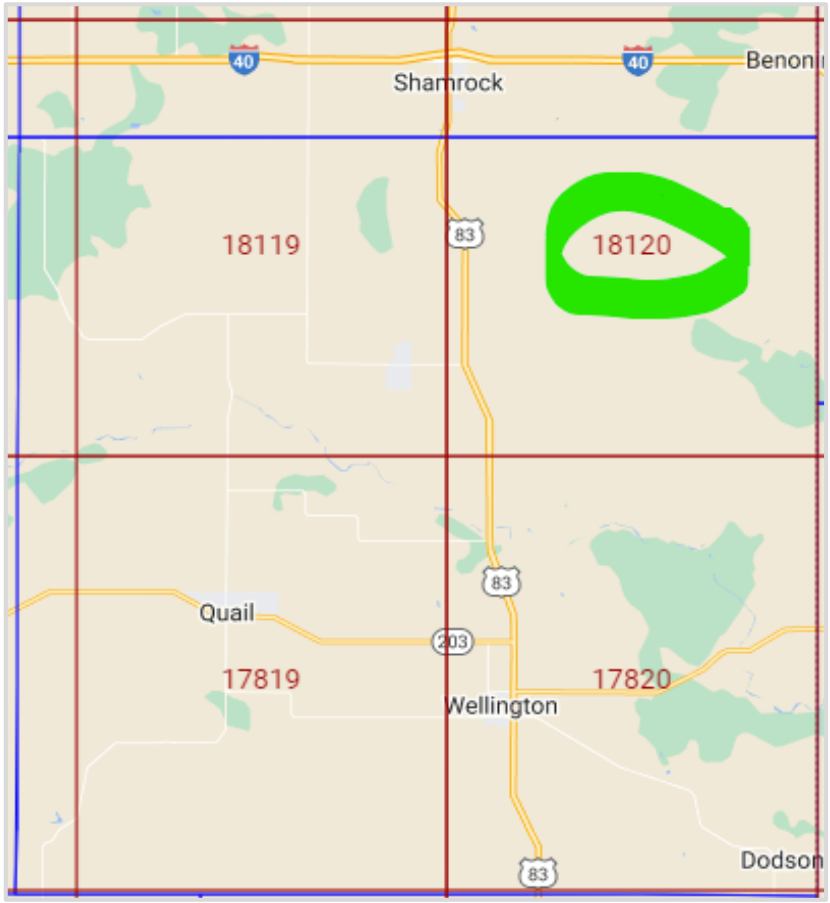
Estimated Net Return $ 21,630

$76.88/acre

MPCI RP Policy- 85% EU: 11.9 bu gte
$15.14/acre premium, $84.25/acre coverage

Collingsworth County GS2 Example- 2022

- 85% CL, 100% PF
- 157.03 acres of hay grazer
- 100% share
- Jun-Jul 50%, Aug-Sep 50%
- Grid 18120



Collingsworth County GS2 Example- 2022

Rainfall Index Indemnity Estimation

County	Interval	Grid	Type	Trigger Index- Coverage Level	Final Index- % of Normal Rainfall	Insured Acres	Percent Insured	Protection Per Acre	Protection Per Unit	Payment Factor	Share	Estimated Amount Payable
Collingsworth	Jun-Jul	18120	Hay Gzr	85%	104.0%	157.03	50%	$ 192.43	$ 15,109	-0.224	100%	$ -
Collingsworth	Aug-Sep	18120	Hay Gzr	85%	49.3%	157.03	50%	$ 192.43	$ 15,109	0.420	100%	$ 6,346

Some rainfall numbers are only estimates at this time. Final numbers may not be available, estimates subject to change.

Total $ 6,346

*Final Index: < 85.0% = Claim > 85.0% = No Claim

Equal opportunity provider.

DIAMOND INSURANCE
CROP · LIVESTOCK FARM & RANCH

Less Premium $ 2,526

$16.09/acre

Estimated Net Return $ 3,820

$24.33/acre

Collingsworth County GS1 Example- 2023

Rainfall Index Indemnity Estimation

County	Interval	Grid	Type	Trigger Index- Coverage Level	Final Index- % of Normal Rainfall	Insured Acres	Percent Insured	Protection Per Acre	Protection Per Unit	Payment Factor	Share	Estimated Amount Payable
Collingsworth	Sep-Oct	18120	Wheat	85%	65.8%	91.27	34%	$ 211.96	$ 6,578	0.226	100%	$ 1,487
Wheeler	Sep-Oct	18119	Wheat	85%	81.5%	80.70	34%	$ 211.96	$ 5,816	0.041	100%	$ 238
Wheeler	Sep-Oct	18120	Wheat	85%	65.8%	240.33	34%	$ 211.96	$ 17,320	0.226	100%	$ 3,914
Wheeler	Sep-Oct	18419	Wheat	85%	74.0%	206.94	34%	$ 211.96	$ 14,913	0.129	100%	$ 1,924
Collingsworth	Nov-Dec	18120	Wheat	85%	146.4%	91.27	33%	$ 211.96	$ 6,384	-0.722	100%	$ -
Wheeler	Nov-Dec	18119	Wheat	85%	135.2%	80.70	33%	$ 211.96	$ 5,645	-0.591	100%	$ -
Wheeler	Nov-Dec	18120	Wheat	85%	146.4%	240.33	33%	$ 211.96	$ 16,810	-0.722	100%	$ -
Wheeler	Nov-Dec	18419	Wheat	85%	112.8%	206.94	33%	$ 211.96	$ 14,475	-0.327	100%	$ -
Collingsworth	Jan-Feb	18120	Wheat	85%	58.5%	91.27	33%	$ 211.96	$ 6,384	0.312	100%	
Wheeler	Jan-Feb	18119	Wheat	85%	51.6%	80.70	33%	$ 211.96	$ 5,645	0.393	100%	
Wheeler	Jan-Feb	18120	Wheat	85%	58.5%	240.33	33%	$ 211.96	$ 16,810	0.312	100%	
Wheeler	Jan-Feb	18419	Wheat	85%	42.7%	206.94	33%	$ 211.96	$ 14,475	0.498	100%	

Some rainfall numbers are only estimates at this time; final numbers have not yet been released.

