Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
Record Name:	Acreage	Version:	Approved
Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Section 1: Liability Calculation						
Premium Guarantee Per Acre Amount = Approved Yield * Coverage Level Percent	Premium Guarantee Per Acre Amount	Internal		999999999.99	If Unit of Measure equals Pounds "LBS", then round to whole number. If Unit of Measure equals Tons "TONS", then round to 2 decimals. Otherwise, round to 1 decimal.	Common Crop Insurance Policy definition 'production guarantee (per acre)'. Premium Guarantee Per Acre Amount should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Approved Yield	P11	42	99999999.99	None	For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Coverage Level Percent	P14	34	9.9999	None	For APH Trend and Yield Exclusion the Coverage Level Percent in this section is ALWAYS the chosen coverage level and NOT the Effective Coverage Level.

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03						
Record Name: Acreage		**Reinsurance Year:** 2019				
Record Code: P11		**Version:** Approved				
		Release Date: 12/6/2019				

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
When Guarantee Adjustment Type Code equals Late Planting, "L" OR Prevented Planting, "P": Guarantee Per Acre Amount = Premium Guarantee Per Acre Amount * Guarantee Adjustment Factor	Guarantee Per Acre Amount	Internal		999999999.99	If Unit of Measure equals Pounds "LBS", then round to whole number. If Unit of Measure equals Tons "TONS", then round to 2 decimals. Otherwise, round to 1 decimals.	Guarantee Per Acre Amount should be rounded to whole pounds for Dry Beans, "0047" (all types), and Dry Peas, "0067" (all types).
	Guarantee Adjustment Factor	P11	69	0.999	None	Edit with the Guarantee Adjustment ICE, "D00068" or ADM Guarantee Adjustment, "A01220" for Preventing Planting.
Price Election Amount = Projected Price (or Contract Price) * Price Election Percent	Price Election Amount	Internal		9999.9999	When Commodity Code equals Barley, "0091", Corn, "0041", Cotton, "0021", Grain Sorghum, "0051", Soybeans, "0081" or Wheat, "0011"; round to nearest whole cent [$9.99]. If result is based on Contract Price for specialty type Corn, Soybeans or Barley; round to nearest one hundredth cent ($9.9999).	

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
Record Name:	Acreage	Version:	Approved
Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Price Election Amount (contintued)	= Projected Price (or Contract Price) * Price Election Percent	Price Election Amount (continued)	Internal		9999.9999	When Commodity Code equals Canola, "0015", Rice, "0018", Sunflowers, "0078"; round to nearest one-tenth cent [$9.999]. If result is based on Contract Price for specialty type Canola; round to nearest one hundredth cent ($9.9999). When Commodity Code equals Popcorn, "0043", Dry Beans, "0047", or Dry Peas,"0067" round to nearest one-hundredth cent [$9.9999].	
		Projected Price	ADM		99999.9999		Liability for Yield Protection, "01" allows the producer the opportunity to choose a percentage of the Projected Price. Liability for Revenue Protection, "02", or Revenue Protection with Harvest Price Exclusion, "03", requires the producer to choose 100 percent of the Projected Price. Edit with ADM Price, "00810".

Exhibit Name: Premium Calculation				
Exhibit Number: P11-1, Plan 01, 02, 03		**Reinsurance Year:** 2019		
Record Name: Acreage		**Version:** Approved		
Record Code: P11		**Release Date:** 12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Price Election Amount (continued) = Projected Price (or Contract Price) * Price Election Percent	Contract Price	P11	46	9999.9999	None	For Yield Protection, "01", Contract Price may be used in lieu of the Projected Price for Dry Beans, Dry Peas, specialty types of Canola, Corn, Soybean or Barley. For Revenue Protection, "02", or Revenue Protection with Harvest Price Exclusion, "03", Contract Price may be used in lieu of the Projected Price for Dry Beans, Dry Peas, or specialty types of Canola, Corn or Soybeans. If the insured chooses to use the contract price, the contract price per bushel should be entered in the contract price field. The contracted price will be capped by RMA at a certain percentage over the projected price for Canola, Corn, Soybean and Barley as specified in the Special Provisions.
	Price Election Percent	ICE		9.9999	None	Price Election Percent must equal 1.000, when Insurance Plan Code is Revenue Protection, "02", or Revenue Protection with Harvest Price Exclusion, "03". Edit with ICE Price Election Percent, "D00007".
Premium Total Guarantee Amount = Premium Guarantee Per Acre Amount * Price Election Amount * Reported Acreage	Premium Total Guarantee Amount	Internal		99999999.99	Round to 2 decimals.	
	Price Election Amount	Internal		9999.9999	None	
	Reported Acreage	P11	48	99999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage.

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
Record Name:	Acreage	Version:	Approved
Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Total Guarantee Amount =	Guarantee Per Acre Amount * Price Election Amount * Reported Acreage	Total Guarantee Amount	P11	103	99999999.99	Round to 2 decimals.	
		Price Election Amount	Internal		9999.9999	None	
		Reported Acreage	P11	48	999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage.
Premium Liability Amount =	Premium Total Guarantee Amount * Insured Share Percent	Premium Liability Amount	Internal		9999999999	Round to whole number.	
		Insured Share Percent	P11	43	9.9999	None	
Liability Amount =	Total Guarantee Amount * Insured Share Percent	Liability Amount	P11	94	9999999999	Round to whole number.	
		Insured Share Percent	P11	43	9.9999	None	
Section 2: Unit Discount Calculation							The appropriate discount factor should be looked up and applied.
When commodities are setup in the unit discount table for lookups based solely on acres.							
Revenue Lookup Adjustment Factor	= **When the Unit Structure Code is Optional Unit, "OU", "UA", "UD", Basic Unit, "BU", or Enterprise Unit, "EU" or "EP":** Unit Structure Discount Factor	Revenue Lookup Adjustment Factor	Internal		9.99999999	None	
	= **When the Unit Structure Code is Whole Farm Unit "WU":** Unit Structure Discount Factor for Enterprise Unit "EU"	Unit Structure Discount Factor	Internal		9.99999999	None	Capped at 1.0 From below for Unit Structures "OU, UA, UD, BU, EU or EP".

Exhibit Name: Premium Calculation								
Exhibit Number: P11-1, Plan 01, 02, 03				**Reinsurance Year:** 2019				
Record Name: Acreage				**Version:** Approved				
Record Code: P11				**Release Date:** 12/6/2019				

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Unit Structure Discount Factor	= **When the Unit Structure Code is Optional Unit, "OU", "UA", or "UD":**	Unit Structure Discount Factor	Internal		9.99999999	None	capped at 1.0
	Optional Unit Discount Factor	Optional Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090".
	= **When Unit Structure Code is Basic Unit, "BU":** Basic Unit Discount Factor	Basic Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090".
	= **When the Unit Structure Code is Enterprise Unit, "EU" or "EP":** Enterprise Unit Discount Factor	Enterprise Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090". Enterprise Units will now mandate that all insured acreage for a commodity will be included in the Enterprise Unit. This includes both fall and spring planted acreage. Enterprise Unit Discount Factor is contingent upon the sum of the reported acres which were not prevented from planting for all applicable units being greater than or equal to the Area Low Quantity and less than or equal to Area High Quantity fields contained on the ADM Unit Discount, "A01090". Unit is not eligible as an enterprise unit if summed planted acres are less than 20 acres or 20% of insured crop acreage.

