Understanding Farm Programs

Crop Insurance, ACRE and SURE: Changes and Hints for 2009

Paul D. Mitchell
Agricultural and Applied Economics
University of Wisconsin-Madison
(608) 265-6514 pdmitchell@wisc.edu

January 30, 2009

Overview

- Quickly overview farmer practices and experience with crop insurance in Wisconsin
- Integrated Risk Management for 2009
  - Flexible Cash Leases
  - ACRE and SURE
  - Crop insurance changes: BYE, CRC/GRIP prices
    - Use new programs and reduce coverage level?

Types of Policies

	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

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%	9.8%	9.7%	1.03
APH BuyUp	12.2%	18.5%	37.9%	2.43
CRC BuyUp	40.7%	61.6%	55.4%	3.24
GRIP BuyUp	4.9%	7.5%	4.2%	1.21
GRP CAT	0.2%	0.3%	0.1%	1.00
GRP BuyUp	1.5%	2.3%	2.8%	1.11
All Total	66.1%			2.83

WI soybean policies in 2008

	% planted acres	% insured acres	% policies sold	Avg. Units/Policy
APH CAT	4.9%	6.9%	6.7%	1.05
APH BuyUp	9.0%	12.6%	20.2%	1.93
CRC BuyUp	51.2%	71.7%	67.5%	2.66
GRIP BuyUp	4.4%	6.1%	3.7%	1.19
GRP CAT	0.1%	0.1%	0.1%	1.00
GRP BuyUp	1.8%	2.6%	1.9%	1.01
All Total	71%			2.41

Corn Coverage Levels in Dane County 2008

	CRC		APH	
Cvg	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

	CRC		APH	
Cvg	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

		Corn		Soybeans	
Plan	Cvg	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%

Summary

- Lots of WI grain acres insured, more could be
- CRC most popular
  - Slightly larger than average sized farms buy it
  - Use more than average number of units
  - 70-75% coverage level popular
- APH popular among smaller farms (cheap)
  - Use fewer than average number of units
  - CAT (corn) and 65% coverage level popular
- GRIP (and GRP) used by some larger farms
  - 90% coverage level most popular