Total $ 7,563

*Final Index: < 85.0% = Claim > 85.0% = No Claim

Equal opportunity provider.

DIAMOND INSURANCE

Less Premium $ 15,507

$25.04/acre

Estimated Net Return $ (7,944)

($12.83/acre)

MPCI RP Policy- 85% EU: 11.9 bu gte
$20.55/acre premium, $104.60/acre coverage

Collingsworth County GS1 Example- 2023

Rainfall Index Indemnity Estimation

County	Interval	Grid	Type	Trigger Index- Coverage Level	Final Index- % of Normal Rainfall	Insured Acres	Percent Insured	Protection Per Acre	Protection Per Unit	Payment Factor	Share	Estimated Amount Payable
Collingsworth	Sep-Oct	18120	Wheat	85%	65.8%	91.27	34%	$ 211.96	$ 6,578	0.226	100%	$ 1,487
Wheeler	Sep-Oct	18119	Wheat	85%	81.5%	80.70	34%	$ 211.96	$ 5,816	0.041	100%	$ 238
Wheeler	Sep-Oct	18120	Wheat	85%	65.8%	240.33	34%	$ 211.96	$ 17,320	0.226	100%	$ 3,914
Wheeler	Sep-Oct	18419	Wheat	85%	74.0%	206.94	34%	$ 211.96	$ 14,913	0.129	100%	$ 1,924
Collingsworth	Nov-Dec	18120	Wheat	85%	146.4%	91.27	33%	$ 211.96	$ 6,384	-0.722	100%	$ -
Wheeler	Nov-Dec	18119	Wheat	85%	135.2%	80.70	33%	$ 211.96	$ 5,645	-0.591	100%	$ -
Wheeler	Nov-Dec	18120	Wheat	85%	146.4%	240.33	33%	$ 211.96	$ 16,810	-0.722	100%	$ -
Wheeler	Nov-Dec	18419	Wheat	85%	112.8%	206.94	33%	$ 211.96	$ 14,475	-0.327	100%	$ -
Collingsworth	Jan-Feb	18120	Wheat	85%	58.5%	91.27	33%	$ 211.96	$ 6,384	0.312	100%	$ 1,992
Wheeler	Jan-Feb	18119	Wheat	85%	51.6%	80.70	33%	$ 211.96	$ 5,645	0.393	100%	$ 2,218
Wheeler	Jan-Feb	18120	Wheat	85%	58.5%	240.33	33%	$ 211.96	$ 16,810	0.312	100%	$ 5,245
Wheeler	Jan-Feb	18419	Wheat	85%	42.7%	206.94	33%	$ 211.96	$ 14,475	0.498	100%	$ 7,209
											Total	**$ 24,227**

**Some rainfall numbers are only estimates at this time; final numbers have not yet been released.*

*Final Index: < 85.0% = Claim > 85.0% = No Claim

Equal opportunity provider.

DIAMOND INSURANCE

Less Premium $ 15,507

$25.04/acre

Estimated Net Return $ 8,720

$14.08/acre

MPCI RP Policy- 85% EU: 11.9 bu gte
$20.55/acre premium, $104.60/acre coverage

Dual Use Coverage Option

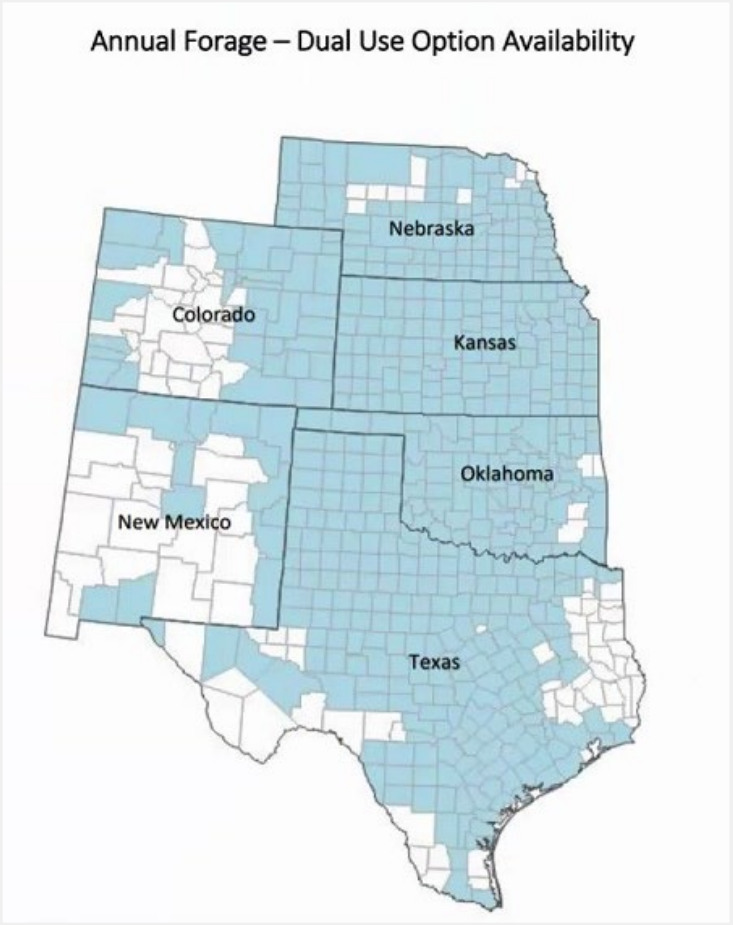
- Allows small grain producers to insure crops like wheat for grazing in the winter/early spring under AF RI, and insure their grain crop with a separate policy, remaining eligible to maintain both benefits.
- Only an option for GS1
- Available in select counties in CO, KS, NE, NM, OK and TX.
- The CBV for Dual Use is adjusted to 40% of the full year Annual Forage CBV.

Dual Use Coverage Option

- The annual forage county base value (CBV) is adjusted when used with a small grains policy to estimate the value of grazing up to the short rate date.
- The CBV is adjusted by estimating the ratio of grazing value prior to the short rate data compared to the full year grazing value based on data from FSA's Noninsured Crop Disaster Assistance Program (NAP).

