FARM BILL CHOICES: WHAT SHOULD CROP FARMERS DO?

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Examples for La Crosse, Monroe and Vernon Counties by Bill Halfman and Steve Huntzicker

Goal Today

- Overview how PLC (+SCO) and ARC work
- General rules of thumb to guide your decisions
- Decision aids you can use to work through your specific farms

Multi-Step Process with Different Deadlines

- Step 1: Maintain or Reallocate Base Acres By 2/27/15
- Step 2: Maintain or Update Payment Yields Owner Signs

Producer

Signs

- Step 3: Elect PLC/ARC-CO/ARC-IC
 3/31/2015
- Step 4: Consider SCO By 3/15/2015
- Step 5: Enroll in PLC/ARC By Summer 2015
- Farmers and land owners will have to choose
 - 1. PLC
 - 2. County ARC by Crop
 - 3. Individual ARC for Whole Farm
 - Irrevocable choice for 2014 2018 crop years
- Plenty of time to make decisions

Updating Base Acres

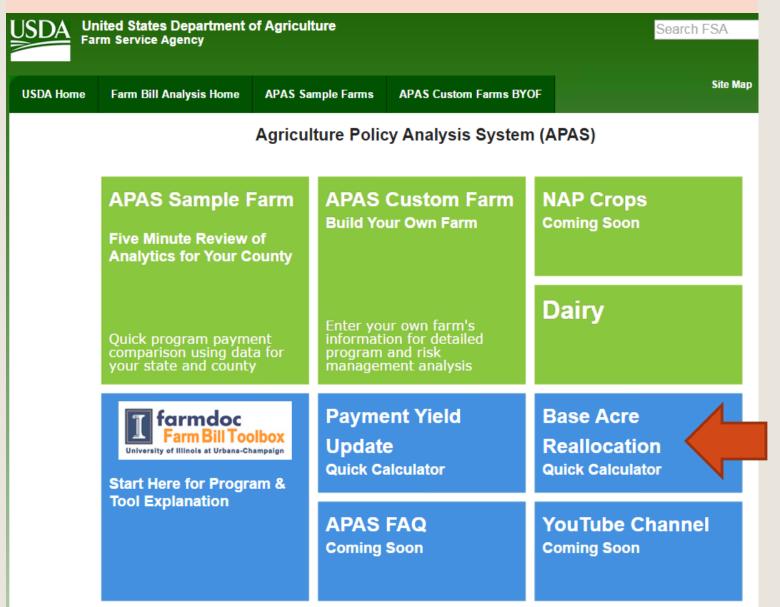
- Base acres haven't been updated since 2002 Farm Bill, so current base acres are based on 1998-2001 plantings
- 2 Options
 - 1. Keep current base acres
 - 2. Keep same total base acres, but reallocate using actual 2009-2012 planted acre shares
- Recommendation: Choose option that puts more acres into <u>Corn</u>: crop with the highest expected payments
 - In WI: Corn > Soy \geq Wheat > Oats
- Farm cannot increase total base acres, only reallocate total based on acreage shares planted during 2009-2012

Actual FSA Farm in Iowa

2014 Commodity Soybeans	2014 Base Acres 57.00	2014 CC Yield 32.00	2014 Commo Corn	odity 2014 Bas 85.	And the second s	14 CC Yield 109.00
		MARY CONTRACT	History	10.0 00 00 00 00 00 00 00 00 00 00 00 00		000000000000000000000000000000000000000
Crop		2008	2009	2010	2011	2012
Soybeans	Planted	69.40	41.70	78.40	44.80	103.70
Soybeans	Prevented	0.00	0.00	0.00	0.00	0.00
Soybeans	Double	0.00	0.00	0.00	0.00	and the second
Soybeans	Subsequent	0.00	0.00	0.00	0.00	0.00
Com	Planted	50.70	95.50	67.80	103.70	0.00 58.80
Corn	Prevented	0.00	0.00	0.00	0.00	the second se
Corn	Double	0.00	0.00	0.00	and the second sec	0.00
Corn	Subsequent	0.00	0.00	0.00	0.00	0.00
Oats	Planted	7.30	0.00	14.00	5.00	0.00
Oats	Prevented	0.00	0.00	0.00	a far an ar when which is a second	0.00
Oats	Double	0.00	0.00	and the second state of th	0.00	0.00
Oats	Subsequent	0.00	0.00	0.00	0.00	0.00

- Current base acres: 57.0 soybean + 85.8 corn = 142.8 ac
- 2009-2012 Average Planted Acres: 67.15 soybeans, 81.45 corn, and 4.75 oats = 153.35 acres
 - Shares: 43.79% soybeans, 53.11% corn, 3.10% oats
- Reallocation Options: 43.79% x 142.8 = 62.53 ac soybean, 53.11% x 142.8 = 75.85 ac corn, 3.1% x 142.8 = 4.42 ac oats
- Should this farm update Base Acres? Probably not

