

Supplemental Coverage Option (SCO) for Apples

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Apple growers in New York are starting to see a new crop insurance option in some counties, Supplemental Coverage Option (SCO). I had a couple of questions about it in Ulster County last fall. Now that we are nearing time to sign up for crop insurance again, let's dig in a little deeper – what is SCO and why might you consider it?

The supplemental coverage option (SCO) is an endorsement that you can add to your underlying apple crop insurance policy (APH). It provides additional coverage that is based on an event's *regional* impacts to yield. Your primary apple policy pays if you suffer an insurable loss on your farm based on your policy coverage and your losses. SCO pays if the regional yield, calculated as

the weighted average of policyholder yields reported to RMA in a region, falls below 86% of the expected regional yield due to an insurable event, regardless of what happens to yields on your farm. Insurable events typically include natural disasters or weather, such as flood or drought or pest infestation, that lead to lower yields or quality even when good management practices are used.

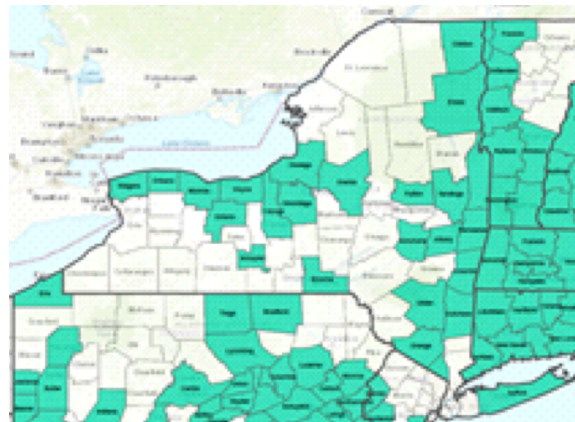


Figure 1: Counties with SCO available, non-irrigated apples

As an example, if a hail storm hits most of the farms in your region, but the damage on your farm was not high enough to trigger an indemnity payment, you would not receive an insurance payment. BUT if you had purchased the SCO endorsement, and the hail damage in your region resulted in regional yields below 86% of the area expected yield, you would

Impact to Individual Yield above level	to insured	Yes APH No SCO	Yes APH Yes SCO
Impact to Individual Yield below level	to insured	No APH No SCO	No APH Yes SCO
Regional Yield at or above 86% of expected yield			Regional Yield below 86% of expected yield

Table 1: Payment Triggers SCO vs APH Apples

receive an insurance payment, even though you personally did not have an insurance-triggering loss. In a nutshell, as you can see in Table 1, it is possible, with an SCO policy, to suffer an individual loss, but not receive an SCO payment or vice-versa.

So how do you know if SCO makes sense for your farm? In general, the degree to which your yields and yield risk match those of the SCO area is a key consideration when deciding whether to purchase an SCO endorsement. The greater the difference between your farm’s yield volatility and the SCO area’s yield volatility, the less likely an SCO payment will be triggered when you experience a yield loss. The size or homogeneity of the region could also have an impact. A smaller, region is more likely to have an event that would result in a regional yield or revenue impact than a very large region. The size of the SCO region can vary from single county to multi county. For example, Ulster County, NY’s region for fresh market, irrigated apples is just Ulster County but Washington County NY’s region is 18 counties in New York, Massachusetts and Vermont.

How much does SCO coverage cost? If you have purchased less underlying insurance coverage, the SCO coverage would cost more but provide more protection. If you have purchased more coverage then the SCO coverage costs less but provides less additional protection. Figure 2 shows how the two programs work together. Also, like APH insurance, SCO coverage is subsidized by the federal government, so farmers only pay 35% of the actuarial cost of the coverage.

