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2015 Crop Insurance Decision Tool and SCO

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The *2015 Crop Insurance Decision Tool* is now available for download from the FAST section of *farmdoc* ([link for download](#)). Currently, the tool provides farmer-paid premiums for wheat. Premiums are given for all plans within the COMBO and Area Risk Protection Insurance (ARPI) products. New for this year are premiums for the Supplemental Coverage Option (SCO).

SCO Premiums

SCO premiums are shown on the premium page within the *2015 Crop Insurance Decision Tool*. Figure 1 shows the portion of the farmer-paid premium page related to SCO. Premiums in Figure 1 are for Wyandot County, Ohio, given a 67 bushel Trend-Adjusted Actual Production History (APH) yield, a \$6.00 projected price, and a .21 volatility.

SCO provides coverage for the range from 86% down to the coverage level of the selected COMBO product. In Figure 1, premiums on the row "80% - 86%" give premiums for SCO from 86% to 80% and assumes that a COMBO product with an 80% coverage level has been selected. (See [here](#) for more of a description of SCO.)

Three columns of premiums are given: one if the underlying COMBO product is Revenue Protection (RP), one if the underlying product is RP with the harvest price exclusion (RPwExl), and one if the underlying product is Yield Protection (YP). Premiums for SCO with RP as the underlying COMBO product range from \$6 per acre for a "50% - 86%" coverage to \$1 for an "85% - 86%" coverage.

RMA has decided to round all SCO premiums to the nearest dollar. Therefore all SCO quotes within the *2015 Crop Insurance Decision Tool* also are rounded to the nearest dollar. In some cases, rounding will cause SCO to have the same premiums across different ranges. For example, SCO has the same premium of \$6 per acre for "50% - 86%", "55% - 86%", and "60% - 86%" ranges for RP (see Figure 1). In other cases, rounding will cause an SCO product to have a \$0 per acre premium, as is the case for the 85% - 86% range for SCO with RPwExl and YP products (see Figure 1).

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Figure 1. SCO Premiums from Crop Insurance Decision Tool, Wheat, 2015.¹

Supplemental Coverage Option (SCO)

Type:	No type specified		
Practice:	Non-irrigated		
Range	RP	RPwExl	YP
\$ per acre			
50% - 86%	6	5	2
55% - 86%	6	5	2
60% - 86%	6	5	2
65% - 70%	5	5	2
70% - 86%	5	5	2
75% - 86%	4	4	1
80% - 86%	3	2	1
85% - 86%	1	0	0

¹ Wyandot County, Ohio, \$6.00 projected Price, .21 volatility, 67 bu. TA-APH yield.

Example of Combined Premiums

Table 1 shows premiums for an RP product and the associated SCO product. Premiums are for the Wyandot County case given above. The “RP plus SCO” column shows farmer-paid premium for the underlying RP product and the SCO product. Here, total premium costs range from \$7.43 per acre at the 50% coverage level to \$18.91 per acre at the 85% coverage level. With SCO, the range in premiums across coverage levels is \$11.48 per acre (\$18.91 - \$7.43). This \$11.48 range is less than the \$16.48 range on the underlying RP product (\$17.91 premium for an 85% RP product - \$1.43 for a 50% RP product). The premium range for SCO is less because there is a substitution involved with SCO. SCO is providing more of the protection at low RP coverage level while the underlying RP policy is providing more of the production at higher RP coverage levels.

Table 1. Farmer-Paid Premiums for Revenue Protection (RP) and Supplemental Coverage Option (SCO), Wheat, Wyandot County, Ohio.¹

Coverage Level	RP	SCO	RP plus SCO
\$ per acre			
50%	1.43	6.00	7.43
55%	2.01	6.00	8.01
60%	2.67	6.00	8.67
65%	3.43	5.00	8.43
70%	4.30	5.00	9.30
75%	6.23	4.00	10.23
80%	10.36	3.00	13.36
85%	17.91	1.00	18.91

¹ For an enterprise unit (100 acres) with a 67 bushel per acre TA-APH yield, \$6.00 projected price, and .21 volatility

All of the combinations of SCO and RP products shown in Figure 1 have the same minimum guarantee (The final guarantee could be higher if harvest price is greater than the projected price). The minimum guarantee is \$346:

$$\$346 = 67 \text{ guarantee yield} \times \$6.00 \text{ projected price} \times .86.$$

What triggers crop insurance payments varies across coverage levels of the underlying RP policy:

- 85%: RP payments will be triggered by farm revenue below the RP minimum guarantee of \$342 (67 bushels x \$6.00 projected price x 85% coverage level). SCO payments between \$346 (86% coverage level) to \$342 (85% coverage level) are triggered when county revenue is lower than a county guarantee. How much of the range is triggered depends on the shortfall of county revenue relative to the county guarantee.
- 75%: RP payments will be triggered by farm revenue below the RP minimum guarantee of \$302 (67 bushels x \$6.00 projected price x 75% coverage level). SCO payments between \$346 (86% coverage level) to \$302 (75% coverage level) are triggered when county revenue is lower than a county guarantee. How much of the range is triggered depends on the shortfall of county revenue relative to the county guarantee.
- 65%: RP payments will be triggered by farm revenue below the RP minimum guarantee of \$261 (67 bushels x \$6.00 projected price x 65% coverage level). SCO payments between \$346 (86% coverage level) to \$261 (65% coverage level) are triggered when county revenue is lower than a county guarantee. How much of the range is triggered depends on the shortfall of county revenue relative to the county guarantee.

All premiums for SCO products have combined premiums higher than the RP product with the 75% coverage level. The 75% RP product has a \$6.23 per acre premium (see Table 1). SCO plus RP has a \$7.43 premium at a 50% coverage level, \$8.01 at a 55% coverage level, and \$8.67 premium at a 60% coverage level.

Summary

The *2015 Crop Insurance Decision Tool* includes SCO premiums. SCO plus the underlying product will vary in a smaller range than premiums without SCO. The 2015 Crop Insurance Decision Tool will be updated for corn and soybeans when premiums are released in December of this year.

References

Schnitkey, G., and N. Paulson. "[Supplemental Coverage Option \(SCO\) in Wheat.](#)" *farmdoc daily* (4):145, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, August 5, 2014.