

Commodity Program Decision Tools



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Why should a producer use the decision tools?

- Understand how the programs work
- Analyze different price/yield scenarios
- Compare options if the owner retains current base acreage or reallocates base acreage
- Analyze FSA commodity choices and crop insurance choices together for more effective risk management



What data is needed?

- FSA Number
- Crop
- CC Payment Yield
- Base Acres
- Historical Planted Acres (2009-2013)

Get this from the Reported Commodity
Crop History Summary from FSA

- APH Yield
- Historical Crop Yields (2008-2012)
- Insurance Policy Type (YP, RP, RP-HPE) and Coverage Level
- Current/Future Planted Acres (2014-2018)

Get this from your Insurance
Yield/Acreage Report from your
agent



OSU-KSU Farm Bill Decision Aid

by J. Campiche, E. DeVuyst, G.A. Barnaby, and M. Taylor



Where do I find this decision tool?


<http://okla.st/DecisionTool>

OSU Farm Bill Website:

<http://agecon.okstate.edu/agpolicy/farmbill.asp>



Excel-based Decision Tool



2014 Government Program and Crop Insurance Decision Tool

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K-STATE
KANSAS STATE UNIVERSITY

If you are connected to the internet, you can check for an update by clicking the button below.

This program is intended for instructional purposes only. The user assumes all risk associated with actual decision-making associated with any farm commodity programs. Consult your FSA office and crop insurance agent before enrolling in programs and crop insurance.

Prior to completing this program, collect your Crop History Summary (mailed to you by FSA) or USDA Report FSA-156EZ from your FSA Office.

Select State/Territory	Oklahoma		
Select County/Parish	Garfield		
Select Crops			
Enter Farm Number	Lease % Share	100.00%	

Enter Scenario Description

Crop	APH	Current Base Acres	FSA Yield	Reallocated Base Acres	Updated FSA Yield
Wheat_Winter					
Crop	2014 Planted Acres	2015 Planted Acres	2016 Planted Acres	2017 Planted Acres	2018 Planted Acres
Wheat_Winter					
Crop	2014 Price	2015 Price	2016 Price	2017 Price	2018 Price
Wheat_Winter					

View units per acre

What do you want to work on next?

- Enter data into yellow cells
- Great for scenario analysis
- Does not require an internet connection



The Variables

Crop	APH	Current Base Acres	FSA (CC) Yield	Reallocated Base Acres	Updated FSA Yield
Wheat_Winter	34.0	1.0	40.0	1.0	40.0
Crop	2014 Planted Acres	2015 Planted Acres	2016 Planted Acres	2017 Planted Acres	2018 Planted Acres
Wheat_Winter	1	1	1	1	1
Crop	2014 Price	2015 Price	2016 Price	2017 Price	2018 Price
Wheat_Winter	\$ 5.990	\$ 4.940	\$ 4.200	\$ 5.000	\$ 5.500



ARC Potential Payments

ARC-County						
Enter Crop Yield Data for Your County						
Crop	2009 Yield	2010 Yield	2011 Yield	2012 Yield	2013 Yield	
Wheat_Winter	24.0	31.0	26.0	42.0	39.0	
Crop	2014 Yield	2015 Yield	2016 Yield	2017 Yield	2018 Yield	View units per acre
Wheat_Winter	15.0	27.0	17.0	35.0	30.0	
Crop	2014 Price	2015 Price	2016 Price	2017 Price	2018 Price	
Wheat_Winter	\$ 5.990	\$ 4.940	\$ 4.200	\$ 5.000	\$ 5.500	
Crop	2009 Price	2010 Price	2011 Price	2012 Price	2013 Price	
Wheat_Winter	\$ 4.870	\$ 5.700	\$ 7.240	\$ 7.770	\$ 6.870	
Crop	Base Acres	Loan Rate	Reference Price	Reallocated Base Acres	Benchmark Price 2014	
Wheat_Winter	1.0	\$ 2.94	\$ 3.50	1.0	\$ 6.60	
Crop	ARC Benchmark	ARC Guarantee	2014 Actual Revenue	Payment Rate	Max Payment	
Wheat_Winter	\$ 211.91	\$ 181.72	\$ 131.78	\$ 49.84	\$ 21.13	
ARC-County Payments with Current Base Acres Paid on 85% of Base Acres 100% Share						
Crop	2014	2015	2016	2017	2018	Net Present Value
Wheat_Winter	\$ 18	\$ 18	\$ 17	\$ 5	\$ -	\$ 55
Totals	\$ 18	\$ 18	\$ 17	\$ 5	\$ -	
Total Discounted ARC Payments @ 5% Discount Rate				\$		55



PLC Potential Payments

Price Loss Coverage Calculations						
Crop	2014 Price	2015 Price	2016 Price	2017 Price	2018 Price	
Wheat_Winter	\$ 5.990	\$ 4.940	\$ 4.200	\$ 5.000	\$ 5.500	
Crop	Current Base Acres	Loan Rate	Reference Price	Reallocated Base Acres	Updated FSA Yield	
Wheat_Winter	1	\$ 2.94	\$ 5.50	1.0	40.0	
PLC Payments with Current Base Acres and UPDATED FSA Yields 100% Share						
Crop	Base Acres	PLC Payment				NPV
		2014	2015	2016	2017	2018
Wheat_Winter	1	\$ -	\$ 19	\$ 44	\$ 17	\$ -
Totals		\$ -	\$ 19	\$ 44	\$ 17	\$ -
Total Discounted PLC Payment @ 5% Discount Rate					\$	73