Dual Use Coverage Option

Question	Answer
What growing season is the Dual Use Option available?	The option only available for Growing Season 1
What crops are eligible for the Dual Use Option?	Primarily, wheat, but some counties also include barley and oats. Check the Annual Forage and Small Grains Special Provisions for your county to confirm the option is available.
When should I stop grazing my small grain crop if I elect the Dual Use Option?	You must stop grazing the small grains crop by the date published in the Small Grains Special Provision if you wish to keep the full protection of your Small Grains policy for grain. If you decided to short rate your grain policy, you must notify your insurance company by the same date.



First Crop/ Second Crop

- If planted after a failed crop, First Crop/Second Crop rules apply.
- If the insured crop is destroyed or otherwise disposed of, the insured may be eligible to receive indemnities for the insured index intervals during or prior to the disposal of acreage.
- Insurance will cease and no coverage will be provided for any subsequent index intervals on the destroyed acreage & the full premium will be owed.

First Crop/ Second Crop

- For acreage insured as first crop in the crop year that suffered an insurable loss & a second crop is planted:
  - If the producer elects NOT to insure the second crop, the producer can collect 100% of the indemnities owed for the first crop for all insured index intervals during or prior to planting of the second crop.
  - The insured will pay 100% of the full premium owed for the first crop for the insurance period.

First Crop/ Second Crop

- For acreage insured as first crop in the crop year that suffered an insurable loss & a second crop is planted:
  - Insurance will cease & no coverage will be provided for the first insured crop for any index intervals subsequent to the planting of the second crop.

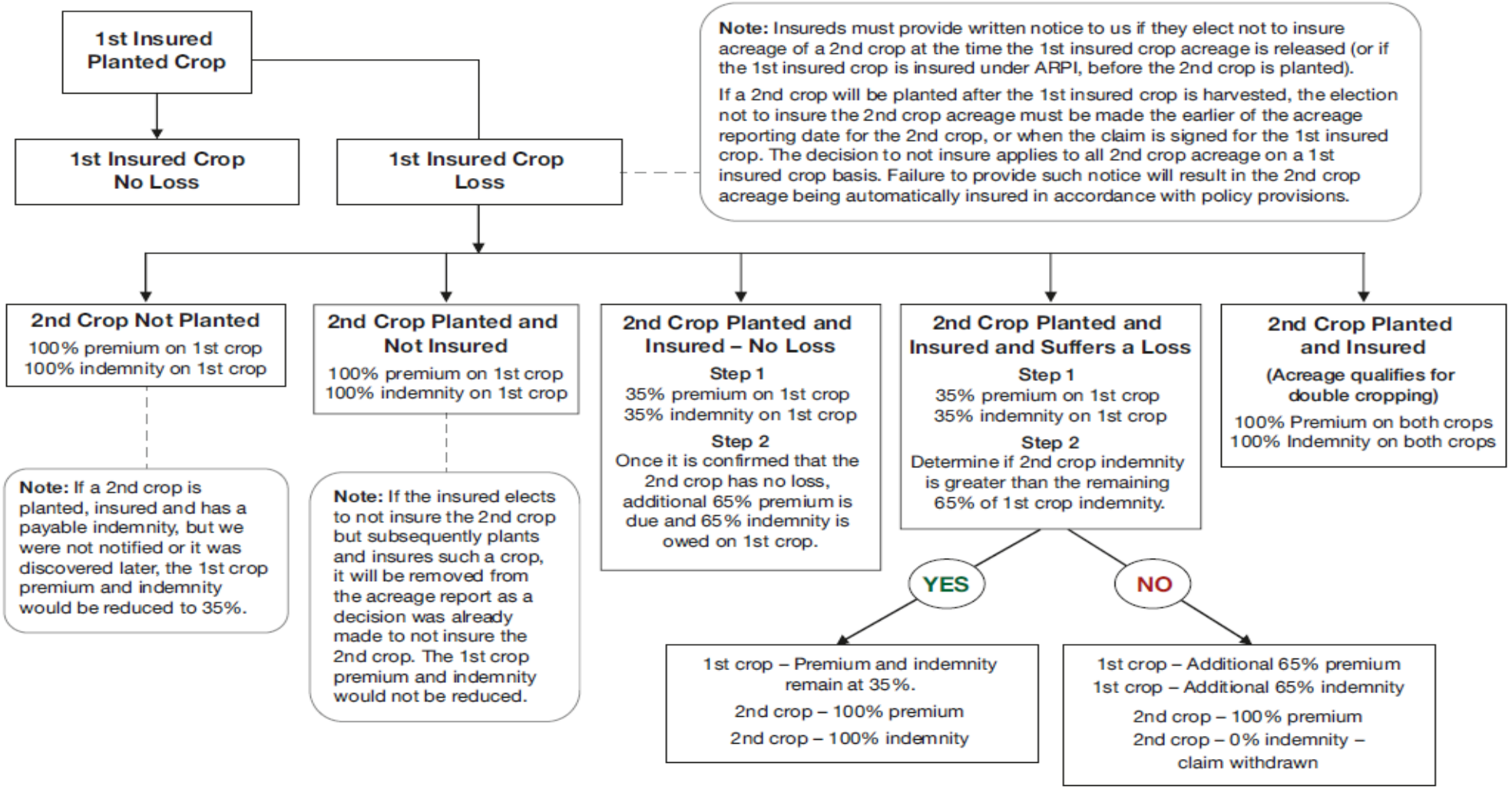
First Crop/ Second Crop

- If the insured elects to insure the second crop:
  - The insured will pay full premium for the second crop and will receive the full indemnity if there is a loss.
  - The insured can collect 35% of the indemnity owed for the first insured crop.
  - The insured will pay 35% of the full premium owed for the first insured crop.

First Crop/ Second Crop

- If the insured elects to insure the second crop:
  - If the second crop does not suffer a loss, the insured can then collect 65% of the indemnities not previously paid for from the first crop and the remaining 65% premium will be owed for the first crop.
  - Insurance will cease and no coverage will be provided for the first insured crop for any index intervals subsequent to the planting of the second crop.

