

Update on Risk Management and Processing Crops

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Processing Crops Meeting

Hancock, WI

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Goal Today

- Update on crop insurance and risk management changes for 2009
- Farmer crop insurance practices and experiences, both grains and vegetables

New in 2009

- Crop insurance changes
 - BYE: Biotech Yield Endorsement for Corn
 - Price change limits on CRC and GRIP
- Farm Bill
 - SURE: Supplemental Revenue Assistance Payments
 - Planting Transferability Pilot Project

BYE: Biotech Yield Endorsement

- RMA approved for WI starting in 2009
- Corn CRC and APH, non-irrigated only
- If plant 75% of unit in triple stack Bt corn (RR, Bt-CB and Bt-RW), lower premium
- Still plant refuge (20% acres as non-Bt), but refuge can be a different insured unit
- Premium reduction varies with location, yield, coverage level, and APH vs CRC
- Typical: about 10% or \$1-\$2/ac

BYE Effect on Premiums

Marquette County, 150 bu/ac avg yield

Cvg	APH	APH BYE	Δ	% Δ	CRC	CRC BYE	Δ	% Δ
50%	5.41	4.08	1.33	25%	8.39	6.65	1.74	21%
55%	6.89	5.64	1.25	18%	11.01	9.34	1.67	15%
60%	8.09	6.89	1.2	15%	13.28	11.79	1.49	11%
65%	10.84	9.68	1.16	11%	18.27	16.70	1.57	9%
70%	13.46	12.25	1.21	9%	23.30	21.65	1.65	7%
75%	18.30	16.77	1.53	8%	32.51	30.41	2.10	6%
80%	26.08	23.86	2.22	9%	47.55	44.53	3.02	6%
85%	38.16	34.63	3.53	9%	71.44	66.70	4.74	7%

CRC and GRIP Price Limits

- CRC & GRIP had max price changes up or down covered
 - Corn \$1.50, Soybeans \$3.00
 - Under old markets, didn't matter
- 2008 bases prices and harvest prices
 - Corn \$5.40 base price, \$4.13 harvest price
 - Missed limit by 23 cents
 - Soybeans: \$13.36 base, \$9.22 harvest price
 - Hit limit!!! Indemnities calculated with harvest price of \$10.36, not \$9.22, so losses paid at a lower rate than for RA policy!!!

New CRC/GRIP Price Limits

- CRC and GRIP limits changed for 2009
 - No downward limit
 - 200% of base price upward limit
 - Corn: \$4.04 now \$0 to \$8.08
 - Soybeans: \$8.80 now \$0 to \$17.60
- Increases risk protection (and premiums!)
- RA has the same limits now as well

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 $75\% \times 1.15 = 86.25\%$
 - Guarantee capped at 90% insurance guarantee
- With SURE, you may want to reduce your coverage level
 - Remember: at whole farm level, not crop level

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
- Buy insurance for processing vegetables
- APH, CRC, GRP, GRIP (AGR-Lite?)
- Cheapest route: buy CAT policy from insurance agent or NAP policy from FSA

Planting Transferability Pilot Project

- If farmer planted vegetable crops on base acres, lost commodity program benefits, plus reduced commodity payments for other base acres
 - Harder to find new processing vegetable growers
- 2009: can plant processing crops on base acres and only lose commodity payments for that year
 - Cucumbers, Green Peas, Snap Beans, Sweet Corn, Lima Beans, Pumpkins, and Tomatoes
- Acres must be under contract
- 9,000 acres max in WI can enroll in program
- Contact your FSA office for details

Sweet Corn and GRP/GRIP

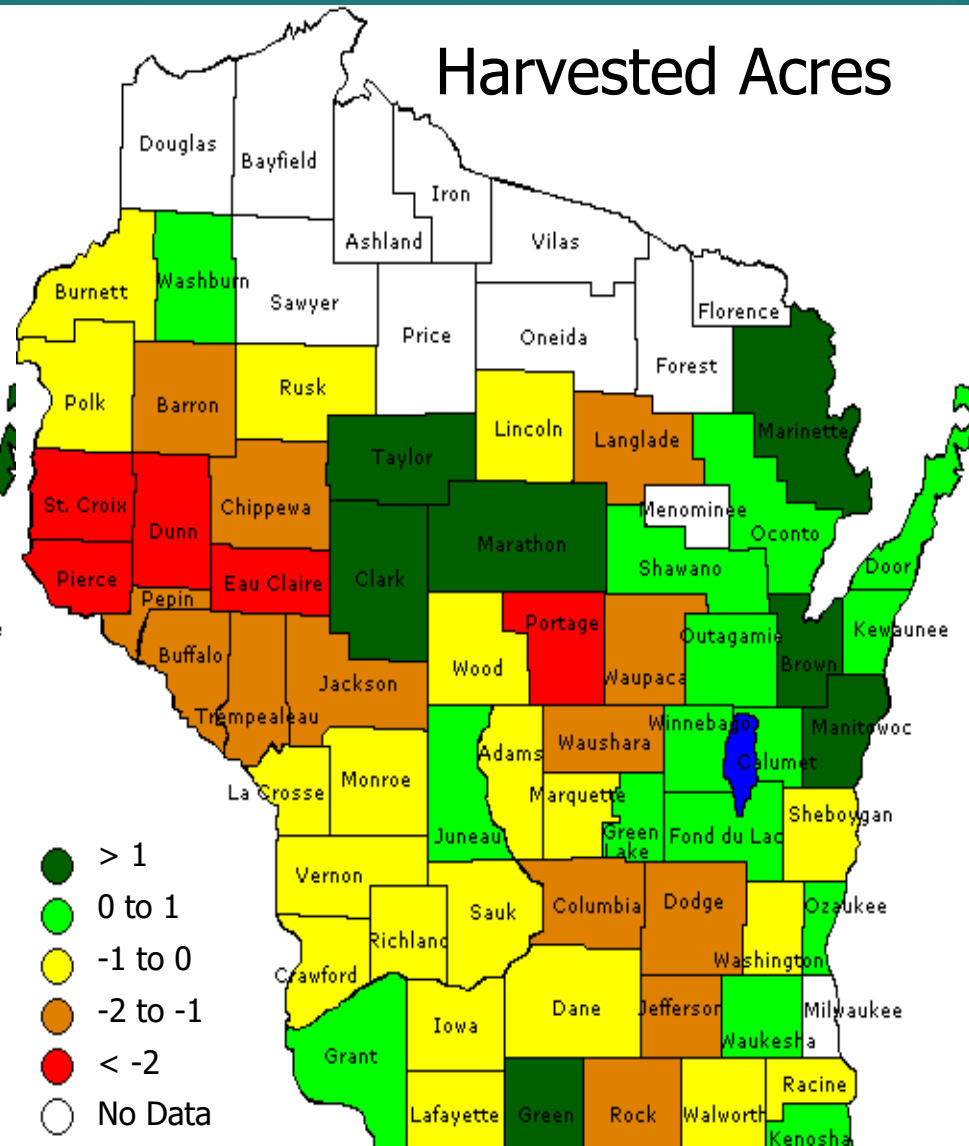
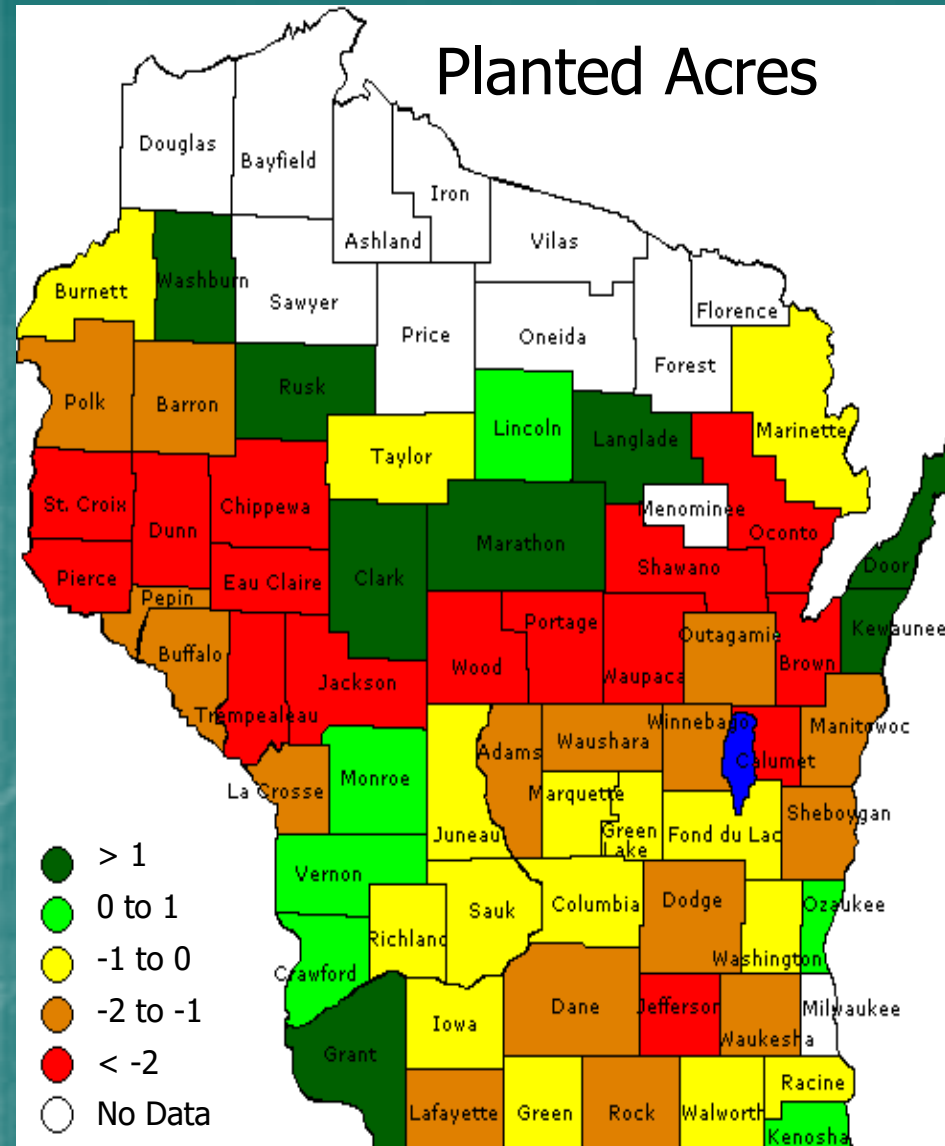
- Can buy Corn GRP or GRIP for sweet corn acres in WI, no option for other crops
- Important issue: Which county yield do you choose to insure
 - **yield per planted acre?**
 - **yield per harvested acre?**
- Only in Wisconsin is there a choice

