

Crop Insurance Overview for 2008

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**These slides are a conglomeration of slides
from presentations made in Jan-Feb 2008**

Goal Today

- Overview current crop insurance programs for corn, soybeans and wheat
- Crop Insurance Hints for 2008
- Crop Insurance changes coming

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?

Types of Policies

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

APH: Actual Production History

- If your harvested yield is less than your yield guarantee, receive an indemnity
- Yield guarantee: average of your actual harvested yields for last 4-10 years
- Coverage Level: Choose percentage of your average yield as your guarantee, from 50% to 85% by 5% intervals
- Price Election: Choose price paid for each bushel below your guarantee, from 100% to 55% of established APH price

APH Indemnity

- If Harvested Yield < Yield Guarantee
- $\text{Indemnity} = P_{\text{APH}} \times (Y_{\text{guarantee}} - Y_{\text{harvested}})$
- APH price: Average of February closing prices of CBOT harvest futures contracts
 - APH prices will be high this year: \$5.48 corn and \$13.66 beans on Monday
- Coverage level determines your trigger, pay more for higher coverage
- Price election determines how much paid when have a loss, pay more for higher price election

If you have a loss

- If you think you have a loss, **contact your crop insurance agent**
 - Documentation of losses and practices is key
 - Likely leave corn standing for loss adjustment
 - Stalk rot/lodged corn, Aflatoxin a loss
 - Wildlife damage a loss: deer, wild hogs, geese
 - Alternative uses: Be careful before you graze
- Lots of rules, don't forfeit your indemnities by making a mistake

Unit Structure

- Each unit
 - Planted to same crop during insurance period
 - Cannot cut across a county line
 - Separate production records for each unit
- Three unit types (smallest to largest)
 - Optional Unit, Basic Unit, Enterprise Unit
- Lots of rules on units, know them. Your crop insurance agent should be able to help

CRC Crop Revenue Coverage

- Combines APH with price protection based on CBOT futures prices
- Your APH yield history and CBOT prices set your preliminary revenue guarantee
- Same coverage level options, same unit structures
- Your revenue at harvest is your yield x CBOT prices (e.g., Nov average of Dec corn)
- If your harvest revenue is below your guarantee, triggers an indemnity payment

CRC protects against price increases and decreases

- If price falls or have low yield, know will have grain or money to buy grain to fulfill contracts
- If price increases by harvest, revenue guarantee increases too, so again know will have grain or money to buy grain to fulfill contracts
- Still have to market your grain
 - Can now market more aggressively since you will have grain or indemnities to buy grain at the existing market prices if you have a yield loss

GRP Group Risk Plan

GRIP Group Risk Income Protection

- GRP = APH, except uses NASS county average yield
- GRIP with Harvest Revenue Option = CRC, except uses NASS county average yield
- Cheaper because lower cost to adjust losses (no field visits)
- Not available for Wheat in WI
- Payments not made until Mar/Apr when NASS yields come out: cash flow issues

Lots of Crop Insurance Rules

- Communicate with your crop insurance agent is key to getting most from your policy
- Rules on: Planting dates, Late/prevented planting, Double cropping, Alternative crop uses, Corn maturity, Yield guarantees, Units, Breaking new ground (CRP vs pasture)
- If your agent does not know and will not find out for you, find a new agent
- Insurance agents do not always know all rules
- Call your county ag agent or RMA St. Paul regional office 651-290-3304

Wisconsin farmers and crop insurance

- Relative to neighboring states, WI a low participation state in crop insurance
- CRC the most popular coverage, then APH, then GRIP, then GRP
- APH CAT policies used (50% coverage level with 55% price election), very cheap to buy \$100/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 2007

	% planted acres	% insured acres	% policies sold	Avg. Units/Policy
APH CAT	5.7%	8.9%	9.2%	1.03
APH BuyUp	11.1%	17.3%	28.1%	2.30
CRC BuyUp	38.6%	60.0%	53.7%	3.42
GRIP BuyUp	7.7%	12.0%	6.5%	1.09
GRP CAT	0.1%	0.2%	0.1%	1.00
GRP BuyUp	1.0%	1.5%	2.4%	1.01
All Total	64.3%			2.68

WI soybean policies in 2007

	% planted acres	% insured acres	% policies sold	Avg. Units/Policy
APH CAT	4.4%	6.4%	6.4%	1.04
APH BuyUp	9.0%	12.9%	20.7%	1.86
CRC BuyUp	49.0%	70.5%	66.5%	2.59
GRIP BuyUp	5.6%	8.0%	4.8%	1.06
GRP CAT	0.1%	0.1%	0.0%	1.00
GRP BuyUp	1.4%	2.1%	1.6%	1.04
All Total	69.5%			2.24

WI wheat policies in 2007

	% planted acres	% insured acres	% policies sold	Avg. Units/Policy
APH CAT	4.3%	10.4%	6.5%	1.03
APH BuyUp	10.0%	24.4%	29.7%	1.74
CRC BuyUp	26.8%	65.2%	63.7%	2.07
All Total	41.1%			1.90

WI farmer practices

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

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

-- 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 Wheat in 2007

	total prem. /A	farmer prem. /A	indem./A	program loss ratio	farmer loss ratio
APH CAT	3.43	0.00	1.18	0.34	--
APH BuyUp	12.80	5.18	1.88	0.15	0.36
CRC BuyUp	22.62	9.53	13.34	0.59	1.40
All Total	18.22	7.47	9.28	0.51	1.24

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

Main Point

- Farmers, on average over the whole state, generally win on crop insurance policies
- Crop insurance is a subsidy program that is justified as helping farmers when they need it most, when they have low yields/revenues

Questions?