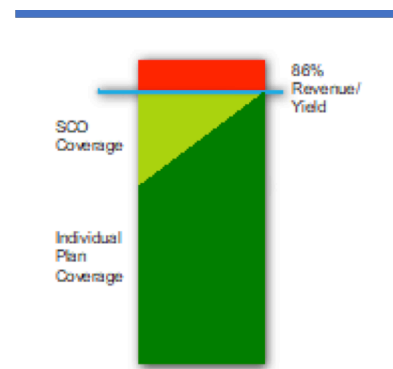


Figure 2: SCO coverage, in conjunction with APH coverage

Let’s look at some scenarios that show how adding the SCO endorsement could impact a grower in 2 regions in Eastern New York, Ulster and Washington Counties (assume the farms have the same historic yields):

2018 Ulster Irrigated Fresh Market Apples, 100 acres

- Approved Yield: 658 bu/ac
- Projected price \$13.30/bu
- Expected Area Yield 769.1 for SCO – region only includes Ulster County. 86% threshold is 661.4 bu/ac

APH Coverage Level Percent	75%	70%	65%	60%	55%	50%
Additional SCO coverage Percent	11%	16%	21%	26%	31%	36%
APH Policy, Producer Premium	\$41,315	\$30,442	\$24,255	\$17,673	\$14,435	\$10,602
APH Yield Guarantee bu/ac	493.5	460.6	427.7	394.8	361.9	329
SCO Endorsement, Producer Premium	\$6,998	\$8,694	\$9,745	\$10,432	\$10,824	\$11,303
SCO Regional Yield Guarantee (86%) bu/ac	661.4	661.4	661.4	661.4	661.4	661.4
Total Premium	\$48,313	\$39,136	\$34,000	\$28,105	\$25,259	\$21,905

2018 Washington Irrigated Fresh Market Apples, 100 acres

- Approved Yield 658 bu/ac
- Price \$13.30/bu
- Expected Area Yield 785.4 – includes 18 counties in NY, MA and VT¹. 86% threshold is 675.4 bu/ac

APH Coverage Level Percent	75%	70%	65%	60%	55%	50%
Additional SCO Coverage Percent	11%	16%	21%	26%	31%	36%
APH Policy, Producer Premium	\$52,101	\$46,060	\$30,786	\$22,507	\$18,481	\$13,666
APH Yield Guarantee bu/ac	493.5	460.6	427.7	394.8	361.9	329
SCO Endorsement, Producer Premium	\$7,776	\$9,850	\$11,218	\$12,137	\$12,733	\$13,078
SCO Regional Yield Guarantee (86%) bu/ac	675.4	675.4	675.4	675.4	675.4	675.4
Total Premium	\$59,877	\$55,910	\$42,004	\$34,644	\$31,214	\$26,744

Scenario 1: A very significant and widespread frost event results in a 51% reduction in yield on the farm, so all levels of APH insurance pay. The regional average yield after this event also declines by 51%. In

¹ Berkshire, MA, Franklin, MA, Albany, NY, Clinton, NY, Columbia, NY, Essex, NY, Fulton, NY, Rensselaer, NY, Saratoga, NY, Ulster, NY, Washington, NY, Addison, VT, Bennington, VT, Chittenden, VT, Grand Isle, VT, Rutland, VT, Windham, VT, Windsor, VT

this example, where the regional yields also had the same level of decline as the farm yield, you can see that having higher SCO coverage and lower APH coverage provided a higher payment.

Table 1: Scenario 1, widespread damage

	Acres	App. Yield	Act. Yield	Price	Exp. Return	Indemnity Payment at Level of APH Coverage					
						75%	70%	65%	60%	55%	50%
Ulster APH	100	658	322.4	\$ 13.30	\$ 875,140	\$227,536	\$183,779	\$140,022	\$ 96,265	\$ 52,508	\$ 8,751
Washington APH	100	658	322.4	\$ 13.30	\$ 875,140	\$227,536	\$183,779	\$140,022	\$ 96,265	\$ 52,508	\$ 8,751
Ulster SCO	100	769.1	376.9	\$ 13.30	\$ 1,022,903	\$112,519	\$163,664	\$214,810	\$265,955	\$317,100	\$368,245
Washington SCO	100	785.4	384.8	\$ 13.30	\$ 1,044,582	\$114,904	\$167,133	\$219,362	\$271,591	\$323,820	\$376,050
Ulster Payout (indemnity - Premium Paid)						\$291,743	\$308,308	\$320,832	\$334,115	\$344,349	\$355,091
Washington Payout (Indemnity - Premium Paid)						\$282,563	\$302,553	\$317,381	\$333,213	\$345,115	\$358,057