Is GRP a good deal for my Corn and Soybeans?

- Bulletins posted on my webpage for 2008
<http://www.aae.wisc.edu/mitchell/extension.htm>
- Analyze county yield data and estimate the expected return to GRP in bu/ac for each Wisconsin county that has GRP
- Expected return = long run average net return to GRP if everything constant over many years
- If GRP is valuable for a county, GRIP will be valuable too, as it adds price protection
- If GRP is not valuable for a county, GRIP can still make sense, to get the price protection

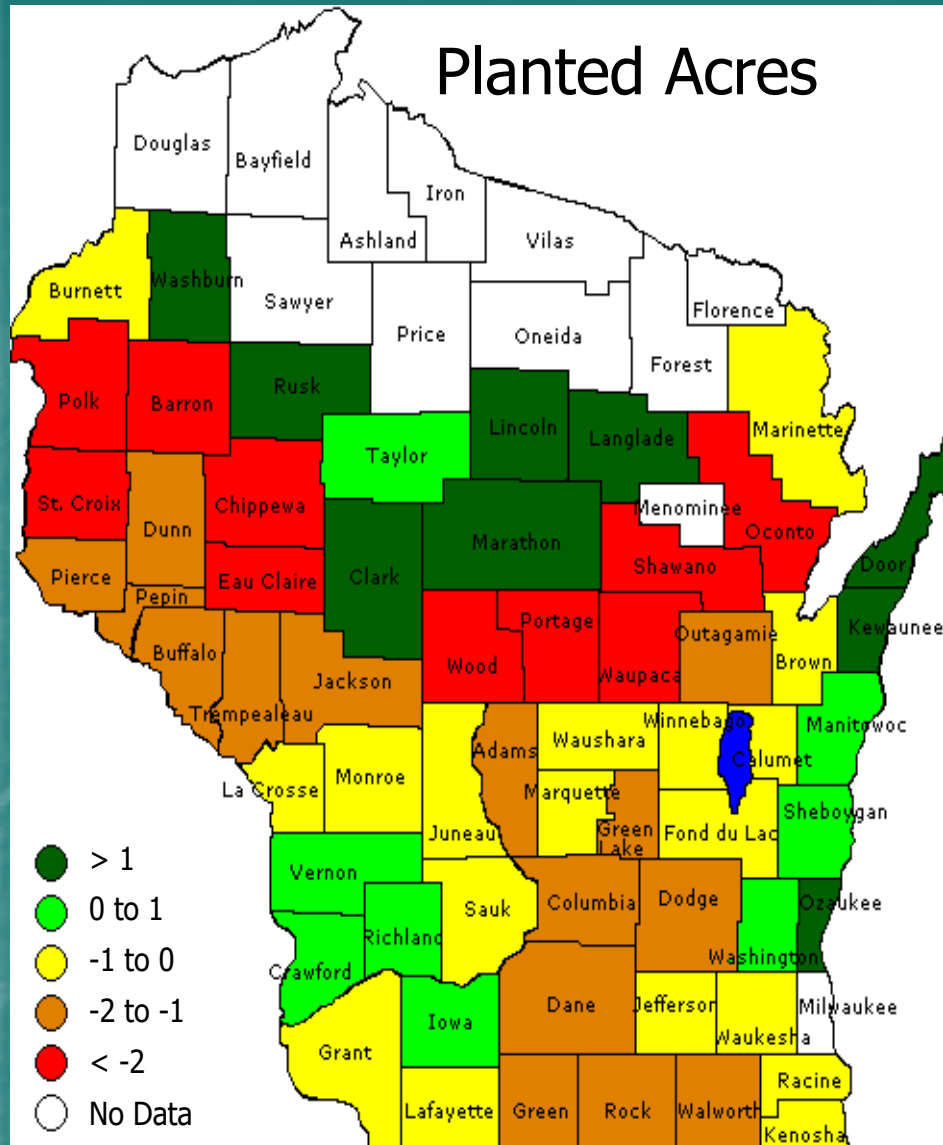
Planted Acres

Harvested Acres

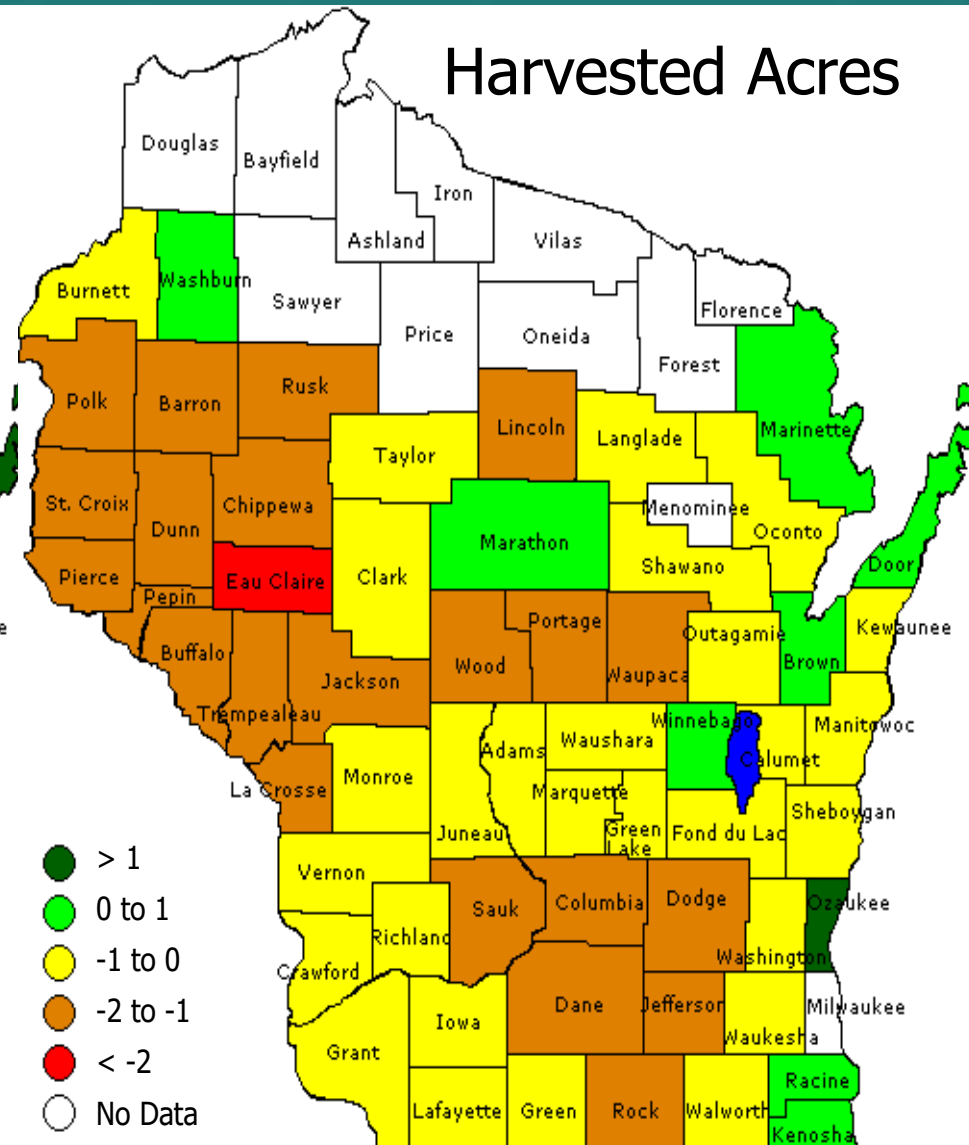


Side-by side comparison (regression yields)

Planted Acres



Harvested Acres



Side-by side comparison (RMA yields)

Crop Insurance Prices for 2009

- Corn APH \$4.00, CRC \$4.04
 - 2008: APH \$4.75, CRC \$5.40
- Soybeans APH \$9.90, CRC \$8.80
 - 2008: APH \$11.50, CRC \$13.36
- Sweet Corn: \$90/ton (same as 2008)
- Potatoes: \$7.65/cwt (\$6.90/cwt in 2008)
- Snap Beans: \$170/ton (same as 2008)
- Green Peas: Contract Price

Summary of New Info