Alternative enter data into an online tool: <u>http://fsa.usapas.com/</u>



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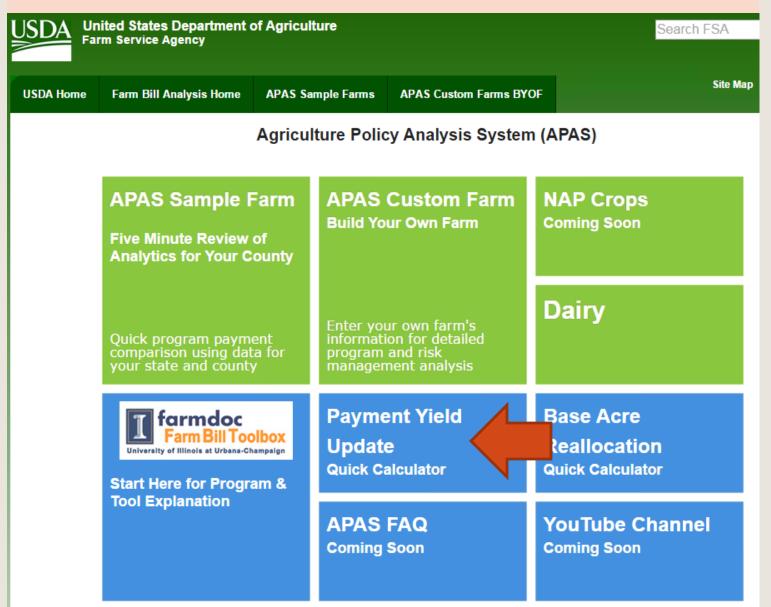
Base Acr	re Reallocatior	۱					
Please add	d the relevant cro	ps on your farm to th	ne calculation.				
Add a G Select		•	to calculation				
Crop	Base Acres	age for each crop Planted Acres	p.			Base Acres	
	Existing	2009	2010	2011	2012	Reallocated	
Corn	85	89	96	110	105	95.24	Delete
	65	60	55	50	65	54.76	Delete
Soybeans							

Yield Updating

- Haven't been updated since 2002 Farm Bill, so currently based on 1997-2001 yields
- 1. Keep your current yields
- 2. Update yields to 90% of your 2008-2012 average,
 - 75% county average as "substitute yield" if your actual yield lower for a year
 - If no yield data for a year, use 75% of county average
- Recommendation: Choose option giving highest Yields
- http://www.fsa.usda.gov/Internet/FSA_File/plc_subyields_web.xls

	Substitu	ute Yields by	/ Crop	
County	Corn	Wheat	Soybeans	Oats
La Crosse	115.0	40.0	33.0	42.0
Monroe	102.0	42.0	29.0	43.0
Vernon	109.0	44.0	32.0	43.0

Alternative enter data into an online tool: <u>http://fsa.usapas.com/</u>



Alternative enter data into an online tool: <u>http://fsa.usapas.com/</u>

Automatically uses substitute yields for your county

Payment Yield Update					×
Minimum Yield Lookup State Wisconsin •	County Barron •	Crop Corn •	Minimum Yield: 100 bushels/acre		
Historical yields per plante Please enter yields in l when crops were plant	bushels/acre. If the cro red or prevented from p	planting.	-		
2008	2009	2010	2011	2012	
155	170	165	179	165	
Calculate	Updated Payment Y 150 bushels/acre	/ield:			

Comments

- Can update base acres and not yields, yields and not base acres, both base acres and yields, or neither
- Can update yields for each crop separately
- Cannot increase total base acres
- Communicate: Renters and Landlords have to work together: often the renter has the production information, but the landlord does the paperwork and signs the forms
- Not all landlords will understand what's going on -- it's been more than a decade since this last happened
- Get signatures on updating base acres and yields, even if do not change, otherwise you cannot make PLC/ARC election until March 1, 2015

Multi-Step Process with Different Deadlines

By 2/27/15

- Step 1: Maintain or Reallocate Base Acres
- Step 2: Keep or Update Yields
- Step 3: Elect PLC/ARC-CO/ARC-IC By 3/31/2015
- Step 4: Consider SCO By 3/15/2015
- Step 5: Enroll in PLC/ARC By Summer 2015
- Recommendations
- Choose option that puts most Base Acres into Corn
- Choose option that gives you the highest Program Yields

New Commodity Support Programs

Price Loss Coverage (PLC)

- Establishes a <u>price</u> floor based on national marketing year average price
- Essentially Counter-cyclical payments, but higher prices
- Can buy Supplemental Coverage Option (SCO) crop insurance as an add-on option
- Agriculture Risk Coverage (ARC)
 - Establishes a <u>revenue</u> floor
 - Essentially a new and improved ACRE program
 - 1) County revenue by Crop (County ARC or ARC-CO)
 - 2) Individual revenue for Whole Farm (ARC-IC)

New Commodity Support Programs

3 Options

1) Price Loss Coverage (PLC)

- Supplemental Coverage Option(SCO) (optional, you buy from insurance agent)
- 2) County ARC (ARC-CO) by crop

3) Individual ARC (ARC-IC) for whole farm

Price Loss Coverage (PLC)