Hints for Using Crop Insurance in 2008

- Why think about crop insurance this year?
- Yield Risk: (probably) the same as it has always been
- Price Risk: increased because volatility has increased with crop prices
- Investment Risk: high input costs mean larger investment in planted fields: want more protection against crop failure/loss

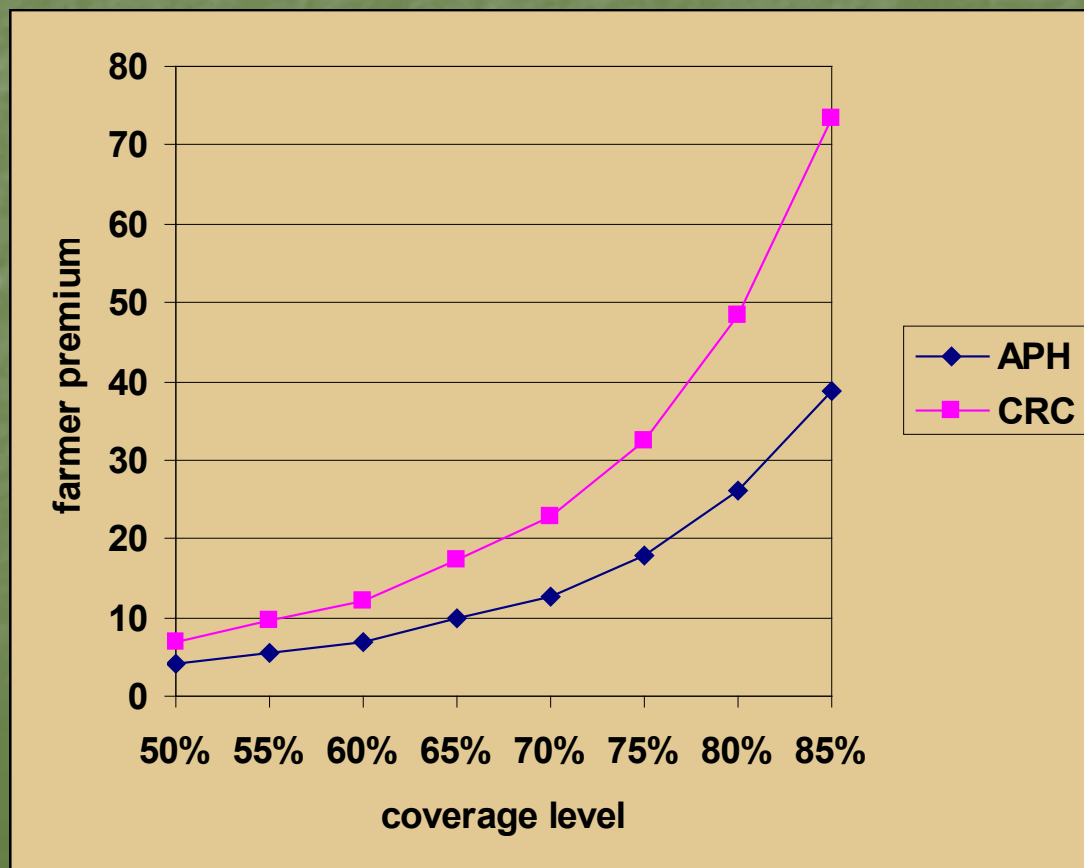
CRC Revenue Insurance will be popular

- Price and investment risks are more important this year
- CRC offers price risk protection based on CBOT futures prices
- CRC offers a revenue guarantee to protect your investment in crop inputs
- Can market more aggressively since you will have the grain or the indemnities to buy grain at existing market prices if you have a yield loss
- Dairy/Livestock farmers: CRC means can buy grain at existing market prices if have yield loss

Crop Insurance Hints for 2008

- Coverage Level for APH and CRC
 - 70-75% most popular and typically maximizes expected returns (or pretty close)
 - Sometimes 65% or 80% are better, but often not by much in terms of expected returns
 - 80% and 85% CRC often quite expensive and don't increase expected returns that much
- Price Election for APH: take 100%
 - Most popular, maximizes expected returns
 - If have a loss, want largest payment possible

- Premiums much higher in 2008
- Premiums are proportional to prices: 10% price increase = 10% premium increase
- Rise fast after 75% coverage (less subsidy)



Calumet County
2007 farmer
premiums for
corn with 150
bu/A APH yield

Unit Structure

- All coverage is at the unit level: if total yield for a unit falls below its guarantee, triggers indemnity payments
- Units: Optional, Basic, and Enterprise Units
- Get as many Optional Units as you can
 - More likely trigger a payment if have a loss
 - Worth slightly larger cost for optional units
 - WI data: larger farms, CRC with many units

GRP/GRIP

- Yield Basis: Value of GRP/GRIP depends on how your yield moves with county yield
- Potentially useful for irrigated farmers or those with short (or no) yield histories
 - Offset irrigation costs in dry years
 - Use while build yield history
 - Combine GRP/GRIP with crop hail
 - GRIP: cheap way to get price protection
- Larger/low risk farms use it as well