- Biotech Yield Endorsement for Corn
 - Use if already planting triple stack
- Price change limits on CRC and GRIP
 - More price protection for corn and soybeans, plus sweet corn (GRIP)
 - Planted or Harvested acres for GRIP?
- To be eligible for disaster payments, insure all crops, sign up for SURE
 - Do you reduce your crop insurance coverage level?
- Planting Transferability Pilot Project
 - New growers on new ground = new issues???
 - Follow FSA rules to keep program eligibility
- Prices for 2009 have been announced

Questions?

Wisconsin farmers and crop insurance

- How do most WI farmers use crop insurance?
 - Typical practices with insurance
- What does crop insurance do monetarily for WI crop farmers?
 - Typical experience with insurance

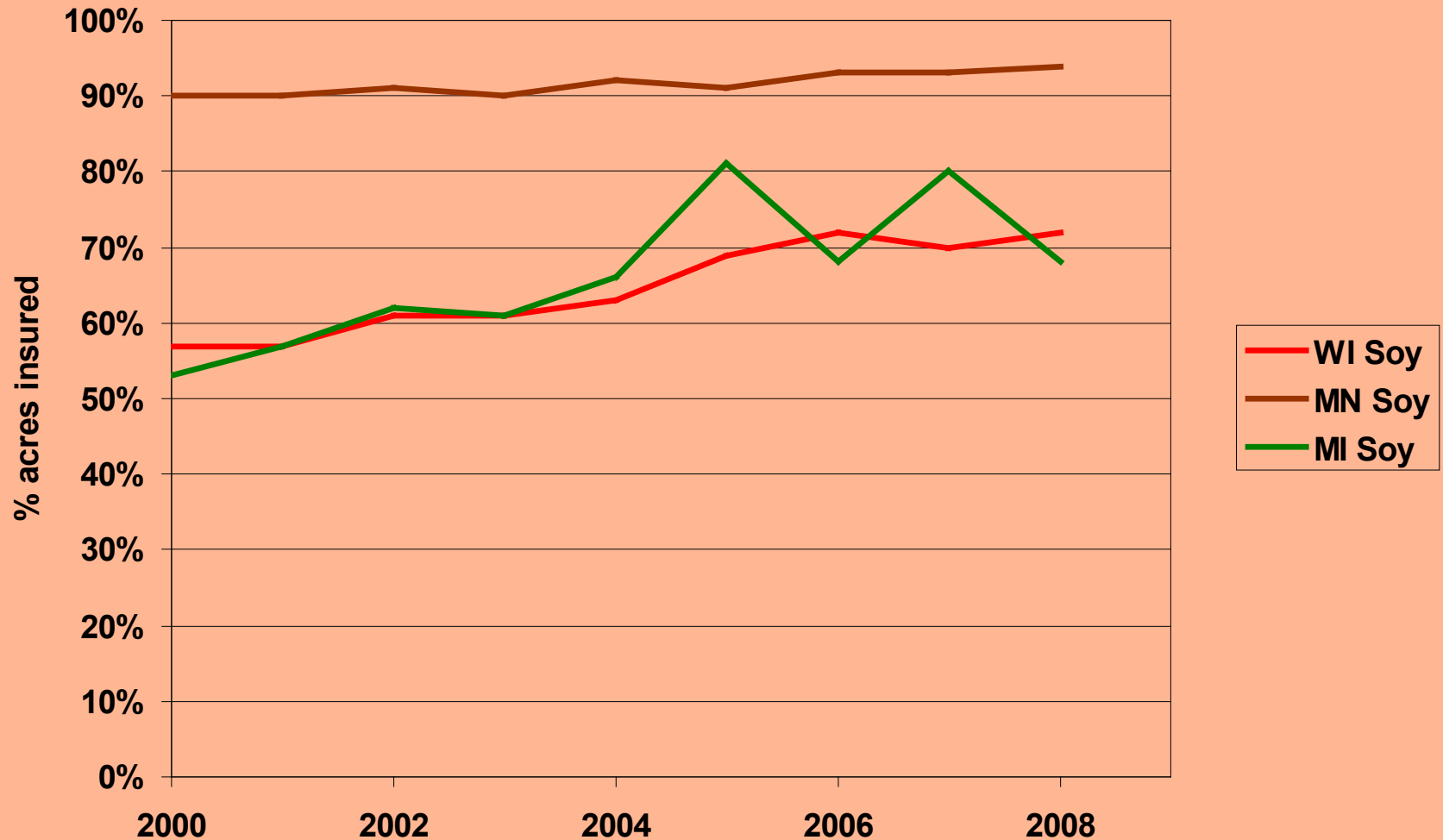
Wisconsin farmers and crop insurance

- Relative to neighboring states, WI a low participation state in crop insurance
- For grains
 - CRC most popular policy, then APH, then GRIP, then GRP
 - APH CAT policies used by sizeable minority
- For vegetables, really only one policy
 - APH or GYC