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
Record Name:	Acreage	Version:	Approved
Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
When commodities are setup in the unit discount table for lookups based on acres <u>and</u> coverage levels.						
= **When the Unit Structure Code is Optional Unit, "OU", "UA", or "UD":** Unit Structure Discount Factor	Revenue Lookup Adjustment Factor	Internal		9.99999999	None	
	Unit Structure Discount Factor	Internal		9.99999999	None	Capped at 1.0 From below for Unit Structure "OU", "UA", or "UD".
Revenue Lookup Adjustment Factor = **When Unit Structure Code is Basic Unit, "BU":** Basic Unit Discount Factor for **65%** Coverage Level	Basic Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090" for 65% Coverage Level. Basic Unit Discount Factor is contingent upon the sum of the reported acres which were not prevented from planting for the unit being greater than or equal to the Area Low Quantity and less than or equal to Area High Quantity fields contained on the ADM Unit Discount, "A01090" for 65% Coverage Level.
= **When the Unit Structure Code is Enterprise Unit, "EU" or "EP" or Whole Farm Unit "WU":** Enterprise Unit Discount Factor for **65%** Coverage Level	Enterprise Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090" for 65% Coverage Level. Enterprise Unit Discount Factor is contingent upon the sum of the reported acres which were not prevented from planting for all applicable units being greater than or equal to the Area Low Quantity and less than or equal to Area High Quantity fields contained on the ADM Unit Discount, "A01090" for 65% Coverage Level.

	Exhibit Name:	Premium Calculation		
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
	Record Name:	Acreage	Version:	Approved
	Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Unit Structure Discount Factor	= **When the Unit Structure Code is Optional Unit, "OU", "UA", or "UD":** Optional Unit Discount Factor	Unit Structure Discount Factor	Internal		9.99999999	None	Capped at 1.0 See Section 19 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
		Optional Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090". See Section 19 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	= **When Unit Structure Code is Basic Unit, "BU":** Basic Unit Discount Factor	Basic Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090" by Coverage Level. Basic Unit Discount Factor is contingent upon the sum of the reported acres which were not prevented from planting for the unit being greater than or equal to the Area Low Quantity and less than or equal to Area High Quantity fields contained on the ADM Unit Discount, "A01090" for Coverage Level. See Section 19 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03			**Reinsurance Year:** 2019			
Record Name: Acreage			**Version:** Approved			
Record Code: P11			**Release Date:** 12/6/2019			

Insurance Plan Code	01 Yield Protection		02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion	
Commodity Code	0011 Wheat 0015 Canola 0018 Rice		0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley	

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Unit Structure Discount Factor = (continued)	**When the Unit Structure Code is Enterprise Unit, "EU" or "EP":** Enterprise Unit Discount Factor	Enterprise Unit Discount Factor	ADM		9.999	None	Edit with ADM Unit Discount, "A01090" by Coverage Level. Enterprise Units will now mandate that all insured acreage for a commodity will be included in the Enterprise Unit. This includes both fall and spring planted acreage. Enterprise Unit Discount Factor is contingent upon the sum of the reported acres which were not prevented from planting for all applicable units being greater than or equal to the Area Low Quantity and less than or equal to Area High Quantity fields contained on the ADM Unit Discount, "A01090" for Coverage Level. Unit is not eligible as an enterprise unit if summed planted acres are less than 20 acres or 20% of insured crop acreage. See Section 19 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03			**Reinsurance Year:** 2019			
Record Name: Acreage			**Version:** Approved			
Record Code: P11			**Release Date:** 12/6/2019			

Insurance Plan Code	01 Yield Protection		02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion	
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas		0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley	

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 3: Base Premium Rate Calculation						If Written Agreement is applicable make the necessary changes as provided by the agreement and ROE ADM.
Current Year Yield Ratio = Rate Yield / Reference Amount	Current Year Yield Ratio	Internal		9.9999	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
	Rate Yield	P15	35	99999999.99	None	For skip row commodities, the rate yield is the converted rate yield from the P15 record with skip row (yield conversion factor) applied.
	Reference Yield	ADM		99999.99	None	Edit with ADM Base Rate, "A01010".
When previous year yield limitation code = '03', Insurance Option Code List contains Yield Cup (YC), and Commodity Code Dry Beans "0047" and Type Code equals Contract "62", or Commodity Code equals Dry Peas "0067" and Type Code equals Spring Contract "98":						
Prior Year Yield Ratio = Round(Approved Yield * Contract Price,0) / Prior Year Reference Amount	Prior Year Yield Ratio	Internal		9999999.99	Round to 2 decimals.	
	Approved Yield	P11	42	99999999.99	None	
	Contract Price	P11	46	9999.9999	None	
	Prior Year Reference Amount	ADM		99999.99	None	Edit with ADM Base Rate, "A01010".
When previous year yield limitation code = '03' and Insurance Option Code List contains Yield Cup (YC) and the aforementioned commodities/types are not applicable:						
Prior Year Yield Ratio = Approved Yield / Prior Year Reference Amount	Prior Year Yield Ration	Internal		9.9999	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
	Approved Yield	P11	42	99999999.99	None	For skip row commodities, the rate yield is the converted rate yield from the P15 record with skip row (yield conversion factor) applied.
	Prior Year Reference Amount	ADM		99999.99	None	Edit with ADM Base Rate, "A01010".

Exhibit Name: Premium Calculation		
Exhibit Number: P11-1, Plan 01, 02, 03	**Reinsurance Year:** 2019	
Record Name: Acreage	**Version:** Approved	
Record Code: P11	**Release Date:** 12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Otherwise:						
Prior Year Yield Ratio = Rate Yield / Prior Year Reference Amount	Prior Year Yield Ratio	Internal		9.9999	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
	Rate Yield	P15	35	99999999.99	None	For skip row commodities, the rate yield is the converted rate yield from the P15 record with skip row (yield conversion factor) applied.
	Prior Year Reference Amount	ADM		99999.99	None	Edit with ADM Base Rate, "A01010".
Current Year Rate Multiplier = Current Year Yield Ratio ^ Exponent Value	Current Year Rate Multiplier	Internal		9999.99999999	Round to 8 decimals.	
	Exponent Value	ADM		S99.999	None	Edit with ADM Base Rate, "A01010".
Prior Year Rate Multiplier = Prior Year Yield Ratio ^ Prior Year Exponent Value	Prior Year Rate Multiplier	Internal		9999.99999999	Round to 8 decimals.	
	Prior Year Exponent Value	ADM		S99.999	None	Edit with ADM Base Rate, "A01010".

