

Crop Insurance and Federal Risk Management Programs: Changes and Hints for 2009

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Goal Today

- Farmer practices and experience with crop insurance
 - Focus on WI and Dane County
- Hints for using crop insurance
- Risk Management for 2009
 - Integrating crop insurance and new 2009 federal risk management programs

Types of Policies

- Yield Insurance vs Revenue Insurance
 - What triggers a payment?
 - Yield or Revenue below the guarantee?
- Individual vs. Area-Wide Coverage
 - Whose yield/revenue triggers payment?
 - Your own or your county's?

	Individual	Area-Wide (County)
Yield	APH Actual Production History	GRP Group Risk Plan
Revenue	CRC Crop Revenue Coverage	GRIP Group Risk Income Protection

- **Catastrophic coverage (CAT):**
50% coverage level 55% price election
 - APH, GRP, GRIP (not CRC)
- **AGR-Lite:** Insure Schedule F income

Farmer Choices

- Have to choose policy to buy (if any)
 - Within each type, have other decisions
- CRC/APH
 - Coverage level
 - Price election
 - Unit structure
- GRP/GRIP
 - Coverage level
 - Corn GRP/GRIP: yield per harvested acre or yield per planted acre

Wisconsin farmer practices with crop insurance

- Relative to neighboring states, WI a low participation state in crop insurance
- CRC the most popular policy, then APH, GRIP, and last is GRP
- APH CAT policies common
 - Little protection, very cheap \$300/crop/county

WI vs. neighboring states

% planted acres insured in 2007

State	Corn	Soybeans	Wheat
IA	92%	75%	24%
IL	78%	71%	47%
MN	91%	93%	91%
MI	67%	66%	56%
WI	64%	70%	41%

WI in 2004: 54% corn, 63% Soybeans, 33% Wheat

WI corn policies in 2008

	% planted acres	% insured acres	% policies sold	Avg. Units/Policy
APH CAT	6.5%	10.9%	10.7%	1.03
APH BuyUp	12.2%	20.5%	30.9%	2.43
CRC BuyUp	40.7%	68.3%	61.3%	3.24
GRIP BuyUp	4.9%	8.3%	4.6%	1.21
GRP CAT	0.2%	0.4%	0.1%	1.00
GRP BuyUp	1.5%	2.6%	3.1%	1.11
All Total	60%			2.83

WI soybean policies in 2008

	% planted acres	% insured acres	% policies sold	Avg. Units/Policy
APH CAT	4.9%	7.4%	7.2%	1.05
APH BuyUp	9.0%	13.5%	21.6%	1.93
CRC BuyUp	51.2%	77.0%	72.3%	2.66
GRIP BuyUp	4.4%	6.6%	3.9%	1.19
GRP CAT	0.1%	0.1%	0.1%	1.00
GRP BuyUp	1.8%	2.8%	2.0%	1.01
All Total	71%			2.41

WI wheat policies in 2008

	% planted acres	% insured acres	% policies sold	Avg. Units/Policy
APH CAT	3.5%	7.8%	4.6%	1.03
APH BuyUp	2.1%	21.1%	25.0%	1.79
CRC BuyUp	31.7%	71.1%	70.4%	2.12
All Total	44.5%			1.99

WI Farmer Practices: Summary

- Lots of WI grain acres could be insured
- CRC most popular among those buying insurance
 - Slightly larger than average sized farms buy it
 - Use more than average number of units
- APH popular among smaller farms
 - Use fewer than average number of units
- GRIP (and GRP) popular among largest farms

Crop Insurance in Dane County 2008

Crop	Acres	Policies	Liability
Corn (1 st)	124,162	599	67,574,661
Forage Prd (3 rd /4 th)	11,008	102	2,248,219
Forage Sdg	593	19	107,301
Green Peas	187	8	55,465
Hybrid Seedcorn	1,386	6	820,996
Oats	38	3	4,784
Soybeans (2 nd)	53,365	462	22,282,257
Sweet corn	235	7	85,122
Tobacco	572	94	1,639,311
Wheat (3 rd /4 th)	7,684	127	2,098,004
Total	199,242	1,430	97,143,837