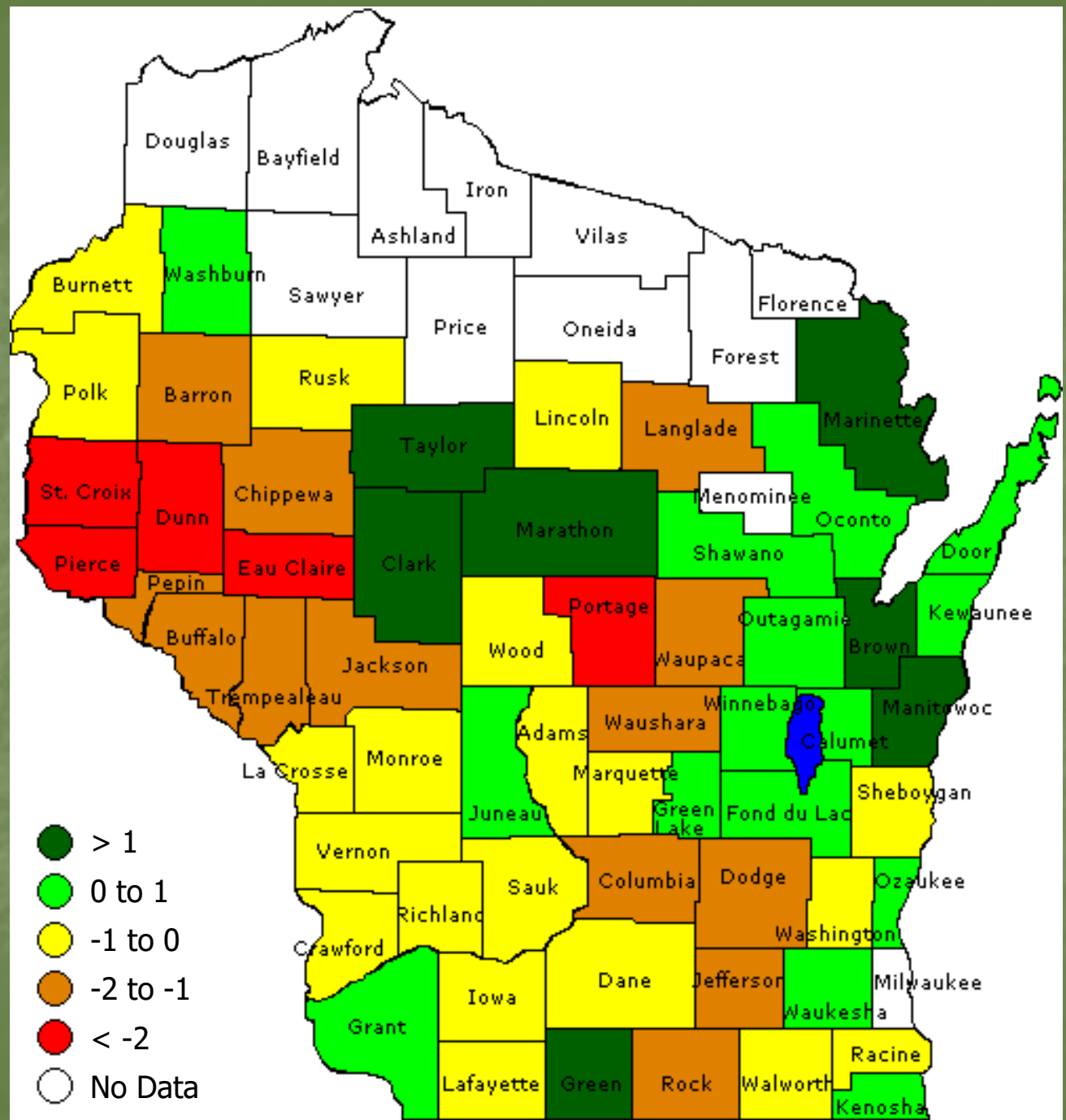
GRP/GRIP for Corn in Wisconsin

- Important issue for Corn: Which county yield do you choose to insure, yield per planted acre or yield per harvested acre?
- Only in Wisconsin is there a choice
- Because of dairy, in years with marginal corn yields, poorer corn chopped for silage
 - Yield per harvested acre can remain high, even though it's a bad year
- Which is better? Depends on the county!

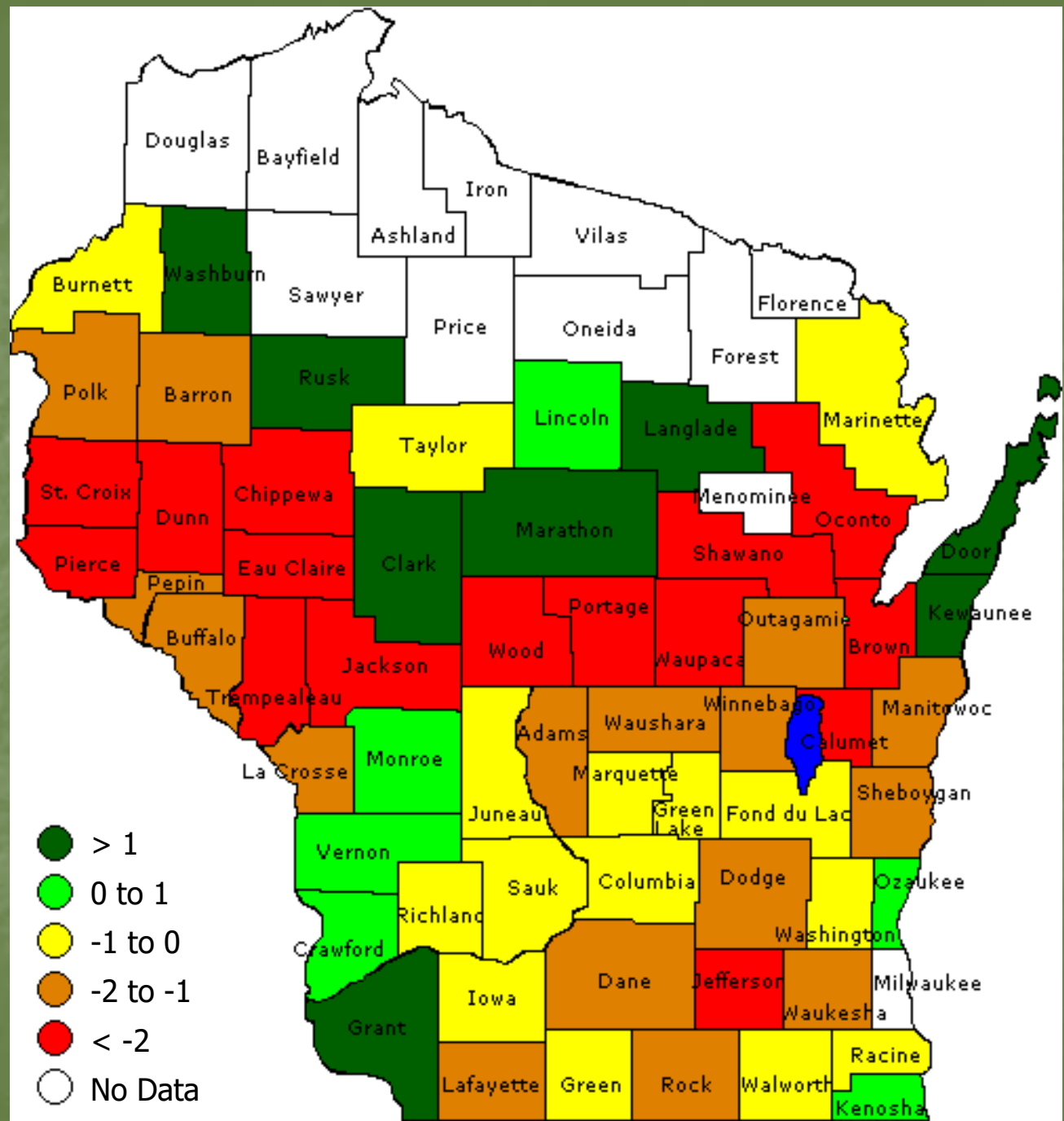
Is GRP a good deal for my Corn and Soybeans?