Exhibit Name: Premium Calculation							
Exhibit Number: P11-1, Plan 01, 02, 03				**Reinsurance Year:** 2019			
Record Name: Acreage				**Version:** Approved			
Record Code: P11				**Release Date:** 12/6/2019			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Current Year Base Rate		Current Year Base Rate	Internal		9999999999.99999999	Round to 8 decimals.	
	= **When Rate Method Code is Fixed, "F":** Sub County Rate	Sub County Rate	ADM		99.9999	None	Edit with ADM Sub County Rate, "A01050".
	= **When Rate Method Code is Additive, "A":** Sub County Rate + (Current Year Rate Multiplier * Reference Rate + Fixed Rate)	Current Year Rate Multiplier	Internal		9999.99999999	None	
	= **When Rate Method Code is Multiplicative, "M":** Sub County Rate * (Current Year Rate Multiplier * Reference Rate + Fixed Rate)	Reference Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".
	= **Otherwise:** Current Year Rate Multiplier * Reference Rate + Fixed rate	Fixed Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".
Prior Year Base Rate		Prior Year Base Rate	Internal		9999999999.99999999	Round to 8 decimals.	
	= **When Rate Method Code is Fixed, "F":** Sub County Rate	Sub County Rate	ADM		99.9999	None	Edit with ADM Sub County Rate, "A01050".
	= **When Rate Method Code is Additive, "A":** Sub County Rate + (Prior Year Rate Multiplier * Prior Year Reference Rate + Prior Year Fixed Rate)	Prior Year Rate Multiplier	Internal		9999.99999999	None	
	= **When Rate Method Code is Multiplicative, "M":** Sub County Rate * (Prior Year Rate Multiplier * Prior Year Reference Rate + Prior Year Fixed Rate)	Prior Year Reference Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".
	= **Otherwise:** Prior Year Rate Multiplier * Prior Year Reference Rate + Prior Year Fixed rate	Prior Year Fixed Rate	ADM		9.9999	None	Edit with ADM Base Rate, "A01010".

	Exhibit Name:	Premium Calculation			
	Exhibit Number:	P11-1, Plan 01, 02, 03		Reinsurance Year:	2019
	Record Name:	Acreage		Version:	Approved
	Record Code:	P11		Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0075 Peanuts 0051 Grain Sorghum 0078 Sunflowers 0067 Dry Peas 0081 Soybeans 0091 Barley

	Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Current Year Base Premium Rate		Current Year Base Premium Rate	Internal		9999999999.99999999	Round to 8 decimals.	If Option Code "YE" or "TA" is applicable and the effective coverage level exceeds the highest coverage level for the offer in the ADM, see Section 23 for the Current Year Base Premium Rate calculation.
	When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU": = Round(Current Year Base Rate * Rate Differential Factor * Unit Residual Factor, 8)	Rate Differential Factor	ADM		9.999999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
		Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, 'BU'.
	When Unit Structure code is Enterprise Unit, "EU" or "EP": = Round(Current Year Base Rate * Rate Differential Factor * Enterprise Unit Residual Factor, 8)	Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Enterprise Unit, 'EU' or 'EP'.
	When Unit Structure code is Whole Farm Unit, "WU": = Round(Current Year Base Rate * Rate Differential Factor * Whole Farm Unit Residual Factor, 8)	Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Whole Farm Unit, 'WU'.

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03				**Reinsurance Year:** 2019		
Record Name: Acreage				**Version:** Approved		
Record Code: P11				**Release Date:** 12/6/2019		

Insurance Plan Code	01 Yield Protection		02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion	
Commodity Code	0011 Wheat 0015 Canola 0018 Rice		0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley	

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
When previous year yield limitation code = '03' and Insurance Option Code List contains Yield Cup (YC):							
Prior Year Base Premium Rate =	**When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":**	Prior Year Base Premium Rate	Internal		9999999999.99999999	Round to 8 decimals.	
		Prior Year Rate Differential Factor	ADM		9.999999999	None	Edit with ADM Coverage Level Differential, "A01040."
	Round(Prior Year Base Rate * 1.05 * Prior Year Rate Differential Factor * Prior Year Unit Residual Factor, 8)	Prior Year Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040."
	When Unit Structure code is Enterprise Unit, "EU" or "EP": Round(Prior Year Base Rate * 1.05* Prior Year Rate Differential Factor * Prior Year Enterprise Unit Residual Factor, 8)	Prior Year Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040".
	When Unit Structure code is Whole Farm Unit, 'WU': Round(Prior Year Base Rate * 1.05 * Prior Year Rate Differential Factor * Prior Year Whole Farm Unit Residual Factor, 8)	Prior Year Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040."

Exhibit Name:	Premium Calculation			
Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019	
Record Name:	Acreage	Version:	Approved	
Record Code:	P11	Release Date:	12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Otherwise:							
Prior Year Base Premium Rate		Prior Year Base Premium Rate	Internal		9999999999.99999999	Round to 8 decimals.	
	= **When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":** Round(Prior Year Base Rate * Prior Year Rate Differential Factor * Prior Year Unit Residual Factor, 8)	Prior Year Rate Differential Factor	ADM		9.999999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
		Prior Year Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU".
	= **When Unit Structure code is Enterprise Unit, "EU" or "EP":** Round(Prior Year Base Rate * Prior Year Rate Differential Factor * Prior Year Enterprise Unit Residual Factor, 8)	Prior Year Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Enterprise Unit, 'EU' or 'EP'.
	= **When Unit Structure code is Whole Farm Unit, 'WU':** Round(Prior Year Base Rate * Prior Year Rate Differential Factor * Prior Year Whole Farm Unit Residual Factor, 8)	Prior Year Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Whole Farm Unit, 'WU'.
Base Premium Rate =	MIN (Current Year Base Premium Rate, Prior Year Base Premium Rate * 1.2, .999)	Base Premium Rate	P11	97	9999999999.99999999	Round to 8 decimals.	
Revenue Lookup Rate =	MIN(Current Year Base Rate, Prior Year Base Rate * 1.2, 0.9999)	Revenue Lookup Rate	Internal		9999999999.9999	Round to 4 decimals.	