Scenario 2: A less significant frost results in a 20% reduction in yield on your farm and regionally. You do not have enough of a loss to receive APH payments at any level of coverage, but you do receive a benefit from SCO for the difference between 86% and 80% yields. In this example, where there is widespread damage, but the level of damage on the individual farm is not high enough to result in a crop insurance payment, the SCO endorsement resulted in indemnities but not APH at any level.

Table 2: Scenario 2, widespread minor damage

	Acres	App. Yield	Act. Yield	Price	Exp. Return	Indemnity Payment at Level of APH Coverage					
						75%	70%	65%	60%	55%	50%
Ulster APH	100	658	526.4	\$ 13.30	\$ 875,140	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Washington APH	100	658	526.4	\$ 13.30	\$ 875,140	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ulster SCO	100	769.1	615.3	\$ 13.30	\$ 1,022,903	\$ 61,374	\$ 61,374	\$ 61,374	\$ 61,374	\$ 61,374	\$ 61,374
Washington SCO	100	785.4	628.3	\$ 13.30	\$ 1,044,582	\$ 62,675	\$ 62,675	\$ 62,675	\$ 62,675	\$ 62,675	\$ 62,675
Ulster Payout (indemnity - Premium Paid)						\$13,061	\$22,238	\$27,374	\$33,269	\$36,115	\$39,469
Washington Payout (Indemnity - Premium Paid)						\$2,798	\$14,315	\$20,671	\$28,031	\$31,461	\$35,931

Scenario 3: A hailstorm affects your farm, resulting in a 35% reduction in yield. The level of damage regionally was not enough to cause regional yields to fall below 86% of expected yield, so there is no

SCO payment. In this example, you can see that for more localized events, indemnities are more likely to be triggered at higher levels of APH coverage. These types of events are also what may make SCO endorsements less likely to pay out in counties where the region is very large.

Table 3: Scenario 3, localized damage

	Acres	App. Yield	Act. Yield	Price	Exp. Return	Indemnity Payment at Level of APH Coverage					
						75%	70%	65%	60%	55%	50%
Ulster APH	100	658	427.7	\$13.30	\$ 875,140	\$ 87,514	\$ 43,757	\$ -	\$ -	\$ -	\$ -
Washington APH	100	658	427.7	\$13.30	\$ 875,140	\$ 87,514	\$ 43,757	\$ -	\$ -	\$ -	\$ -
Ulster SCO	100	769.1	769.1	\$13.30	\$ 1,022,903	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Washington SCO	100	785.4	785.4	\$13.30	\$ 1,044,582	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Ulster Payout (Indemnity - Premium Paid)						\$39,201	\$4,621	(\$34,000)	(\$28,105)	(\$25,259)	(\$21,905)
Washington Payout (Indemnity - Premium Paid)						\$27,637	(\$4,603)	(\$42,004)	(\$34,644)	(\$31,214)	(\$26,744)

So, should you consider adding the SCO endorsement? Like any farm management decision, it depends.

- SCO would provide more protection for your farm business if insurable events that are likely to impact your farm are as likely or are more likely to also affect other producers in your region.
- Due to the higher coverage level than APH, SCO may help you increase the number of scenarios under which you would be likely to receive a benefit.
- Using SCO with lower levels of APH may decrease your premium, but in exchange you are less likely to receive an indemnity for insurable events that occur on your farm but not in your region
- **A key consideration is whether you have enough coverage to get your business back on its feet after an insurable event, at an annual cost that is affordable to your business.**

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