

Crop Insurance

2021 Master Marketer

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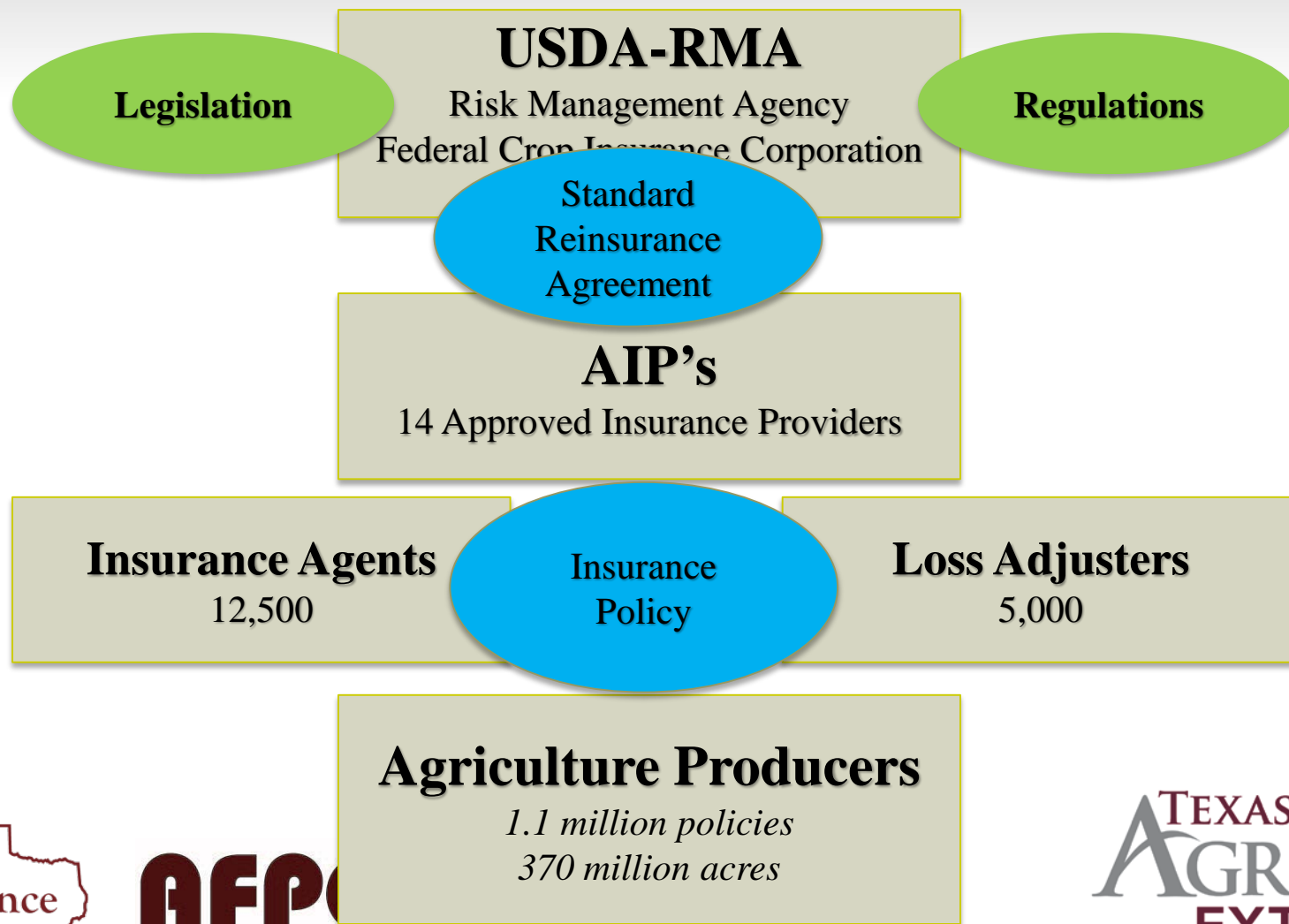
Texas A&M AgriLife Extension Service



Outline

- ❑ Crop Insurance System
- ❑ Insurance concepts
- ❑ Crop Insurance Overview
- ❑ Performance & Popular products
- ❑ Product Choices
 - ❑ Coverage level
 - ❑ Unit Structure
 - ❑ Approved yield adjustments
 - ❑ Supplemental Coverage (SCO / STAX)
- ❑ Other Considerations

Federal Crop Insurance Delivery System



Insurance / Risk Concepts



Insurance / Risk Concepts

- What is a \$1 on RED worth?
- Half Red & Half Black, pays \$2 or \$0
- Feels like an even bet...
- But what are the chances
 - Chance of red = $18/38 = 47.37\%$
 - Chance of black = $18/38 = 47.37\%$
 - Chance of green = $2/38 = 5.26\%$
- Expected value of a bet on RED:
 - $\$2(47.37\%) + \$0(52.63\%) = \$0.95$



Insurance / Risk Concepts

- House burns down?
 - Chance of fire = 0.5%
 - Chance nothing happens = 99.5%
- Expected Value of Fire loss
 - $\$250,000(0.5\%) + \$0(99.5\%) = \$1,250$
- Insurance Premiums & Indemnities
 - Actuarially fair premium = Expected Indemnity = \$1,250
 - Expense & Profit Loading
(Premium will include cost of the insurance company's business)
 - Risk Aversion
(Homeowner willing to pay more than EV to avoid disaster)
 - You might have to pay \$1,750 for something worth \$1,250



Crop Insurance Overview

- AIP's & agents earn money in the form of Administrative and Operating (A&O) payments through the SRA, based on volume of business, value of liability sold, etc. **Not by loading premiums**
- Actuarial Goal:
 - $\text{Total Premium} = \text{Expected Indemnity}$
 - $\text{Loss Ratio} = \text{Actual Indemnity} / \text{Total Premium} = 1.0$
- Underwriting gain (loss)
 - $\text{Gain(loss)} = \text{Total Premium} - \text{Actual Indemnity Payout}$
 - Underwriting gains & losses are shared by AIP's and USDA

