

## Seed Cotton Price Loss Coverage Program Example

Seed Cotton (SC) is defined as unginning upland cotton that is now eligible for Agricultural Risk Coverage (ARC) and Price Loss Coverage (PLC) programs under the 2014 Farm Bill. The SC PLC and ARC programs will be in effect for the 2018 crop. This document is intended to provide an example of the SC PLC program's features, including the calculation of a farm's SC base acres, calculation of farm's SC PLC payment yield as well as how SC PLC payment rates will be calculated by Farm Service Agency (FSA) and a hypothetical payment calculation for an example Mississippi Delta farm.

SC base acres will be established by the conversion of generic base acres. Generic base acres will no longer be in effect beginning with the 2018 crop year. For any farm with generic base that planted covered commodities on that farm from 2009 to 2016 the owner will have 2 options to convert generic base acres for that farm as follows:

Option 1-a: Seed cotton base equal to higher of 80% of generic base with 20% unconverted generic base designated as unassigned crop base and ineligible for ARC/PLC

Option 1-b: Seed cotton base equal to 2009–2012 average seed cotton plantings, not to exceed total generic base – any unconverted generic base is designated as unassigned crop base and ineligible for ARC/PLC; or

Option 2: All generic base converted proportionally based on 2009–2012 average plantings of seed cotton and other covered commodities. Under this option, there would be no unassigned crop base for the farm.

For example, under Option 1-a, a farm with 1,000 acres of generic base that had an average cotton planted acreage for 2009-2012 of less than 800 acres could convert to 800 acres of SC base, with the remaining 200 acres becoming unassigned crop base that would be ineligible for ARC or PLC payments. Under Option 1-b, if the farm had average plantings of more than 800 acres the farm, for example 950 acre average, then 950 acres of the 1000 generic base acres could be converted to SC base with 50 acres becoming unassigned crop base.

The farm's SC payment yield will be based on either the farm's current CCP lint yield or an updated lint yield calculated based on 90% of the farm's 2008-2012 actual lint yields, excluding the years in which cotton was not grown on farm. The conversion of either the farms CCP lint yield or updated lint yield to the SC payment yield is accomplished by multiplying the lint yield by the statutory conversion factor of 2.4.

Table 1 contains actual planted and considered planted data for a farm in the Mississippi Delta for the 2009-2012 time frame. This farm has 300 generic base acres.

Table 1. Planted and Considered Planted History for Mississippi Delta Farm.

FSN XX71	2009	2010	2011	2012	2009-2012 Average	% Planted to Crop of Total
Cotton			100	600	175.0	17.50%
Soybeans	500	700	600	400	550.0	55.00%
Corn	300	150	300		187.5	18.75%
Wheat	200	150			87.5	8.75%
Total Planted	1000	1000	1000	1000	1000	

Table 2 shows the generic base acre allocation results generated from Option 1-a, Option 1-b and Option 2 for this farm. Under option 1-a, 240 acres of generic base (80% of 300) would be assigned to SC base, with 60 acres designated as unassigned base. Option 1-b would result in 175 acres assigned to SC base (the average cotton acreage planted from 2009-2012) and 125 acres designated as unassigned base.

Table 2. Generic Base Conversion Results.

Base Type	Option 1-a	Option 1-b	Option 2
Seed Cotton	240	175	52.5
Soybeans			165.0
Corn			56.4
Wheat			26.1
Unassigned	60	125	
Total	300	300	300

If the owner selected option 2 to convert generic base on this farm given the plantings for 2009-2012, the farm would be assigned 52.5 SC base acres (300 generic base acres \* 17.5% cotton planted), 165 soybean base acres (300 generic base acres \* 55.0% soybeans planted), 56.4 corn base acres (300 \* 18.75% corn planted) and 26.1 wheat base acres (300 generic base acres \* 8.75% wheat planted).

This farm's SC payment yield calculation is shown below in Table 3. This farm's current CCP yield is 839 pounds per acre. Cotton was planted on this farm in 2011 and 2012 (years in which cotton was not planted do not enter into the calculation), so yields for 2011 and 2012 are averaged and in this case result in an average lint yield of 1,110 pounds per acre. After application of the 90% statutory lint yield adjustment factor, this farm's adjusted lint yield is calculated at 999 pounds per acre based on the 2008-2012 farm yields. With the option to choose the higher of the adjusted lint yield or the farm's current CCP yield, the updated lint yield would be 999 pounds per acre. The SC payment yield for this farm is calculated by multiplying the updated lint yield by the statutory lint to SC conversion factor ( $999 * 2.4 = 2,398$  SC pounds per acre). The calculated SC payment yield of 2,398 pounds per acre will be used in all future calculations of the farm's SC PLC payments.

Table 3. SC Yield Calculation for the Mississippi Delta Farm.

Year	Lint Yield
2012	1,231
2011	988
2010	
2009	
2008	
2008-2012 Average Yield	1,110
Statutory Lint Yield Adjustment Factor	90%
A. Adjusted Lint Yield	999
B. Farm's CCP Yield	839
Updated Lint Yield (Greater A or B)	999
Statutory Lint to SC Conversion Factor	2.4
FSN XX71 Seed Cotton Payment Yield	2,398

As with PLC programs for other Title I covered commodities, FSA will use marketing year average (MYA) prices based on National Agricultural Statistics Service (NASS) price data and will make PLC payments when the MYA price falls below the statutory reference price for the covered commodity. The SC statutory reference price is \$0.367 per pound. FSA will calculate the SC MYA as a weighted average of the upland cotton lint price and the cottonseed price reported by NASS for the marketing year.

The example shown in Table 4 uses the estimated SC MYA price of \$0.3353 per pound along with the statutory reference price of \$0.367 to calculate an estimated SC PLC payment rate of \$0.0317 per pound. The example uses the SC yield and SC PLC payment yield for the example farm.

Table 4. Example PLC Payment Calculation.

FSN XX71 Seed Cotton Payment Yield	2,398
SC PLC Payment Rate (\$/lb)	\$ 0.0317
Payment Reduction Percentage	85%
FSN XX71 SC Payment Rate (\$ per base acre)	\$ 64.61

Based on our example farm's SC yield of 2,398 pounds per acre and a SC PLC payment rate of .0317 per pound, the payment rate per base acre would be \$64.61. That payment rate coupled with the 240 SC base acres from choosing Option 1-a results in a SC PLC payment of \$15,506 for the example farm. Option 1-b would result in a SC PLC payment of \$11,307 (175 SC base acres). Option 2 would result in an SC PLC payment \$3,392 (52.5 SC base acres).

There are important decisions related to the options available under the new legislation for conversion of generic base acres. Mississippi State University Extension Service will be providing additional material to support decisions related to conversion of generic base acres in the coming weeks.

**Prepared by Larry Falconer, Extension Economist, MSU-ES. Special thanks to Dr. Jody Campiche, Director, Economics and Policy Analysis, National Cotton Council for her input on this document.**