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Updating the Price Loss Coverage (PLC) Payment Yields in the 2018 Farm Bill

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Price Loss Coverage (PLC) Payment Yield Update

The 2018 Farm Bill permits landowners of farms an opportunity to update the payment yield used to calculate PLC payments due to a farm for each covered commodity. The deadline for updating the PLC payment yield is June 30, 2020. The PLC payment yield update is the landowner's decision, which is independent of the producer's decision to elect or enroll in either the Agriculture Risk Coverage (ARC) or Price Loss Coverage (PLC) programs.

During the period from 2008 to 2012, some farmers experienced poor crop yields. This is also the period that was used to establish the PLC payment yields in the 2014 Farm Bill, if landowners chose to update at that time. To address potential yield shortfalls during earlier periods, the 2018 Farm Bill provides a nationwide PLC payment yield update opportunity for each farm, identified by its farm serial number (FSN), and each covered commodity based on the farm's crop yield history from 2013 to 2017.

The updated PLC payment yield will be in effect beginning with the 2020 crop year to calculate PLC payments. If the owner of a farm chooses to update the PLC payment yield for a covered commodity, it will be calculated in the following manner:

PLC Payment Yield = 90% × (A Farm's Average Yield for 2013-2017 of a Covered Commodity)[1,2]
× (U.S. Average Yield for 2008-2012)/ (U.S. Yield Average for 2013-2017)[3, 4]

[1]Excludes any crop year in which the acreage planted to the covered commodity was zero. Yields are per planted acre.
[2] If the yield per planted acre for a covered commodity for a farm in any of the crop years was less than the substitute county yield (75 percent of the average county yields for 2013-2017), the substitute county yield for that covered commodity will be assigned for that crop year.
[3](U.S. Yield Average for 2008-2012) / (U.S. Yield Average for 2013-2017) can also be called the U.S. Yield Ratio for a covered commodity, which cannot be less than 0.9 or greater than 1.00.
[4] In the case of seed cotton, the PLC Payment Yield for seed cotton equals 2.4 times the average yield of the upland cotton per planted acre.

The U.S. yield ratios for covered commodities are shown in Table 1. Under the 2018 Farm Bill, the PLC program does not allow for the establishment of yield by practice (irrigated and non-irrigated). The PLC payment yield can be updated based on the farm's average yield for 2013-2017 of a covered commodity. The annual farm's average yield is calculated as the total production for a covered commodity divided by the total irrigated and non-irrigated planted acres for that commodity.

Table 1. U.S. Yield Ratio for PLC Payment Yield Updates.

Covered Commodity	National Yield Factor	Covered Commodity	National Yield Factor	Covered Commodity	National Yield Factor
Barley	0.9437	Lentils	1.0000	Rice, Temp Japonica	0.9591
Canola	0.9634	Mustard Seed	0.9460	Safflower	1.0000
Chickpeas, Large	1.0000	Oats	0.9524	Seed Cotton	0.9000
Chickpeas, Small	0.9760	Peanuts	0.9273	Sesame Seed	0.9673
Corn	0.9000	Peas, Dry	0.9988	Soybeans	0.9000
Crambe	1.0000	Rapeseed	1.0000	Sunflower Seed	0.9396
Flaxseed	1.0000	Rice, Long	0.9330	Wheat	0.9545
Grain Sorghum	0.9077	Rice, Medium	0.9887		

Source: PLC Yield Adjustment Factor, USDA Farm Service Agency (FSA) website under Non-Program Year Specific Data: https://www.fsa.usda.gov/programs-and-services/arcplc_program/arcplc-program-data/index

Examples

Depending on the yield history of a farm (FSN), the updated PLC payment yield may or may not be able to increase the existing PLC payment yield to a higher level on that farm. Rationally, a landowner will update the PLC payment yield when the updated PLC payment yield exceeds the existing PLC payment yield on the farm. In some cases, the updated PLC payment yield will be lower than the existing PLC payment yield, and the landowner will choose to retain the existing PLC payment yield.

The following examples illustrate when a landowner chooses to update the PLC payment yield and when a landowner chooses to retain the farm's existing PLC payment yield. The first two examples are only relevant for seed cotton because of the additional factor of 2.4 times upland cotton yield and the specific seed cotton yield ratio of 0.90. The last two examples are for peanuts, but are also similar to the calculation for other covered commodities (except seed cotton). In the case of peanuts, there is a specific yield ratio of 0.9273.