	Exhibit Name:	Premium Calculation		
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
	Record Name:	Acreage	Version:	Approved
	Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 4: Optional Coverage (Additive "A" and Multiplicative "M")							If Option Rate Method Code equal "T" (Total Premium Rate Adjustment) see Section 9.
Additive Optional Rate Adjustment Factor =	**When Rate Method Code is Additive, "A":** $\sum$ Option Rate * Rate Differential Factor	Additive Optional Rate Adjustment Factor	Internal		999999.9999	Round to 4 decimals.	
		Option Rate	ADM		99999.9999	None	Option Rate will be the Sum of all Option Rate with Rate Method Code equal to Additive, "A". Edit with ADM Option Rate, "A01060".
		Rate Differential Factor	ADM		9.99999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
Multiplicative Optional Rate Adjustment Factor =	**When Rate Method Code is Multiplicative, "M":** $\sum$ Option Rate1 * Option Rate2 * Option Rate3...	Multiplicative Optional Rate Adjustment Factor	Internal		999999.9999	Round to 4 decimals.	
		Option Rate	ADM		9.9999	None	Edit with ADM Option Rate, "A01060".
Section 5: Revenue Coverage Add on Rates (Applicable only for Plans 02 and 03)							**It is recommended that other than hard coding for specific type and practice codes which will eventually change when the new key structure is adopted, that a condition be put in place that will set the add on rate to 0 when the Price Volatility is 0. This condition MUST occur at some point in order to circumvent the Calculation of Preliminary Revenue Protection Add on Rate and Preliminary Revenue Protection with Harvest Price Exclusion Add on Rate, which contains a constraint that the add on rate be at least 1% greater than the base Premium Rate.**
Lookup Rate = Revenue Lookup Rate * Revenue Lookup Adjustment Factor		Lookup Rate	Internal		9999999999.9999	Round to 4 decimals.	
		Revenue Lookup Rate	Internal		9999999999.9999	Round to 4 decimals.	From Section 3.
		Revenue Lookup Adjustment Factor	Internal		9.99999999	None	From Section 2.

Exhibit Name: Premium Calculation				
Exhibit Number: P11-1, Plan 01, 02, 03		**Reinsurance Year:** 2019		
Record Name: Acreage		**Version:** Approved		
Record Code: P11		**Release Date:** 12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Adjusted Mean Quantity = Approved Yield * Mean Quantity / 100	Adjusted Mean Quantity (AdjMean)	Internal		999999.99999999	Round to 8 decimals.	
	Approved Yield (AY)	P11	42	99999999.99	None	For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Mean Quantity	ADM		999.999999999	None	Edit with ADM Combo Revenue Factor, "A01030". Search the Combo Revenue Factor, "A01030" for the Mean Quantity using Lookup Rate.
Adjusted Standard Deviation Quantity = Approved Yield * Standard Deviation Quantity / 100	Adjusted Standard Deviation Quantity (AdjStndDev)	Internal		9999999999.99999999	Round to 8 decimals.	
	Approved Yield (AY)	P11	42	99999999.99	None	For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row cotton, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Standard Deviation Quantity	ADM		999.999999999	None	Edit with ADM Combo Revenue Factor, "A01030". Search the Combo Revenue Factor "A01030" for the Standard Deviation Quantity using Lookup Rate.

		Exhibit Name:	Premium Calculation				
		Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019		
		Record Name:	Acreage	Version:	Approved		
		Record Code:	P11	Release Date:	12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas 0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
LnMean $=$ Ln(Projected Price or Contract Price) – (Price Volatility Factor)^2 / 2	log Mean Quantity (LnMean)	Internal		999999.99999999	Round to 8 decimals.	
	Projected Price	ADM		99999.9999		Edit with ADM Price, "A00810".
	Contract Price	P11	46	9999.9999	None	Contract price as addressed in Section 1, capped with Max Contract Price from ADM.
	Price Volatility Factor	ADM		9.99		Edit with ADM Price, "A00810".
Yield Draw Quantity$_{\text{Sequence Number}}$ $=$ **For Sequence Number 1 to 500** Yield Draw Quantity	Yield Draw Quantity	ADM		S99.999999999	None	Edit with ADM Beta, "A01020". Use the Beta ID field from ADM Insurance Offer, "A00030" and the Beta "A01020" to obtain the applicable draws. There should be 500 draws (or sequence numbers) per Beta Id for every distinct Beta Id in the Insurance Offer ADM, "A00030".
Price Draw Quanity$_{\text{Sequence Number}}$ $=$ **For Sequence Number 1 to 500** Price Draw Quantity	Price Draw Quantity	ADM		S99.999999999	None	Edit with ADM Beta, "A01020". Use the Beta ID field from ADM Insurance Offer, "A00030" and the Beta "A01020" to obtain the applicable draws. There should be 500 draws (or sequence numbers) per Beta Id for every distinct Beta Id in the Insurance Offer ADM

Exhibit Name: Premium Calculation		
Exhibit Number: P11-1, Plan 01, 02, 03	**Reinsurance Year:** 2019	
Record Name: Acreage	**Version:** Approved	
Record Code: P11	**Release Date:** 12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Simulated Yield Protection Losses Quantity $= \sum_{i=1}^{500}$ Round(MAX(0, AY * covlvl - Round(MAX(0, Yield$_i$ * AdjStndDev + AdjMean),12)), 12)	Simulated Yield Protection Losses Quantity (SimYPLosses)	Internal		9999999999.99999999999	Round to 12 decimals.	
	Approved Yield (AY)	P11	42	99999999.99	None	For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Coverage Level Percent (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	Yield Draw Quantity$_i$ (Yield$_i$)	ADM		S99.999999999	None	

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	**Reinsurance Year:**	2019
Record Name:	Acreage	**Version:**	Approved
Record Code:	P11	**Release Date:**	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
	Simulated Revenue Protection Losses Quantity(SimRPLosses)	Internal		9999999999.99999999999	Round to 12 decimals.	
Simulated Revenue Protection Losses = Quantity $$\sum_{i=1}^{500} \textbf{Round(}\text{MAX}(0, AY * covlvl * \textbf{Round(}\text{MAX}(\text{ProjPrice}, \textbf{Round(}\text{MIN}(2 * \text{ProjPrice}, \textbf{Round(}e^{(\text{Price}_i * \text{Price Volatility Factor} + \text{LnMean})}\textbf{,12))},\textbf{12))},\textbf{12)} - (\textbf{Round(}\text{MAX}(0, \text{Yield}_i * \text{AdjStdDev} + \text{AdjMean})\textbf{,12)} * \textbf{Round(}\text{MIN}(2 * \text{ProjPrice}, \textbf{Round(}e^{(\text{Price}_i * \text{Price Volatility Factor} + \text{LnMean})}\textbf{,12))}, \textbf{12)))},\textbf{12)}$$	Approved Yield (AY)	P11	42	99999999.99	None	For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Coverage Level Percent (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	Yield Draw Quantity$_i$ (Yield$_i$)	ADM		S99.999999999	None	
	Projected Priced or Contract Price (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810". Contract Price as addressed in Section 1.

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	**Reinsurance Year:**	2019
Record Name:	Acreage	**Version:**	Approved
Record Code:	P11	**Release Date:**	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
	Simulated Revenue Protection with Harvest Price Exclusion Losses Quantity (SimRPhpeLosses)	Internal		9999999999.99999999999	Round to 12 decimals.	
Simulated Revenue Protection with Harvest Price Exclusion Losses Quantity $= \sum\limits_{i=1}^{500}$ **Round(**MAX(0, AY * covlvl * ProjPrice - (**Round(**MAX(0, Yield_i * AdjStdDev + AdjMean)**,12)** * **Round(**MIN(2 * ProjPrice, **Round(**$e^{(\text{price}_i * \text{Price Volatility Factor} + \text{LnMean})}$, **12)),12)))**,12)**	Approved Yield (AY)	P11	42	99999999.99	None	For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Coverage Level Percent (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	Projected Priced or Contract Price (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810". Contract Price as addressed in Section 1.