- Same as Counter-Cyclical Payments, but with higher "Reference Prices"
 - Corn \$3.70, Soybeans \$8.40, Wheat \$5.50, and Oats \$2.40
- If National Marketing Year Average Price is less than the Reference Price, PLC payments made
 - PLC Payment Rate = Reference Price MYA Price
 - PLC Payment = 85% x Base Acres x Payment Yield x PLC Payment Rate
- Option to buy Supplemental Coverage Option (SCO), a new type of crop insurance

Simple PLC Example

- Suppose the corn National Marketing Year Average Price is \$3.50
- Corn Reference Price is \$3.70 > \$3.50, so PLC payments are triggered
- PLC Payment Rate = \$3.70 \$3.50 = \$0.20/bu
- If have 80 corn Base Acres with a Payment Yield of 110 bu/ac, then your PLC payment would be
- 85% x 80 ac x 110 bu/ac x \$0.20/bu = \$1,496
- This is why if you update payment yields, pick the option that gives the highest payment yields

Supplemental Coverage Option (SCO)

- If you sign up for PLC, you have the <u>option</u> to buy SCO: allows you to insure part of your RP/YP deductible with a county policy (ARP/AYP)
 - Layer individual & county coverage
 - Can't exceed 86% total coverage
- Add SCO to an RP policy to increase coverage up to the 86% maximum
 - SCO will not pay until county loss exceeds 14%
 - 65% SCO premium subsidy (farmer pays 35%)
- SCO available in 2015, only if choose PLC

Aside: where to get more information

- U of IL FAST Tools:
 - http://www.farmdoc.illinois.edu/fasttools/index.asp

"2014 Farm Bill Decision Tool: ARC-COPLC"

- County ARC vs PLC what-if calculator: farmer enters county yields and national prices for 2014-2018 and it calculates ARC and PLC payments
- FSA National web site: ARC/PLC information
- <u>http://www.fsa.usda.gov/FSA/webapp?area=home&subjec</u>
 <u>t=arpl&topic=landing</u>
- USDA National Marketing Year Average Prices 2002-2013
- <u>http://www.fsa.usda.gov/FSA/webapp?area=home&subjec</u>
 <u>t=ecpa&topic=foa-cc</u>

Aside: National Marketing Year Average Price

- Corn and Soybeans: Marketing Year runs Sept 1- Aug 31
- Wheat and Oats: Marketing Year runs June 1- May 31
- USDA NASS tracks crop prices farmers receive, announces monthly and annual average at state and national levels
- Weighted by sales volumes, so prices in corn producing regions dominate the national corn MYA price
- USDA National Marketing Year Average Prices 2002-2013
- <u>http://www.fsa.usda.gov/FSA/webapp?area=home&subjec</u>
 <u>t=ecpa&topic=foa-cc</u>
- Google "USDA National Marketing Year Average Prices"

PLC Comments

- PLC payments depend on national MYA price, not actual price the farmer gets
- If a farmer sells corn for \$3/bu, but national MYA price is \$3.75, the farmer receives no PLC payment
- If a farmer sells corn for \$4/bu, but national MYA price is \$3.60, the farmer still receives a PLC payment

Agriculture Risk Coverage (ARC)

- <u>County ARC</u> payments made if Actual County Revenue is less than County Guarantee
- County Benchmark = 5-Year Olympic Average County Yield x 5-Year Olympic Average MYA Price
 - Use PLC Reference Price if higher than MYA Price
 - Use 70% County T-Yield if higher than County Yield
- <u>County Guarantee</u> = 86% of County Benchmark
- <u>Actual Revenue</u> = County Average Yield x MYA Price
- ARC Payment Rate = County Guarantee Actual County Revenue, up to 10% of County Benchmark
- <u>ARC Payment</u> = 85% x Base Acres x ARC Payment Rate

Olympic Averaging: <u>Unofficial</u> 2014 Corn Example La Crosse County

Year	Yield	Price
2013	150	4.46
2012	138	6.89
2011	157	6.22
2010	167	5.18
2009	161	3.55
	Varies by county	Same for all counties

- Olympic Average Yield = 156
- Olympic Average Price = 5.29
- ARC County Benchmark = 5.29 x 156 = \$825.24
- ARC Guarantee = 86% x \$825.24 = \$709.70
- Maximum ARC Payment = 10% x \$709.70= \$70.97

Olympic Averaging: <u>Unofficial</u> 2014 Corn Example Monroe County

Year	Yield	Price
2013	122	4.46
2012	122	6.89
2011	150	6.22
2010	157	5.18
2009	148	3.55
	Varies by county	Same for all counties

- Olympic Average Yield = 140
- Olympic Average Price = 5.29
- ARC County Benchmark = 5.29 x 140 = \$740.60
- ARC Guarantee = 86% x \$740.60 = \$636.92
- Maximum ARC Payment = 10% x \$636.60= \$63.69

Olympic Averaging: <u>Unofficial</u> 2014 Corn Example Vernon County

Year	Yield	Price
2013	140	4.46
2012	128	6.89
2011	154	6.22
2010	158	5.18
2009	158	3.55
	Varies by county	Same for all counties

- Olympic Average Yield = 151
- Olympic Average Price = 5.29
- ARC County Benchmark = 5.29 x 151 = \$798.79
- ARC Guarantee = 86% x \$798.79 = \$686.96
- Maximum ARC Payment = 10% x \$686.96= \$68.69