SCO

Supplemental Coverage Option Calculations						
Crop	2014 Price	2015 Price	2016 Price	2017 Price	2018 Price	
Wheat_Winter	\$ 5.990	\$ 4.940	\$ 4.200	\$ 5.000	\$ 5.500	
Crop	Crop Insurance	Coverage Level	SCO Yield	Max SCO Coverage	Payment multiplier	SCO Premium
Wheat_Winter	RP	75%	33.2	86%	100%	\$ 5.00
Crop	Projected Price when Insurance is Purchased					
	2014	2015	2016	2017	2018	
Wheat_Winter	\$ 5.99	\$ 5.00	\$ 4.20	\$ 5.00	\$ 5.50	
Crop	Projected Harvest Price					
	2014	2015	2016	2017	2018	
Wheat_Winter	\$ 5.99	\$ 5.00	\$ 4.20	\$ 5.00	\$ 5.50	
Crop	Expected SCO Payments Net of Premiums 100% Share					
	2014	2015	2016	2017	2018	Net Present value
Wheat_Winter	\$ -	\$ 3	\$ (5)	\$ (5)	\$ (5)	\$ (10)
Totals	\$ -	\$ 3	\$ (5)	\$ (5)	\$ (5)	\$ (10)



NAAFP Decision Tool (A&M/FAPRI)

Where do I find this decision tool?

<https://usda.afpc.tamu.edu/>

Farm with Two Crops and One FSA Number

USDA United States Department of Agriculture
Farm Service Agency

AFPC | Decision Aids | FAPRI
Iowa State University University of Missouri

Home Clients About Us Iowa Corn and Soybeans One FSA Number

Iowa Corn and Soybeans One FSA Number's Farm Units

FSA #	Farm Name	Crop Practice	Edit	Yields
1	Iowa Grain Farm	Grain Corn Non-Irrigated	Edit	Yields
1	Iowa Grain Farm	Commodity Soybeans Non-Irrigated	Edit	Yields

[New Farm Unit](#)

Available Tools [Help!](#)

[Yield Update](#) ←

This tool calculates values for PLC yields using yield histories for your units listed on the left.

[Base Acre Reallocation & PLC/ARC Decision Aid](#)


This tool helps you decide whether to reallocate your base acres and whether to choose PLC, ARC-C, or ARC-I for each farm unit based on your data.

[Farm Bill 2014 Insurance](#)

This tool calculates net revenue for alternative insurance choices available through the 2014 Farm Bill and RMA.

[Generic Base Election Assistance](#)

This tool calculates net returns for alternative crops under PLC and ARC which you could allocate generic base.



Reasons to use the NAAFP Tool

- It is a very powerful tool for estimating program coverage
 - Saves farm data in one place for easy access across devices
 - Crop insurance tool
 - Can work on clients farms
 - Will print out FSA forms for enrollment
-



NCPE Decision Tool (Illinois)

Where do I find this decision tool?

<http://fsa.usapas.com/>

Agriculture Policy Analysis System (APAS)

APAS Sample Farm Five Minute Review of Analytics for Your County Quick program payment comparison using data for your state and county	APAS Custom Farm Build Your Own Farm Enter your own farm's information for detailed program and risk management analysis	NAP Crops Coming Soon Dairy
 Start Here for Program & Tool Explanation	Payment Yield Update Quick Calculator APAS FAQ Coming Soon	Base Acre Reallocation Quick Calculator YouTube Channel Coming Soon

Source: Gary Schnitkey, Jonathan Coppess, Nick Paulson



Reasons to use the NCPE Tool

- Simple yield and base reallocation tools
- Great charts that compare program payments
- I find it simpler to use than the NAAFP tool



General thoughts...

- Is your enrollment in ARC or PLC covering enough of your risk?
- What is your underlying insurance coverage and will it allow you to survive crop disasters
- The only wrong decision is not having a risk management plan



Things to consider...

- Talk with your insurance agent about your crop insurance coverage (enterprise units can provide a high level of coverage)
- How do you account for losses in yield if you are enrolled in PLC?
- What strategies will help you mitigate large decreases in price if you are enrolled in ARC?
- Do not stress over these decisions, you have managed risk before.



References

- **Price Loss Coverage/Agriculture Risk Coverage**
 - (http://www.fsa.usda.gov/programs-and-services/arcplc_program/index)
- **OSU Farm Bill Decision Tool**
 - (<http://agecon.okstate.edu/agpolicy/farmbill.asp>)
- **University of Illinois at Urbana-Champaign farmdoc Farm Bill Toolbox**
 - (<http://farmbilltoolbox.farmdoc.illinois.edu/>)
- **USDA Decision Aids Texas A&M University and the University of Missouri**
 - (<https://usda.afpc.tamu.edu/>)