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

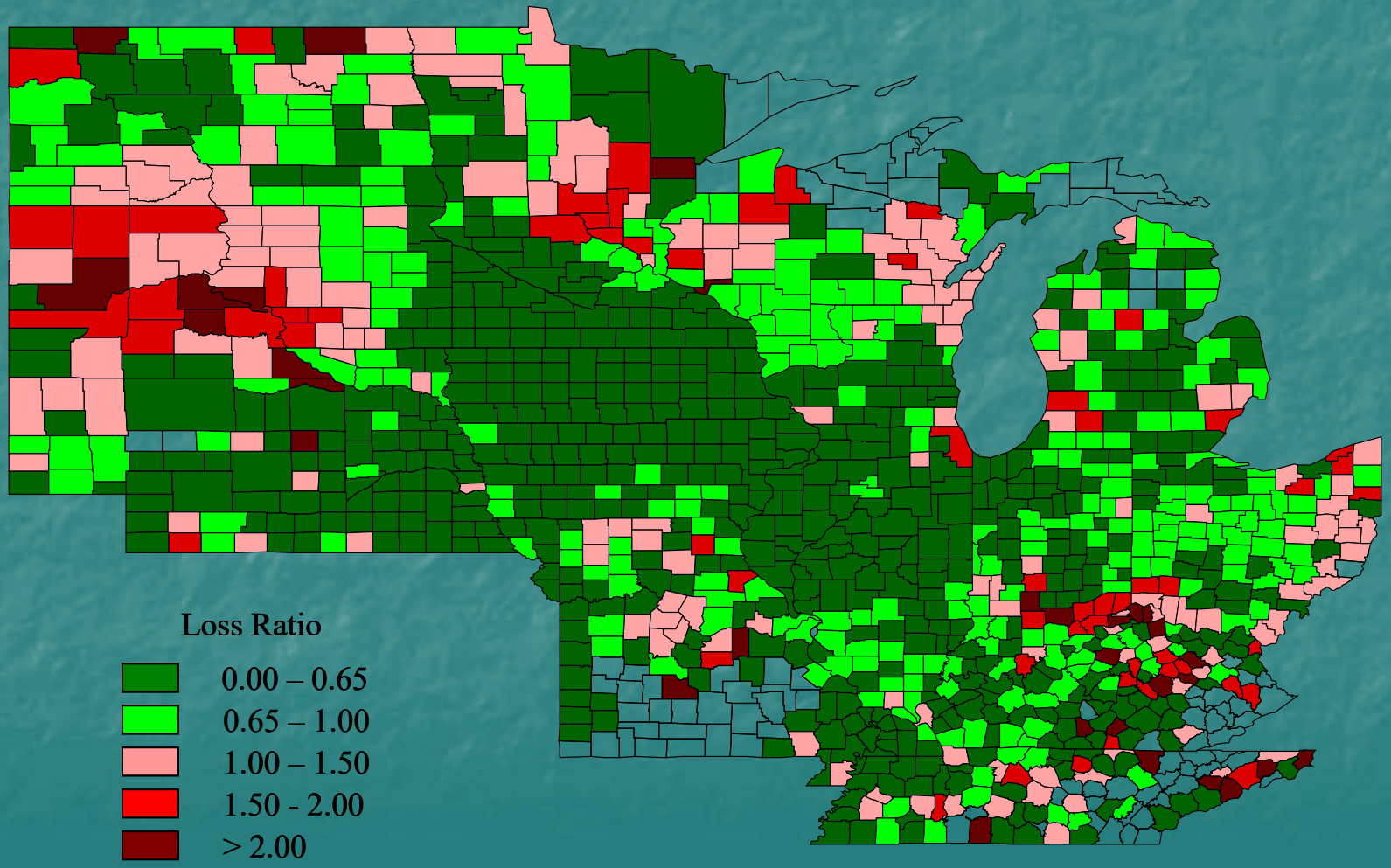
WI Crop Insurance for Corn in **2007**

	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
All Total	45.48	19.50	30.97	0.68	1.59

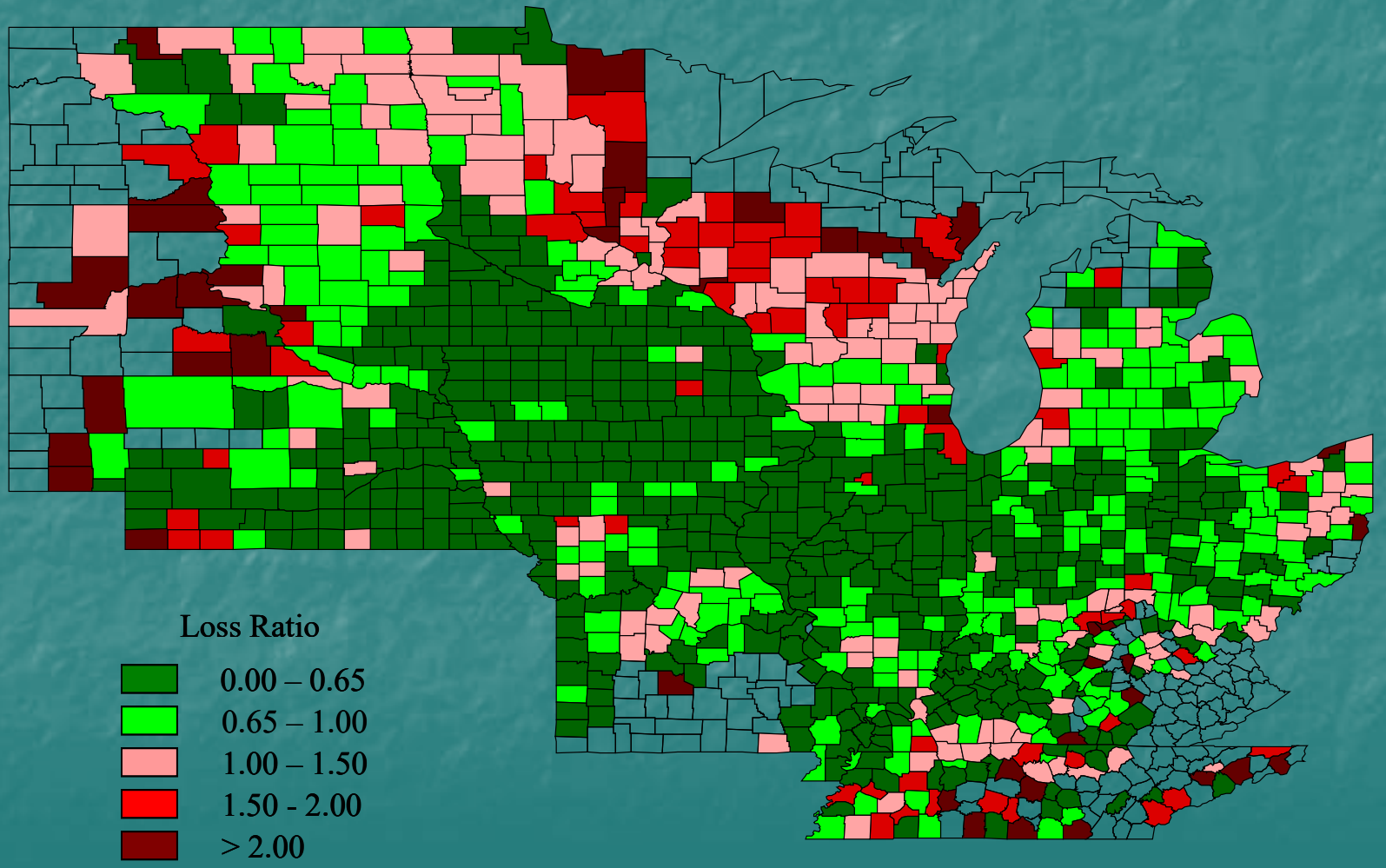
WI Crop Insurance for Soybeans in **2007**