- Bulletins posted on my webpage (soybeans soon)
- 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

Expected Net
Return (bu/ac)
to corn GRP
using the
**Harvested
Acres Option,**
regression
estimated
expected yield

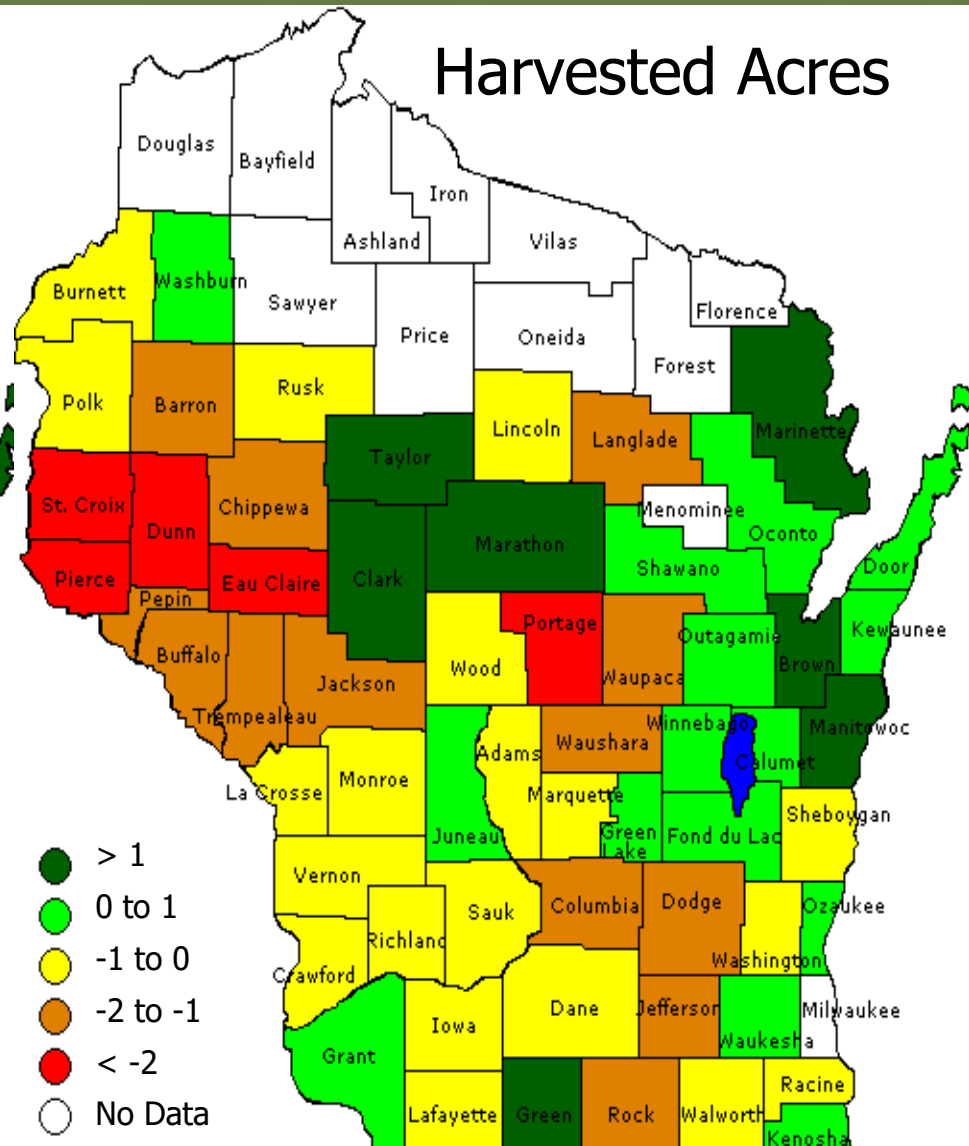
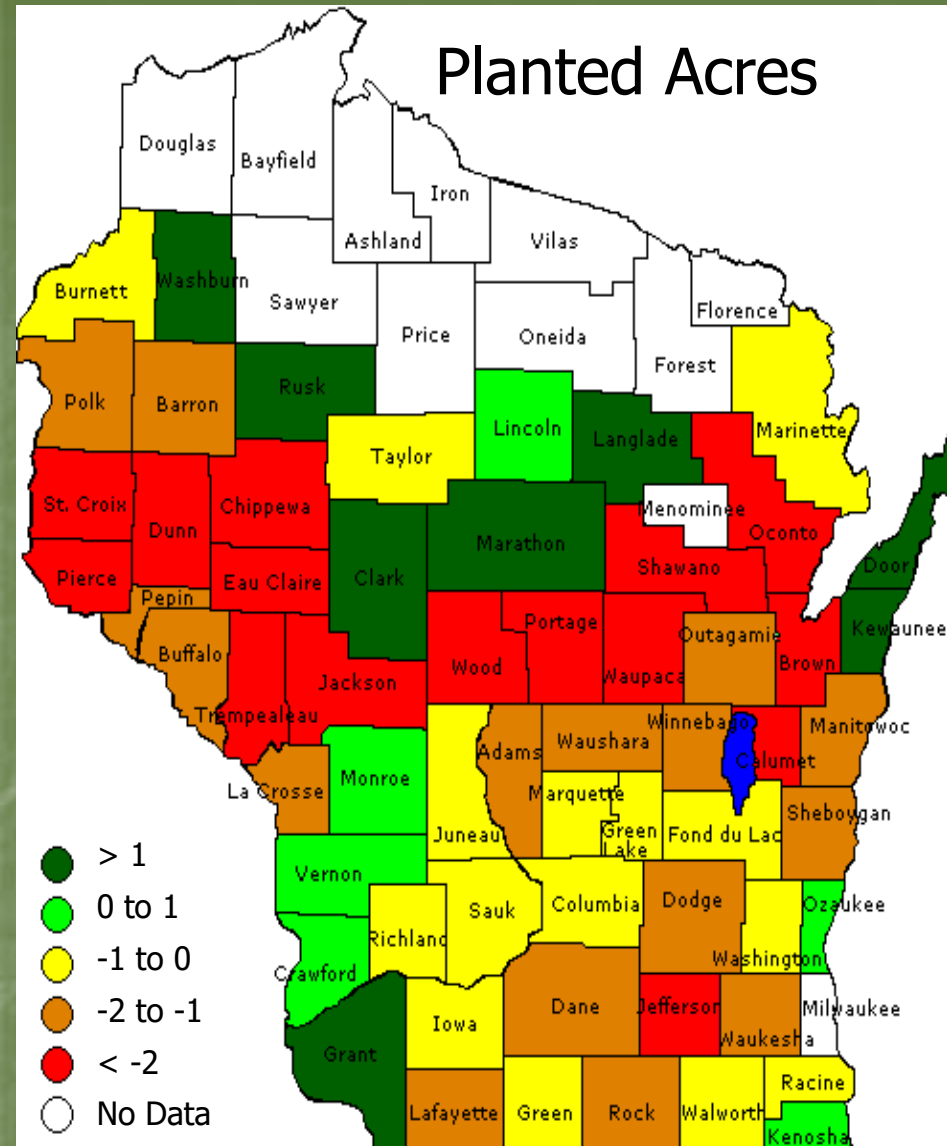