First Crop/ Second Crop



Collingsworth 2023 Wheat Example

- If certify wheat acres as grain/graze:
  - AF RI:
    - GS1 @ 40% Dual Use Coverage: $84.81/ac
    - GS2-4 @ 100% AF RI coverage: $211.96/ac
  - MPCI policy:
    - 100% coverage on wheat $104.60/ac and/or spring crops
    - Short-rate option
  - Subject to first crop/second crop rules

What is new & exciting

https://scontent-ord5-1.xx.fbcdn.net/v/t39.30808-6/328517640_910916310044188_5170012106633095524_n.jpg?_nc_cat=107&ccb=1-7&_nc_sid=8bfeb9&_nc_ohc=N-fmfwD-DwcAX9mxgtw&_nc_oc=AQkkJ5tPKis8K7s0EzvSIzD2iluwDubhJkk3FVEIYeaabRmbeePqwoHWtDGqyOoVgAA&_nc_ht=scontent-ord5-1.xx&oh=00_AfA1pKBk0OIXC3KT6mNtIYFOxQD7uGJhxYAb3mK7ICSLsQ&oe=63E59E2C

DIAMOND INSURANCE

Farm Bill Programs

- March 15th deadline to make annual ARC/PLC elections at the FSA office.
- Use your crop insurance policy options to help guide you- will impact your insurance eligibility for certain policies.
- More on this later

Oats & Rye

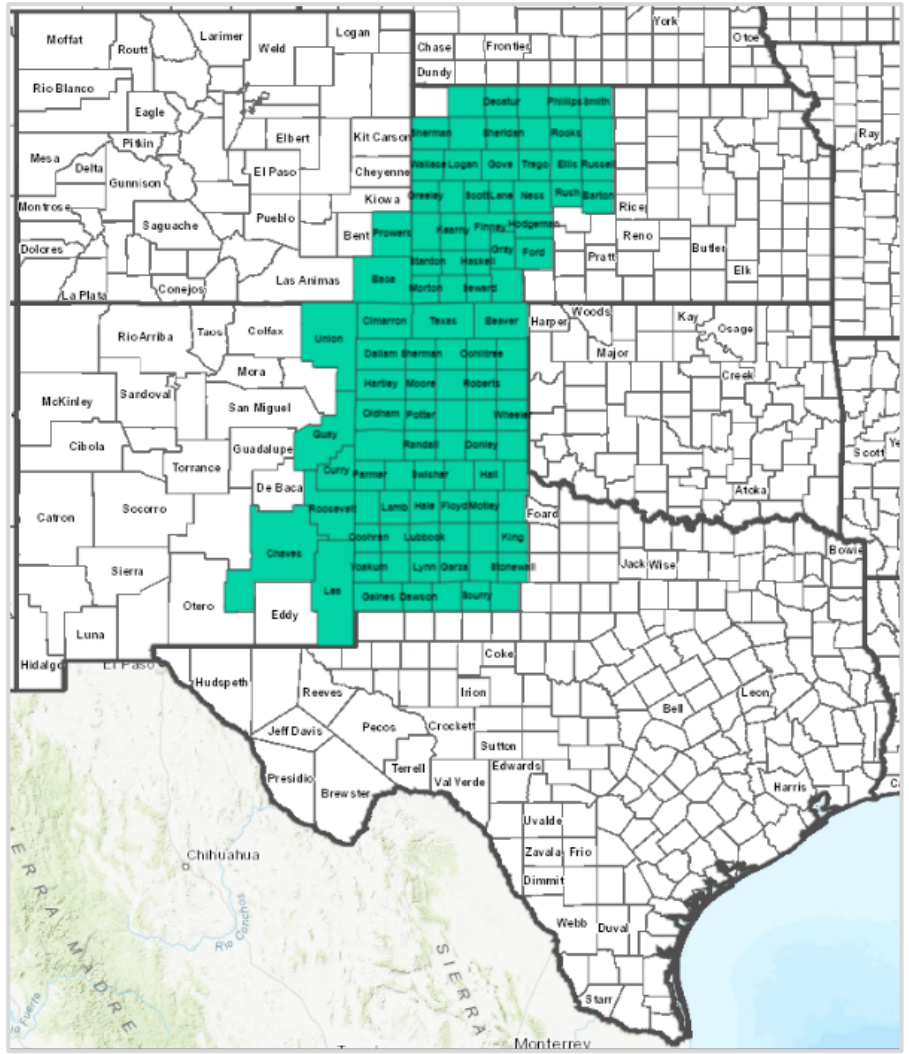
- Revenue coverage added
- Implementation for spring oats for 2023 crop year & winter oats and rye for 2024 crop year.
- CBOT soft red winter wheat contract to set the revenue prices.

Corn for Earlage/Snaplage

- Corn acreage grown for earlage, snaplage, etc. can be insured as either silage or grain, depending on the type(s) offered in the county.
- Earlage/snaplage production cannot be converted to grain or silage; a pre-harvest appraisal as the type reported will be used for the Actual Production History (APH) database.