Policies in Dane County 2008

Crop	Plan	Acres	Policies	Liability	Acres	Policies	Liability
Corn	APH	29,336	192	9,312,799	24%	32%	14%
Corn	CRC	88,062	377	53,244,266	71%	63%	79%
Corn	GRIP	6,142	24	4,542,276	5%	4%	7%
Corn	GRP	622	6	475,320	1%	1%	1%
Soybeans	APH	10,845	118	2,665,874	20%	26%	12%
Soybeans	CRC	41,555	335	18,827,303	78%	73%	84%
Soybeans	GRIP	833	7	706,663	2%	2%	3%
Soybeans	GRP	132	2	82,417	0%	0%	0%

Corn Coverage Levels in Dane County 2008

Cvg	CRC		APH	
	Policies	Acres	Policies	Acres
50	1	215	78	17,868
55	1	94	2	89
60	6	777	1	285
65	44	9,065	52	5,957
70	147	32,588	40	3,651
75	146	33,329	19	1,486
80	20	6,802		
85	12	5,192		

Most Popular

CRC: 70%-75%

APH: 50% CAT
and then 65%

Soybean Coverage Levels in Dane County 2008

Cvg	CRC		APH	
	Policies	Acres	Policies	Acres
50	2	433		
55	1	60		
60	6	896	1	96
65	28	3,579	27	1,923
70	101	11,020	22	1,770
75	130	16,455	18	938
80	46	4,550	1	89
85	21	4,562	2	50

Most Popular

CRC: 70%-75%

APH: 65% and
no CAT

GRP/GRIP Coverage Levels in Dane County 2008

Plan	Cvg	Corn		Soybeans	
		Policies	Acres	Policies	Acres
GRIP	70			1	238
	85	1	84		
	90	23	6,058	6	595
GRP	70	1	33		
	75	1	101		
	90	4	488	2	132

Most Popular: GRP/GRIP: 90%

Crop Insurance in Dane County

- Corn and soybeans by far most important
- CRC most popular, then APH, then GRIP
 - GRIP and CRC: larger farms and higher yields
 - APH: smaller farms and lower yields
- Coverage Levels
 - CRC: 70%-75%
 - APH: CAT (50%), then 65%
- Dane County a lot like the rest of the state

Experience with Crop Insurance

- Loss Ratio measures insurance performance
- Loss Ratio = Indemnities/Premiums
 - Loss Ratio of 1.5 means, on average, \$1.50 in indemnities paid for every \$1.00 of premiums
- Crop insurance: Subsidized premiums, farmers and government each pay part
 - Program loss ratio = Indemnity/(Govt. + Farmer Premium)
 - Farmer loss ratio = Indemnity/Farmer Premium
- Farmers care about farmer loss ratio

WI Crop Insurance for Corn in 2007

	total prem. /A	farmer prem. /A	indem./A	program loss ratio	farmer loss ratio
APH CAT	7.48	--	1.97	0.26	--
APH BuyUp	28.30	11.48	29.64	1.05	2.58
CRC BuyUp	53.03	23.16	42.75	0.81	1.85
GRIP BuyUp	65.90	29.52	1.60*	0.04*	0.09*
GRP CAT	2.20	--	0.00*	0*	--
GRP BuyUp	11.20	4.84	2.09*	0.27*	0.63*
All Total	45.48	19.50	30.97	0.68	1.59

-- Farmers pay no per acre premiums, so no loss ratio.

* Policy does not pay indemnities until March/April 2008, these for 2006.