County ARC Payment Example for "Cornfield County"

- Suppose 2014 County ARC Guarantee is \$750 for corn
- Suppose 2014 actual USDA yield is 180 bu/ac and 2014 MYA corn price is \$3.60
- Actual revenue is 180 x 3.60 = \$648/ac
- \$648 < \$750, triggers County ARC payment
- ARC Payment Rate = 750 648 = \$102/ac: exceeds max
- Maximum ARC payment = 10% x County guarantee (\$750)
- So ARC Payment Rate = \$75.00
- ARC Payment = 85% x ARC Payment Rate per corn base acre
- ARC Payment = 85% x \$75 = \$63.75 per corn base acre

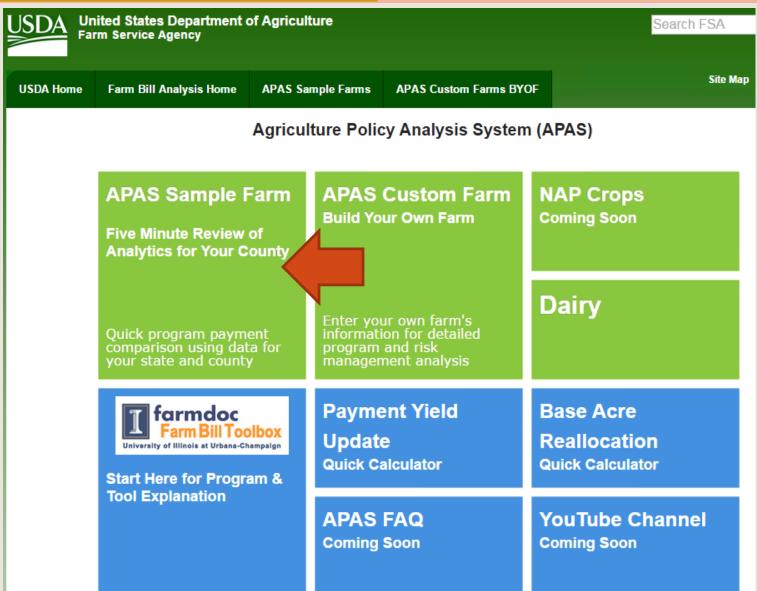
ARC Comments

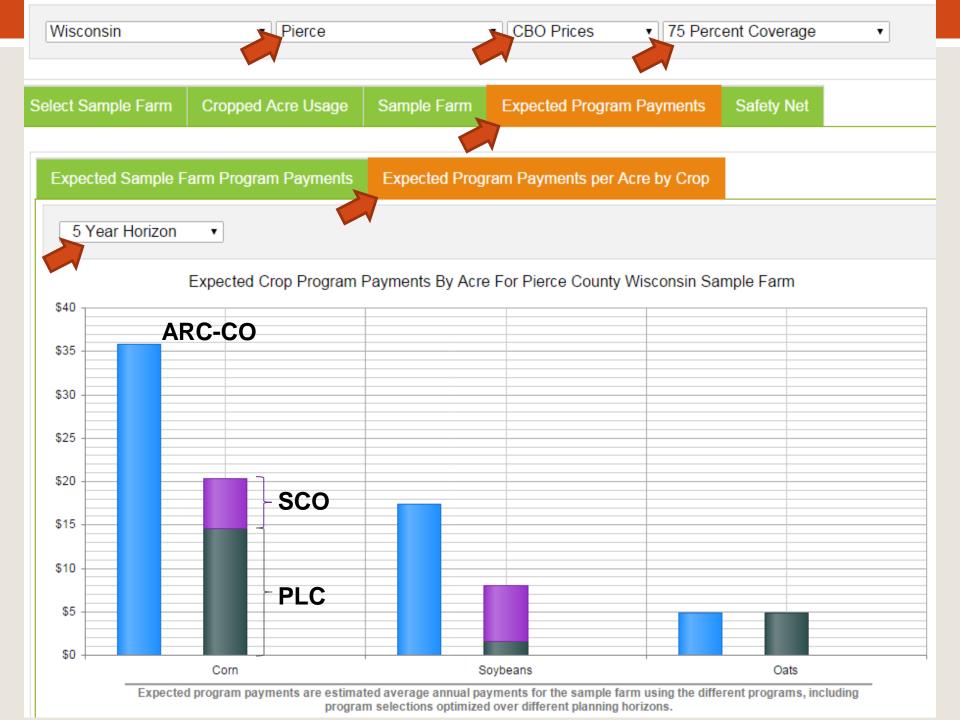
- County ARC varies by county: guarantee, maximum payments, and actual yields
- County ARC guarantee varies over time: 5 year moving Olympic Average
- Kind of like SCO, a county-level revenue insurance with an 86% coverage level
- Differences
 - Uses 5-Year Olympic Average of prices and yield to determine guarantee
 - Uses national marketing year average price as the actual price, not CME futures prices