Silage Sorghum Endorsement

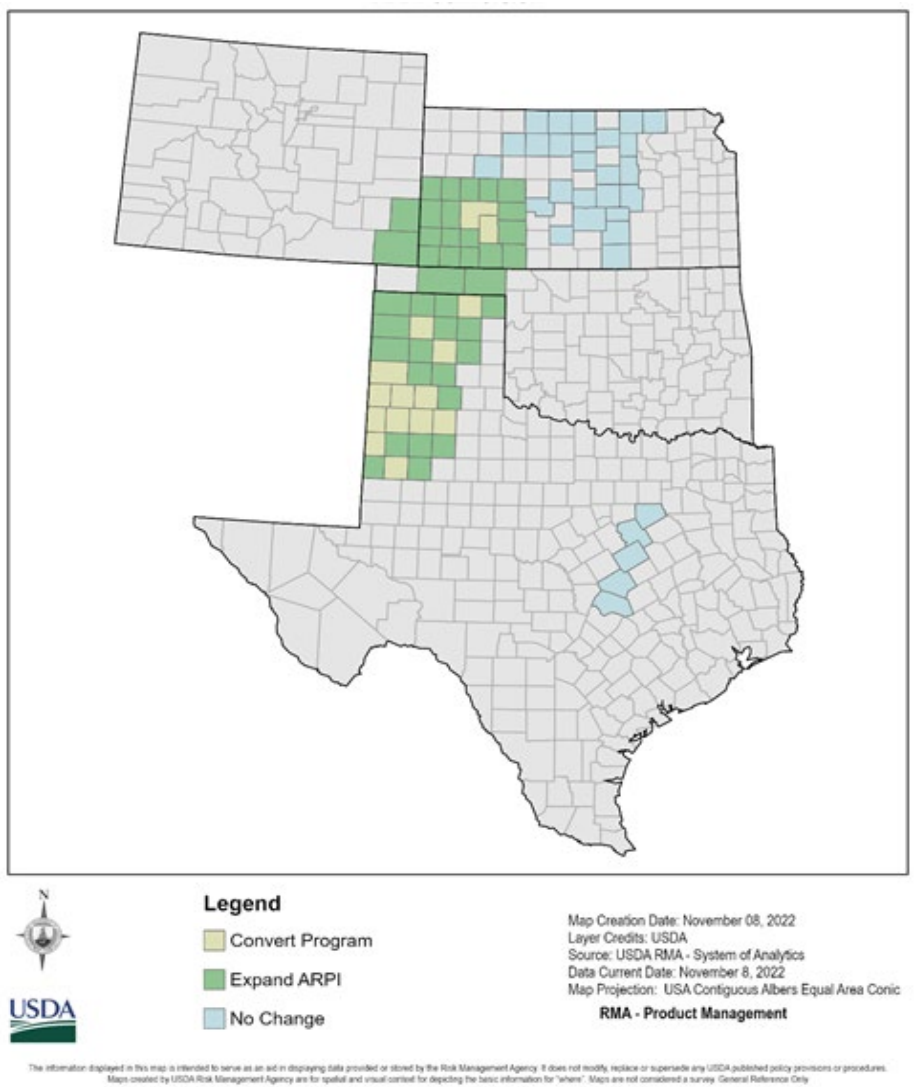
- Converted to permanent status
- Allows written agreement



https://public-rma.fpac.usda.gov/apps/MapViewer/index.html

Area Risk Protection (ARPI)- Irr Grain Sorghum

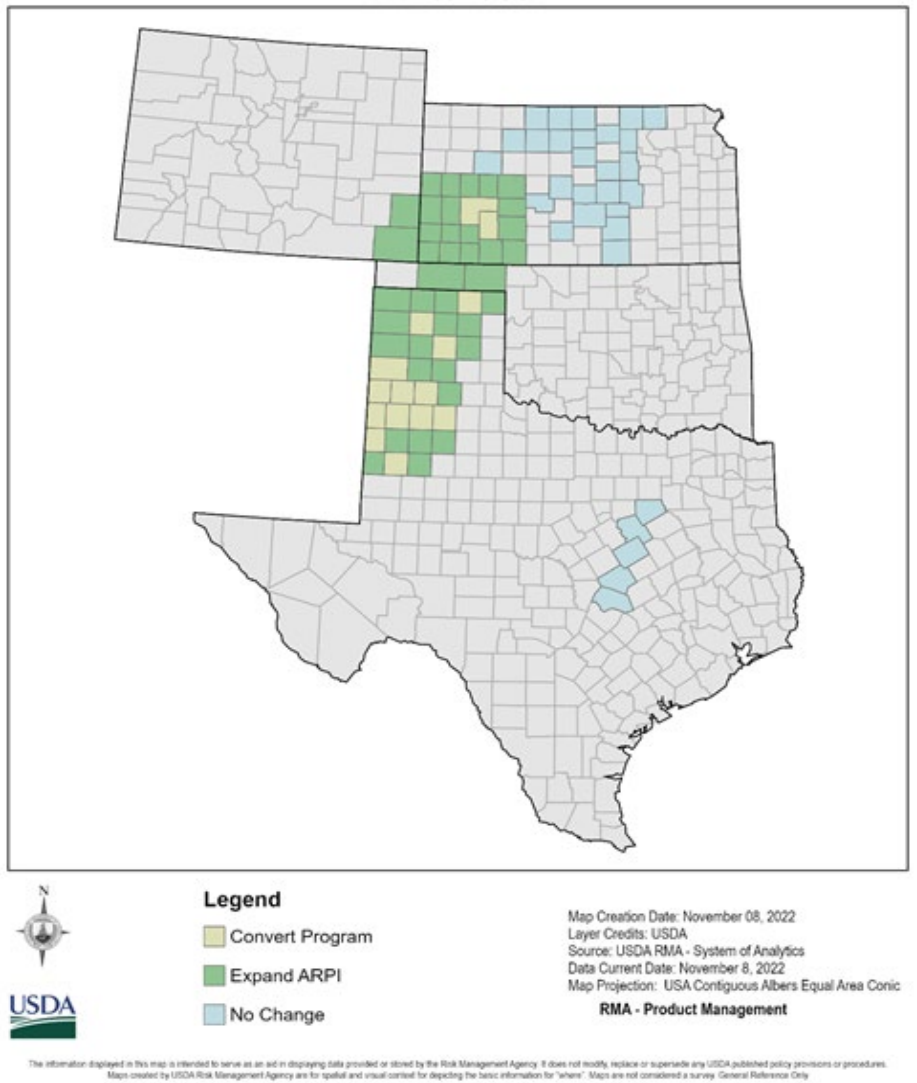
- RMA & the National Sorghum Producers developed an enhanced ARPI program.
- Changed the actuarial basis for the irrigated grain sorghum offer to irrigated corn
  - Data shows when there is a loss for irr corn, there is a high correlation to a loss for irr grain sorghum.



https://www.rma.usda.gov/en/News-Room/Frequently-Asked-Questions/ARPI-for-Irrigated-Grain-Sorghum-beginning-with-Crop-Year-2023