	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
All Total	23.44	10.40	18.12	0.77	1.74

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
- Payments come when you need them
  - Years 1-3: pay $1 premium, no indemnity
  - Year 4: pay $1 premium, $8 indemnity
  - 4-Year Avg Loss Ratio = 8/4 = 2.0

Questions?

Integrated Risk Management in 2009

- Crop insurance is only one tool available
- Flexible cash leases with FSA rule change
- ACRE: new federal commodity program
- SURE: new federal disaster aid program
- Changes in crop insurance
  - BYE and new CRC price limits
- 2 page Hints: see my web page
  www.aae.wisc.edu/mitchell/extension.htm

Flexible Cash Leases

- Landlords may want higher rent, but lots of uncertainty in grain price and input costs
- Flexible cash leases popular as way for tenant-landlord to share the risk (up and downside)
- **FSA has relaxed rules so tenant-landlord no longer have to share govt. payments**
- Flexible Cash Lease: Base rental rate with bonus based on actual yields and prices
- You 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 "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
- **Less need for 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**

Actual State Revenue		ACRE State Revenue Guarantee	
Actual State Yield per Planted Acre	less than	90% of Benchmark State Yield per Planted Acre (5-year Olympic[b] average)	no more than a 10% change from previous year
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**

Actual Farm Revenue		ACRE Farm Benchmark Revenue	
Actual Farm Yield	less than	Average Farm Yield per Planted Acre (5-year Olympic[b] average)	no more than a 10% change from previous year
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.