ARC Comments

- Just like PLC, county ARC payments are determined by county yields and national MYA prices, not a farmer's actual yields and prices received
- A farmer may get ½ of his average revenue, but if the actual county yield x national MYA price exceeds the county guarantee, the farmer receives no county ARC payment
- A farmer may get twice his average revenue, but if the actual county yield x national MYA price is less than the county guarantee, the farmer still receives a county ARC payment

Decision Aids: U of IL with USDA Funding http://fsa.usapas.com/





- Next slides are county-specific results as examples using the three different projected price scenarios
- CBO- highest projections
- USDA- lowest projections
- FAPRI- somewhere between

 If you enter in your own farm in the web tool you can enter your own price projections or use one of the three above

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175 Percent Coverar

Actual Prices 2013 & Estimated Prices 2014

CBO Projected Prices 2015-2018

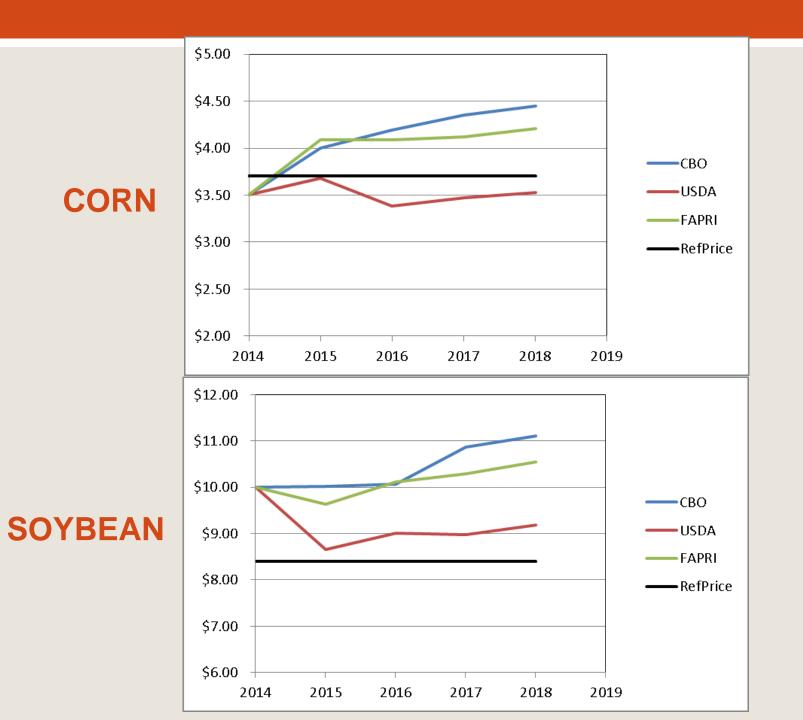
Crop	2013	2014	2015	2016	2017	2018
CORN	\$4.46	\$3.50	\$4.00	\$4.19	\$4.35	\$4.45
OATS*	\$3.75	\$3.05	\$2.59	\$2.57	\$2.71	\$2.79
SOYBEANS	\$13.00	\$10.00	\$10.02	\$10.06	\$10.87	\$11.11

USDA Projected Prices 2015-2018

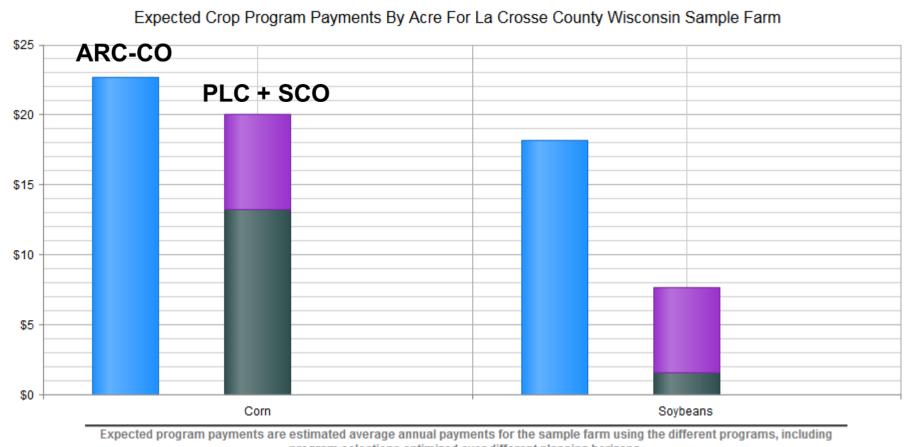
Cropop	2013	2014	2015	2016	202017	2012018
CORNEN	\$4.46	\$3,50	\$3.68	\$3.38	\$7\$3747	\$3.\$3.53
OATS	\$3.75	\$3.05	\$2.24	\$1.97	\$2.01	\$2,\$2.06
SOYBEANS	\$13.00	\$10.00	\$8,66	\$9.00	\$8,97	^{\$9} \$9.19

FAPRI Projected Prices 2015-2018

Crop	2013	2014	2015	2016	2017	2018
CORN	\$4.46	\$3.50	\$4.09	\$4.09	\$4.12	\$4.21
OATS	\$3.75	\$3.05	\$3.27	\$3.28	\$3.30	\$3.34
SOYBEANS	\$13.00	\$10.00	\$9.64	\$10.11	\$10.29	\$10.54