Area Risk Protection (ARPI)- Irr Grain Sorghum

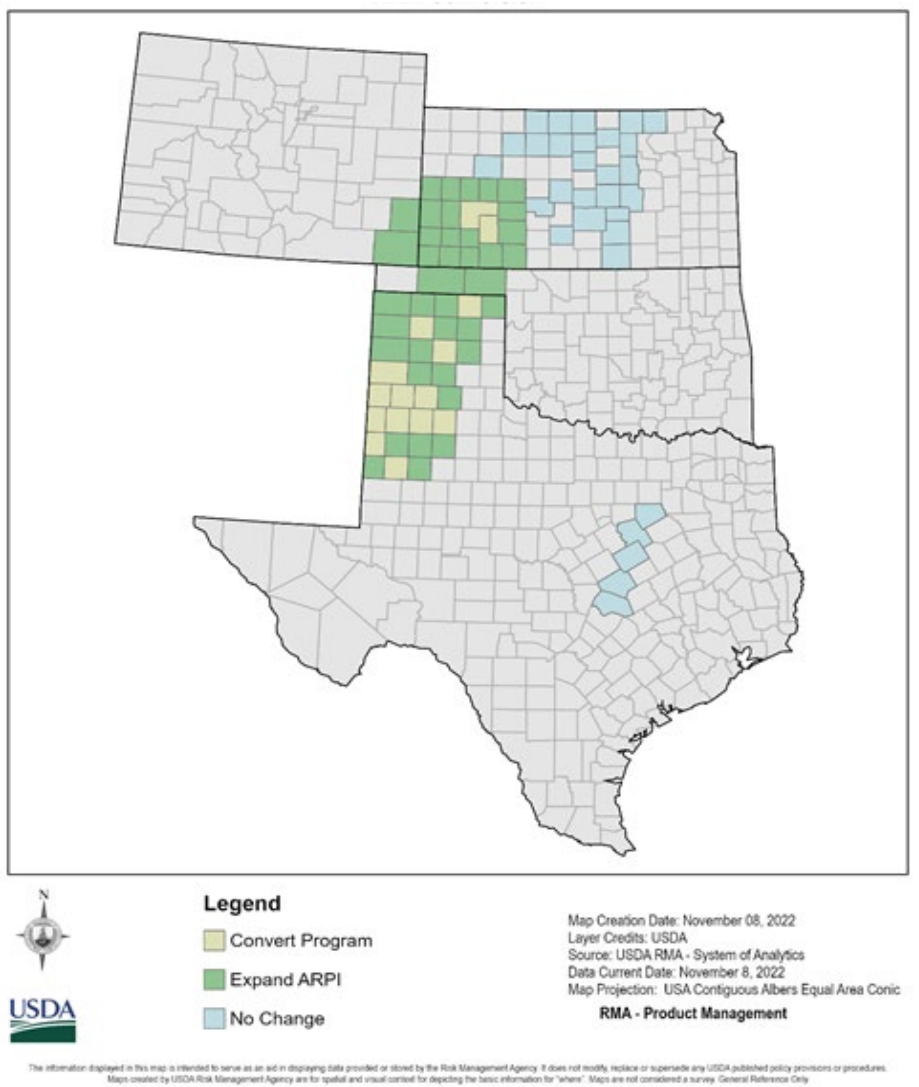
- Blue- No change- The grain sorghum ARPI program had no changes.
- Yellow- Convert Program- The basis of the ARPI offer changed from grain sorghum to corn.
- Green- Expand ARPI- New ARPI offers are now available for irr grain sorghum using corn basis for the offer.



https://www.rma.usda.gov/en/News-Room/Frequently-Asked-Questions/ARPI-for-Irrigated-Grain-Sorghum-beginning-with-Crop-Year-2023

Area Risk Protection (ARPI)- Irr Grain Sorghum

- SCO yields for corn will be used to determine the expected yield & premium rate.
  - Expected yield will be 80% of the irr corn yield.
  - Historical irr corn yields will be used to derive the irr grain sorghum rate.
- No change to grain sorghum price.



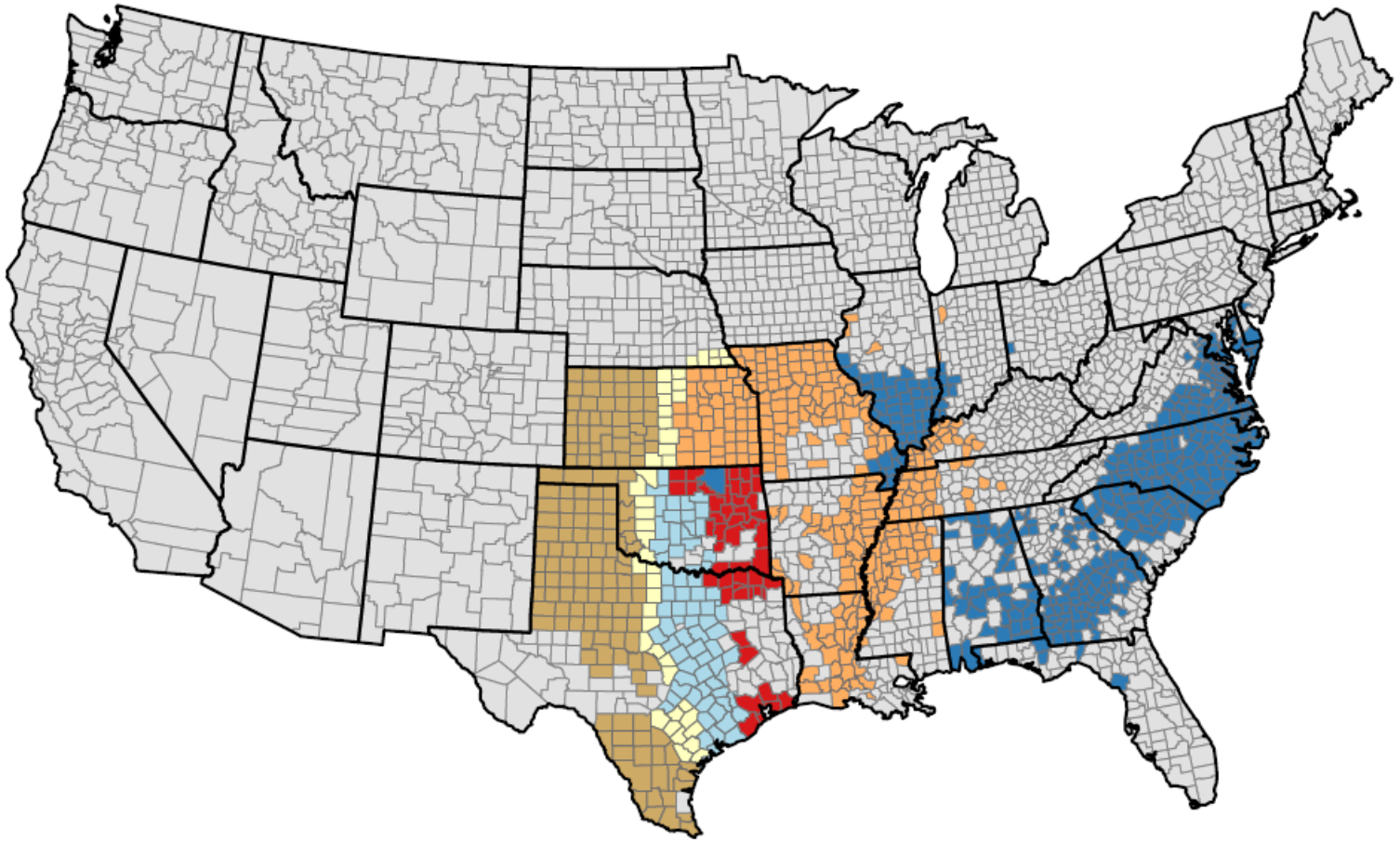
https://www.rma.usda.gov/en/News-Room/Frequently-Asked-Questions/ARPI-for-Irrigated-Grain-Sorghum-beginning-with-Crop-Year-2023

