

NEW FARM BILL CHOICES

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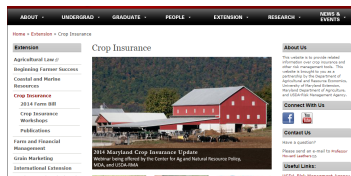


USDA United States Department of Agriculture
Risk Management Agency

*"This institution is an equal
opportunity provider."*



Our website:
<http://www.aren.umd.edu/extension/crop-insurance>



My Personal Journey

- Reading the language
- Working through examples.
- Preliminary lessons:
 - Everything is different.
 - Except where it isn't. (PLC and countercyclical payments)
 - Everything is complicated.
 - Farmers will need to make some important decisions about program participation.



WARNING: TALOCA

There
Are
Lots
Of
Confusing
Acronyms



Crop Commodity Program Decisions

- What Program will you participate in for the next 5 years?
 - Price Loss Coverage (PLC)
 - With or without participation in supplemental coverage option (SCO)
 - Agricultural Risk Coverage, County option (ARC – CO)
 - Agricultural Risk Coverage, Individual option (ARC – IN)
- Update base acres?
- Update yields?
- Inter-relationships between Program decisions and crop insurance decisions.



Next step on my path to discovery:
Constructing examples that include all
elements of programs and insurance.

What we need for our examples:

- 7 different yield measures
- 6 different price measures
- 3 different area measures



Review of all assumptions

- Things which are known to a considerable degree:
 - Examples: county yields from the recent past, PLC reference prices.
- Characteristics of a particular farm, things known from that farm's past.
 - Examples: program yields, base acres, Average Production History for insurance.
- Guesses or "scenarios" about the future.
 - Examples: future crop prices; future county yields.



Program alternatives under this scenario: Summary

	Market income	Insurance indemnity	Program payment	SCO indemnity	Insurance Premium	SCO premium	Total
County ARC + 75% rev. insur	58,300	1,300	5,922	0	2466	0	63056
PLC + rev. insurance	58,300	1,300	3,905	0	2466	0	61039
PLC + rev. ins. + SCO	58,300	1,300	3,905	7702	2466	1276	67465


"Normal" or average wheat income: 200 acres x 65 b/acre x \$6.54/b = \$85,020

86% of normal income: \$73,117

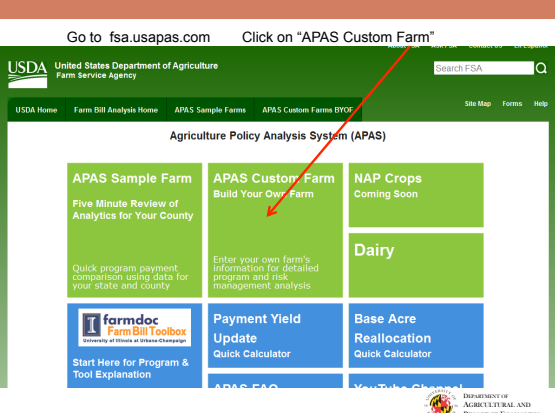


Next step on my path to discovery:
Using the “decision tools”

The complicated details of the programs
are built into a calculator.



Go to fsa.usapas.com Click on “APAS Custom Farm”



USDA United States Department of Agriculture
Farm Service Agency

USDA Home Farm Bill Analysis Home APAS Sample Farms APAS Custom Farms (DYOF) Site Map Forms Help

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


Dairy

farmdoc
Farm Bill Toolbox
University of Illinois at Urbana-Champaign

Payment Yield Update
Quick Calculator

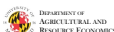
Base Acre Reallocation
Quick Calculator

Start Here for Program & Tool Explanation



Lessons from the decision tools.

- Choice of PLC or ARC – CO can be made on a crop-by-crop basis.
- The “best” program for corn may not be the “best program” for wheat or barley.
- For two farmers in the same county:
 - ARC-CO will have identical per acre payments for a crop.
 - PLC will have different per acre payments depending on the farmer’s program yields.



Lessons from the decision tools.

- For two farmers in the same county:
 - ARC-CO will have identical per acre payments for a crop.
 - PLC will have different per acre payments depending on the farmer's program yields.

	County	Program yield	ARC-CO payment per acre	PLC payment per acre
Joe Baltimore	Baltimore	70	34.99	6.82
Hank Baltimore	Baltimore	210	34.99	20.45



Lessons from the decision tools.