Exhibit Name: Premium Calculation
Exhibit Number: P11-1, Plan 01, 02, 03
Record Name: Acreage
Record Code: P11

Reinsurance Year: 2019
Version: Approved
Release Date: 12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Simulated Yield Protection Base Premium Rate	= (Simulated Yield Protection Losses Quantity / 500) / (Approved Yield * Coverage Level Percent)	Simulated Yield Protection Base Premium Rate	Internal		999999.99999999	Round to 8 decimals.	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) Effective Coverage Level Percent will replace Coverage Level Percent.
Simulated Revenue Protection Base Premium Rate	= (Simulated Revenue Protection Losses / 500) / (Approved Yield * Coverage Level Percent * (Projected Price or Contract Price))	Simulated Revenue Protection Base Premium Rate	Internal		999999.99999999	Round to 8 decimals.	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) Effective Coverage Level Percent will replace Coverage Level Percent.
Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate	= (Simulated Revenue Protection with harvest Price Exclusion Losses Quantity / 500) / (Approved Yield * Coverage level Percent * (Projected Price or Contract Price))	Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate	Internal		999999.99999999	Round to 8 decimals.	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) Effective Coverage Level Percent will replace Coverage Level Percent.
Preliminary Revenue Protection Premium Add on Rate	= MAX(Simulated Revenue Protection Base Premium Rate - Simulated Yield Protection Base Premium Rate, 0.01 * Base Premium Rate)	Preliminary Revenue Protection Premium Add on Rate	Internal		999999.99999999	Round to 8 decimals.	This is a control meant to ensure that the premium rate associated with Revenue Protection is at least 1% greater than the basic Base Premium Rate where the Price Volatility Factor is NOT EQUAL to 0.
Preliminary Revenue Protection with Harvest Price Exclusion Add on Rate	= MAX(Simulated Revenue Protection with Harvest Price Exclusion Base Premium Rate - Simulated Yield Protection Base Premium Rate, -0.5 * Base Premium Rate)	Preliminary Revenue Protection with Harvest Price Exclusion Add on Rate	Internal		999999.99999999	Round to 8 decimals.	This is a control meant to ensure that the premium rate associated with Revenue Protection with Harvest Price Exclusion will not be less than half of the Base Premium Rate where the Price Volatility Factor is NOT EQUAL to 0.

Exhibit Name: Premium Calculation			
Exhibit Number: P11-1, Plan 01, 02, 03		**Reinsurance Year:** 2019	
Record Name: Acreage		**Version:** Approved	
Record Code: P11		**Release Date:** 12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Section 6: Historical Revenue Capping (Applicable only for Plans 02 and 03) Note: This Section will not apply if record has a Written Agreement.						This section is for calculation the 2010 Revenue Assurance Optional Unit Level Base Premium Rate for coverage level percents 65 thru 85 where applicable. Then it is used in conjunction with the Base Premium Rate and Revenue Add On Rates to compute capped Revenue Add On Rates. This table is set up such that the only value that will change from year to year is the Commodity Year. By doing this we are fixing a point where the premium calculation method was changed and applying an exponential capping over time. If there is NOT a corresponding row in the Historical Revenue Capping ADM, "A01110", then this calculation does not need to be performed. Furthermore, since coverage level percents 50, 55, 60 did not exist for Revenue Assurance (RA) historically capping does not need to be performed for those coverage level percents as well. If TA is applicable then this will be based on the TA Effective Coverage Level Percent. See next statement. When TA and YE Option is selected, this section does not apply when the Effective Coverage Level is less than 65%.

	Exhibit Name:	Premium Calculation			
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019	
	Record Name:	Acreage	Version:	Approved	
	Record Code:	P11	Release Date:	12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Capping Yield Ratio = Rate Yield / Capping Reference Yield	Capping Yield Ratio	Internal		9.99	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
	Rate Yield	P15	35	99999999.99	None	For skip row commodities, the rate yield is the converted rate yield from the P15 record with skip row (yield conversion factor) applied.
	Capping Reference Yield	ADM		99999.99	None	Edit with ADM Historical Revenue Capping, "A01110".
Prior Capping Yield Ratio = Rate Yield / Prior Capping Reference Yield	Prior Capping Yield Ratio	Internal		9.99	Round to 2 decimals.	Cup at 0.50 and Cap at 1.50.
	Rate Yield	P15	35	99999999.99	None	For skip row commodities, the rate yield is the converted rate yield from the P15 record with skip row (yield conversion factor) applied.
	Prior Capping Reference Yield	ADM		99999.99	None	Edit with ADM Historical Revenue Capping, "A01110".
Capping Rate Multiplier = Capping Yield Ratio $^{\text{Capping Exponent Value}}$	Capping Rate Multiplier	Internal		999999.99999999	Round to 8 decimals.	
	Capping Exponent Value	ADM		S99.999	None	Edit with ADM Historical Revenue Capping, "A01110".

Exhibit Name: Premium Calculation		
Exhibit Number: P11-1, Plan 01, 02, 03	**Reinsurance Year:** 2019	
Record Name: Acreage	**Version:** Approved	
Record Code: P11	**Release Date:** 12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Prior Capping Rate Multiplier =	Prior Capping Yield Ratio ^{Prior} Capping Exponent Value	Prior Capping Rate Multiplier	Internal		999999.99999999	Round to 8 decimals.	
		Prior Capping Exponent Value	ADM		S99.999	None	Edit with ADM Historical Revenue Capping, "A01110".
Historical Capping Base Rate =	**If Rate Method Code = Fixed, "F":** Sub County Rate	Historical Capping Base Rate	Internal		999999.99999999	Round to 8 decimals.	
	If Rate Method Code = Additive, "A": Sub County Rate + (Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)	Sub County Rate	ADM		9.9999	None	Edit with ADM Sub County Rate, "A01050".
	If Rate Method Code = Multiplicative, "M": Sub County Rate * (Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)	Capping Reference Rate	ADM		9.9999		Edit with ADM Historical Revenue Capping, "A01110".
	Otherwise: (Capping Rate Multiplier * Capping Reference Rate + Capping Fixed Rate)	Capping Fixed Rate	ADM		9.9999		Edit with ADM Historical Revenue Capping, "A01110".
Historical Prior Capping Base Rate =	**If Rate Method Code = Fixed "F":** Sub County Rate	Historical Prior Capping Base Rate	Internal		999999.99999999	Round to 8 decimals.	
	If Rate Method Code = Additive, "A": Sub County Rate + (Prior Capping Rate Multiplier * Prior Capping Reference Rate + Prior Capping Fixed Rate)	Sub County Rate	ADM		9.9999	None	Edit with ADM Sub County Rate, "A01050".
	If Rate Method Code = Multiplicative, "M": Sub County Rate * (Prior Capping Rate Multiplier * Prior Capping Reference Rate + Prior Capping Fixed Rate)	Prior Capping Reference Rate	ADM		9.9999		Edit with ADM Historical Revenue Capping, "A01110".
	Otherwise: (Prior Capping Rate Multiplier * Prior Capping Reference Rate + Prior Capping Fixed Rate)	Prior Capping Fixed Rate	ADM		9.9999		Edit with ADM Historical Revenue Capping, "A01110".
Historical Basic Unit Base Rate =	.9 * MIN(.999, Historical Prior Capping Base Rate * 1.2, Historical Capping Base Rate)	Historical Basic Unit Base Rate	Internal		999999.99999999	Round to 8 decimals.	