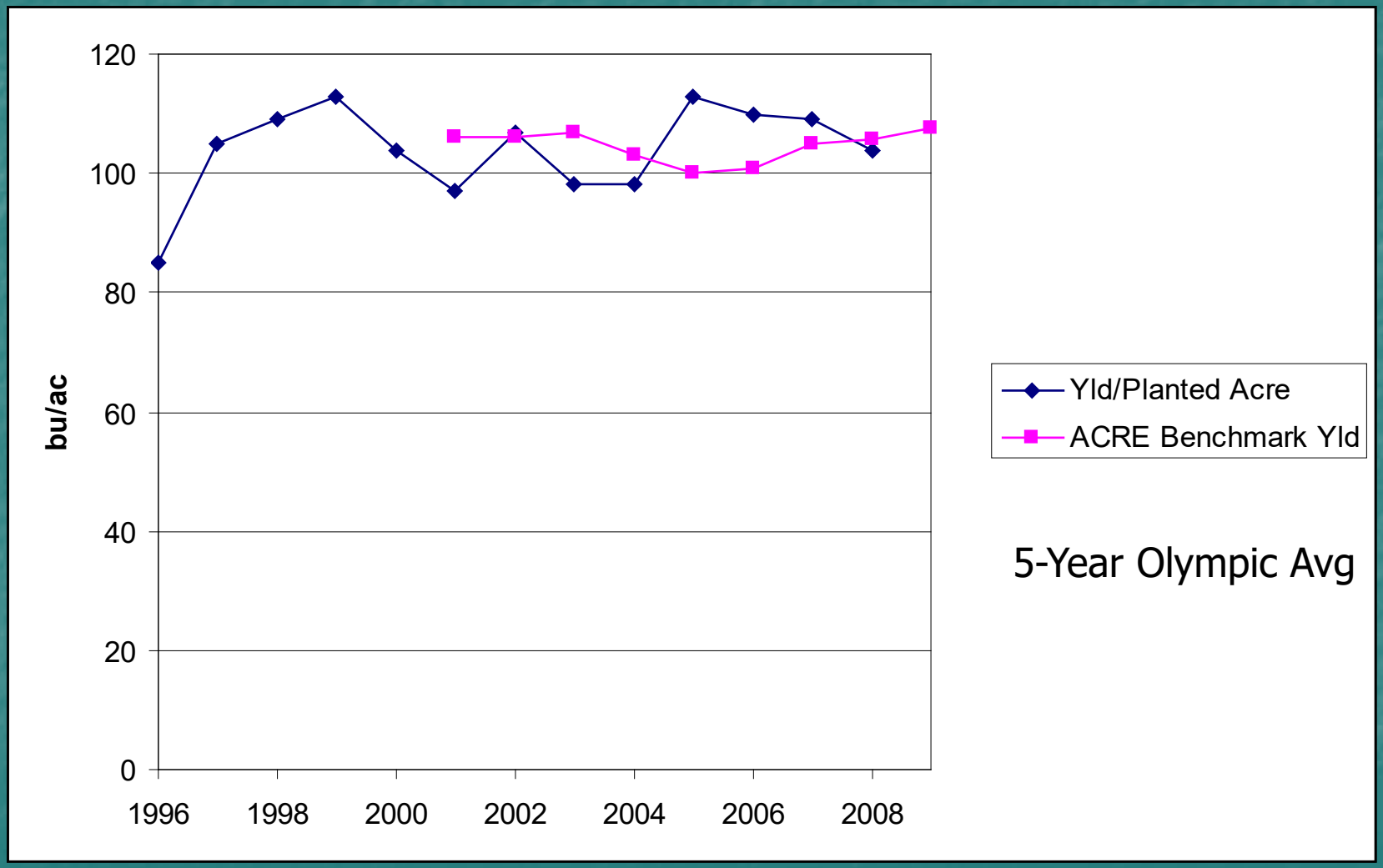
[d] Becomes 85% in 2012

[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?

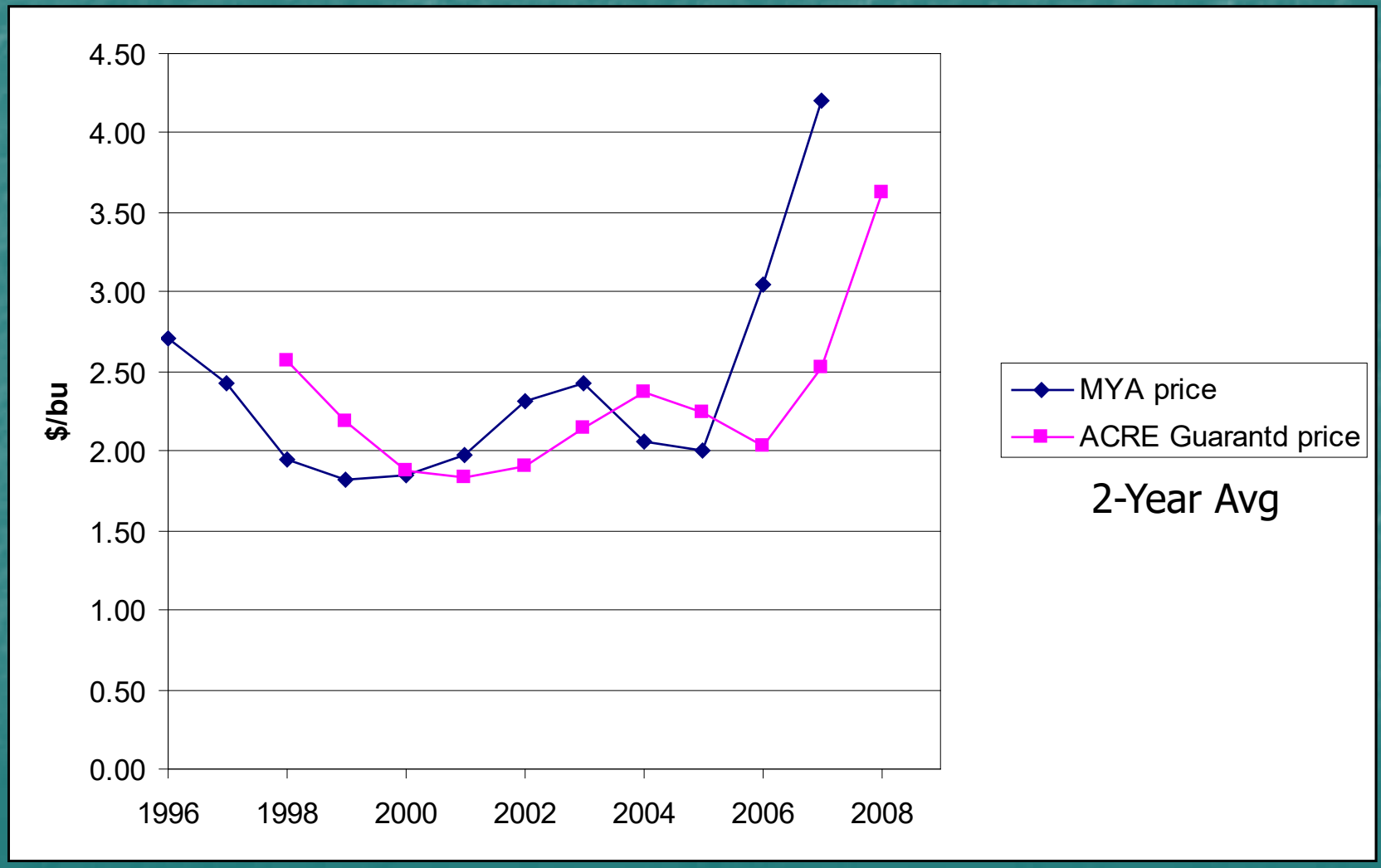
- With today's prices and expected prices, seems unlikely we will trigger LDP's or CCP's
- **ACRE is kind of like State Level GRIP Revenue Insurance with premium equal to 20% of Direct Payments**
- What will make for high ACRE payments?
  - Market prices below average MYA prices from previous 2 years and/or low state average yield