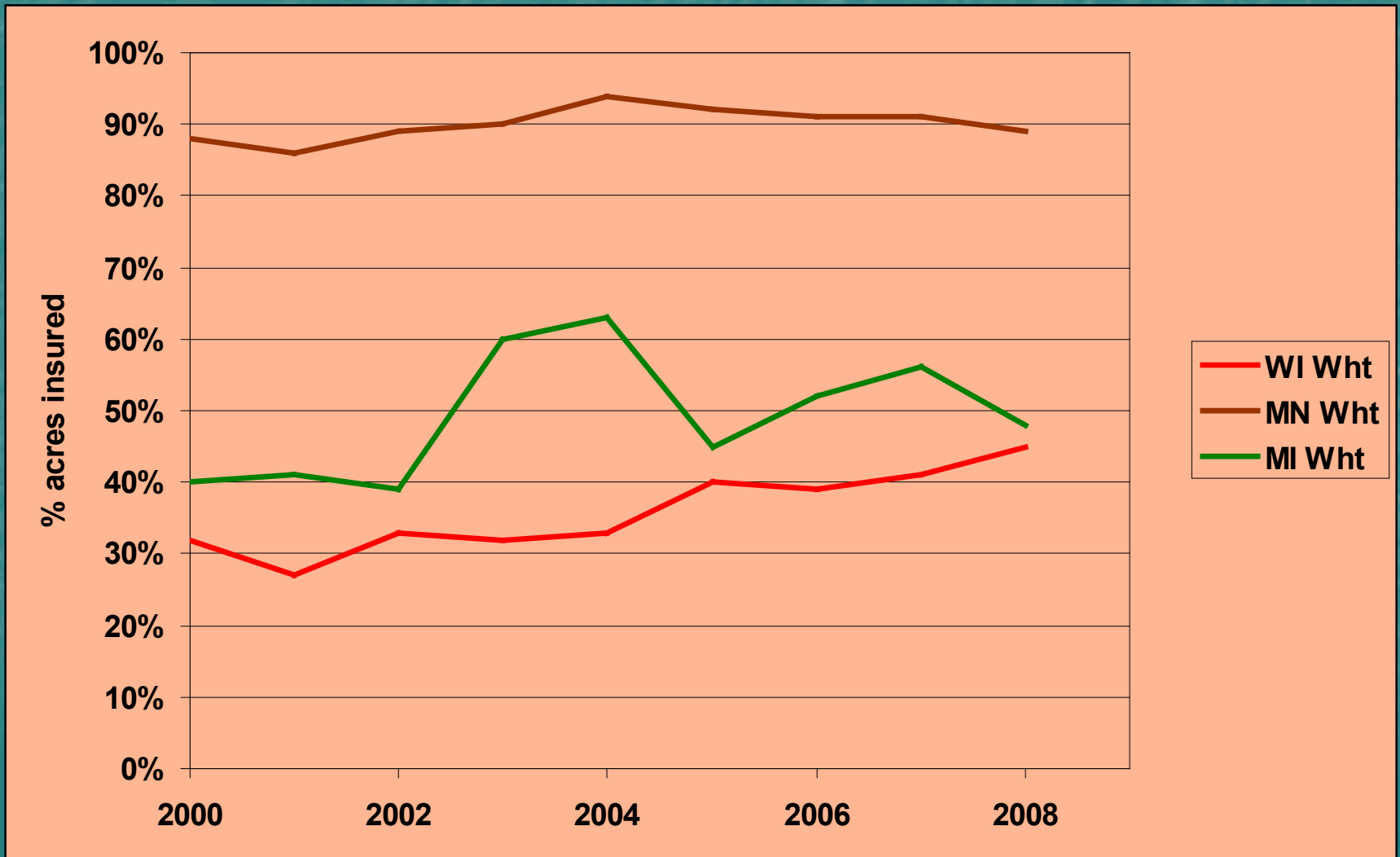
Corn Trends: WI, MN, MI



Soybeans Trends: WI, MN, MI



Wheat Trends: WI, MN, MI



WI corn policies in 2008

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

WI soybean policies in 2008

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

WI 2007 Corn Coverage Levels by Policy (% of policies)

		Cvg Lvl	APH	CRC	GRIP	GRP
APH	42%	50%	30%	10%		
CRC	38%	55%	9%	7%		
GRIP	10%	60%	13%	14%		
GRP	9%	65%	15%	17%		9%
		70%	14%	17%	10%	20%
		75%	13%	16%	11%	11%
		80%	4%	12%	14%	14%
		85%	2%	7%	17%	16%
		90%			47%	30%

WI 2007 Soybean Coverage Levels by Policy (% of policies)

		Cvg Lvl	APH	CRC	GRIP	GRP
APH	45%	50%	30%	8%		
CRC	44%	55%	8%	5%		
GRIP	7%	60%	11%	13%		
GRP	4%	65%	17%	17%		6%
		70%	17%	18%	11%	31%
		75%	13%	17%	5%	9%
		80%	3%	14%	11%	6%
		85%	2%	8%	16%	9%
		90%			56%	40%

WI 2007 Wheat Coverage Levels by Policy (% of policies)

		Cvg Lvl	APH	CRC	GRIP	GRP
APH	48%	50%	35%	11%		
CRC	52%	55%	3%	6%		
GRIP		60%	10%	11%		
GRP		65%	19%	19%		
		70%	19%	26%		
		75%	13%	26%		
		80%				
		85%				
		90%				

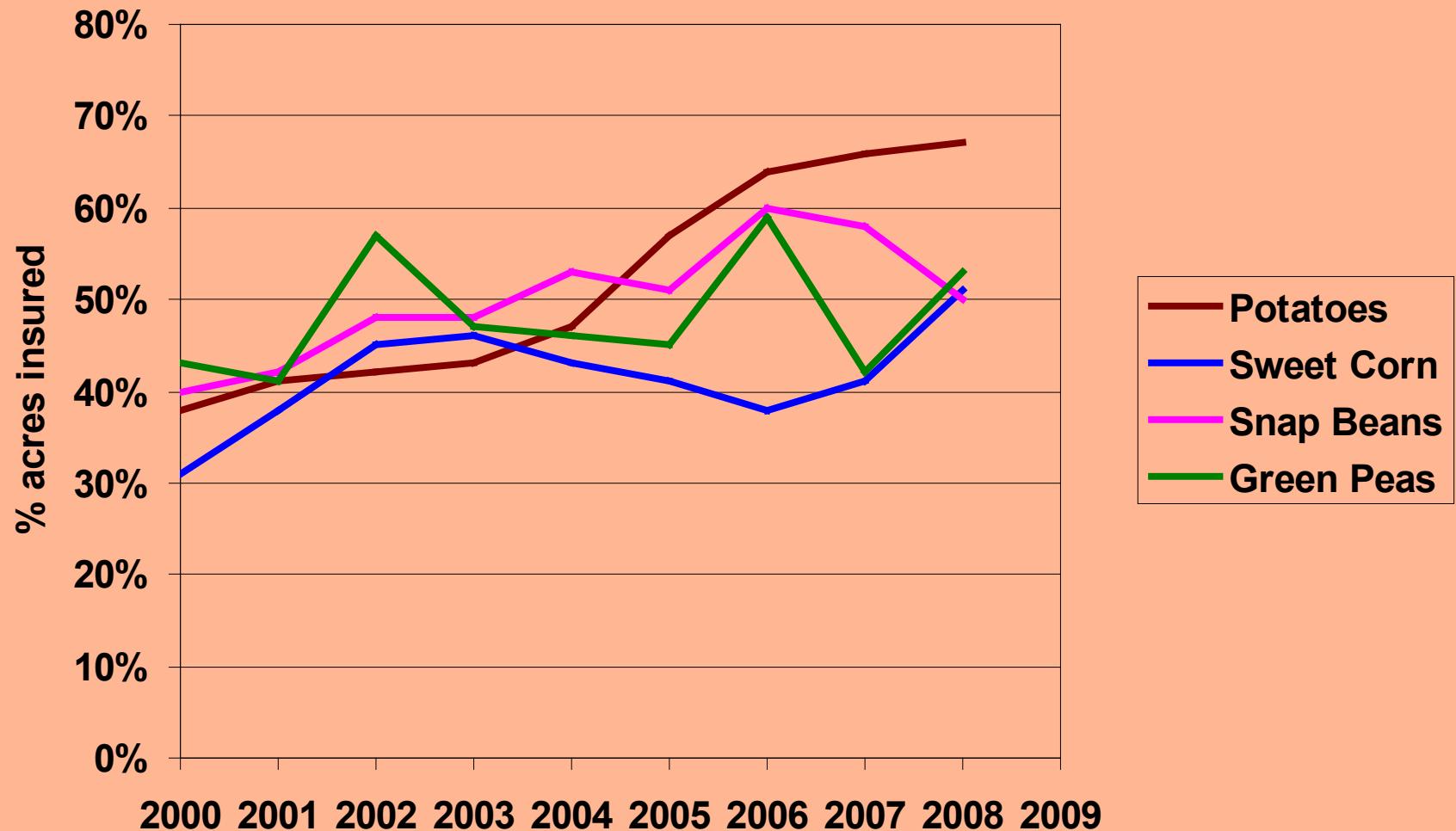
WI Farmer Practices

- Lots of WI grain acres are insured, more could be
- 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
- Coverage Levels
 - CRC: 65%-75%
 - APH: CAT/50%, then 65%-70%
 - GRP/GRIP: 90%

Vegetable Crop Insurance in WI

- Only one policy for major vegetable crops
 - APH for sweet corn
 - GRP/GRIP too, but appears as corn in data
 - GYC (= APH) for potatoes, snap beans, and green peas
- Again, WI a low participation state
- Coverage Levels
 - 50%/CAT and 70% most common