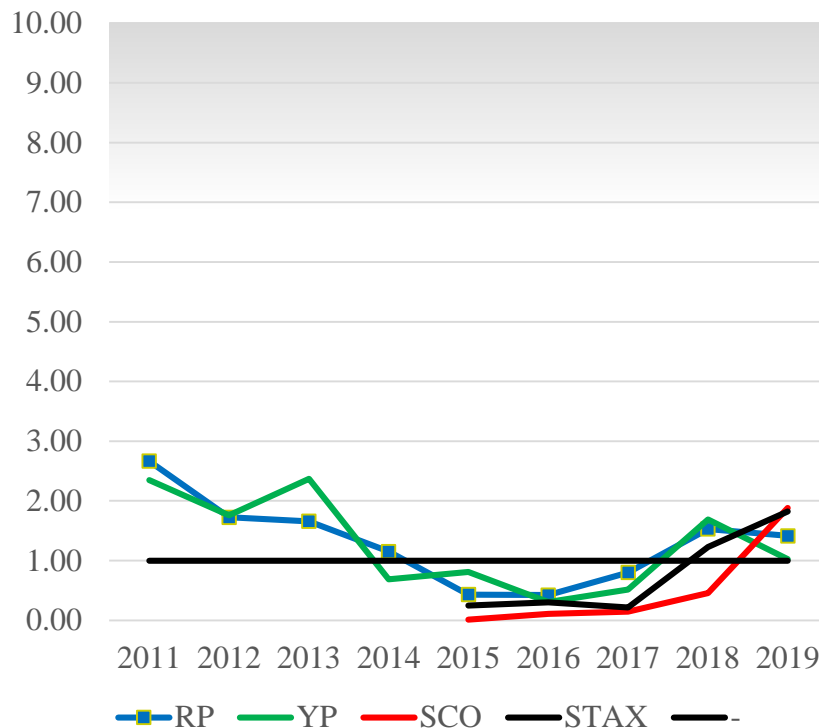
Crop Insurance Overview

- Actuarial Goal
 - $\text{Loss Ratio} = \text{Indemnity} / \text{Total Premium} = 1.0$
- Average Subsidy is 62% of Total Premium
- For a \$20 total premium
 - USDA pays 62% (\$12.40)
 - Farmer pays 38% (\$7.60)
 - $\text{Expected Indemnity} / \text{Farmer premium} = \$20 / \$7.60$
 - \$2.63 Expected Indemnity per \$1 farmer premium
 - Or
 - \$1 Expected Indemnity will cost you \$0.38 premium