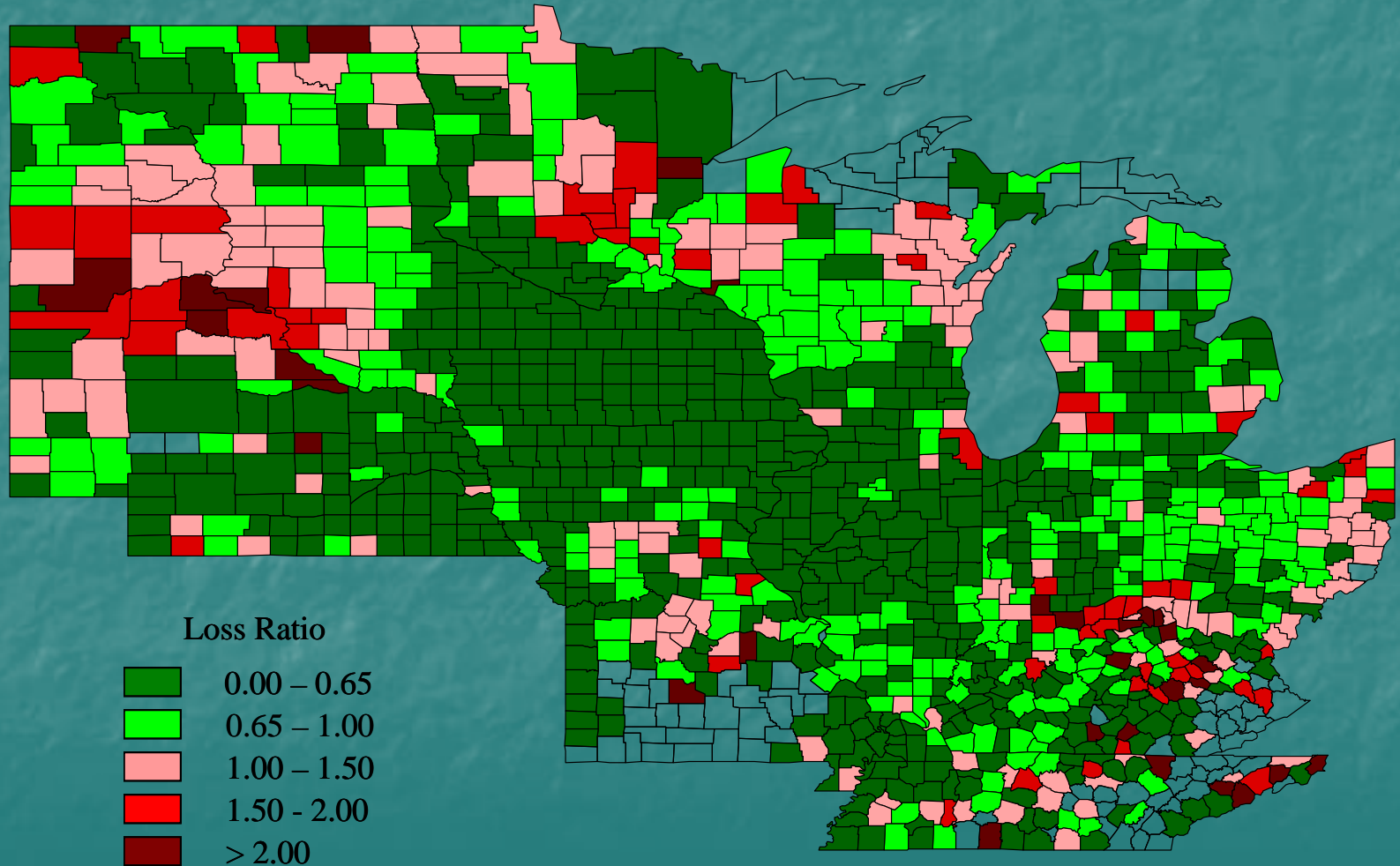
WI Crop Insurance for Soybeans in 2007

	total prem. /A	farmer prem. /A	indem./A	program loss ratio	farmer loss ratio
APH CAT	2.86	--	0.64	0.22	--
APH BuyUp	12.77	5.28	10.48	0.82	1.99
CRC BuyUp	26.36	11.87	23.74	0.90	2.00
GRIP BuyUp	35.30	15.82	0.16*	0.01*	0.01*
GRP CAT	0.98	--	0.00*	0*	--
GRP BuyUp	9.25	4.11	0.00*	0*	0.00*
All Total	23.44	10.40	18.12	0.77	1.74