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	**Reinsurance Year:**	2019
Record Name:	Acreage	**Version:**	Approved
Record Code:	P11	**Release Date:**	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Historical Revenue Protection Base Premium Rate	**When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":**	Coverage Level Percent	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	= [beta0 Factor + Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Historical Basic Unit Base Rate ^2 + Beta 3 Factor * Coverage Level Percent + Beta 4 Factor * Coverage Level Percent ^2 + Beta 5 Factor * Approved Yield / Capping Reference Yield + Beta 6 Factor * (Approved Yield / Capping Reference Yield)^2 + Beta 7 Factor * Price Volatility Factor + Beta 8 Factor * Price Volatility Factor^2 + Beta 9 Factor * Historical Basic Unit Base Rate * Coverage Level Percent + Beta 10 Factor * Historical Basic Unit Base Rate * Approved Yield / Capping Reference Yield + Beta 11 Factor * Historical Basic Unit Base Rate * Price Volatility Factor + Beta 12 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 13 Factor * Coverage Level Percent * Price Volatility Factor + Beta 14 Factor * (Approved Yield / Capping Reference Yield) * Price Volatility Factor] * Unit Residual Factor X 1.1	Historical Revenue Protection Base Premium Rate	Internal		9999999999.99999999	Round each intermittent Beta * calculation to 8 decimals as it has been done historically.	
		Beta 0 Factor - Beta 14 Factor	ADM		S99.999999999	None	Edit with ADM Historical Revenue Capping, "A01110".
		Price Volatility Factor	ADM		9.99	None	Edit with ADM Price, "A00810".
		Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	When Unit Structure Code is equal to Enterprise Unit, "EU" or "EP": = Replace 'Unit Residual Factor' with 'Enterprise Unit Residual Factor'	Enterprise Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03			**Reinsurance Year:** 2019			
Record Name: Acreage			**Version:** Approved			
Record Code: P11			**Release Date:** 12/6/2019			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate	**When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU":**	Coverage Level Percent	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	= [beta0 Factor + Beta 1 Factor * Historical Basic Unit Base Rate + Beta 2 Factor * Historical Basic Unit Base Rate ^2 + Beta 3 Factor * Coverage Level Percent + Beta 4 Factor * Coverage Level Percent ^2 + Beta 5 Factor * Approved Yield / Capping Reference Yield + Beta 6 Factor * (Approved Yield / Capping Reference Yield)^2 + Beta 7 Factor * Price Volatility Factor + Beta 8 Factor * Price Volatility Factor^2 + Beta 9 Factor * Historical Basic Unit Base Rate * Coverage Level Percent + Beta 10 Factor * Historical Basic Unit Base Rate * Approved Yield / Capping Reference Yield + Beta 11 Factor * Historical Basic Unit Base Rate * Price Volatility Factor + Beta 12 Factor * Coverage Level Percent * Approved Yield / Capping Reference Yield + Beta 13 Factor * Coverage Level Percent * Price Volatility Factor + Beta 14 Factor * (Approved Yield / Capping Reference Yield) * Price Volatility Factor] * Unit Residual Factor X 1.1	Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate	Internal		9999999999.99999999	Round each intermittent Beta * calculation to 8 decimals as it has been done historically.	
		Beta 0 Factor - Beta 14 Factor	ADM		S99.999999999	None	Edit with ADM Historical Revenue Capping, "A01110".
		Price Volatility Factor	ADM		9.99	None	Edit with ADM Price, "A00810".
		Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	When Unit Structure Code is equal to Enterprise Unit, "EU" or "EP": = Replace 'Unit Residual Factor' with 'Enterprise Unit Residual Factor'	Enterprise Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).

<table>
<tr><td colspan="2">

Exhibit Name: Premium Calculation
Exhibit Number: P11-1, Plan 01, 02, 03
Record Name: Acreage
Record Code: P11

</td><td colspan="2">

Reinsurance Year: 2019
Version: Approved
Release Date: 12/6/2019

</td></tr>
</table>

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Capped Revenue Protection Add on Rate = MIN(Base Premium Rate + Preliminary Revenue Protection Add On Rate, Historical Revenue Protection Base Premium Rate * 1.2^(Commodity Year - Capping Year)) - Base Premium Rate	Capped Revenue Protection Add on Rate	Internal		9999999999.99999999	Round to 8 decimals.	Use the Preliminary Add On Rates for Insurance Plan Code Revenue Protection, "02" or Revenue Protection with Harvest Price Exclusion, "03" from section 5, the Base Premium Rate from section 3 to calculate the Capped Revenue add on factors.
	Base Premium Rate	P11	97	999999.99999999	None	
	Commodity Year	P14	10	CCYY	None	
	Capping Year	ADM		CCYY	None	Edit with ADM Historical Revenue Capping, "A01110".
Capped Revenue Protection with Harvest Price Exclusion Add on Rate = MIN(Base Premium Rate + Preliminary Revenue Protection with Harvest Price Exclusion Add On Rate, Historical Revenue Protection with Harvest Price Exclusion Base Premium Rate * 1.2^(Commodity Year - Capping Year)) - Base Premium Rate	Capped Revenue Protection with Harvest Price Exclusion Add on Rate	Internal		9999999999.99999999	Round to 8 decimal	Use the Preliminary Add On Rates for Insurance Plan Code Revenue Protection, "02" or Revenue Protection with Harvest Price Exclusion, "03" from section 5, the Base Premium Rate from section 3 to calculate the Capped Revenue add on factors.
	Base Premium Rate	P11	97	999999.99999999	None	
	Commodity Year	P14	10	CCYY	None	
	Capping Year	ADM		CCYY	None	Edit with ADM Historical Revenue Capping, "A01110".