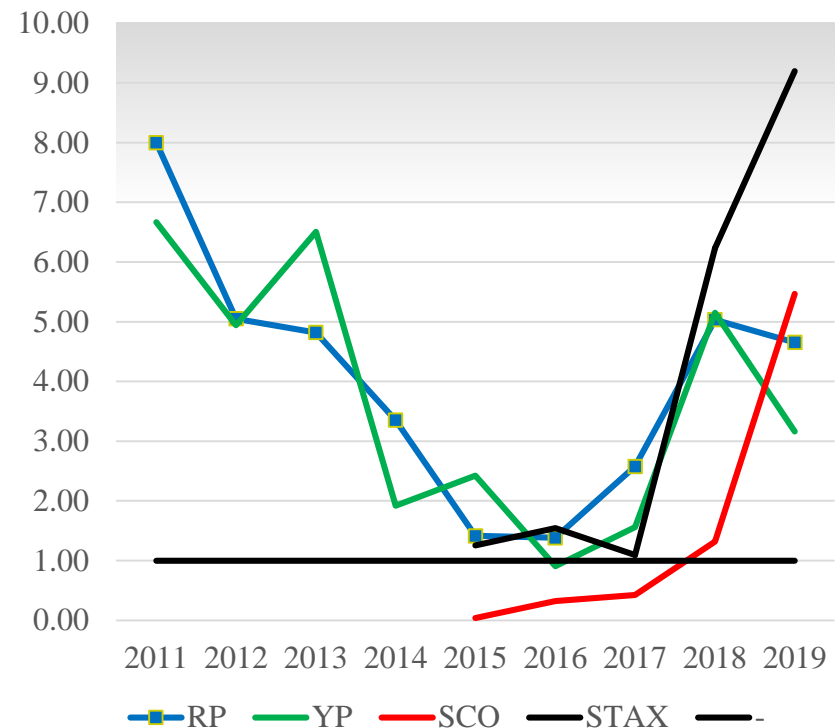
Crop Insurance History

Loss Ratio – Texas Cotton

Indemnity / Total Premium



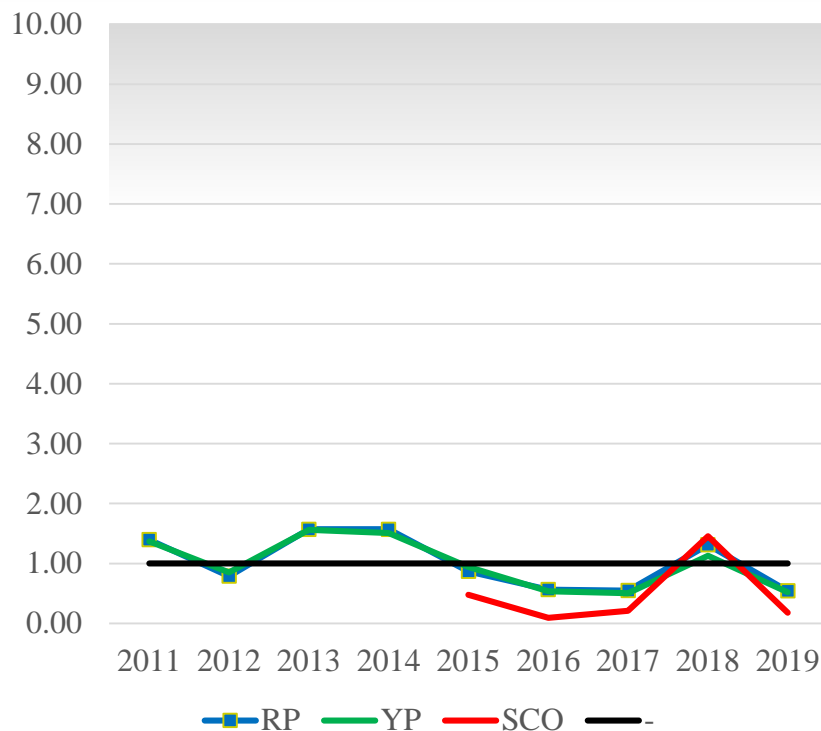
Indemnities / Producer Premiums



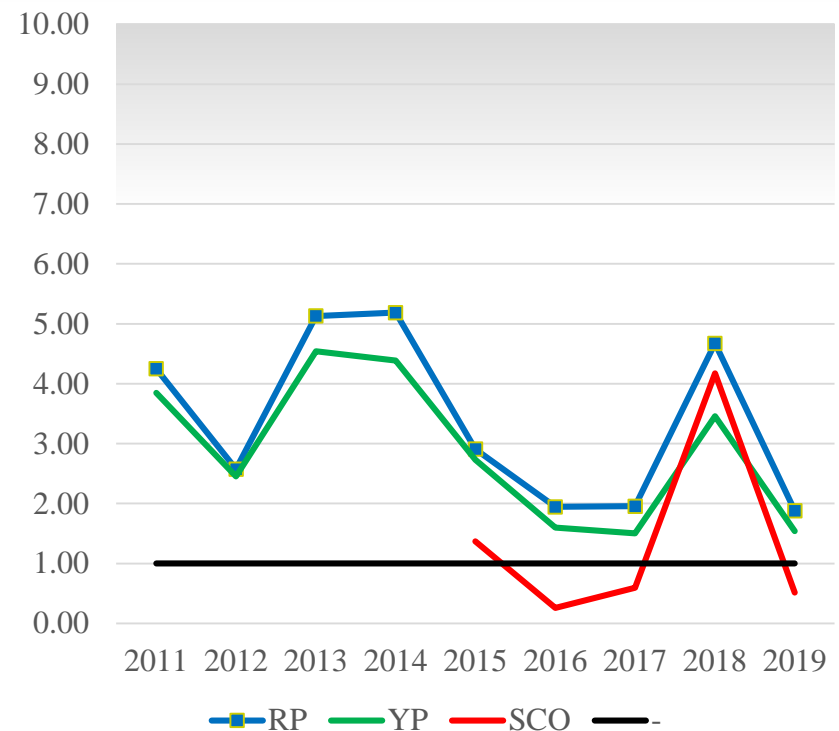
Crop Insurance History

Loss Ratio - Texas Wheat

Indemnity / Total Premium



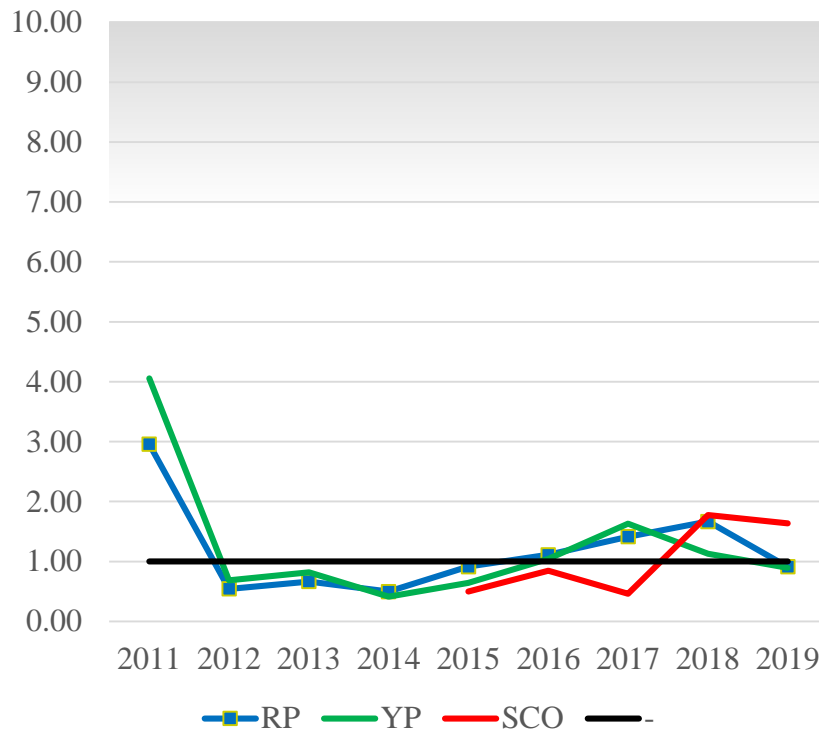