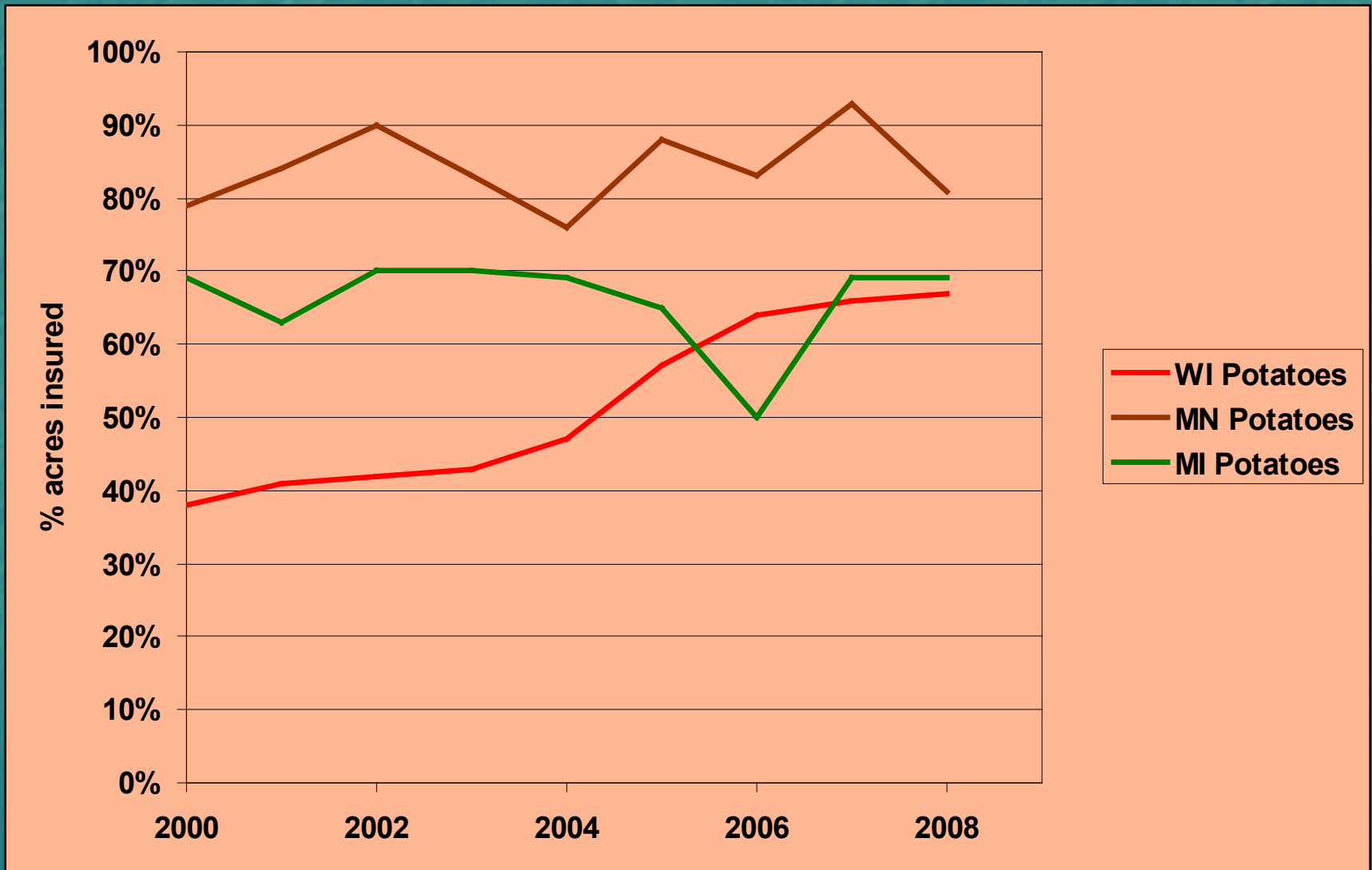
WI Vegetable Crop Participation



Vegetable Crop Participation

- Potatoes: keeps increasing, 67% in 2008
- Sweet Corn: flat for many years, but swinging upward lately
- Snap Beans: steady increase unit last two years: why dropping off?
- Green Peas: flat trend, but gyrates
- Will SURE increase veg acre participation?
- What about Planting Transferability Pilot?

WI Potatoes: low participation



WI Sweet Corn: low participation



Low Participation for WI Green Peas, but not for WI Snap Beans



Coverage Levels

Coverage Level	Potatoes	Sweet Corn	Snap Beans	Green Peas
50%	40%	27%	33%	25%
55%	2%	3%	2%	2%
60%	9%	9%	13%	11%
65%	12%	19%	20%	17%
70%	21%	27%	20%	31%
75%	16%	16%	13%	15%

50%/CAT and 70% most common

Questions?

Experience with Crop Insurance

- Loss Ratio measures insurance performance
- $\text{Loss Ratio} = \text{Indemnities} / \text{Premiums}$
 - Loss Ratio of 1.5 means for every \$1.00 in premiums collected, policy pays out \$1.50
- Crop insurance: Subsidized premiums, farmers and government each pay part
 - Program loss ratio
$$= \text{Indemnity} / (\text{Govt.} + \text{Farmer Premium})$$
 - Farmer loss ratio $= \text{Indemnity} / \text{Farmer Premium}$

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	29.49	0.45	1.00
GRP CAT	2.20	--	0.00	0.00	--
GRP BuyUp	11.20	4.84	2.44	0.22	0.50
All Total	45.48	19.50	30.97	0.68	1.59

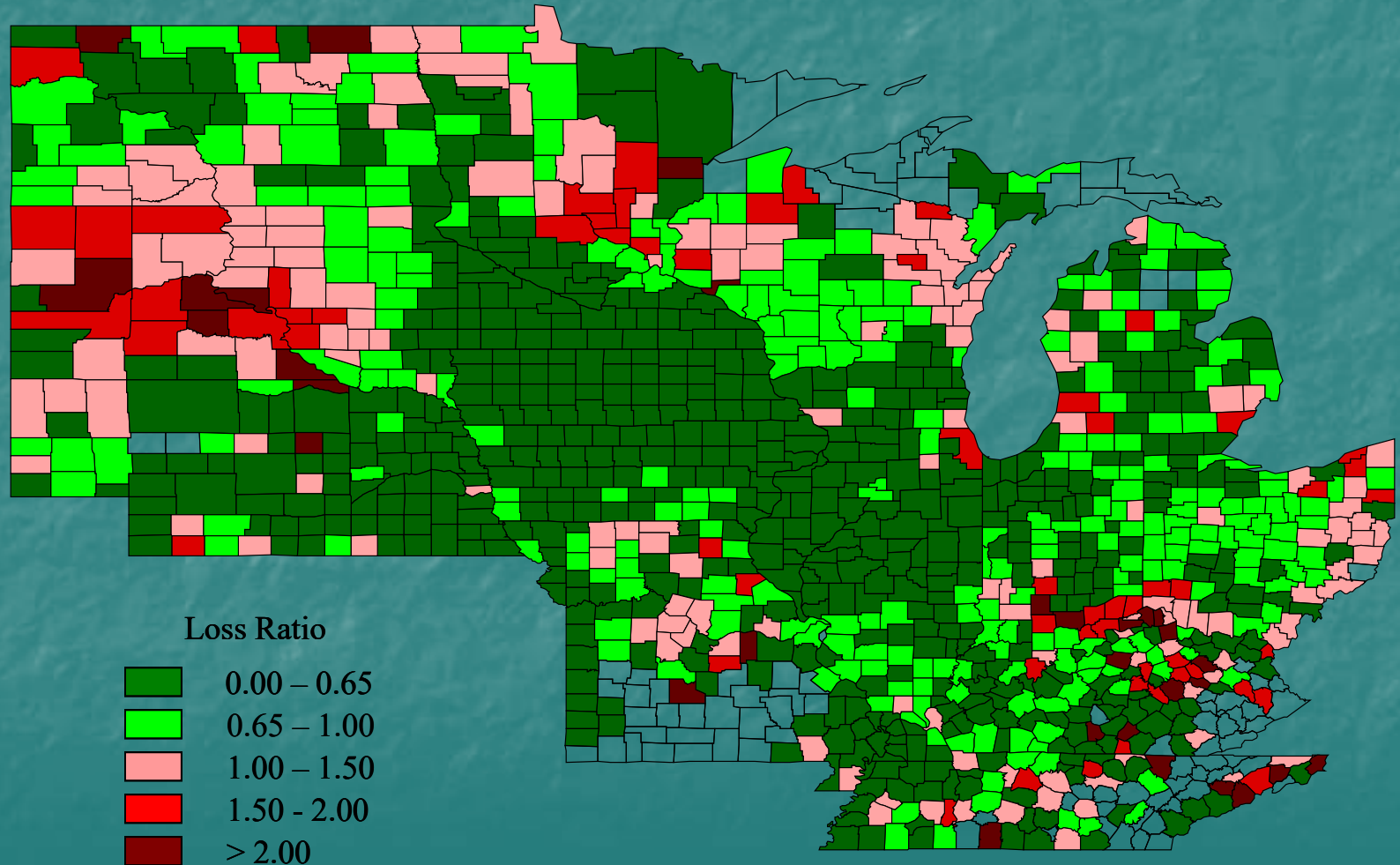
-- Farmers pay no per acre premiums, so no farmer loss ratio.