Expected Net
Return (bu/ac)
to corn GRP
using the
**Planted
Acres Option,**
regression
estimated
expected yield



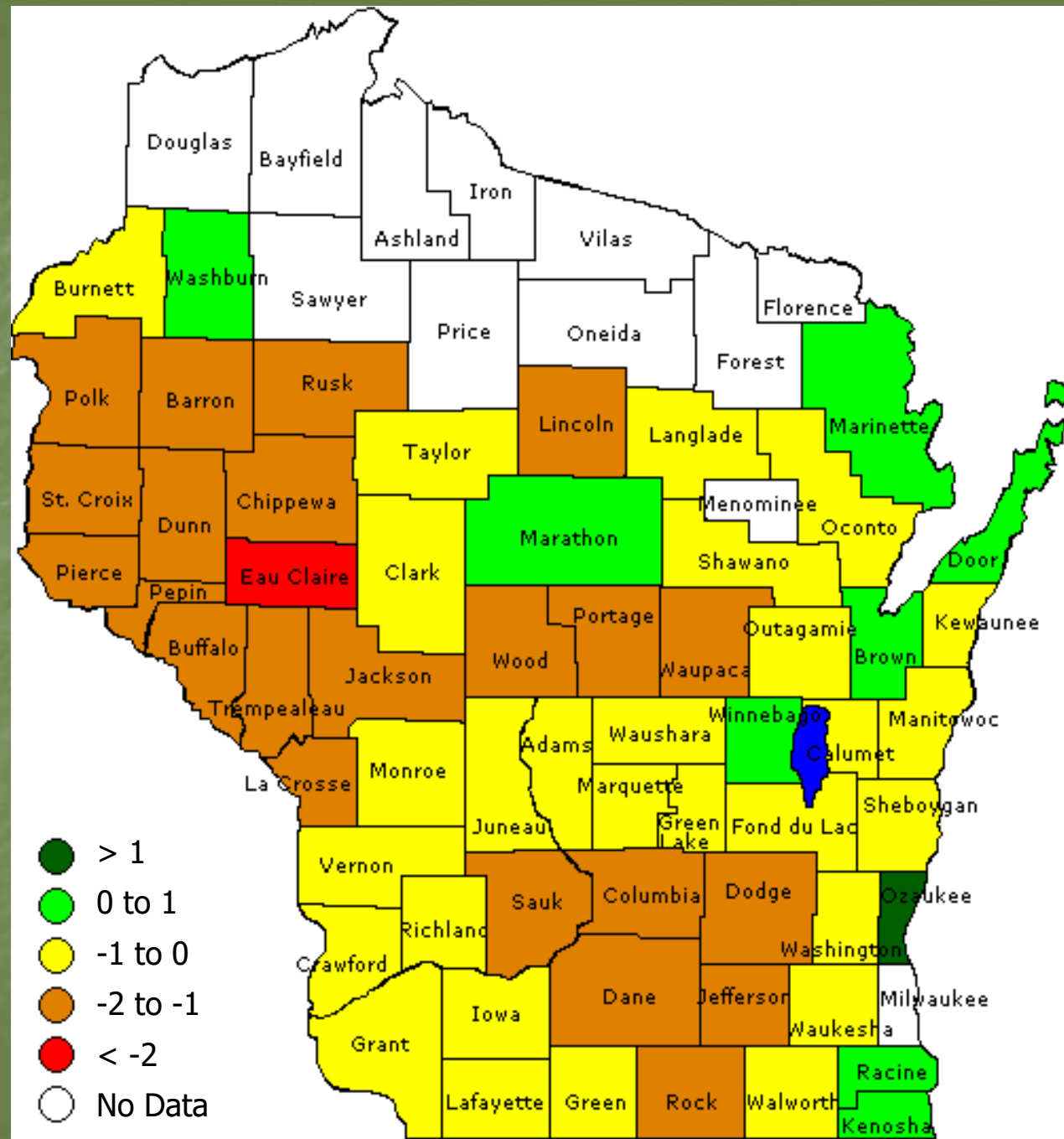
Planted Acres

Harvested Acres

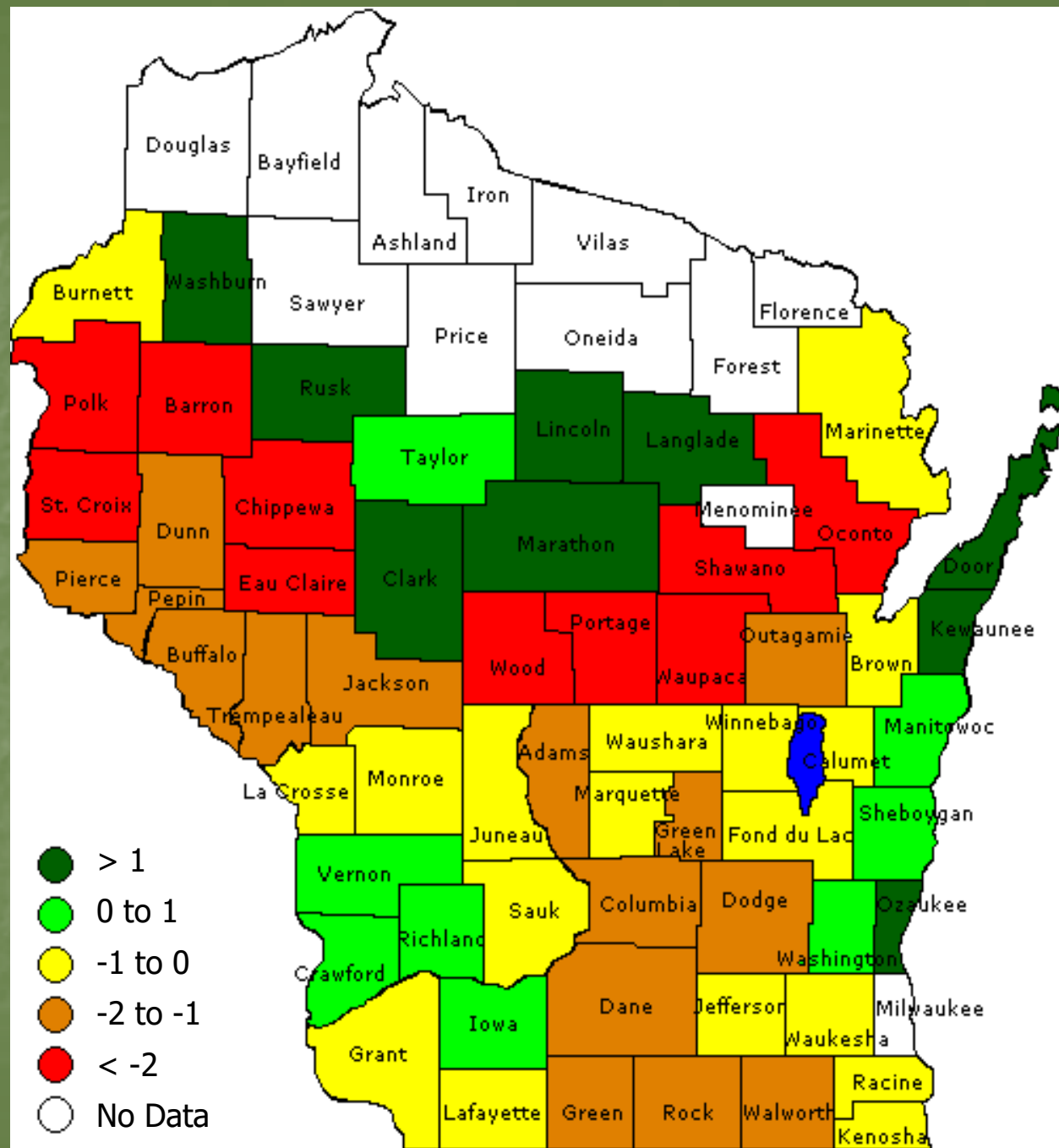