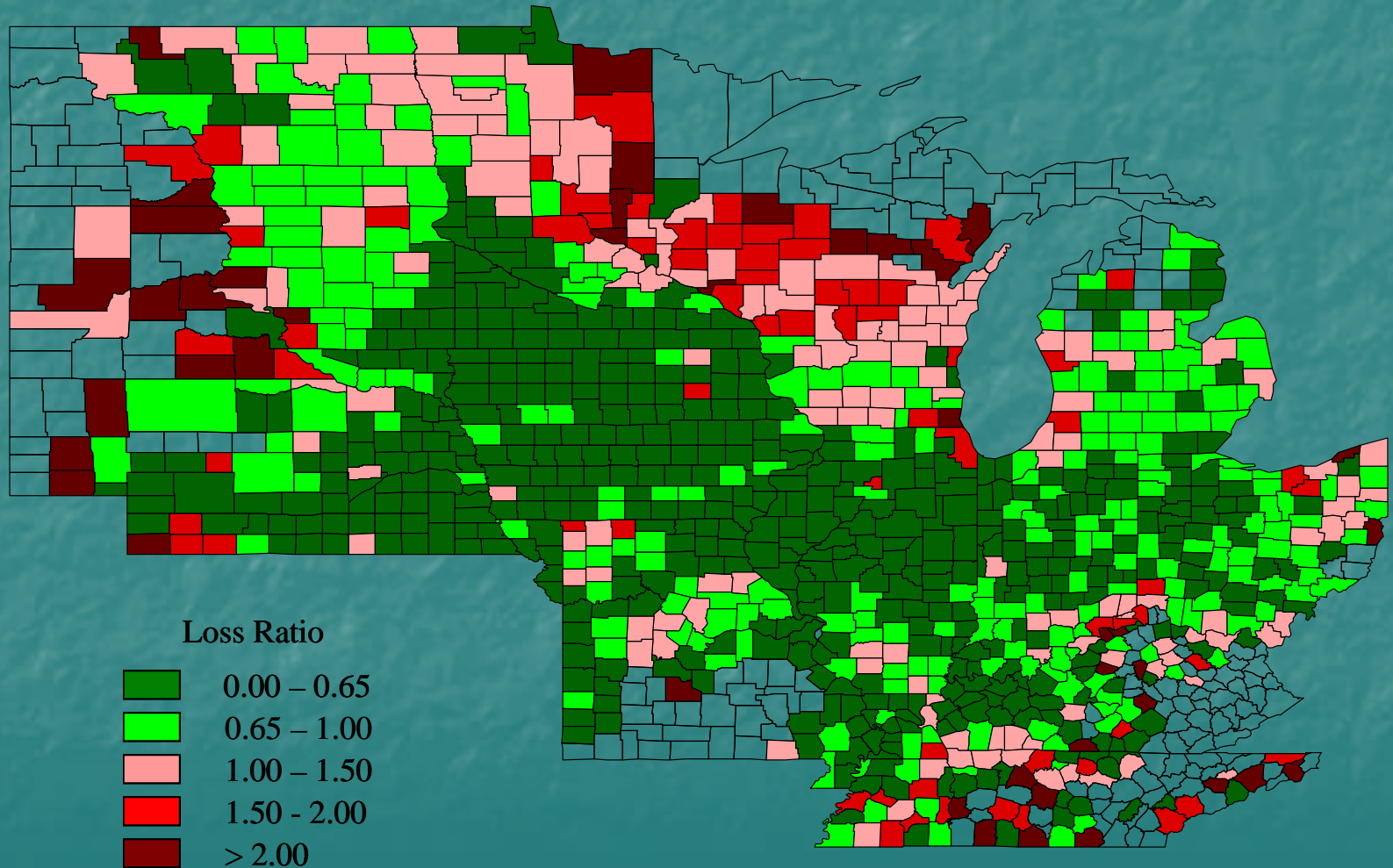
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* Policy does not pay indemnities until March/April 2008, these for 2006.

APH+CRC+RA Average County Program Loss Ratios for Corn 1995-2007



APH+CRC+RA Average County Program Loss Ratios for Soybeans 1995-2007



Main Point

- Farmers, on average over the whole state, generally win on crop insurance policies
 - Especially in the north
 - Especially for soybeans
- Main corn/soybean counties in US “carry” the crop insurance program for remaining counties
 - NE, IA, IL, IN, MN

Hints for Using Crop Insurance in 2009

- It's all about risk management and crop insurance is only one of the tools available
- Integrate crop insurance into overall risk management—it's not a stand alone decision anymore
- 2 page handout or see my web page www.aae.wisc.edu/mitchell/extension.htm

Risk Management in 2009

- 2009 is a strange year: grain and input prices were very high, now low. Riskier?
- Lock in inputs to avoid availability risk
 - Many farmers waiting at risk of not getting what want when want it this spring
- Figure out your costs and profit margin
 - Can you afford to insure all input costs?
 - Do you need larger cash reserves for margin calls and cash flow fluctuations?