WI Crop Insurance for Soybeans in 2007

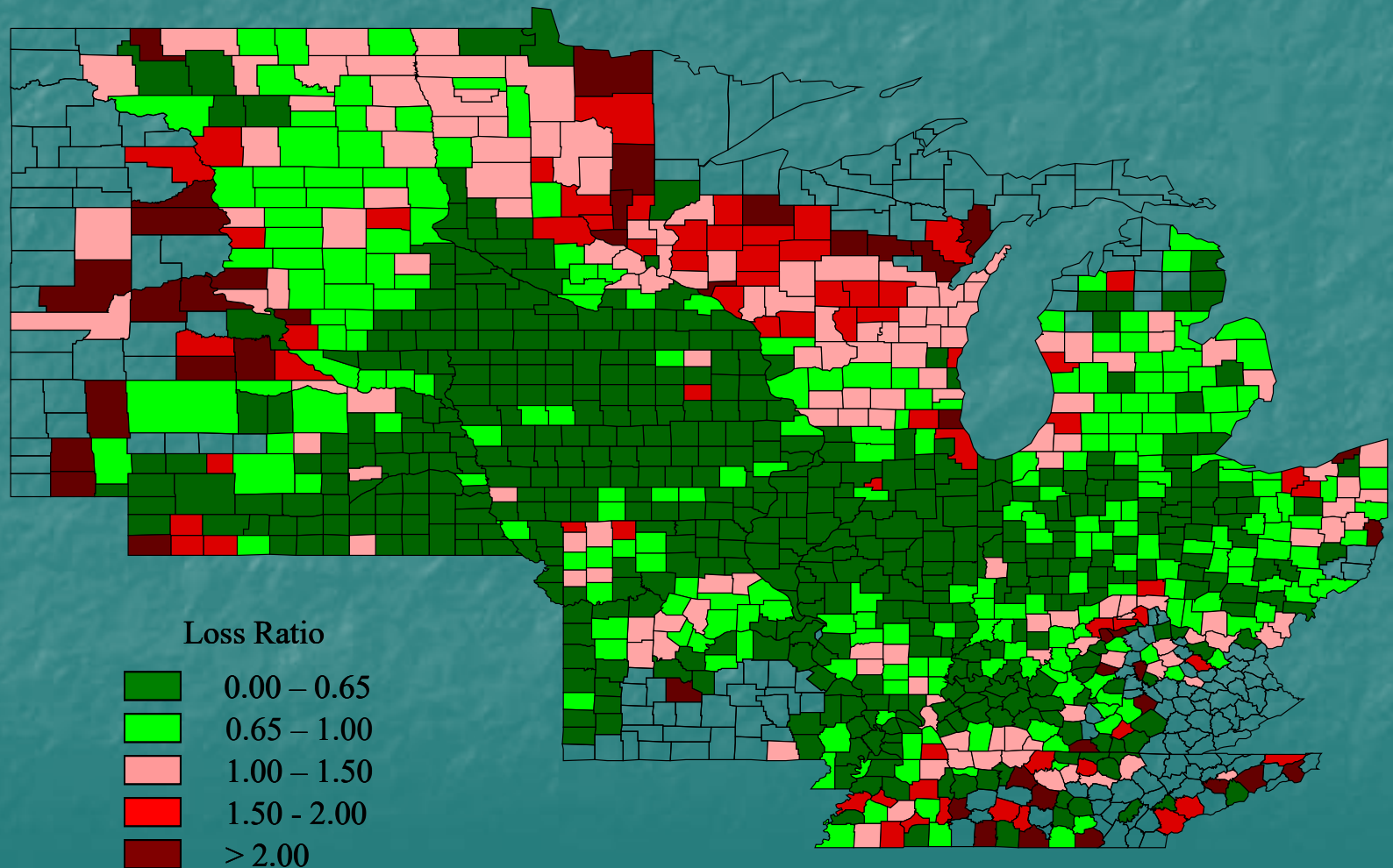
	total prem. /A	farmer prem. /A	indem./A	program loss ratio	farmer loss ratio
APH CAT	2.86	--	0.64	0.22	--
APH BuyUp	12.77	5.28	10.48	0.82	1.99
CRC BuyUp	26.36	11.87	23.74	0.90	2.00
GRIP BuyUp	35.30	15.82	3.63	0.10	0.23
GRP CAT	0.98	--	0.00	0.00	--
GRP BuyUp	9.25	4.11	1.21	0.13	0.29
All Total	23.44	10.40	18.12	0.77	1.74

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

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



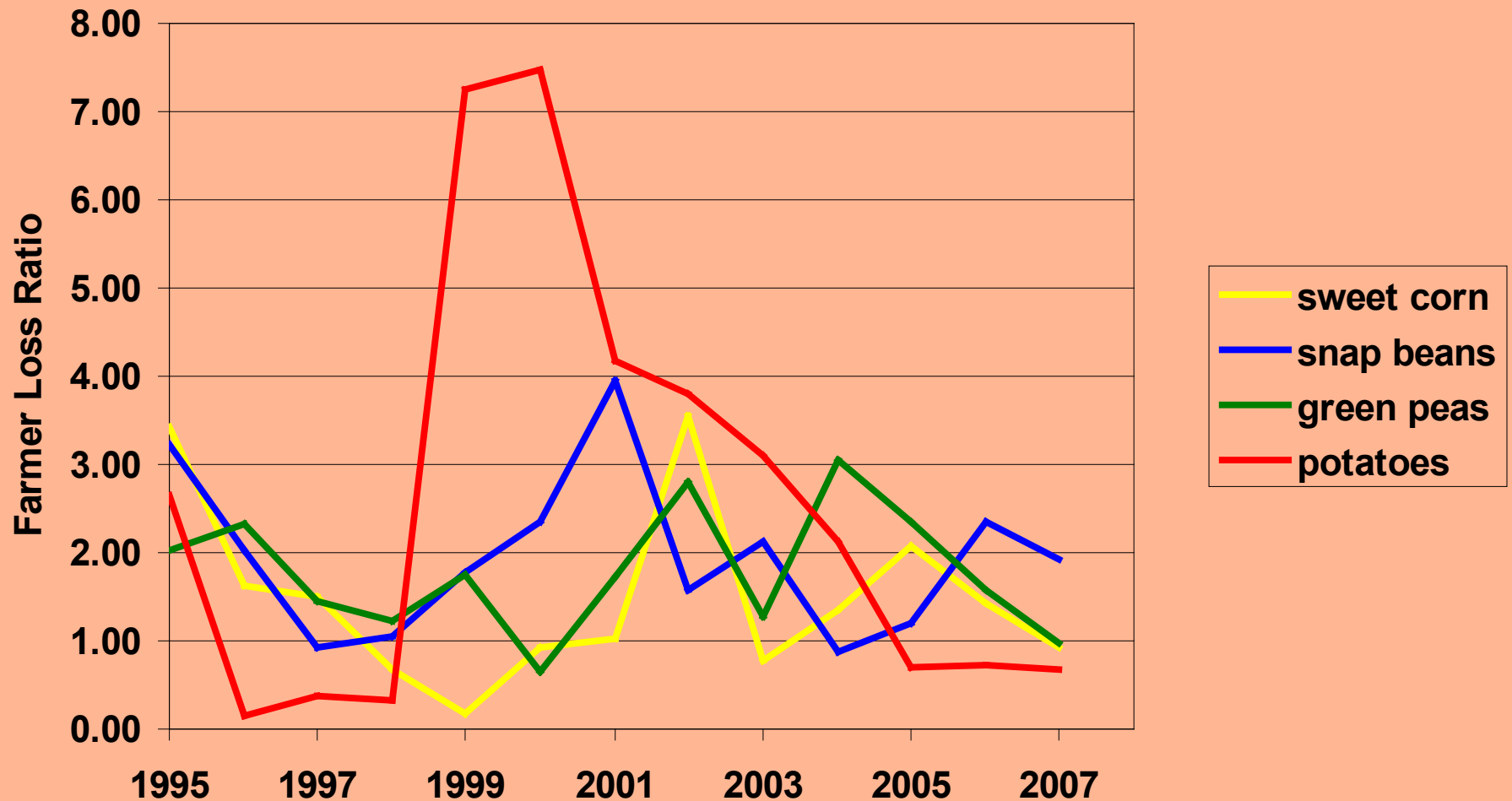
APH+CRC+RA Average County (Program) Loss Ratios for Soybeans 1995-2007