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
Record Name:	Acreage	Version:	Approved
Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 7: Whole Farm Unit Base Premium Rate						**The Whole Farm Unit Discount is only applicable to the Revenue Protection and Revenue Protection with Harvest Price Exclusion Insurance Plans, unless the Special Provisions allow Whole Farm Units for other Insurance Plans.** **Whole Farm Units will now mandate that producers include both their spring and fall planted commodities into the whole farm unit for commodity/plans offering Whole Farm Units.** **Malting Barley Coverage is NOT applicable for Whole Farm Unit.**
Lookup Rate = Revenue Lookup Rate * Revenue Lookup Adjustment Factor	Lookup Rate	Internal		9999999999.9999	Round to 4 decimals.	
	Revenue Lookup Rate	Internal		9999999999.9999	Round to 4 decimals.	From Section 3.
	Revenue Lookup Adjustment Factor	Internal		9.99999999	None	From Section 2.
Mean Quantity $_{commodityj}$ = Mean Quantity $_{commodityj}$ WHERE Lookup Rate $_{commodityj}$ = Base Rate $_{commodityj}$	Mean Quantity $_{commodityj}$	ADM		999.999999999	None	Edit with ADM Combo Revenue Factor, "A01030". Search the Combo Revenue Factor, "A01030" for the Mean Quantity, When the Lookup Rate = Base Rate
	Lookup Rate $_{commodityj}$	Internal		9.9999	None	
	Base Rate $_{commodityj}$	ADM		9.9999	None	Edit with ADM Combo Revenue Factor, "A01030".

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03				**Reinsurance Year:** 2019		
Record Name: Acreage				**Version:** Approved		
Record Code: P11				**Release Date:** 12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0075 Peanuts 0051 Grain Sorghum 0078 Sunflowers 0067 Dry Peas 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Standard Deviation Quantity $_{commodityj}$ = Standard Deviation Quantity $_{commodityj}$ WHERE Lookup Rate $_{commodityj}$ = Base Rate $_{commodityj}$	Standard Deviation Quantity $_{commodityj}$	ADM		999.999999999	None	Edit with ADM Combo Revenue Factor, "A01030". Search the Combo Revenue Factor, "A01030" for the Standard Deviation Quantity, When the Lookup Rate = Base Rate
	Lookup Rate $_{commodityj}$	Internal		9.9999	None	
	Base Rate $_{commodityj}$	ADM		9.9999	None	Edit with ADM Combo Revenue Factor, "A01030".
Adjusted Mean Quantity $_{commodityj}$ = Approved Yield $_{commodityj}$ * Mean Quantity $_{commodityj}$ / 100	Adjusted Mean Quantity $_{commodityj}$	Internal		999999.999999999	Round to 8 decimals.	
	Approved Yield $_{commodityj}$	P11	42	99999999.99	None	For APH Trend, Yield Cup, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
Adjusted Standard Deviation Quantity $_{commodityj}$ = Approved Yield $_{commodityj}$ * Standard Deviation Quantity $_{commodityj}$ / 100	Adjusted Standard Deviation Quantity $_{commodityj}$	Internal		9999999999.99999999	Round to 8 decimals.	
	Approved Yield $_{commodityj}$	P11	42	99999999.99	None	For APH Trend, Yield Cup, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
$\text{LnMean}_{commodityj} = \dfrac{\ln(\text{Projected Price or Contract Price}_{commodityj}) - (\text{Price Volatility Factor}_{commodityj})^2}{2}$	log Mean$_{commodityj}$ (LnMean)	Internal		999999.99999999	Round to 8 decimals.	
	Projected Price or Contract Price$_{commodityj}$	ADM		99999.9999		Edit with ADM Price, "A00810". Contract Price as addressed in Section 1.
	Price Volatility Factor$_{commodityj}$	ADM		9.99	None	Edit with ADM Price, "A00810".
$\text{Yield Draw Quantity}_{commodityj\ Sequence\ Number} = \text{Yield Draw Quantity}_{commodity}$	Yield Draw Quantity	ADM		S99.999999999	None	ADM Insurance Offer, "A00030", and Beta, "A01020", should be used to obtain the applicable draws. There should be 500 Draws (or sequence numbers) per Beta Id in the ADM Beta, "A01020" for every distinct Beta Id in the ADM Insurance Offer, "A00030".
$\text{Price Draw Quantity}_{commodityj\ Sequence\ Number} = \text{Price Draw Quantity}_{commodity}$	Price Draw Quantity	ADM		S99.999999999	None	ADM Insurance Offer, "A00030", and Beta, "A01020", should be used to obtain the applicable draws. There should be 500 Draws (or sequence numbers) per Beta Id in the ADM Beta, "A01020" for every distinct Beta Id in the ADM Insurance Offer, "A00030".