Risk Management in 2009

- Rental rates with all this uncertainty???
 - Flexible cash leases more popular as way for tenant-landlord to share margin risk
 - Base rental rate plus bonus based on actual yields and prices
 - FSA has relaxed rules so tenant-landlord no longer have to share govt. payments
 - May want to (re-)negotiate with landlords to get these leases for 2009

New in 2009

- Farm Bill
 - ACRE: Average Crop Revenue Election
 - SURE: Supplemental Revenue Assistance Payments
- Crop insurance changes
 - BYE: Biotech Yield Endorsement for Corn
 - Price change limits on CRC and GRIP

ACRE: Average Crop Revenue Election

- New Farm Bill alternative like “Govt. GRIP”
- Creates state level revenue guarantee (NASS state yields and USDA prices)
- If actual state revenue less than guarantee, triggers ACRE payments
- Farmer “premium” = 20% of direct payments, all counter-cyclical payments and 30% of loan deficiency payments
- Means may need less CRC/GRIP coverage

ACRE Payments

- Fairly complicated formula main idea here
- Two triggers satisfied to receive ACRE payment
 - 1) Actual State Rev. < ACRE State Rev. Guarantee
 - 2) Actual Farm Rev. < ACRE Farm Benchmark Rev.
- Trigger calculations: See next slide
- If triggers met, then receive ACRE payments =
(State Rev. Guarantee – Act. State. Rev) x
83.3% Farm Planted Acres x
(5-year avg farm yld/5-year avg state yld)

Average Crop Revenue Election (ACRE) Payments^a

BOTH triggers must be met before ACRE payments are made

1. STATE TRIGGER	Actual State Revenue	less than	ACRE State Revenue Guarantee	no more than a 10% change from previous year
	Actual State Yield per Planted Acre		90% of Benchmark State Yield per Planted Acre (5-year Olympic ^b average)	
	times larger of		times	
	{ National Average Market Price or 70% of National Loan Rate }		ACRE Program Guarantee Price (2-year average of National Market Price)	
2. FARM TRIGGER	Actual Farm Revenue	less than	ACRE Farm Benchmark Revenue	no more than a 10% change from previous year
	Actual Farm Yield		Average Farm Yield per Planted Acre (5-year Olympic ^b average)	
	times larger of		times	
	{ National Average Market Price or 70% of National Loan Rate }		ACRE Program Guarantee Price (2-year average of National Market Price)	
			plus	
			Per Acre Producer-Paid Crop Insurance Premium	

Calculating ACRE payments^c

Lesser of: {

ACRE State Revenue Guarantee	minus	Actual State Revenue
ACRE State Revenue Guarantee	times	25%
times		
83.3% ^d of Farm Planted Acres ^e		
times		

5-year farm Olympic^b average of yield per planted acre / 5-year state Olympic^b average of yield per planted acre

^a Farms participating in ACRE receive no counter-cyclical payments, direct payments reduced by 20%, and a loan rate reduced by 30%.

^b An Olympic average drops the highest and lowest observations before calculating the average.

^c ACRE payments will be issued October 1 with no advance payments made.

^d Becomes 85% in 2012

^e Total planted acres for which a producer may receive ACRE payments may not exceed a farm's total base acres. If total planted acres exceeds a farm's base acres, the farm may elect which planted acres to enroll in ACRE.

How about a little help?