Expanded Double Cropping

- RMA released preliminary information on increasing the availability of double cropping insurance opportunities for soybeans and grain sorghum in approximately 1500 counties.
- The expansion will occur in one of three ways:
    1) Program Extension
    2) Blanket written agreement
    3) Streamlining the WA process and removing the previous production requirement.

Double Cropping Grain Sorghum

County Availability



Option

- XC and/or Relay Crop Written Agreement
- Blanket Written Agreement
- Coverage Available
- Irrigated Only / Blanket WA
- Written Agreement - 2 Years History
- Written Agreement - 3 Years History
- Written Agreement - No History

Grain Sorghum - Double Cropping Expansion - Public Map

Map Creation Date: December 19, 2022
Layer Credits: PRISM & USDA RMA
Source: USDA Risk Management Agency
Data Current Date: December 19, 2022
Map Projection: USA Contiguous Albers Equal Area Conic
RMA Insurance Services

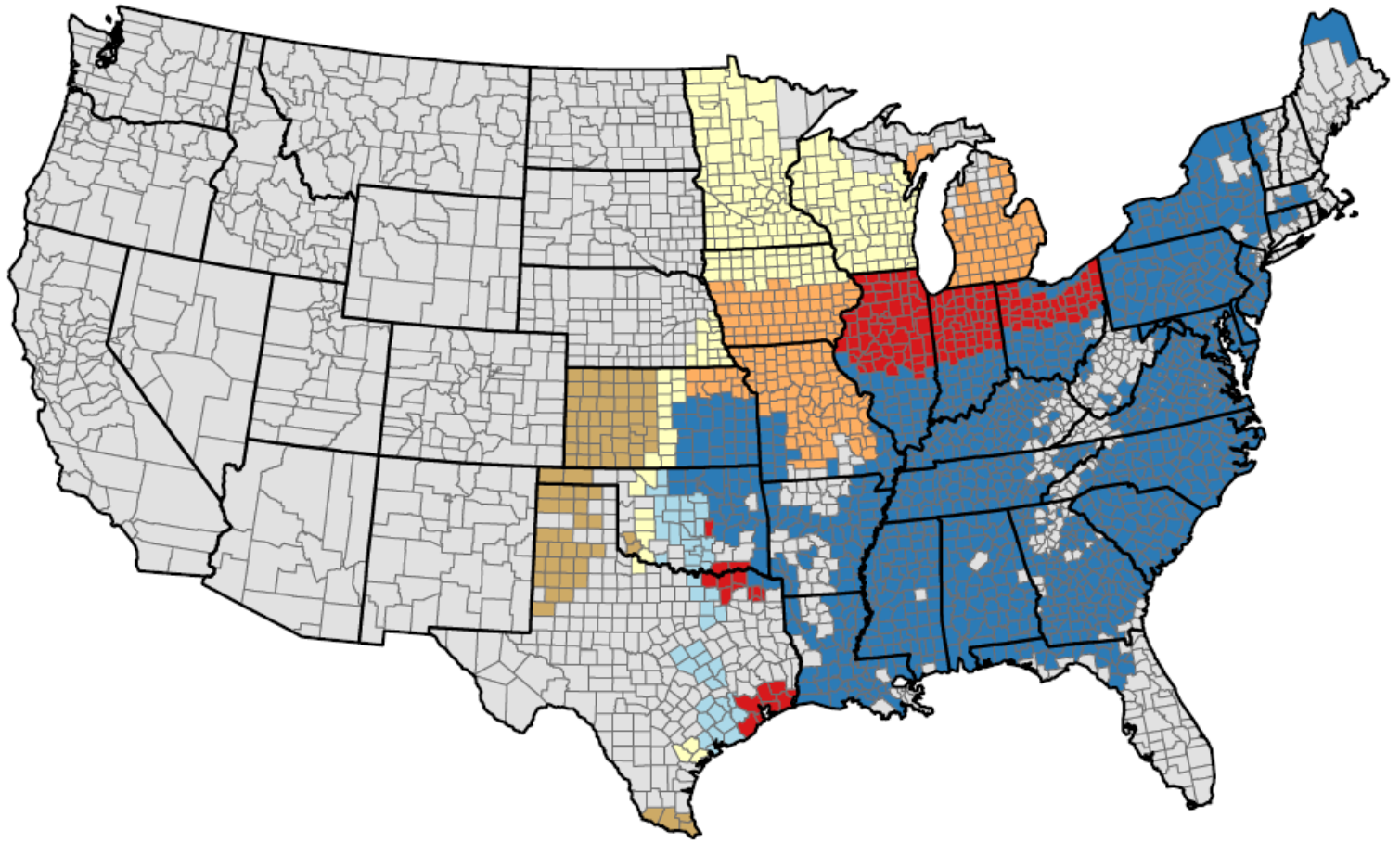
The information displayed in this map is intended to serve as an aid in displaying data provided or stored by the Risk Management Agency. It does not modify, replace or supersede any USDA published policy provisions or procedures. Maps created by USDA Risk Management Agency are for spatial and visual context for depicting the basic information for "where". Maps are not considered a survey. General Reference Only.