Main Point

- Farmers, on average over the whole state, generally win on grain crop insurance
 - 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 = $8/4 = 2.0$

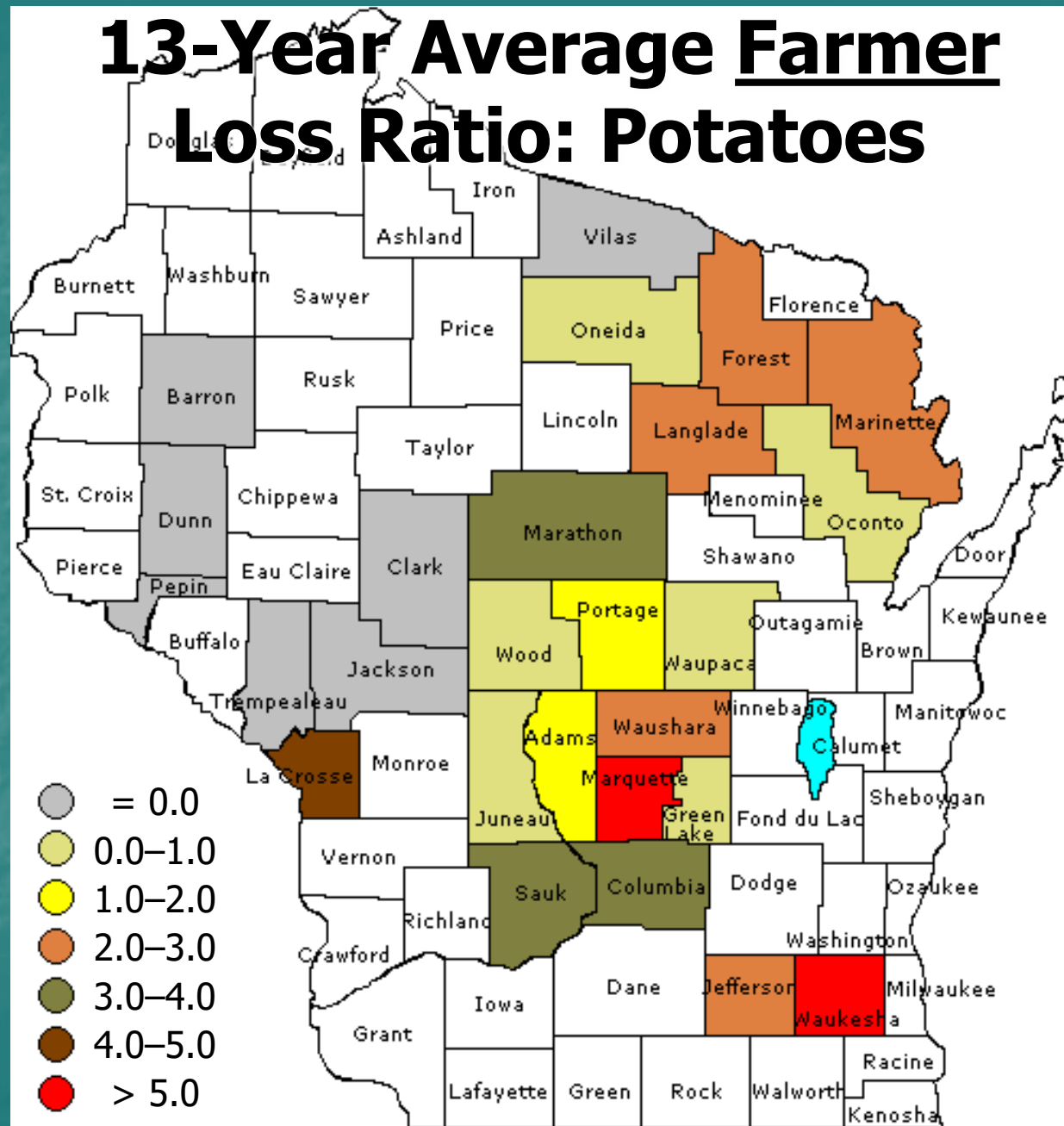
WI Farmer Loss Ratios for Vegetable Crops



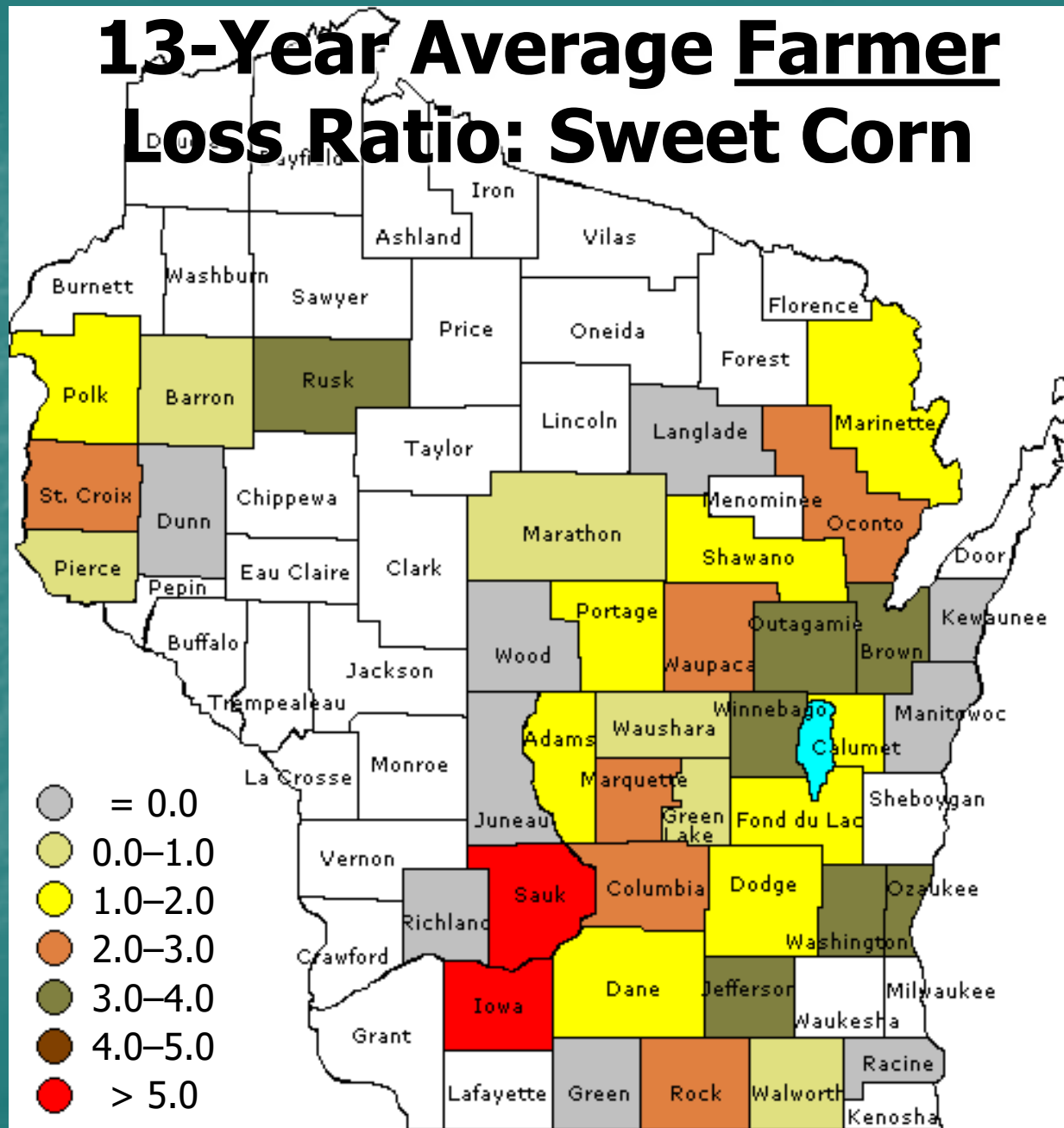
WI Farmer Loss Ratios for Vegetable Crops

Year	Potatoes	Sweet Corn	Snap Beans	Green Peas
2000	4.72	0.68	1.67	0.46
2001	4.01	0.98	3.73	1.69
2002	3.81	3.48	1.55	2.80
2003	3.09	0.79	1.94	1.28
2004	2.11	1.29	0.37	3.03
2005	0.70	2.07	1.16	1.04
2006	0.59	1.43	2.22	1.59
2007	0.33	0.93	1.83	0.98
AVG	2.42	1.46	1.81	1.61