Indemnity / Producer Premium



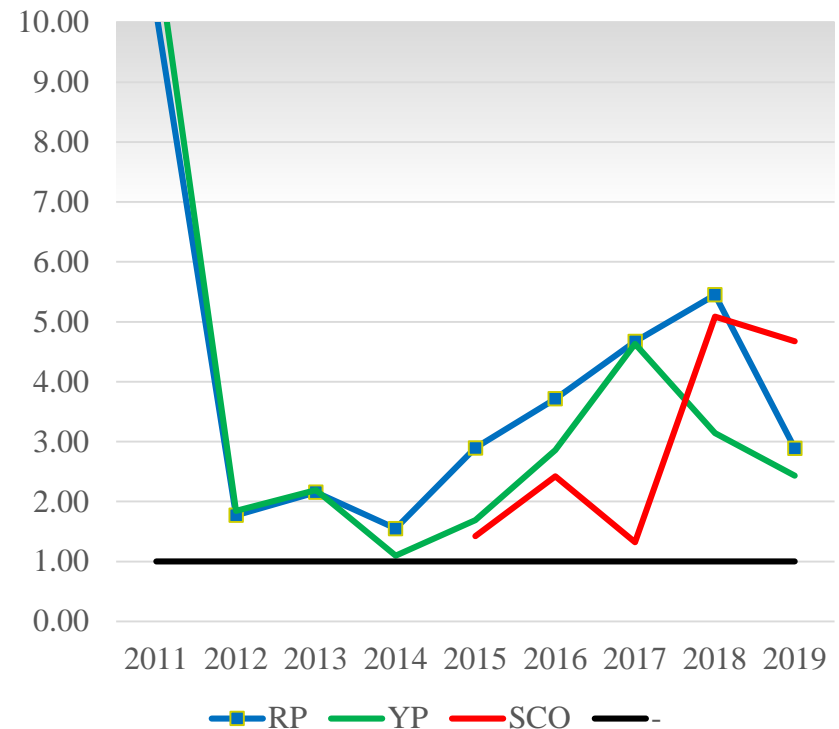
Crop Insurance History

Loss Ratio – Texas Corn

Indemnity / Total Premium



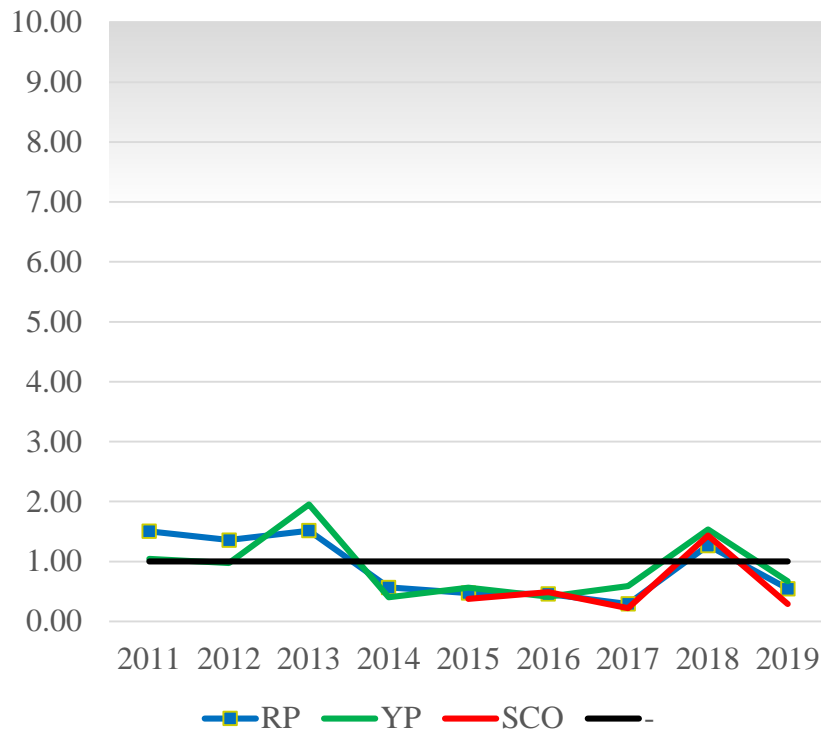
Indemnity / Producer Premium



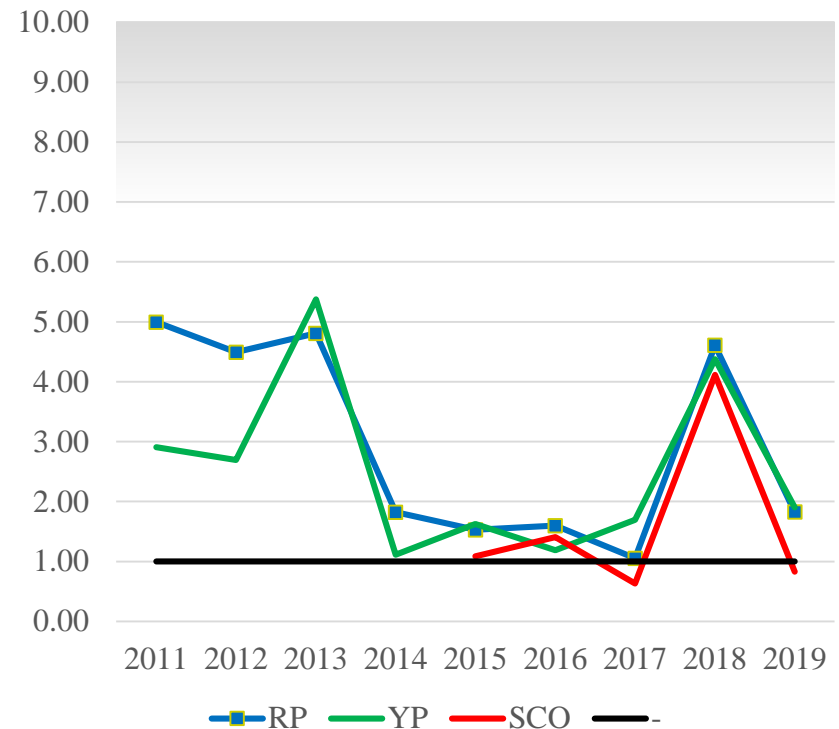
Crop Insurance History

Loss Ratio - Texas Grain Sorghum

Indemnity / Total Premium