-- Public Information --

https://www.rma.usda.gov/en/Topics/Double-Cropping-Initiative

Double Cropping Soybeans

County Availability



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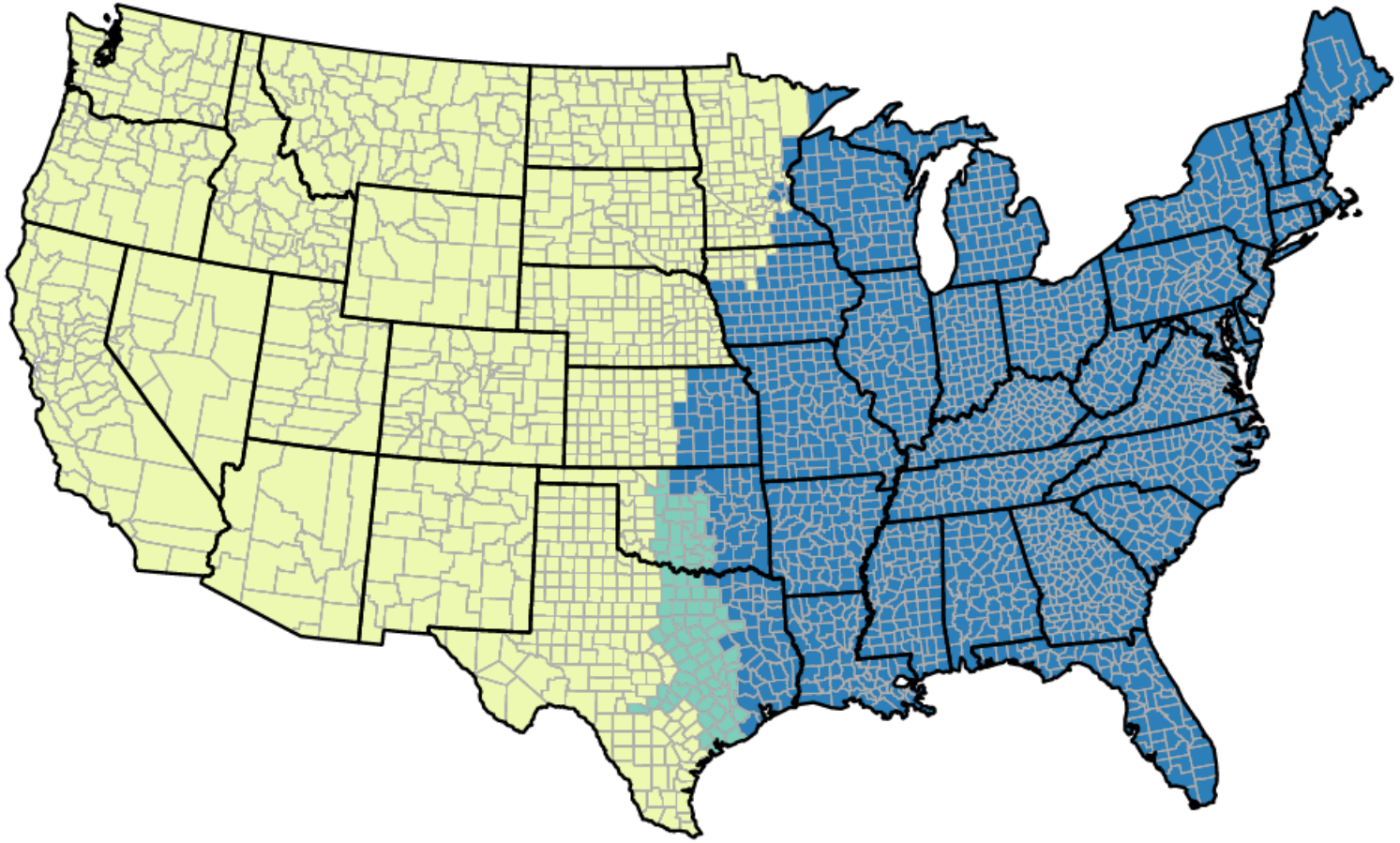
Soybeans - Double Cropping Expansion - Public Map

https://www.rma.usda.gov/en/Topics/Double-Cropping-Initiative

Relay Crop

Written Agreement Record Requirements



Relay Crop Zones

- Zone 1 - No Records Required
- Zone 2 - Two Year Records Requirement
- Zone 3 - Three Year Records Requirement

This map depicts written agreement record requirement zones for relay crops. Insurance is available, by written agreement, in all of the contiguous United States. Counties without soybean actuarial documents must submit an XC type written agreement for the crop to be insurable.

Map Creation Date: October 03, 2022
Layer Credits: PRISM & USDA RMA
Source: USDA Risk Management Agency
Data Current Date: October 03, 2022
Map Projection: USA Contiguous Albers Equal Area Conic
RMA Insurance Services

A cropping practice where a second-planted crop ("relay crop") is planted into an established crop (other than a cover crop) where the crops are planted in a manner that allows separate agronomic maintenance and harvest of the crops unless otherwise defined in the Crop Provisions.

https://www.rma.usda.gov/en/Topics/Double-Cropping-Initiative

Things to consider

https://www.shutterstock.com/g/jevticb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TRADITION
JUST BECAUSE YOU'VE ALWAYS DONE IT THAT WAY
DOESN'T MEAN IT'S NOT INCREDIBLY STUPID.

Keep on top of your record keeping

- Get it right & keep up at the FSA office.
- Insurance policy, FSA 578 & elevator/gin tickets should all match.
- Make sure you keep good records and can create a paper trail.
- Be ready for an audit.

Stay connected with your agent

- Your policies need to be reevaluated EVERY year.
- If you are adding ground, breaking out ground, considering new crops or changing something within your entity, let your agent know ASAP.
- Before you make any changes to your crop rotation or entity, have a conversation with your crop insurance agent.

Stay connected with your agent

- Check in with your agent before AND after
  1) Planting
  2) Replanting
  3) Harvesting
  4) Making any change to a crop or insured entity
  5) Have any crop related issue

Understand & use your insurance policy

- Cover crops
- Hail and/or wind
- Marketing
- Prevented Plant
- Quality issues
- Replant
- Revenue loss
- Yield loss

Understand & use your insurance policy

- Use your agent; we work for you!

https://www.pinterest.com/pin/306174474640109796/

Questions

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