WI Corn Yields

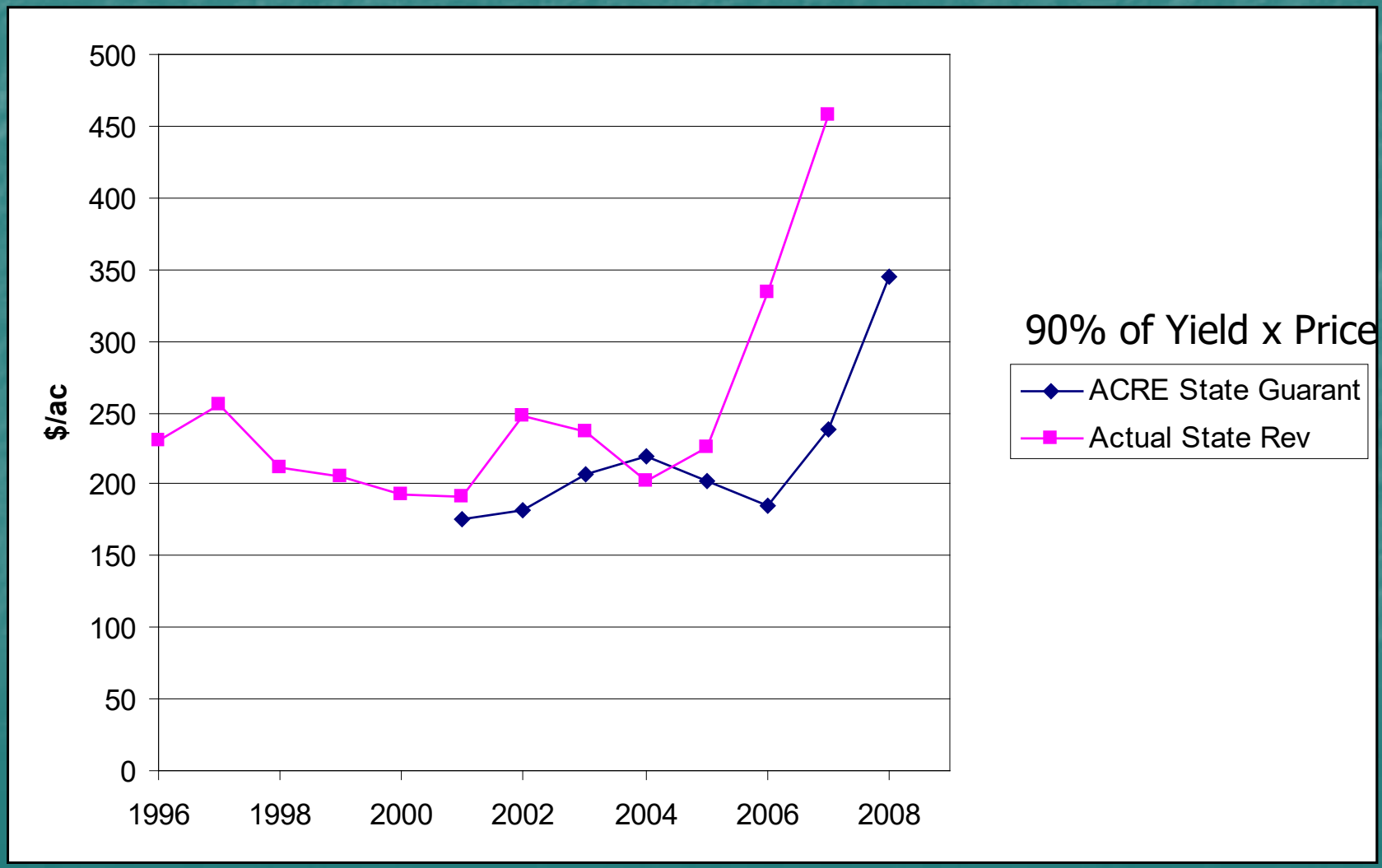


These are yields per planted acre, which includes acres used for silage. WI uses 20-25% of planted acres for silage. Yield per harvested acre would be much higher

National MYA Corn Prices



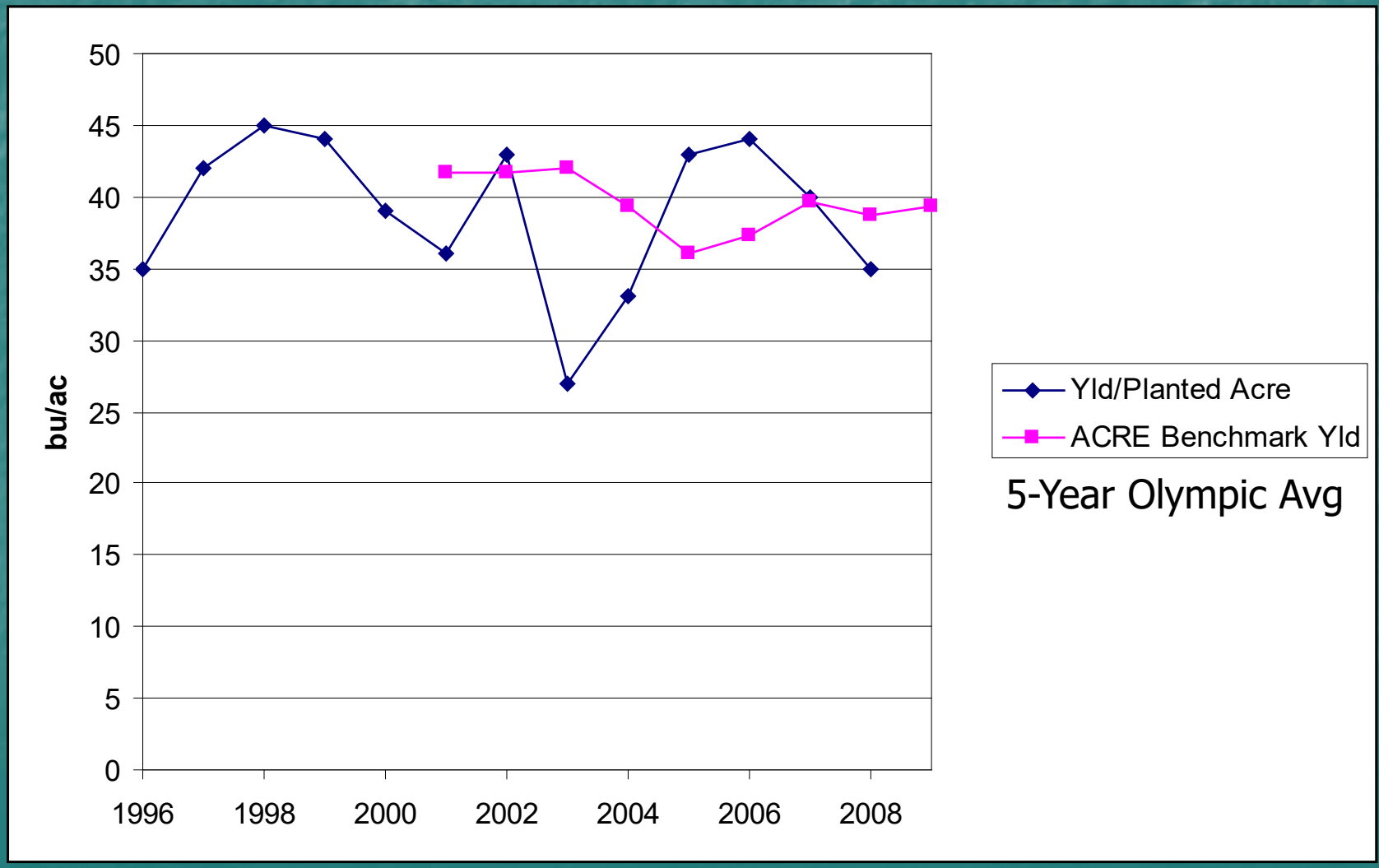
ACRE State Guarantee and Actual State Revenue