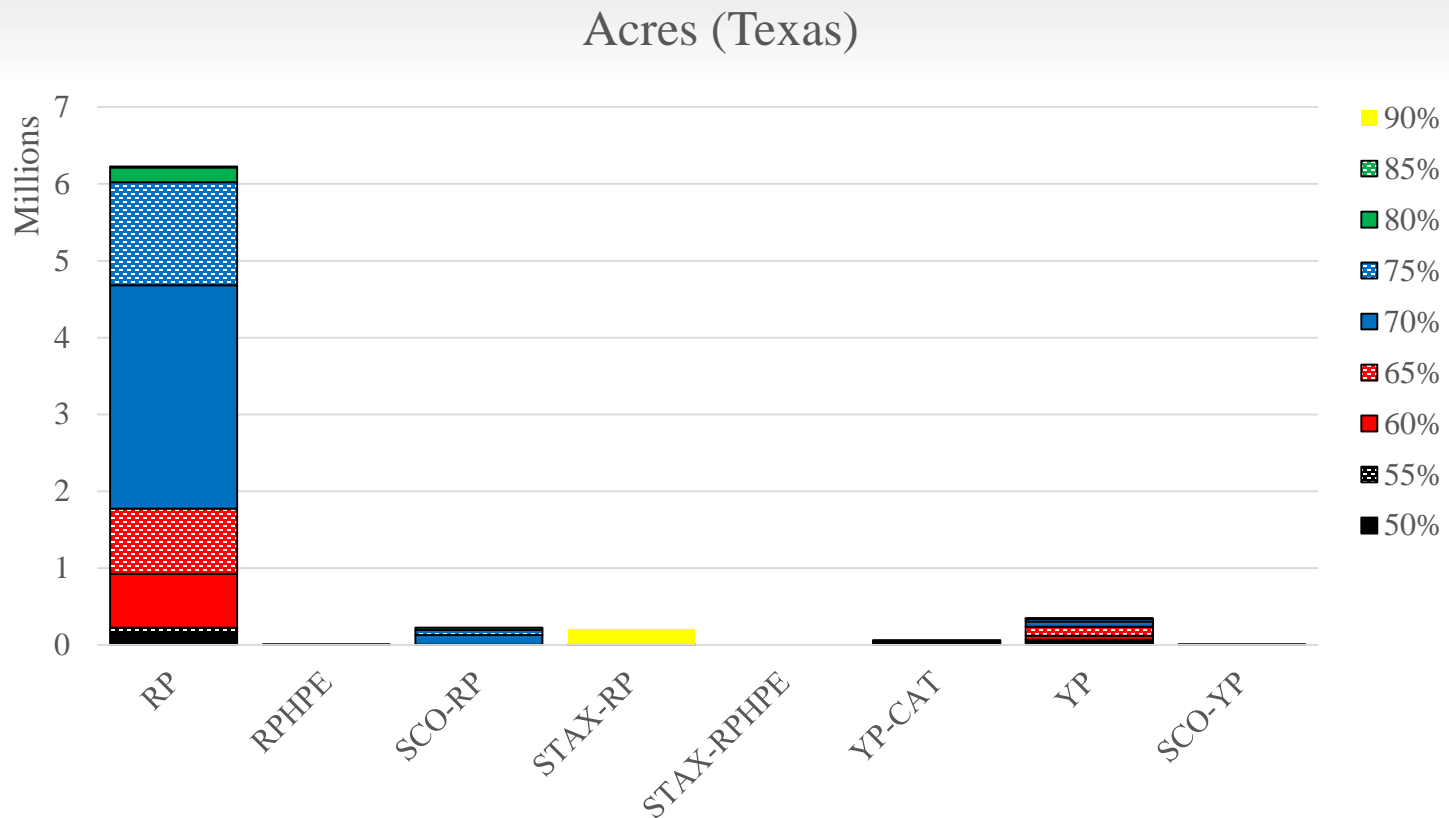
Indemnity / Producer Premium



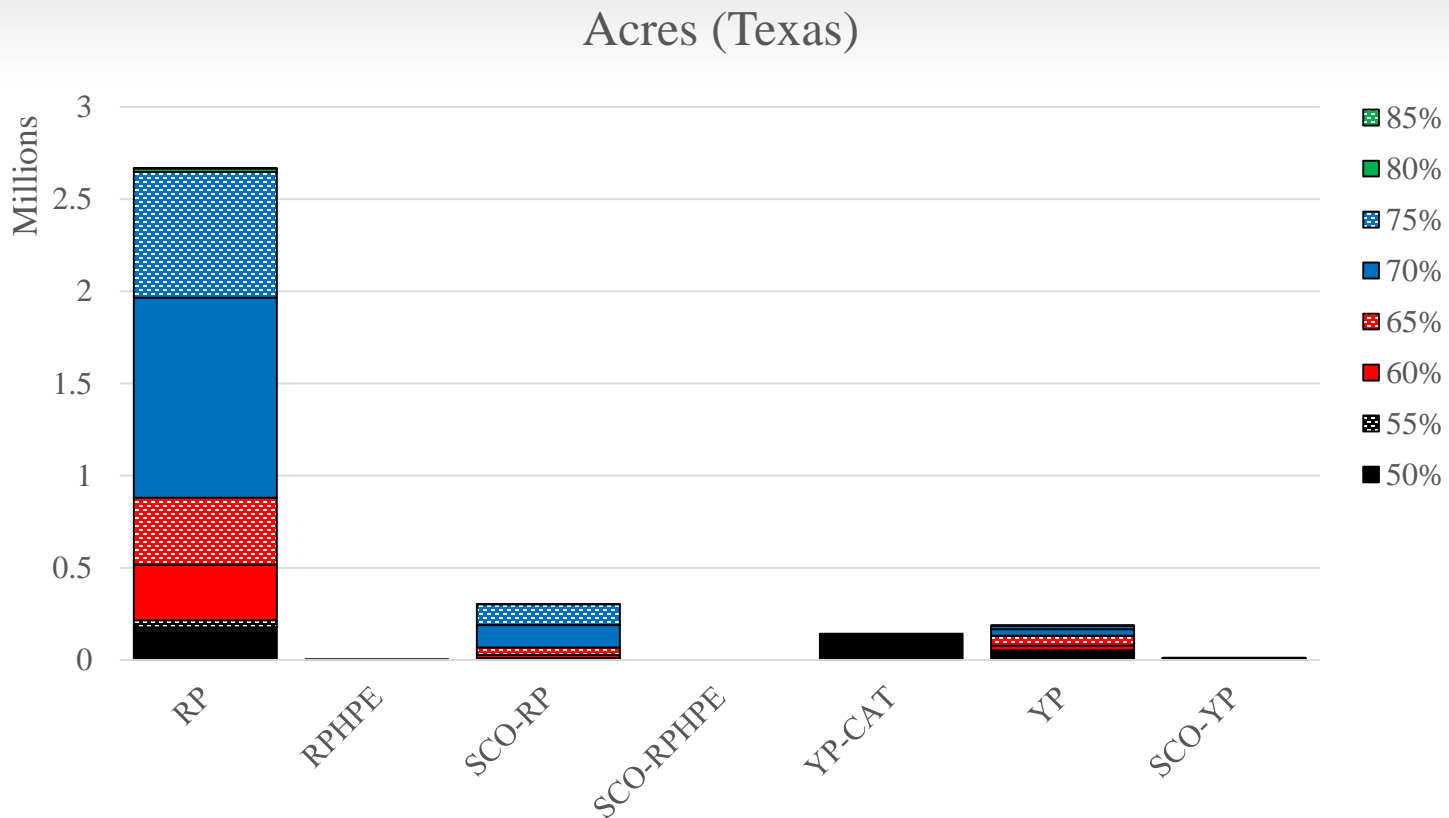
Crop Insurance Overview

- Coverage Level
 - Effectively a Deductible Selection
 - Producers selects a 70% coverage level, then the producer must suffer at least a 30% loss before crop insurance will pay an indemnity.
- Types of Policies:
 - Yield Only Policies = only yield declines are covered
 - Revenue Policies = yield and/or price declines are covered
 - Whole Farm Revenue Protection = covers entire farm, not just one commodity
 - Individual vs. Area or county coverage
 - Supplemental Coverage Policies

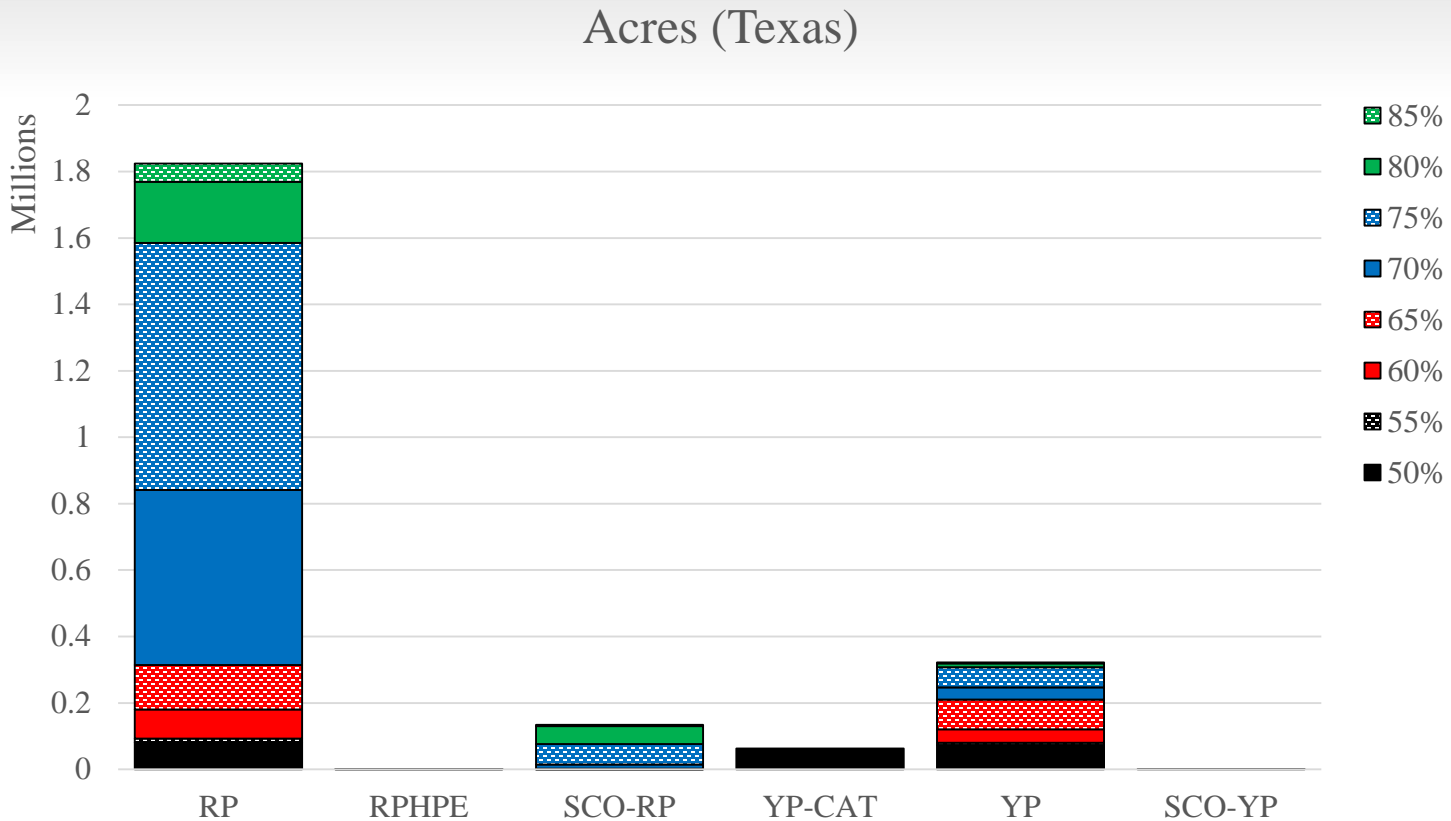
Crop Insurance Products Used 2020 Cotton