- For two farmers with the same program yields but in different counties:
 - PLC will have identical per acre payments for a crop.
 - ARC-CO will have different per acre payments depending on the farmer's county.

	County	Program yield	ARC-CO payment per acre	PLC payment per acre
Joe Baltimore	Baltimore	70	34.99	6.82
Joe Calvert	Calvert	70	16.55	6.82
Joe Caroline	Caroline	70	45.84	6.82



Why does ARC-CO differ from county to county?

	Corn ARC-CO (5 year average)	average yield 2000-2013	Olympic average yield 2008-13
St. Mary's	17.41	100	94
Queen Anne's	20.43	131	114
Baltimore	34.99	126	135
Dorchester	50.18	132	130

When "normal" long term yields are higher than recent yields, then a return to normal will mean low or no ARC-CO payments.

When "normal" long term yields are lower than or close to recent yields, then a return to normal is more likely to generate ARC-CO payments.



Lessons from the decision tools.

- Choosing the “right” program can make a big difference:
 - \$10 per corn base acre in Calvert Co.
 - \$39 per corn base acre in Caroline Co.

	County	Program yield	ARC-CO payment per acre	PLC payment per acre
Joe Calvert	Calvert	70	16.55	6.82
Joe Caroline	Caroline	70	45.84	6.82



Lessons from the Decision Tools

- Corn: ARC-CO is better than PLC.
- Soybeans: ARC-CO is better than PLC.
- Wheat: PLC or ARC-CO case by case.
- Barley: PLC is better than ARC-CO.

- (“Usually” better.)

- SCO (Supplemental Coverage Option) expected indemnities do not cover premiums for corn. (Tentative conclusion: needs further confirmation.)



Baltimore County average annual expected payments during 2014-2018

	ARC-CO	PLC	SCO indemnity	SCO premium
Corn	34.99	10.71	7.53	8.67
Wheat	16.23	10.96	Not available	
Soybeans	22.21	1.46	3.42	5.20
Barley	23.55	46.92	Not available	

Wheat is a close call, and PLC would be higher if a farmer’s payment yield was above 67, instead of the 45 used in these calculations.



Lessons from the Decision Tools

- To evaluate individual ARC, run one scenario with the "best" individual choices for your crops, and a second scenario for ARC-IN.
- In the sample cases I have run, ARC-IN is never better.



Reallocation of Base

- Two choices:
 - Keep the base acres allocated as they are now.
 - Keep the total number of base acres the same, but reallocate them so they reflect recent average cropping practices.
- 5 year average returns per acre.

	Corn	Soybeans	Barley	Wheat
St. Mary's	17.41	14.70	55.45	
Queen Anne's	20.43	19.47	34.12	11.56
Baltimore	34.99	22.21	46.92	16.23

Barley base acres are a goldmine (if price projections used here are correct). If you have them, but now grow little or no barley do not reallocate. If you don't have barley base, but you've grown barley lately, do reallocate.



The further we go into the future, the more the prognosicators differ.

Actual Prices 2013 & Estimated Prices 2014						
CBO Projected Prices 2015-2018						
Crop	2013	2014	2015	2016	2017	2018
BARLEY	\$6.06	\$4.85	\$4.39	\$4.35	\$4.56	\$4.67
CORN	\$4.50	\$3.50	\$4.00	\$4.39	\$4.35	\$4.45
SOYBEANS	\$12.70	\$10.00	\$10.02	\$10.06	\$10.87	\$11.11
WHEAT	\$6.87	\$5.40	\$5.40	\$5.63	\$5.65	\$5.78

USDA Projected Prices 2015-2018						
Crop	2013	2014	2015	2016	2017	2018
BARLEY	\$6.06	\$4.85	\$4.02	\$3.63	\$3.71	\$3.75
CORN	\$4.50	\$3.50	\$3.68	\$3.38	\$3.47	\$3.53
SOYBEANS	\$12.70	\$10.00	\$8.66	\$9.80	\$8.97	\$9.19
WHEAT	\$6.87	\$5.40	\$5.10	\$4.30	\$4.33	\$4.56

FAPRI Projected Prices 2015-2018						
Crop	2013	2014	2015	2016	2017	2018
BARLEY	\$6.06	\$4.85	\$4.56	\$4.51	\$4.50	\$4.57
CORN	\$4.50	\$3.50	\$4.09	\$4.09	\$4.12	\$4.21
SOYBEANS	\$12.70	\$10.00	\$9.64	\$10.11	\$10.29	\$10.54
WHEAT	\$6.87	\$5.40	\$5.73	\$5.72	\$5.79	\$5.87

\$8.40 trigger price for soybean PLC payments

\$4.95 trigger price for barley PLC payments



How much does future price prognostication matter?

