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## COMBO'S PRODUCT RELEASED FOR 2011 CROP INSURANCE YEAR

After several years of planning, the Risk Management Agency will release the COMBO product for use in insuring crops for the 2011 cropping year. The first experience many producers will have with the Combo product will be when insuring wheat for 2011. The COMBO product is meant to simplify crop insurance choices, replacing many individual farm-level products with one product: the COMBO product. The release of the COMBO product does not impact county level plans such as Group Risk Plan (GRP) or Group Risk Income Plan (GRIP).

COMBO's relationships to APH, CRC, RA, and IP

Table 1. Products Replaced by COMBO Products.

COMBO Product	Replaces these Products
Yield Protection	Actual Production History (APH)
Revenue Protection	Crop Revenue Coverage (CRC) Revenue Assurance with the Harvest Price Option (RA-HP)
Revenue Protection with the Harvest Price Exclusion	Revenue Assurance with the Base Price Option (RA-BP) Income Protection (IP)

The COMBO product has three "plans" offering coverage previously contained in the Actual Production History (APH), Crop Revenue Coverage (CRC), Income Protection (IP), and Revenue Assurance (RA) products (see Table 1):

- 1. Yield Protection will make payments when yields fall below a yield guarantee. Yield Protection replaces the APH product.
- 2. Revenue Protection will make payments when revenue falls below a revenue guarantee. Under Revenue Protection, the guarantee can increase if the harvest price is above the projected price. Revenue Protection is similar to coverage offered under CRC and RA with the harvest price option.
- 3. Revenue Protection with the harvest price exclusion will make payments when revenue falls below a revenue guarantee. With the harvest price exclusion, the guarantee will not increase if the harvest price is above the projected price. Revenue Protection with the harvest price exclusion replaces IP and RA with the base price option.

## Example of the COMBO Product's Guarantees and Payments for Wheat

Mechanics of calculating guarantees and payments under the COMBO product are very similar to those under APH, CRC, IP, and RA. Mechanics will be illustrated using the following parameters:



- Actual Production History (APH) yield equals 60 bushels per acre. The APH yield is used in setting
  guarantees and equals the average of at least four and up to ten years of yields from an insurable unit. The
  use of APH yields has not changed between the COMBO product and previous products.
- Projected price equals \$7.00 per bushel. The project price is used in setting guarantees and determining revenue under revenue protection. The project price also is used to determine payments when there are shortfalls under Yield Protection. The projected price is the average of settlement prices. For wheat in Illinois, Chicago Board of Trade (CBOT) settlement prices for the September contract are averaged from August 15<sup>th</sup> to September 14<sup>th</sup>. The projected price for the 2011 crop will not be known until after September 14<sup>th</sup>. Hence, the \$7.00 price is an estimate for the 2011 crop.

**Yield Protection:** Yield Protection's guarantee will equal the APH yield time a farmer-chosen coverage level. For wheat, all counties have coverage levels available from 50% up to 75% in 5% increments. Some counties also have coverage levels of 80% and 85% available. A unit having a 60 bushel APH yield will have a 45 bushel coverage level if a 75% coverage level is chosen:

45 bushel guarantee = 60 bushel APH yield x 75% coverage level.

Insurance payments will occur whenever yield falls below the yield guarantee. Payments will be based on the yield shortfall times the projected price. Suppose actual yield turns out to be 40 bushels per acre. Then there is a 5 bushel shortfall equal to the 45 bushel guarantee minus the 40 bushel actual yield:

5 bushel yield shortfall = 45 bushel guarantee - 40 bushel actual yield.

If yields are above the 45 bushel guarantee, the yield shortfall equals zero and there will not be a payment. Given a 5 bushel yield shortfall, the payment equals the 5 bushel shortfall times the projected price. Our example uses a \$7.00 projected price, resulting in a \$35 payment:

\$35 payment = 5 bushel yield shortfall x \$7.00 projected price.

