



## Should Changes be Made to Premiums when Actual Production History Yields Decline?

### BACKGROUND

The Risk Management Agency (RMA) attempts to insure the production that a farmer normally produces based on the specific soil type, climate, and production practices used on a particular land unit. In order to gauge that production, an Actual Production History (APH) is established. APH is calculated as a 4- to 10-year simple average of actual yields on the insured land. If there are not sufficient records of actual yields, a transitional yield (T-yield) is assigned based on average yields in the county. The T-yield is used until adequate history is developed.

### ISSUE

In general, yields for the vast majority of U.S. crops have trended up due to improved crop technology and best management practices. But for some crops, regions and individual farmers, the yield trajectory isn't as great and may include five- to 10-year periods where yields are flat to declining. This has occurred in marginal farming areas and in regions suffering through multi-year droughts.

After an APH is established, the producer selects a coverage level, which is the percentage of APH that the farmer chooses to insure. In the case of a Yield Protection policy, a producer with a 36 bushel APH who selects a 75 percent coverage level will be insuring a yield of 27 bushels per acre (36 bushel APH x .75 = 27 insured bushels).

If a farmer purchases a Revenue Protection policy and selects a 75 percent coverage level and the commodity exchange-based price is \$5.00, the insured revenue is \$135 per acre (36 bushel APH x .75 = 27 x \$5.00 = \$135). Coverage levels between 50 and 85 percent are offered on most crops.

Once the insured level of yield or revenue is selected, RMA sets an appropriate premium rate. Current law requires that RMA strive for actuarial soundness, meaning total premiums should equal the indemnities paid, any administrative costs, and an amount that would create a small reserve. Stated another way, premium rates are set to cover expected losses, administrative costs, and a reasonable reserve. Additionally, the agency is required to conduct periodic reviews of its rate-setting methodology.

Many adjustments, including cups, caps, trend adjustments, and yield exclusions have been developed in order to mitigate APH declines. Since the law provides for these adjustments to the original policy, the yields used to calculate an insured unit's APH may be significantly different than the APH that is used to calculate the premium rate.

The following example depicts this issue. The insured value is based on a 10-year average APH of 36 bushels per acre, while the premium rate is based on a longer period (up to 20 years) with the last 10 averaging only 33 bushels per acre. As a result, when compared to an artificially greater APH, both the expected losses and associated premium rates will be higher.

APH Example - 2014 Wheat		
Year	APH Yield	Actual Yield
2004	25	25
2005	41	41
2006	28	28
2007	22	0
2008	45	45
2009	51	51
2010	45	45
2011	41	41
2012	22	11
2013	44	44
AVG	36	33

Under this policy, in any year that the county yield is 50 percent below the 10-year moving average county yield, farmers may choose to exclude that year's farm yield from their approved APH. Alternatively, if the 50 percent county yield isn't triggered and the farm's yield is below 70 percent of the county T-yield, the farmer can use 70 percent of the county T-yield in place of the lower actual yield.

#### OPTION #1

Support an increase in the yield plug to a greater percentage of T-yield than 70 percent.

#### OPTION #2

Eliminate the 50 percent area yield trigger and develop an improved option.

#### OPTION #3

Allow producers the option to use their APH yield or their FSA yield (on which Price Loss Coverage payments are based).

#### OPTION #4

Allow farmers to "start over" or devise a modified period of time to determine their APH.

Actuarial soundness is now determined on a county level. Support determining actuarial soundness over regional, state or multi-state level to mitigate rate increases in counties experiencing multi-year periods of loss until those yields return to more normal levels.

#### OPTION #5

Create a new RMA product similar to the Supplemental Coverage Option that can be stacked on top of an individual crop insurance product. This product should be available to all producers of an insurable commodity. This would allow an individual producer to increase his or her overall coverage level split between an individual and a wider geographic area policy, hopefully at a lower overall rate, allowing for a higher overall level of coverage.

#### OPTION #6

Allow farmers the option to exclude low yields from their APH database based on criteria similar to Yield Exclusion, except using farm level yields rather than county yields, and adjust premium rates to adequately cover the enhanced risk of loss.

#### OPTION #7

Require RMA to create a multiyear insurance option for commodities with multi-year futures contracts.