Example 1 for Seed Cotton: a farm has a planting history from 2013 to 2017 and an existing seed cotton PLC payment yield of 2,000 pounds per acre. The average cotton lint yield of irrigated and non-irrigated land for each year is shown in the example below. The substitute county yield is 1,920 pounds per acre. This substitute yield is applicable to 2013, where the farm's yield (1,872 pounds per acre) was below the 1,920 pounds per acre. In this example, the landowner chooses to update the PLC payment yield to 2,012 pounds per acre.

FSN Existing Seed Cotton PLC Payment Yield			---------->			**2,000**
		2013	2014	2015	2016	2017
FSN Cotton Lint Yield ---------->		780	1,200	1,250	1,000	925
× 2.4 ---------->		~~1,872~~	2,880	3,000	2,400	2,220
Substitute County Yield	1,920	1,920				
			Average	90% Avg	Yield Ratio	**PLC Yield**
			2,484	2,236	0.9	**2,012**
Updated Seed Cotton PLC Payment Yield			---------->			**2,012**

Example 2 for Seed Cotton: a farm has a planting history from 2013 to 2017 and an existing seed cotton PLC payment yield of 2,000 pounds per acre. The average cotton lint yield of irrigated and non-irrigated land for each year is shown in the example below. The substitute county yield is 1,920 pounds per acre. This substitute yield is applicable to 2013, where the farm's yield (1,872 pounds per acre) was below the 1,920 pounds per acre. In this example, the landowner chooses not to update the PLC payment yield and retains the existing seed cotton PLC payment yield of 2,000 pounds per acre.

FSN Existing Seed Cotton PLC Payment Yield			---------->			**2,000**
		2013	2014	2015	2016	2017
FSN Cotton Lint Yield ---------->		780	1,000	1,250	1,000	925
× 2.4 ---------->		~~1,872~~	2,400	3,000	2,400	2,220
Substitute County Yield	1,920	1,920				
			Average	90% Avg	Yield Ratio	**PLC Yield**
			2,388	2,149	0.9	**1,934**
No Update to Seed Cotton PLC Payment Yield			---------->			**2,000**

Example 3 for Peanuts: a farm has a planting history from 2013 to 2017 and an existing peanut PLC payment yield of 3,365 pounds per acre. The average peanut yield of irrigated and non-irrigated land for each year is shown in the example below. The substitute county yield is 3,200 pounds per acre. This substitute yield is applicable in 2016, where the farm's yield (3,100 pounds per acre) was below the 3,200 pounds per acre. In this example, the landowner chooses to update the PLC payment yield to 3,388 pounds per acre.

FSN Existing Peanut PLC Payment Yield				---------->		**3,365**
		2013	2014	2015	2016	2017
FSN Peanut Yield ---------->		4,300	4,100	4,300	~~3,100~~	4,400
Substitute County Yield	3,200				3,200	
			Average	90% Avg	Yield Ratio	**PLC Yield**
			4,060	3,654	0.9273	**3,388**
Updated Peanut PLC Payment Yield				---------->		**3,388**

Example 4 for Peanuts: a farm has a planting history from 2013 to 2017 and an existing peanut PLC payment yield of 3,365 pounds per acre. The average peanut yield of irrigated and non-irrigated land for each year is shown in the example below. The substitute county yield is 3,200 pounds per acre. This substitute yield is applicable in 2016, where the farm's yield (3,100 pounds per acre) was below the 3,200 pounds per acre. In this example, the landowner chooses not to update the PLC payment yield and retains the existing peanut PLC payment yield of 3,365 pounds per acre.

FSN Existing Peanut PLC Payment Yield				---------->		**3,365**
		2013	2014	2015	2016	2017
FSN Peanut Yield ---------->		4,300	4,100	3,900	~~3,100~~	4,400
Substitute County Yield	3,200				3,200	
			Average	90% Avg	Yield Ratio	**PLC Yield**
			3,980	3,582	0.9273	**3,322**
No Update to Peanut PLC Payment Yield				---------->		**3,365**

Summary

Historically, there have not been many opportunities to update the PLC payment yield. In the mid-1980s, farmers had a chance to update their farm payment yield. The next opportunity to update payment yields came in 2002 with limited opportunities and it did not apply to everyone. In the 2014 farm bill, landowners were provided a one-time opportunity to update their PLC payment yield for each covered commodity. The PLC payment yield update is very important because the PLC payment yield is used for calculating the PLC payment. The higher the PLC payment yield on a farm, the higher the PLC payment that farm can potentially receive.

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