A difference between Yield Protection under COMBO and the old APH policy is the price used to determine payments on yield shortfalls. COMBO's Yield Protection uses the same price as that used under Revenue Protection. Under the old policies, the price used for APH policies differed from the price used for CRC, IP, and RA.

**Revenue Protection:** Revenue Protection's guarantee equals the APH yield times the higher of the projected and harvest prices times the farmer-chosen coverage level. Calculation of a minimum guarantee can occur once the base price is set. Given a 60 bushel APH yield and a \$7.00 base price, the minimum revenue guarantee for a 75% coverage level equals \$315 per acre:

\$315 revenue guarantee = 60 bushel APH yield x \$7.00 base price x 75% coverage level.

This guarantee could increase if harvest price is above the base price.

Revenue Protection will make payments when revenue falls below the guarantee. Revenue equals actual yield from the insurable unit times the harvest price. The harvest price is the average of settlement prices of CBOT futures contracts. For wheat in Illinois, the harvest price is the average of the September contract during the month of July. Take an actual yield of 40 bushels and a \$5.00 harvest price. The \$5.00 harvest price is below the base price so the revenue guarantee does not have to be calculated. In this case, revenue is \$200:

\$200 revenue = 40 bushel yield x \$5.00 harvest price.

Since revenue is below the guarantee, Revenue Protection will make a payment equal to the difference between the guarantee and revenue, or \$115 per acre:

\$115 payment = \$315 guarantee = \$200 payment.

The guarantee under Revenue Protection will increase when the harvest price is above the base price. Take a harvest price of \$8.00 per bushel, which exceeds the base price of \$7.00. In this case, the revenue guarantee is increased to \$360 per acre:

\$360 guarantee = 60 bushel APH yield x \$8.00 harvest price x 75% coverage level.

Revenue equals the \$8.00 harvest price time actual yield. For a 40 bushel actual yield revenue is \$240:

\$320 revenue = 40 bushel yield x \$8.00 harvest price. The insurance payment is \$40:



\$40 insurance payment = \$360 guarantee - \$320 revenue

There is a limit on how high the harvest price can be above the base price. Harvest price cannot exceed base price by more than 2 times the base price. This means that a base price of \$7.00 per bushel has a limit of \$14.00 (\$7.00 x 2).

**Revenue Protection with the harvest price exclusion:** Revenue Protection with the harvest price exclusion, hereafter referred to as Revenue Protection with Exclusion, has a guarantee that will not increase if harvest price exceeds the base price. This is the only difference in coverage between Revenue Protection and Revenue Protection with Exclusion.

For a \$7.00 base price and a 60 bushel APH yield, a 75% coverage level results in a \$315 revenue guarantee: \$315 revenue guarantee = 60 bushel APH yield x \$7.00 base price x 75% coverage level.

Insurance payments occur when revenue is below the revenue guarantee. A 40 bushel actual yield and a \$5.00 harvest price give \$200 revenue:

200 revenue = 40 bushel yield x 5.00 harvest price.

and will result in a \$115 insurance payment: \$29 insurance payment = \$315 guarantee - \$200 revenue

A 40 bushel yield and an \$8.00 price has \$320 revenue:

\$320 revenue = 40 bushel yield x \$8.00 harvest price

and an insurance payment of \$0 since revenue is above the revenue guarantee.

Revenue Protection and Revenue Protection with Exclusion make the same insurance payments when the harvest price is below the base price, given the same APH yield and coverage level. Payments can differ when harvest price is above the base price. For example, for the \$8.00 harvest price and 40 bushel yield used above, Revenue Protection has a \$40 payment while Revenue Protection with Exclusion does not have a payment. Insurance payments will be lower under Revenue Protection with Exclusion when harvest prices exceeded base prices.