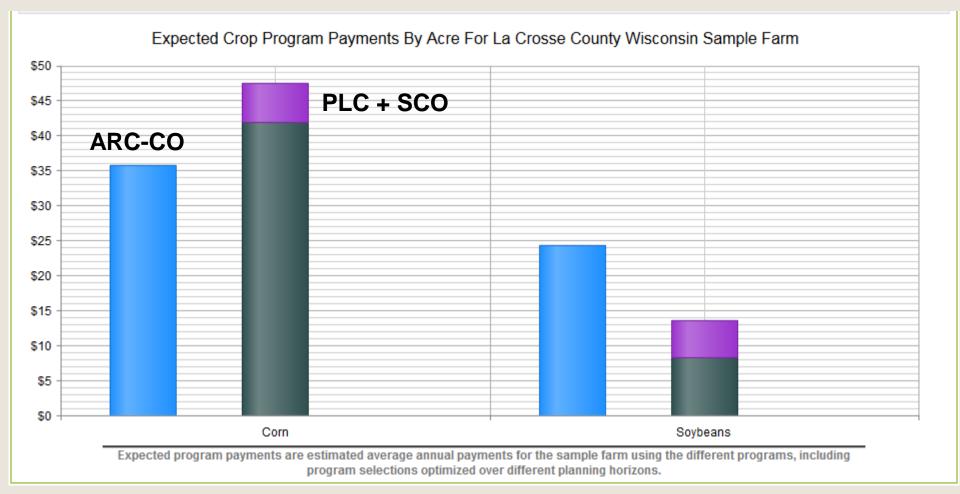


La Crosse County, CBO Prices, 75% RP Coverage, 5-year horizon

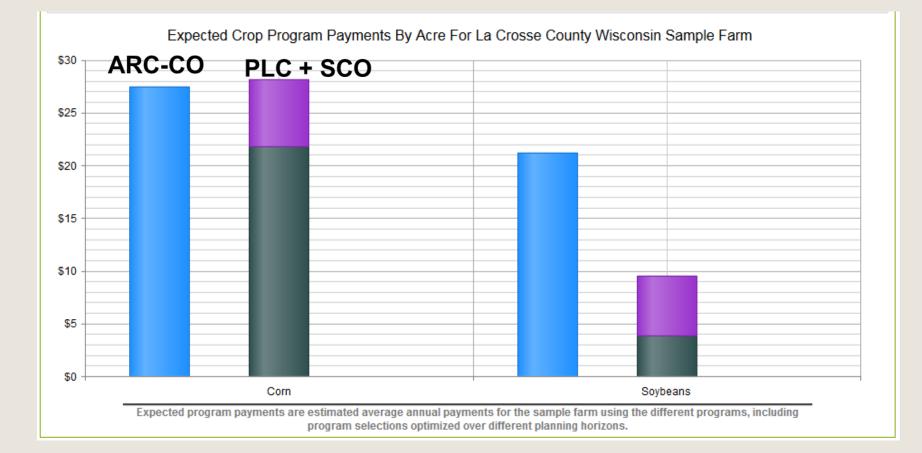


program selections optimized over different planning horizons.

La Crosse County, USDA Prices, 75% RP Coverage, 5-year horizon



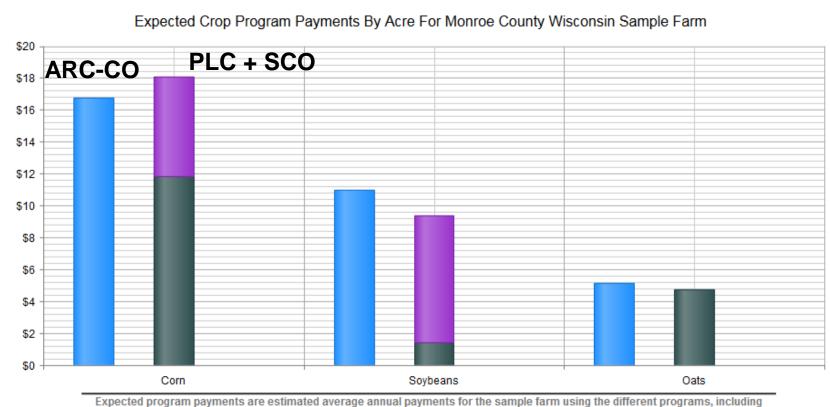
La Crosse County, FAPRI Prices, 75% RP Coverage, 5-year horizon