- With today's prices and expected prices, seems unlikely we will trigger LDP's or CCP's any time soon, so the pertinent question is:
- Are expected ACRE payments $>$ 20% of DP's?
 - ACRE is like revenue insurance with premium equal to 20% of Direct Payments
- What will make for low ACRE payments?
 - Market prices for 2009 to 2012 above 2007 and 2008 average prices and/or state average yields at or above trend yields
- What will make for high ACRE payments?
 - Market prices below 2007 and 2008 average prices and/or low state average yields

More Technical Help

- Iowa State University-CARD: Excel program that simulates random prices and yields to estimate ACRE payments, LDP's and CCP's
- You choose 2008 and 2009 prices, then it simulates prices, state yields, and average ACRE payments vs. current program
- Can also do what-if scenario analysis
http://www.card.iastate.edu/ag_risk_tools/acre/

ACRE: Final Comments

- ACRE will have an annual signup period
- ACRE is an irrevocable choice, so be sure you want to do it
- When will the 2009 signup be?
 - DP and CCP signup begin Oct. 1, as usual
 - Software for ACRE out sometime after Jan 1st
 - Will be able to change your 2009 decision once ACRE signup details are out
- Talk to FSA office to find out dates

SURE: Supplemental Revenue Assistance Payments

- New comprehensive permanent disaster program for crop farmers
- To be eligible: Farm in declared disaster counties or adjacent counties, or farm suffers 50% crop loss due to weather
- Whole farm revenue guarantee to supplement crop insurance guarantees
 - Further reduces your “deductible”

SURE Program

- Whole farm revenue guarantee: If actual farm revenue falls below guarantee, SURE pays up to 60% of the difference
- Includes revenue from all crops: anything mechanically harvested or grazed, in all counties and states
 - Small acreage exclusion
- Actual revenue includes other USDA payments (e.g. ACRE) and crop insurance indemnities (not paid twice for same loss)

SURE Guarantee

- Guarantee equals sum of all crop insurance guarantees increased by 15% to decrease farmer "deductible"
 - 75% coverage becomes $75\% \times 1.15 = 86.25\%$
 - Guarantee capped at 90% insurance guarantee
 - If mostly a cash grain farm, SURE makes buying 80% or 85% CRC less useful
- Some adjustments for low yield history

SURE Actual Revenue

- Actual yields x USDA marketing year average price (Sept-Aug)
- Crop insurance indemnities (including replant and prevented planting)
- 15% of DP's, CCP's, LDP's, and ACRE
- Other disaster payments received

SURE Calculator

- This overview glosses over details
- FSA has SURE calculator on web for farmers to use
- www.fsa.usda.gov/Internet/FSA_File/sure_calculator.xls
- www.fsa.usda.gov/Internet/FSA_File/sure_calc_instructions_v1.pdf
- Informational only—not binding, does not deal with all possible scenarios (yet)
- FSA still finalizing SURE details—be patient

SURE Requirements

- Risk Management Purchase Requirement
- To eligible for SURE payments, you must have all crops insured, including pasture
 - SURE supplements crop insurance and SURE guarantee depends on insurance guarantees
- APH, CRC, GRP, GRIP (AGR-Lite?)
- CAT coverage acceptable or NAP policy

BYE: Biotech Yield Endorsement

- RMA approved for WI starting in 2009
- For corn CRC and APH only
 - If plant 75% of corn as triple stack Bt corn (RR, Bt-CB and Bt-RW), then lower premium
 - Must still plant refuge (20% acres as non-Bt)
 - Refuge can be a different insured unit
- Around 20% lower premium last year (IA, IL, IN, MN), but depends on location and coverage level

CRC and GRIP Price Limits

- Previously, CRC and GRIP had maximum changes in crop prices
 - Corn \$1.50 price change up or down
 - Soybeans: \$3.00 price change up or down
- 2008 bases prices and harvest prices
 - Corn \$5.40 base price, \$4.13 harvest price
 - Missed limit by 23 cents
 - Soybeans: \$13.36 base price, \$10.36 harvest price
 - Exactly hit the limit

Changes for 2009

- CRC and GRIP limits changed for 2009
- No downward limit
- 200% of base price upward limit
 - \$5.40 now would be \$0 to \$10.80
 - \$13.36 now would be \$0 to \$26.72
- Increases risk protection (and premiums!)
- RA has the same limits now as well

Summary

- Lock in inputs to avoid availability risk
- Think about using flexible cash leases
- Think about ACRE, sign up for SURE
 - Can you decrease crop insurance coverage?
- CRC/GRIP offer more price protection
 - Expect higher premiums
- If you plan to use triple stack Bt corn, use BYE for CRC/APH to reduce premiums

Questions?

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