## Summary

Most farmers will find the COMBO plans very similar to previous products. If a farmer had been insuring with CRC or RA-HP, Revenue Protection will be the similar COMBO plan. The same is true for Yield Protection, which replaces the old APH product. Revenue Protection Exclusion replaces the old IP and RA-BP products. Developing the COMBO product was a large project, introducing and changing many actuarial documents, written crop policies, and procedures. As with the release of any new product, the release of the Combo product may have some unattended consequences. What these might be is difficult to say at this point. One concern has been with premiums. The COMBO product introduces new procedures for determining crop insurance premiums. Whether these procedures result in lower or higher premiums will be clearer on the release of the final parameters used to calculate 2011 premiums.

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Appendix Table 1. Discovery Periods for Wheat by State.

				Projected Price		Harvest Price	
				Discovery Period		Discovery Period	
State (Type(s))	Commodity	Contract	Contract	Beginning	Ending	Beginning	Ending
	Exchange	Commodity	Month	Date	Date*	Date	Date
Alabama	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Arkansas	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Colorado (Winter &	KCBT	HRW Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
No Type Specified) Colorado (Spring)	MGE	HRS Wheat	September	1-Feb	28-Feb	1-Aug	31-Aug
Delaware	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
Florida	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Georgia	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Illinois	CBOT	Wheat	September	15-Mug	14-Sep	1-Jul	31-Jul
Indiana	CBOT	Wheat	September September	15-Aug	14-Sep	1-Jul	31-Jul
Iowa (Winter)	CBOT	Wheat	September September		14-Sep	1-Jul	31-Jul
	MGE	HRS Wheat	•	15-Aug 1-Feb	28-Feb		
Iowa (Spring) Kansas			September Julya			1-Aug	31-Aug 30-Jun
	KCBT	HRW Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Kentucky	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun 30-Jun
Louisiana	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	
Maryland	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
Michigan	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
Mississippi	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Missouri	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
Montana (Winter)	KCBT	HRW Wheat	September	15-Aug	14-Sep	1-Aug	31-Aug
Montana (Spring & Khorasan)	MGE	HRS Wheat	September	1-Feb	28-Feb	1-Aug	31-Aug
Nebraska (Winter &	KCBT	HRW Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
No Type Specified)			1	0			
Nebraska (Spring)	MGE	HRS Wheat	September	1-Feb	28-Feb	1-Aug	31-Aug
New Jersey	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
New Mexico	KCBT	HRW Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
New York	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
North Carolina	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Ohio	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
Oklahoma	KCBT	HRW Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Pennsylvania	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
South Carolina	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
South Dakota	KCBT	HRW Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
(Winter)							
South Dakota	MGE	HRS Wheat	September	1-Feb	28-Feb	1-Aug	31-Aug
(Spring & No Type Specified)							
Tennessee	CBOT	Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Texas	KCBT	HRW Wheat	July	15-Aug	14-Sep	1-Jun	30-Jun
Virginia	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
West Virginia	CBOT	Wheat	September	15-Aug	14-Sep	1-Jul	31-Jul
Wisconsin (Winter)	CBOT	Wheat	September -	15-Aug	14-Sep	1-Aug	31-Aug
Wisconsin (Spring)	MGE	HRS Wheat	September -	1-Feb	28-Feb	1-Aug	31-Aug
Wyoming (Winter)	KCBT	HRW Wheat	September	15-Aug	14-Sep	1-Aug	31-Aug
Wyoming (Spring &		HRS Wheat	September	1-Feb	28-Feb	1-Aug	31-Aug
No Type Specified)			I			0	0

<sup>#</sup>Projected Price Discovery Period utilizes the harvest year's average daily settlement price for Spring and Khorasan ##Intermountain Region Counties include Lassen, Modoc, Shasta and Siskiyou Counties.

Source: Copied from Risk Management Agency, Commodity Ecahnge Price Provisions, 2011 and Succeeding Crop Years, June 2010



<sup>###</sup> Hard Red Winter (HRW); Hard Red Spring (HRS)

<sup>\*</sup>February 28 Ending Date is extended to February 29 in leap years.