Side-by side comparison (regression yields)

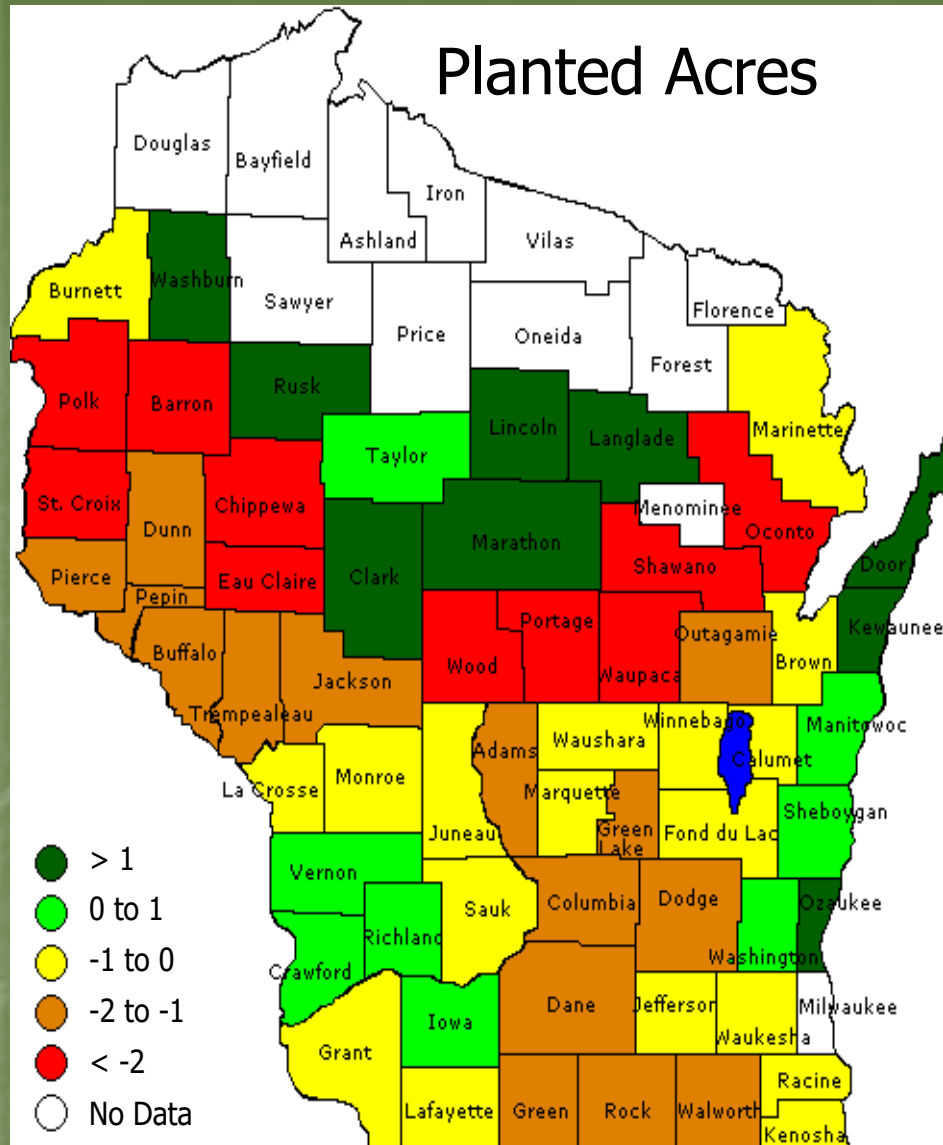
Expected Net
Return (bu/ac)
to corn GRP
using the
**Harvested
Acres Option,**
RMA
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expected yield