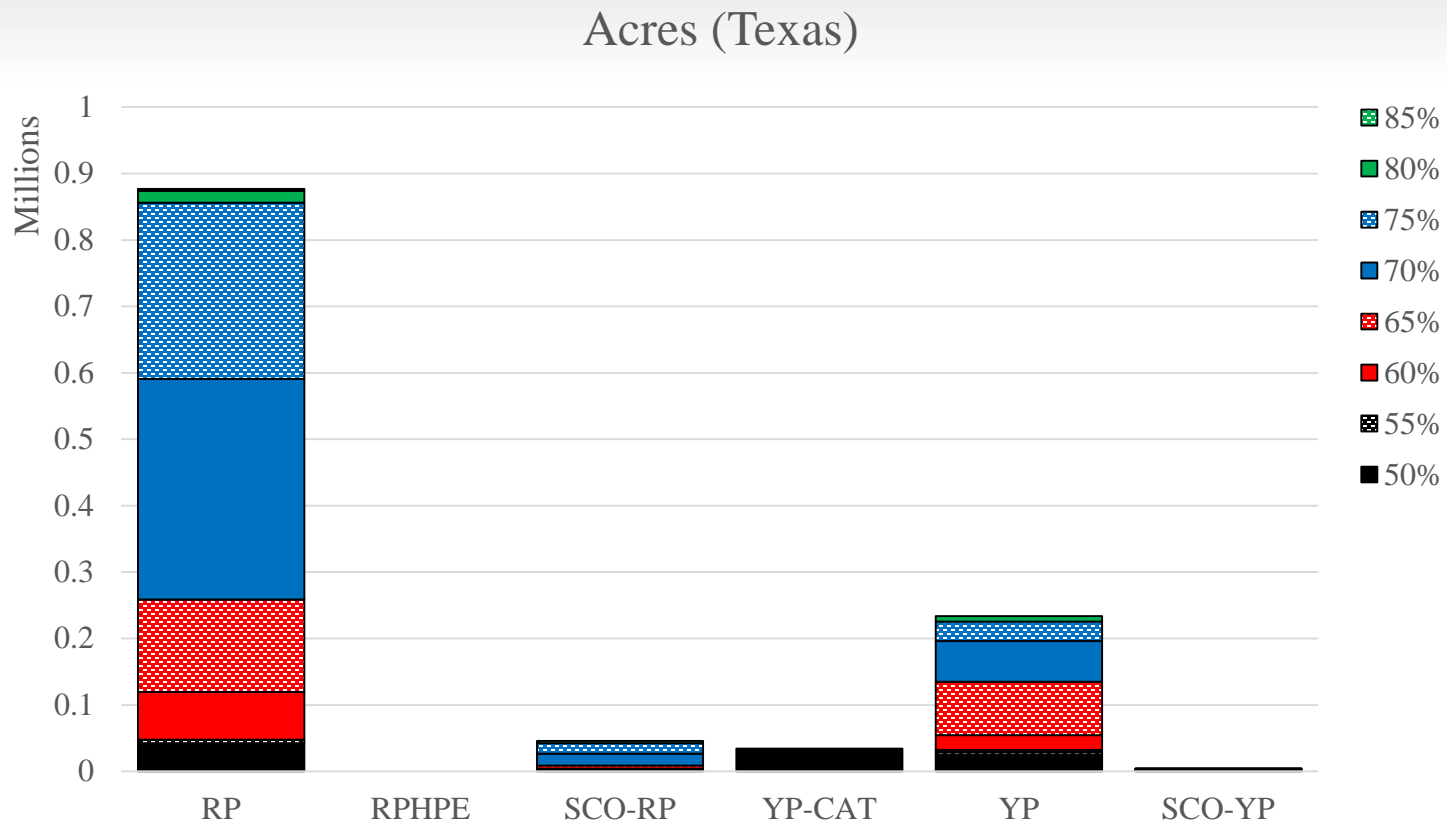
Crop Insurance Products Used 2020 Wheat



Crop Insurance Products Used 2020 Corn



Crop Insurance Products Used 2020 Grain Sorghum



2021 Announced Prices

Commodity	Price Discovery Window	Sales Closing Date	Projected Price	Harvest Price Discovery Window
Wheat	08/15 - 09/14	Sept 30	\$4.90	06/01 - 06/30
Cotton	12/15 - 01/14	Jan 31	\$0.75	09/01 - 09/30
Cotton	01/15 - 02/14	Feb 28	\$0.79 **	10/01 - 10/31
Cotton	02/01 - 02/28	March 15	\$0.80 **	10/01 - 10/31
Corn	12/15 - 01/14	Jan 31	\$4.43	08/01 - 08/31
Corn	01/01 - 01/31	Feb 15	\$4.45	09/01 - 09/30
Corn	02/01 - 02/28	March 15	\$4.51 **	09/01 - 09/30
Grain Sorghum	12/15 - 01/14	Jan 31	\$4.25	08/01 - 08/31
Grain Sorghum	01/01 - 01/31	Feb 15	\$4.27	09/01 - 09/30
Grain Sorghum	02/01 - 02/28	March 15	\$4.33 **	09/01 - 09/30

Coverage Level Choices,

Cost of production, Marketing plans, Marginal increases

County	Dallam	Insurance Product		RP				
Commodity	Corn	APH Yield / Rate Yield		200				
Practice	Irrigated	Announced Price		\$4.50				
RP Coverage (Optional unit)	50%	55%	60%	65%	70%	75%	80%	85%
Guarantee Revenue	\$450	\$495	\$540	\$585	\$630	\$675	\$720	\$765
Total Premium	23.97	30.63	38.38	47.41	57.5	68.79	82.72	101.91
Subsidy	0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38
Producer Premium	7.91	11.03	13.82	19.44	23.58	30.96	43.01	63.18
Marginal Increases								
Guarantee Revenue		45	45	45	45	45	45	45
Total Premium		6.66	7.75	9.03	10.09	11.29	13.93	19.19
Producer Premium		3.12	2.79	5.62	4.14	7.38	12.06	20.17

Premium Subsidy Levels

Coverage Level		0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85
Subsidy Factors	Enterprise Unit	0.80	0.80	0.80	0.80	0.80	0.77	0.68	0.53
	Basic Unit	0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38
	Optional Unit	0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38

Optional/Basic/Enterprise Unit

County	Dallam	Insurance Product		RP				
Commodity	Corn	APH Yield / Rate Yield		200				
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Producer Premium	7.91	11.03	13.82	19.44	23.58	30.96	43.01	63.18
RP Coverage (Basic unit)	50%	55%	60%	65%	70%	75%	80%	85%
Total Premium	14.68	19.12	24.96	31.9	40.07	49.18	60.61	75.86
Subsidy	0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38
Producer Premium	4.84	6.88	8.99	13.08	16.43	22.13	31.52	47.03
RP Coverage (Enterprise unit)	50%	55%	60%	65%	70%	75%	80%	85%
Total Premium	14.68	19.12	24.96	31.54	40.07	49.18	60.09	73.6
Subsidy	0.80	0.80	0.80	0.80	0.80	0.77	0.68	0.53
Producer Premium	2.94	3.82	4.99	6.31	8.01	11.31	19.23	34.59

Tools to Customize Insurance

❑ Yield Adjustment (YA)

For APH yield calculation purposes, producers may elect to substitute 60% of the applicable T-Yield for actual yields when their actual yields are less than 60% of the T-Yield.