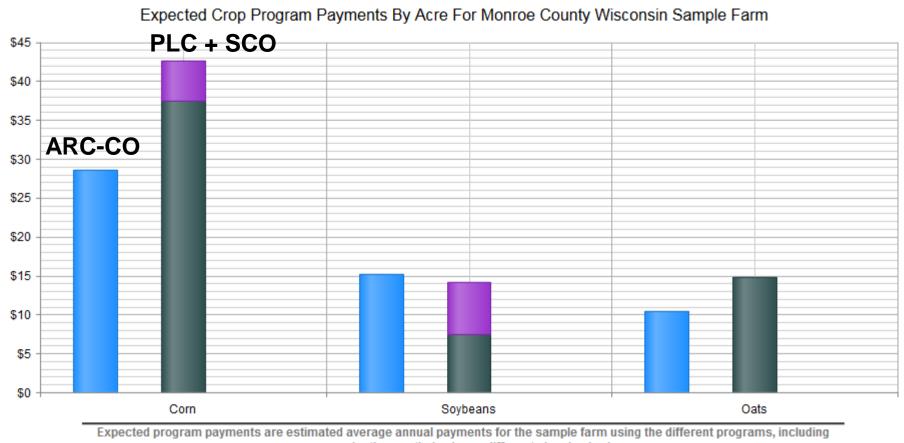
La Crosse County Considerations

- Corn: Need SCO for PLC to beat ARC, do you want to buy another crop insurance policy? Payments from crop insurance are not certain, SCO cost money (ARC/PLC free)
- Maybe wait to see what price for SCO is, then decide?
- You really have to decide that you want to buy SCO for corn, if not, then go ARC?
- If price is pessimistic, PLC is the best, PLC + SCO not bad option, but have to buy SCO. If optimistic/realistic prices, then ARC beats PLC+SCO by a few dollars.
- Soy: ARC wins by a few dollars, even if buy SCO

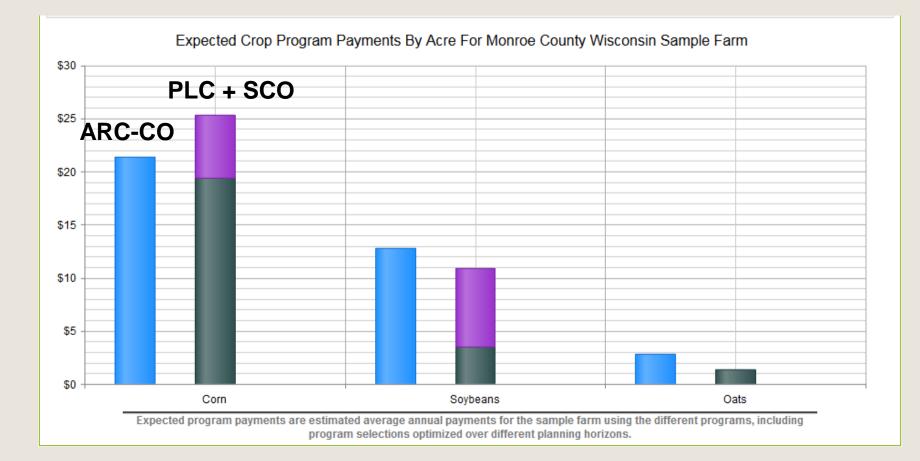
Monroe County, CBO Prices, 75% RP Coverage, 5-year horizon



Monroe County, USDA Prices, 75% RP Coverage, 5-year horizon



Monroe County, FAPRI Prices, 75% RP Coverage, 5-year horizon



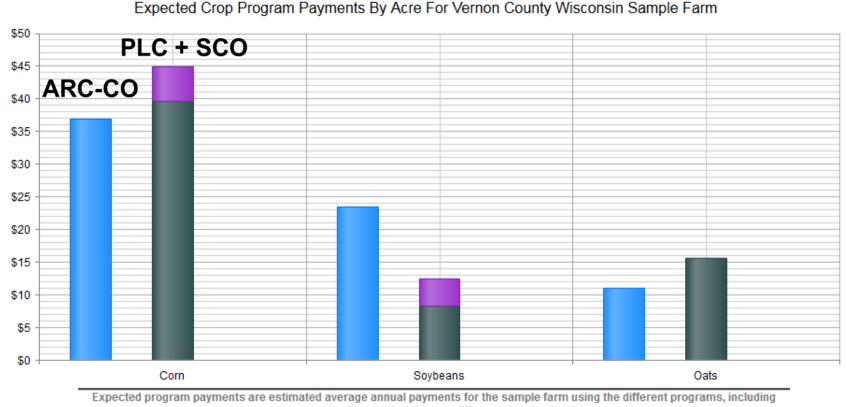
Monroe County Considerations

- Corn: Need SCO for PLC to beat ARC, do you want to buy another crop insurance policy? Payments from crop insurance are not certain, SCO cost money (ARC/PLC free)
- Maybe wait to see what price for SCO is, then decide?
- You really have to decide that you want to buy SCO for corn, if not, then go ARC?
- If price is pessimistic, PLC is the best, PLC + SCO not bad option, but have to buy SCO. If optimistic/realistic prices, then ARC beats PLC+SCO by a few dollars.
- Soy: ARC wins by a few dollars, even if buy SCO
- Oats: ARC wins by a few \$/ac except under pessimistic prices