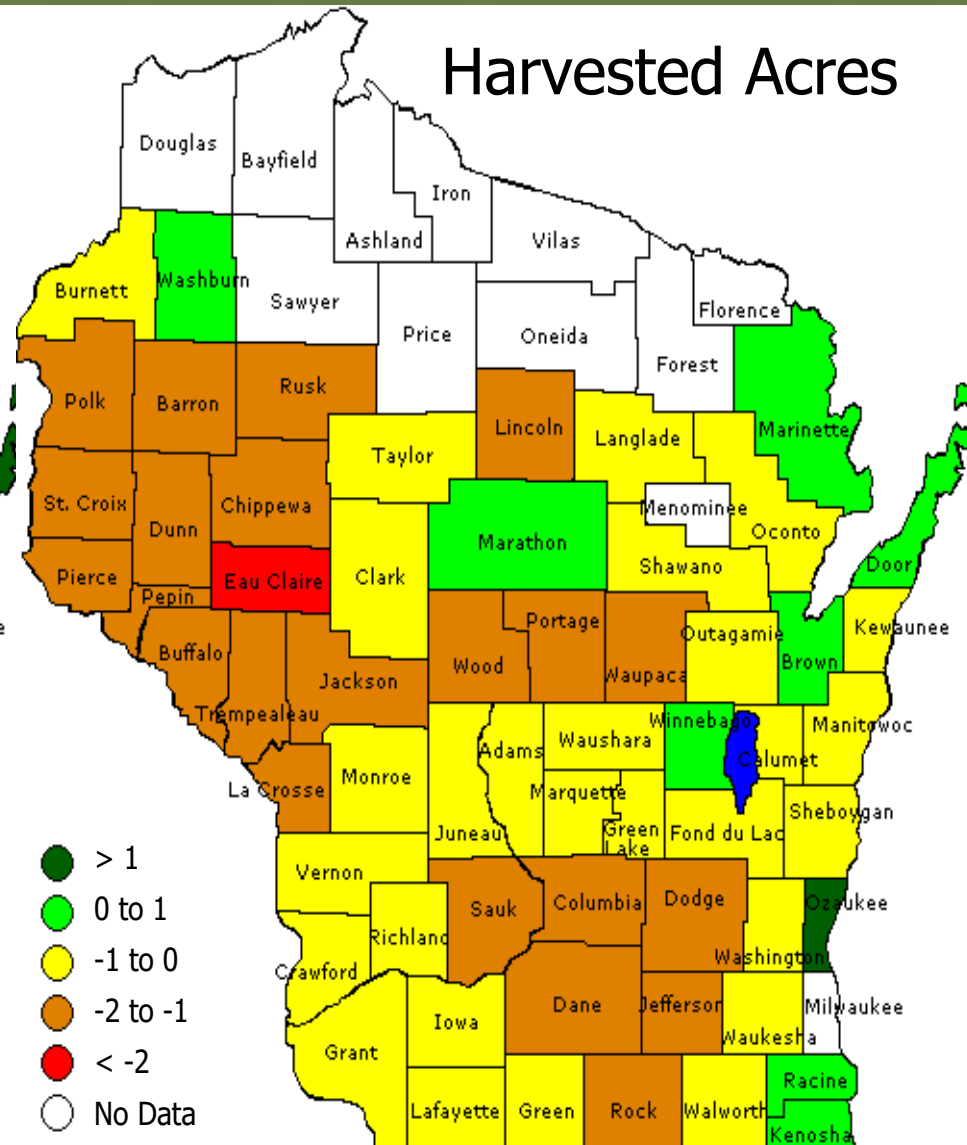
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Planted Acres