❑ APH Yield Exclusion (YE)

Producers are eligible when the county yield is at least 50% below the average of previous 10 consecutive crop years.

Producers in any county contiguous to a county with crop years eligible for exclusion may also exclude yields for those same crop years.

❑ Trend Adjustment (TA)

For APH yield calculations, producers may elect to add a trend factor to actual yields, to reflect trending improvements in crop varieties, practices, etc.

❑ Can you achieve the same protection with lower coverage levels ?

Trend Yield

County	Dallam	Insurance Product				RP			
Commodity	Corn	APH Yield / Rate Yield				200			
Practice	Irrigated	Announced Price				\$4.50			
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Guarantee Revenue		\$450	\$495	\$540	\$585	\$630	\$675	\$720	\$765
Total Premium		23.97	30.63	38.38	47.41	57.5	68.79	82.72	101.91
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Producer Premium		7.91	11.03	13.82	19.44	23.58	30.96	43.01	63.18
Trend Adj increases APH to 220		50%	55%	60%	65%	70%	75%	80%	85%
Guarantee Revenue		\$495	\$545	\$594	\$644	\$693	\$743	\$792	\$842
Total Premium		25.77	32.94	41.25	50.99	61.81	73.97	88.93	109.58
Subsidy		0.67	0.64	0.64	0.59	0.59	0.55	0.48	0.38
Producer Premium		8.50	11.86	14.85	20.91	25.34	33.29	46.24	67.94

Supplemental Products

STAX / SCO

- **Stacked Insurance Protection Plan (STAX)**
 - Only cotton (not in combination with Seedcotton ARC/PLC)
 - Companion or stand alone, **Area** based coverage
 - Starts at 90%, max range of 20%
 - 80% premium subsidy
- **Supplemental Crop Insurance (SCO)**
 - Any crop (not available in combination with ARC)
 - **Area** based coverage, as companion to underlying policy
 - Starts at 86%, range down to where underlying policy starts
 - 65% premium subsidy

SCO

County	Dallam	Insurance Product		RP				
Commodity	Corn	APH Yield / Rate Yield		200				
Practice	Irrigated	Announced Price		\$4.50				
RP Coverage (Optional unit)	50%	55%	60%	65%	70%	75%	80%	85%
Guarantee Revenue	\$450	\$495	\$540	\$585	\$630	\$675	\$720	\$765
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← SCO covers 60%-86% →
65% Premium Subsidy

Whole Farm Revenue Protection

- ❑ Covers all commodities on the farm under **one insurance policy**.
- ❑ Select Coverage level base on:
 - Expected revenue determined by your farm plan, or
 - Historic revenue adjusted for growth at the selected coverage level.
- ❑ Covers up to \$8.5 million of revenue from all commodities produced on the farm/ranch (Excluding timber, forest, forest products, and animals for sport, show or pets)

Whole Farm Revenue Protection

- Well-suited for:
 - Highly diverse farms
 - Farms with specialty commodities
 - Farms selling to direct markets, specialty markets, regional or local markets, and farm-identity preserved markets

Whole Farm Revenue Protection

WFRP Subsidy: Percentage of Total Premium Paid by Government								
Coverage Level	50%	55%	60%	65%	70%	75%	80%	85%
Basic Subsidy-Qualifying Commodity Count: 1	67%	64%	64%	59%	59%	55%	N/A	N/A
Whole-Farm Subsidy- Qualifying Commodity Count: 2	80%	80%	80%	80%	80%	80%	N/A	N/A
Whole-Farm Subsidy- Qualifying Commodity Count: 3 or more	80%	80%	80%	80%	80%	80%	71%	56%

Beginning Farmers & Ranchers

Qualifications

- Must **not** have actively operated and managed a farm or ranch anywhere, with an insurable interest in any crop or livestock for more than 5 crop years

Benefits

- **Exemption from administrative fee** for catastrophic (CAT) and additional coverage (buy up) level policies;
- **Additional 10 percentage points of premium subsidy** for additional coverage policies (buy-up) that have premium subsidy;
- Use of the production history of farming operations where beginning farmers and ranchers were previously involved in the decision making or physical activities; and
- An **increase in the substituted yield for yield adjustment**, which allows a replacement of a low yield due to an insured cause of loss, from 60 to 80 percent of the applicable transitional yield (T-Yield) for the crop in the county.

In the case of a Loss

- Contact your crop insurance agent
- You have **72 hours** from your initial discovery to file a notice of loss
- **Do not destroy** the crop and/or replant until you talk to your agent and discuss options
- **DOCUMENT**, You must provide verifiable documentation that you have planted a crop
 - Seed tickets
 - Fertilizer receipts
 - Precision farming records

Noninsured Crop Disaster Assistance Program (NAP)

- Available Through USDA – FSA
- Basic NAP
 - CAT level coverage (50% Yield -- 55% Price)
 - \$325/crop fee (\$825 max/county and \$1950 max/person)
 - \$125,000 Max Indemnity / person
- NAP Buy-up Options
 - 50/100 -- 55/100 -- 60/100 -- 65/100
 - \$325 fee + (5.25% of guaranteed value) * acres
 - \$300,000 Max Indemnity / person

Questions / Discussion

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