Corn Data for 2007-2009

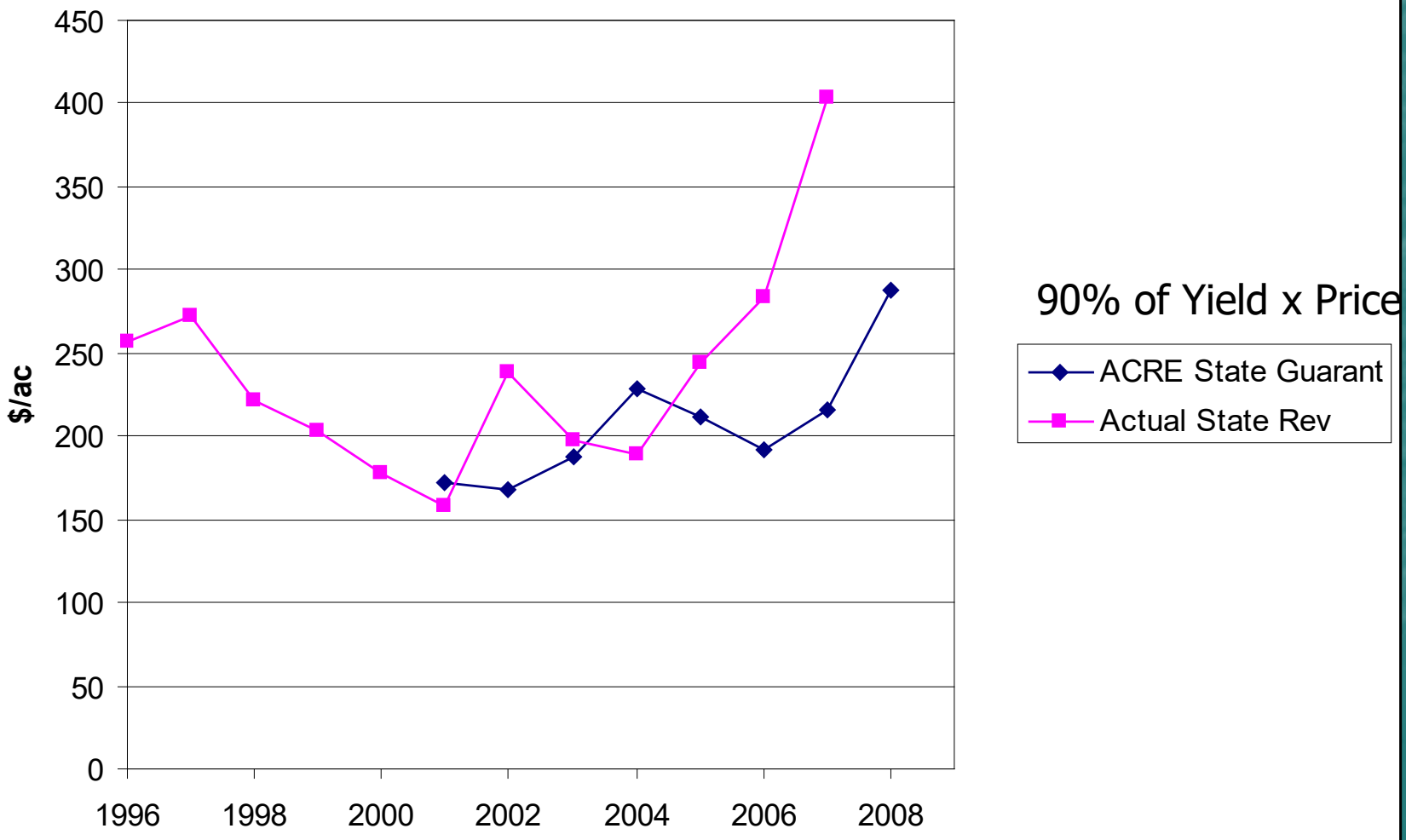
Year	Yield per Plntd Acre	ACRE Bench mark Yield	MYA Price	ACRE Guar-antee Price	ACRE State Rev Guar-antee	Actual State Rev	ACRE Pay-ment
2007	109	105	4.20	2.52	238.14	457.80	0.00
2008	104	106	?.??	3.62	344.26	???.??	?.??
2009		108					