5 year PLC for Barley, using CBO prices, FAPRI prices, and USDA prices, and FAPRI prices.

	Program yields used	CBO prices	FAPRI prices	USDA prices
St. Mary's	65	31.26	22.94	55.45
Queen Anne's	40	19.24	14.12	34.12
Baltimore	55	26.45	19.41	46.92

Barley base acres are a goldmine if USDA projected prices are correct. Less so if FAPRI price projections are correct.

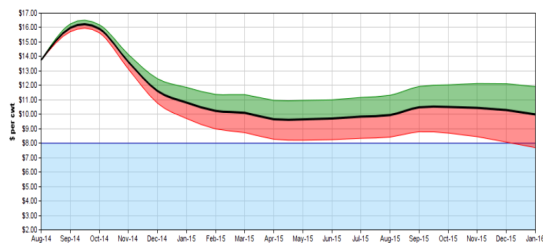


What about Dairy?

- Enrollment decision in Market Protection Program (MPP) due December 5. (Friday).
- You can choose:
 - Basic (\$4.00) free margin protection for 2015 (\$100 flat fee).
 - Higher protection (up to \$8.00) for 2015 with a premium.
 - No enrollment for 2015, with the option of entering the program in 2016.



Forecasted margin based on futures prices in late October 2014.



Source: Thraen, Ohio State, Buckeye Dairy News. <http://dairy.osu.edu/bdnews/Volume%2016%20Issue%205%20files/Volume%2016%20Issue%205.html>



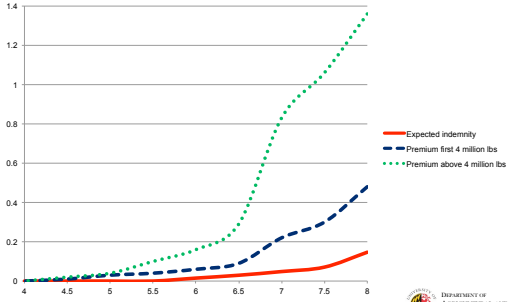
Probability of an MPP payment during 2015.

Margin Level	Sep-Oct 2014	Nov-Dec 2014	Jan-Feb 2015	Mar-Apr 2015	May-Jun 2015	Jul-Aug 2015	Sep-Oct 2015	Nov-Dec 2015
Expected	\$15.95	\$12.62	\$10.52	\$9.88	\$9.68	\$9.89	\$10.50	\$10.37
< \$8.00	-	-	5%	16%	20%	19%	14%	21%
< \$7.50	-	-	2%	10%	13%	12%	9%	15%
< \$7.00	-	-	1%	5%	8%	7%	5%	10%
< \$6.50	-	-	-	2%	4%	3%	3%	6%
< \$6.00	-	-	-	1%	2%	1%	1%	4%
< \$5.50	-	-	-	-	1%	1%	-	2%
< \$5.00	-	-	-	-	-	-	-	1%
< \$4.50	-	-	-	-	-	-	-	-
< \$4.00	-	-	-	-	-	-	-	-

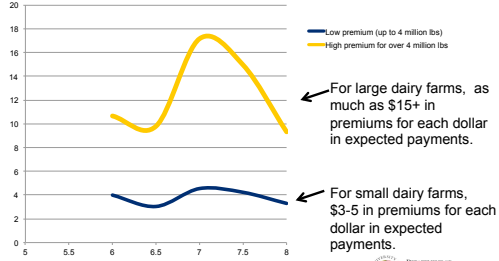
Source: Thraen, Ohio State, Buckeye Dairy News. <http://dairy.osu.edu/bdnews/Volume%2016%20Issue%205%20files/Volume%2016%20Issue%205.html>



For 2015, premiums are much higher than expected indemnities.



Dollars spent in premiums for each dollar of expected indemnity payment, 2015, at different levels of coverage.



For coverage levels less than \$6, there is zero expected indemnity payment.