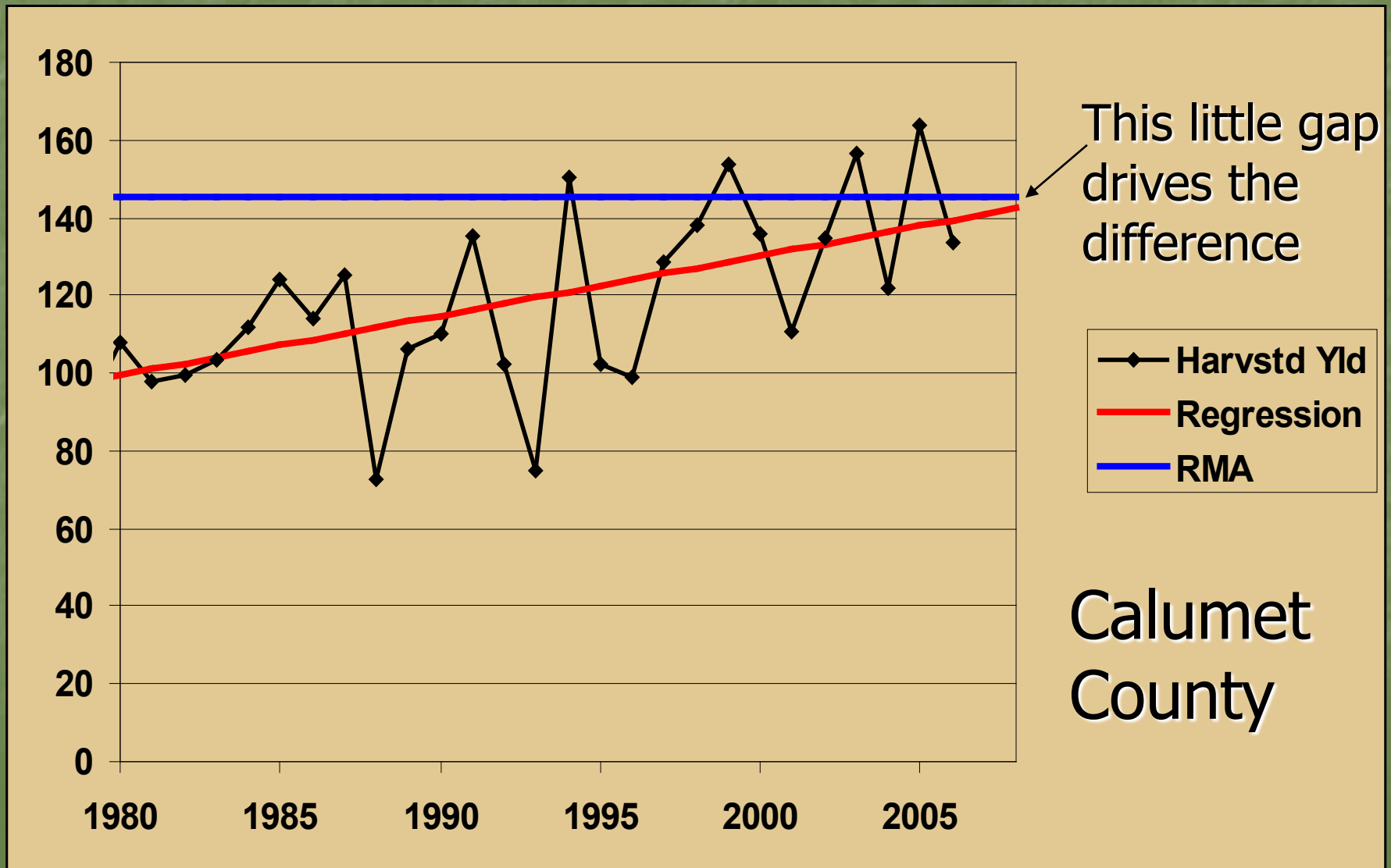


Harvested Acres

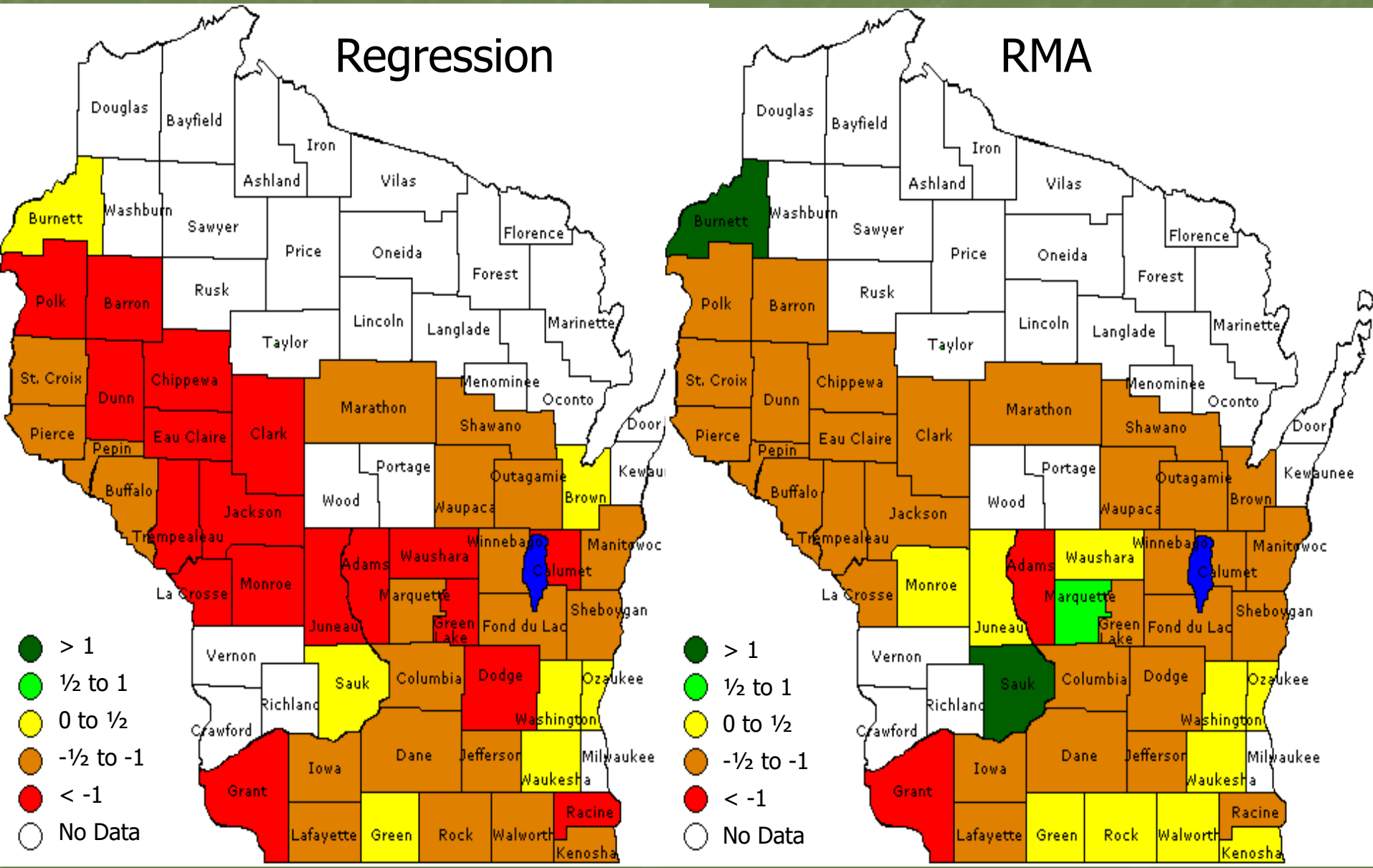


Side-by side comparison (RMA yields)

Regression vs. RMA: What's the difference?



Soybeans: Regression vs. RMA



Main Point

- You decide who to believe, it's your money!
- Compare the regression to the RMA estimate of expected county yield
- Download the NASS county yield and look
- How to download NASS data

http://www.aae.wisc.edu/mitchell/CropInsurance/GRP_County_Results_2008.xls

Crop Insurance Hints

- CRC 65%-75% coverage, 100% price election, with many optional units
- Larger/low risk farms: think GRIP with HRO, using maps to pick acreage option
- Know the rules!
- Breaking new ground (e.g. pasture), can be given low or no coverage
 - Ask your agent for a New Breaking Written Agreement and request a higher yield
 - Harder for agents, may have to look around

Crop Insurance Changes Coming

- Biotech Yield Endorsement
 - Approved Sept 12, 2007
 - Available if plant triple stack (Bt CB, Bt RW, RR) on at least 75% of corn
 - Premium reduction for APH/CRC/RA around 20% at the 70%-75% coverage levels
 - Piloted in IA, MN, IL, and IN starting in 2008
 - Expect expansion to WI if proves popular and actuarially sound

Crop Insurance Changes Coming

- Combo Policy: Released in 2009 or 2010
 - One basic policy with multiple options
 - Combines APH, CRC/RA, GRP, GRIP
 - No longer sell APH, CRC, RA, GRP, GRIP, IP
 - **Will mean RA-like policy for WI (finally)**
- AGR-Lite and AGR combined into AGRI
 - Whole farm revenue insurance that can combine with crop-specific policies
 - Released in 2010

Questions?

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