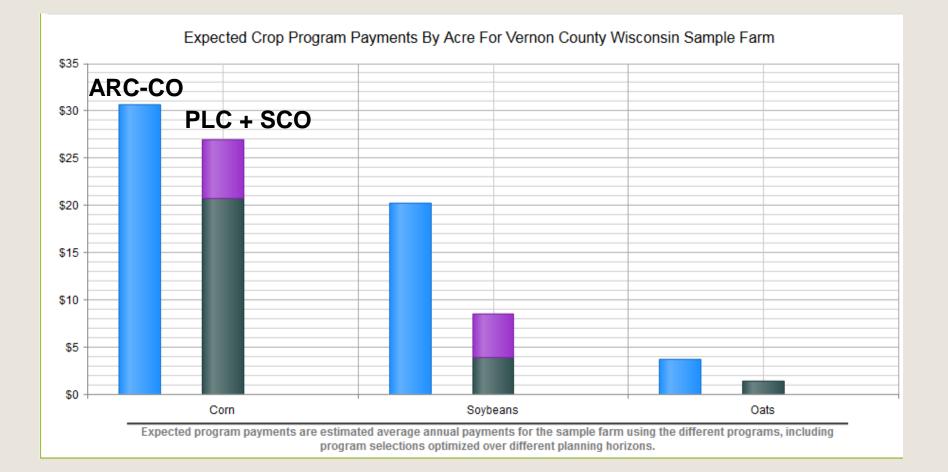
Vernon County, CBO Prices, 75% RP Coverage, 5-year horizon

Expected Crop Program Payments By Acre For Vernon County Wisconsin Sample Farm \$30 ARC-CO \$25 PLC + SCO\$20 \$15 \$10 \$5 \$0 Corn Soybeans Oats Expected program payments are estimated average annual payments for the sample farm using the different programs, including

Vernon County, USDA Prices, 75% RP Coverage, 5-year horizon



Vernon County, FAPRI Prices, 75% RP Coverage, 5-year horizon



Vernon County Considerations

- Corn: looks like ARC wins, even with SCO: this more typical as to what is seen in most counties in WI
- If PLC beats ARC, it's only under pessimistic prices and it really needs SCO to be a good alternative to ARC, and even then not the best. Plus still have to buy SCO, not free like ARC, plus insurance payments are no garuntee
- Soy: County ARC wins
- Oats: County ARC, but not a big winner vs PLC.

Comments

- Charts use county average Payment Yields for PLC
 - Actual farm Payment Yields will be higher or lower depending on how farm yields relate to county yields
- SCO payments are <u>net</u> of premiums
- These are <u>estimates</u> of <u>average</u> payments under different price expectations
- These are not direct payments: no guaranteed payments
- Estimates are not always correct
- Averages are not certain
 - The average of rolling two dice is 7, but this does not mean you always get a 7, you can still roll 2's and 12's

Main Points

- When choosing Base Acre Reallocation
 - Corn > Soybean ≥ Wheat >Oats
 - Get as many Corn base acres as you can
- What about County ARC versus PLC?
 - Depends on prices use/assume, but <u>generally</u> ARC does better for corn & soy in most counties
- Tool has 3 options for <u>average</u> price
- 1) CBO futures prices: optimistic
- 2) USDA WASDE prices: pessimistic
- 3) FAPRI price estimates: realistic

Summary: County ARC versus PLC

- Corn: In most counties ARC > PLC except with pessimistic prices, and if PLC > ARC, it's not by much
 - Recommend <u>County</u> ARC, cost of being wrong is not large, unless pessimistic about prices
 - Is your county an exception? Are you an exception?
- Soybeans: ARC > PLC: I have not found an exception
 - Recommend <u>County</u> ARC
- Oats: In most cases is the same trend as corn

Individual ARC

- Based on revenue from all program crops as a whole for an FSA farm, not crop by crop
- Create a whole farm revenue guarantee and receive payment if actual revenue less than guarantee
 - <u>65%</u> of the payment gap, up to 10% of County ARC guarantee (same maximum as county ARC)
- Like 86% whole-farm revenue coverage
- Acreage-weighted average of each crop's revenue
- Use farm historical yields and national prices, but use Olympic averages
- Complicated and detailed program: if interested, use the tool and try your farm details and see what you get

Comments on Individual ARC

- I have put little time into individual ARC: complicated, need to run for your own farm specifics
 - The 65% payment rate hurts it
- APAS shows County ARC always beats Individual ARC
- Ag Econ "rumors": Individual ARC works for some Montana Wheat farmers (Musselshell County, MT)
- Possible WI exception?
 - A farm that is not very correlated with county average yields?
 - May be irrigated crops in a county with little irrigation?
 - If anyone finds an exception, please let me know

Demonstrate the web tool

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United States Department of Agriculture Search FSA						
USDA Home	Farm Bill Analysis Home	Bill Analysis Home APAS Sa		APAS Custom Farms BY	OF	Site Map
	Agriculture Policy Analysis System (APAS)					
	APAS Sample Farm Five Minute Review of Analytics for Your County		APAS Custom Farm Build Your Own Farm		NAP Crops Coming Soon	
	Quick program payme comparison using dat your state and county	ent a for ⁄	informati program	ır own farm's on for detailed and risk nent analysis	Dairy	
	The second secon	ampaign	Payme Update _{Quick} Ca		Base Acre Reallocation Quick Calculator	
	Tool Explanation		APAS Coming		YouTube Cha Coming Soon	annel

Thanks for Your Attention! Questions?

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