WI Soybean Yields



National MYA Soybean Prices

ACRE State Guarantee and Actual State Revenue



Soybean Data for 2007-2009

Year	Yield per Plntd Acre	ACRE Bench mark Yield	MYA Price	ACRE Guar-antee Price	ACRE State Rev Guar-antee	Actual State Rev	ACRE Pay-ment
2007	40	40	10.10	6.05	215.99	404.00	0.00
2008	35	39	?.??	8.27	287.80	???.??	?.??
2009		39					

"Historical" ACRE Payments

Year	Corn	Soybeans
2001	0.00	14.45
2002	0.00	0.00
2003	0.00	0.00
2004	17.82	38.56
2005	0.00	0.00
2006	0.00	0.00
2007	0.00	0.00
2008	?.??	?.??
Avg 2001-2007	2.55	7.57

ACRE in 2008

- ACRE State Revenue Guarantee
  - Corn = $344.26, Soybeans = $287.80
- Yield per Planted Acre = 104 bu/ac and 35 bu/ac
- To trigger ACRE payments, 2008 MYA price
  - < **$3.31** for corn and < **$8.22** for soybeans
- Established prices so far

	Corn	Soy
Sep	5.02	10.70
Oct	4.37	9.94
Nov	4.26	9.38
Dec	4.10	9.24

ACRE Summary

- If 2008 were an ACRE year, you would not know if you received ACRE payments until the end of the 2008 marketing year
  - Marketing year ends Aug 2009
- Main Point: If due, ACRE payments will come long after the harvest year is past
  - Oct 2009 for 2008 ACRE payments
  - Oct 2010 for 2009 ACRE payments

ACRE Summary

- For 2009, if you signup for ACRE, you will not know the ACRE price and state revenue guarantee for 2009
  - Yield = 108, Price = average of 4.20 and **?.??**
  - Yield = 39, Price = average of 8.27 and **?.??**
- ACRE state revenue guarantee should be high, but how high???

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
  - **FSA talking April or May 2009**
  - Will be able to change your 2009 decision once ACRE signup details are out
- Talk to FSA office to find out dates

Questions?

SURE: Supplemental Revenue Assistance Payments

- New comprehensive permanent disaster program for crop farmers
- Whole farm revenue guarantee on top of crop insurance guarantees
- If actual farm revenue below guarantee, SURE pays up to 60% of the difference
- **Free increase in your crop insurance coverage, but at whole farm level**
  - Free reduction of your insurance "deductible"

SURE Guarantee

- Guarantee equals sum of all crop insurance guarantees for farm increased by 15% at the whole farm level
  - 75% coverage becomes 75% x 1.15 = 86.25%
  - Guarantee capped at 90% insurance guarantee
- **With SURE, less need for buying 80% or 85% CRC**

SURE Actual Revenue

- Actual yields x USDA marketing year average price (Sept-Aug) (Not CBOT)
- 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
  - Small acreage exclusion applies
- APH, CRC, GRP, GRIP (AGR-Lite?)
- Cheapest route: APH CAT or NAP policy

BYE: Biotech Yield Endorsement

- RMA approved for WI starting in 2009
- For corn CRC and APH only (non-irrigated)
  - 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
- Premium reductions last year in IA, IL, IN, MN
  - Around 20% for CRC, 30% for APH
  - Depends on location and coverage level
  - Don’t expect reductions of this magnitude for WI

CRC and GRIP Price Limits

- CRC and GRIP previously had maximum changes in crop prices covered
  - Corn $1.50 price change up or down
  - Soybeans: $3.00 price change up or down
  - Under old markets, didn't matter
- 2008 bases prices and harvest prices
  - Corn $5.40 base price, $4.13 harvest price
    - Above limit by 23 cents
  - Soybeans: $13.36 base, $9.22 harvest price
    - Price limit bound! Indemnities calculated with harvest price of $10.36, not $9.22, so losses paid at a lower price than for RA policy

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

- 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 (slightly) higher premiums
- If you plan to use triple stack Bt corn, use BYE for CRC/APH to reduce premiums

Questions?

Paul D. Mitchell
UW-Madison Ag & Applied Economics
Office: (608) 265-6514
Cell: (608) 320-1162
Email: pdmitchell@wisc.edu
Extension Web Page:
www.aae.wisc.edu/mitchell/extension.htm