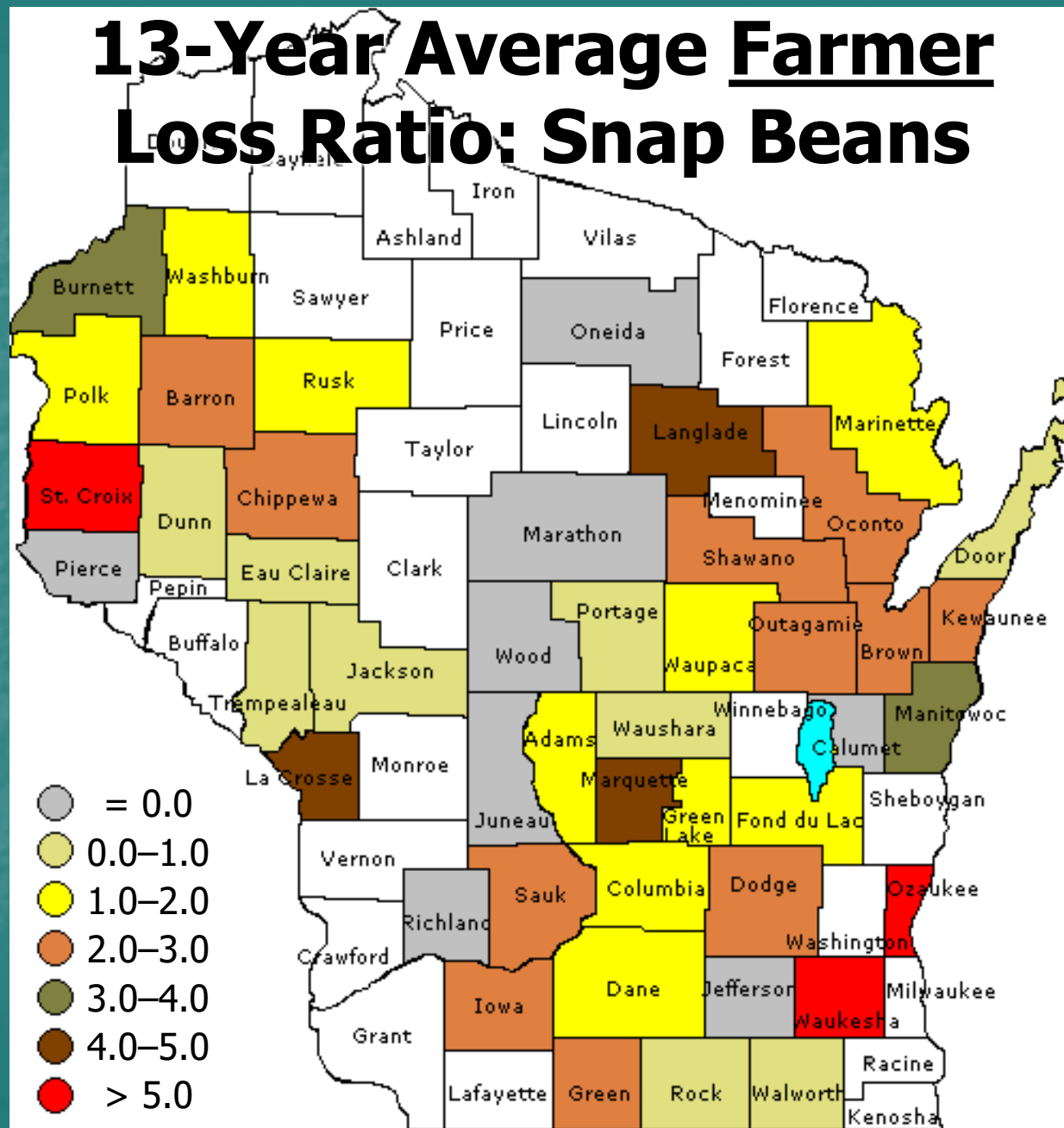
13-Year Average Farmer Loss Ratio: Potatoes



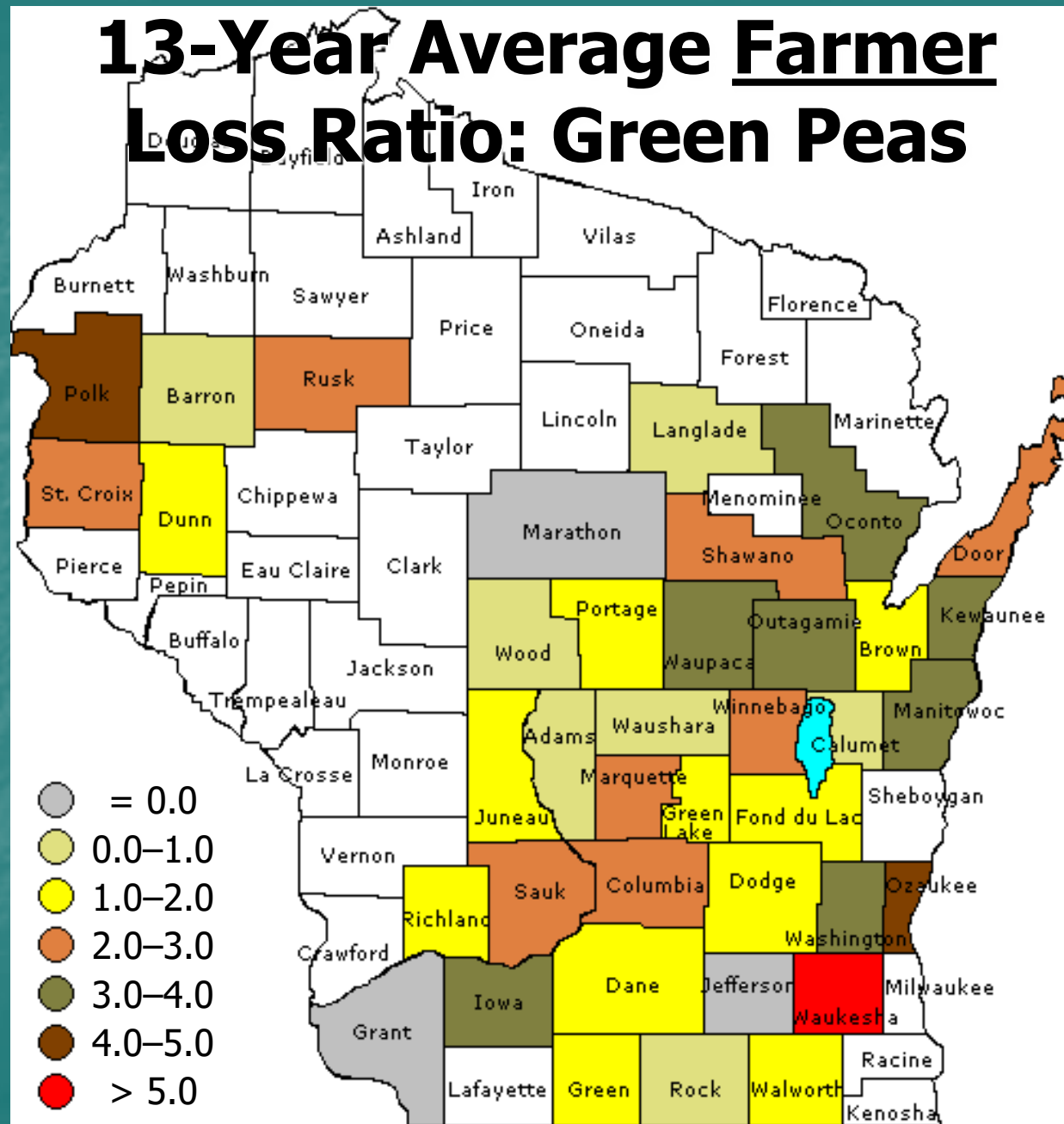
13-Year Average Farmer Loss Ratio: Sweet Corn



13-Year Average Farmer Loss Ratio: Snap Beans



13-Year Average Farmer Loss Ratio: Green Peas



Summary of Farmer Loss Ratios

- On average across WI, farmers generally make money with crop insurance
- In some counties and for some crops, this has not been the case
- Insurance has risk management benefits not captured by the loss ratio
 - Not only increases average net returns, also reduces net returns variability with yield floor
- Consider at least CAT: \$300/crop/county
- Use as many Optional units as possible

Questions?

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