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
Record Name:	Acreage	Version:	Approved
Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0075 Peanuts 0051 Grain Sorghum 0078 Sunflowers 0067 Dry Peas 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
	Simulated Revenue Protection Losses Whole Farm (SimRPLossesWF)	Internal		9999999999.99999999999	Round to 12 decimals.	Simulated Revenue Protection Losses for All Commodity/Acreage report line in the Whole Farm Unit.
	Coverage Level Percent$_{commodityj}$ (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
Simulated Revenue Protection Losses Whole Farm $=$ $$\sum_{i=1}^{500} \textbf{Round}\left(MAX\left(0, \sum_{j=}^{\text{all Commodities}} Ay_{commodityj} * Acres_{commodityj} * covlvl_{commodityj} * \textbf{Round}\left(MAX(ProjPrice_{commodityj}, \textbf{Round}(MIN(2 * ProjPrice_{commodityj}, \textbf{Round}(e^{(Price_{commodityji} * \text{Price Volatility Factor-}commodityj + LnMean_{commodityj})}, \textbf{12})), \textbf{12})), \textbf{12}) - \sum_{j=}^{\text{all Commodities}} \textbf{Round}(MAX(0, \textbf{Round}(Yield_{commodityji} * AdjStdDev_{commodityj} + AdjMean_{commodityj}, \textbf{12})), \textbf{12}) * \textbf{Round}(MIN(2 * ProjPrice_{commodiyj}, \textbf{Round}(e^{(Price_{commodityji} * \text{Price Volatility Factor}commodityj + LnMean_{commodityj})}, \textbf{12})), \textbf{12}) * \textbf{Round}(Acres_{commodityj}, \textbf{12})), 12\right)$$	Approved Yield$_{commodityj}$ (AY)	P11	42	99999999.99	None	Approved Yield for each Commodity/Acreage report line in the Whole Farm Unit. For APH Trend and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Reported Acreage$_{commodityj}$ (Acres)	P11	48	999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage. Reported Acreage for each Commodity/Acreage report line in the Whole Farm Unit.
	Projected Price or Contract Price$_{commodityj}$ (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810". Projected Price or Contract Price for each Commodity/Acreage report line in the Whole Farm Unit.
	Price Draw Quanity$_{commodityj}^{i}$ (Price)	ADM		S99.999999999	None	Price Draw Quantity for each Commodity /Acreage report line in the Whole Farm Unit.
	Price Volatility Factor$_{commodityj}$	Internal		999999.99999999	None	Price Volatility Factor for each Commodity/Acreage report line in the Whole Farm Unit.
	log Mean$_{commodityj}$ (LnMean)	Internal		999999.99999999	None	Log Mean for each Commodity/Acreage report line in the Whole Farm Unit.
	Yield Draw Quantity$_{commodityj}^{i}$ (Yield)	ADM		S99.999999999	None	Yield Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Simulated Revenue Protection Losses Whole Farm (continued) $=$ $\sum_{i=1}^{500}$ **Round(**MAX(0,$\sum_{j=}^{\text{all Commodities}}$ $Ay_{commodityj}$ * $Acres_{commodityj}$ * $covlvl_{commodityj}$ * **Round(**MAX($ProjPrice_{commodityj}$, **Round(**MIN(2 * $ProjPrice_{commodityj}$, **Round(**$e^{(Price_{commodityji} * \text{Price Volatility Factor-}commodityj + LnMean_{commodityj})}$**,12)),12)),12)** - $\sum_{j=}^{\text{all Commodities}}$ **Round(**MAX(0,**Round(**$Yield_{commodityji}$ * $AdjStdDev_{commodityj}$ + $AdjMean_{commodityj}$**,12)),12)** * **Round(**MIN(2 * $ProjPrice_{commodiyj}$, **Round(**$e^{(Price_{commodityji}}$ * Price Volatility Factor$_{commodityj}$ + LnMean$_{commodityj}$)**,12)),12)** * **Round(**$Acres_{commodityj}$**,12)), 12)**	Adjusted Standard Deviation Quantity$_{commodityj}$ (AdjStnDev)	Internal		9999999999.99999999	None	Adjusted Standard Deviation Quantity for each Commodity/Acreage report line in the Whole Farm Unit.
	Adjusted Mean Quantity$_{commodityj}$ (AdjMean)	Internal		999999.999999999	None	Adjusted Mean Quantity for each Commodity/Acreage report line in the Whole Farm Unit.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0075 Peanuts 0051 Grain Sorghum 0078 Sunflowers 0067 Dry Peas 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
	Simulated Revenue Protection Harvest Price Excluded Losses Whole Farm (SimRPhpeLossesWF)	Internal		9999999999.99999999999	Round to 12 decimals.	Simulated Revenue Protection Harvest Price Excluded Losses for All Commodity/Acreage report lines in the Whole Farm Unit.
	Coverage Level Percent$_{commodityj}$ (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
Simulated Revenue Protection Harvest Price Excluded Losses Whole Farm $=$ $\sum\limits_{i=1}^{500}$ **Round**(MAX (0, $\sum\limits_{j=}^{\text{all commodities}}$ covlvl$_{commodityj}$ * AY$_{commodityj}$ * ProjPrice$_{commodityj}$ * Acres$_{commodityj}$) - $\sum\limits_{j=}^{\text{all commodities}}$ **Round**(MAX(0, **Round**(Yield$_{commodityji}$ * AdjStdDev$_{commodityj}$ + AdjMean$_{commodityj,12}$)),12) * **Round**(MIN(2 * ProjPrice$_{commodityj}$, **Round**($e^{(Price_{commodityji} * \text{Price Volatility Factor}_{commodityj} + LnMean_{commodityj})}$,12)),12) * **Round**(Acres$_{commodityj,12}$)), 12)	Approved Yield$_{commodityj}$ (AY)	P11	42	99999999.99	None	Approved Yield for each Commodity/Acreage report line in the Whole Farm Unit. For APH Trend, Yield Cup, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Reported Acreage$_{commodityj}$ (Acres)	P11	48	999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage. Reported Acreage for each Commodity/Acreage report line in the Whole Farm Unit.
	Projected Price or Contract Price$_{commodityj}$ (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810". Projected Price or Contract Price (as addressed in Section 1) for each Commodity/Acreage report line in the Whole Farm Unit.
	Yield Draw Quantity$_{commodityj}$[i] (Yield)	ADM		S99.999999999	None	Yield Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.
	Adjusted Standard Deviation Quantity$_{commodityj}$ (AdjStnDev)	Internal		9999999999.99999999	None	Adjusted Standard Deviation Quantity for each Commodity/Acreage report line in the Whole Farm Unit.
	Adjusted Mean Quantity$_{commodityj}$ (AdjMean)	Internal		999999.999999999	None	Adjusted Mean Quantity for each Commodity/Acreage report line in the Whole Farm Unit.
	Price Draw Quanity$_{commodityj}$[i] (Price)	ADM		S99.999999999	None	Price Draw Quantity for each Commodity/Acreage report line in the Whole Farm Unit.

Exhibit Name:	Premium Calculation		**Reinsurance Year:**	2019
Exhibit Number:	P11-1, Plan 01, 02, 03		**Version:**	Approved
Record Name:	Acreage		**Release Date:**	12/6/2019
Record Code:	P11			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Simulated Revenue Protection Harvest Price Excluded Losses Whole Farm (continued)	$$= \sum_{i=1}^{500} \mathbf{Round}\left(MAX\left(0, \sum_{j=}^{all\ commodities} covlvl_{commodityj} * AY_{commodityj} * ProjPrice_{commodityj} * Acres_{commodityj}\right) - \sum_{j=}^{all\ commodities} \mathbf{Round}\left(MAX\left(0, \mathbf{Round}(Yield_{commodityji} * AdjStdDev_{commodityj} + AdjMean_{commodityj,\mathbf{12}})\right), \mathbf{12}\right) * \mathbf{Round}\left(MIN(2 * ProjPrice_{commodityj}, \mathbf{Round}(e^{(Price_{commodityji} * Price\ Volatility\ Factor_{commodityj} + LnMean_{commodityj})}, \mathbf{12})), \mathbf{12}\right) * \mathbf{Round}(Acres_{commodityj}, \mathbf{12})\right), \mathbf{12})$$	Price Volatility Factor$_{commodityj}$	Internal		999999.99999999	None	Price Volatility Factor for each Commodity/Acreage report line in the Whole Farm Unit.
		log Mean$_{commodityj}$ (LnMean)	Internal		999999.99999999	None	Log Mean for each Commodity/Acreage report line in the Whole Farm Unit.

	Exhibit Name: Premium Calculation			
	Exhibit Number: P11-1, Plan 01, 02, 03		Reinsurance Year: 2019	
	Record Name: Acreage		Version: Approved	
	Record Code: P11		Release Date: 12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Revenue Protection Whole Farm Rate $= \dfrac{\dfrac{SimRPLossesWF}{500}}{\displaystyle\sum_{j=}^{\text{all commodities}}(covlvl_{commodityj} * AY_{commodityj} * ProjPrice_{commodityj} * Acres_{commodityj})}$	Coverage Level Percent$_{commodityj}$ (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup) and "YE" (Yield Exclusion).
	Revenue Protection Whole Farm Rate	Internal		9999999999.99999999	Round to 8 decimals.	
	Projected Price or Contract Price$_{commodityj}$ (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810". Projected Price or Contract Price (as addressed in Section 1) for each Commodity/Acreage report line in the Whole Farm Unit.
Revenue Protection with Harvest Price Exclusion Whole Farm Rate $= \dfrac{\dfrac{SimRPhpeLossesWF}{500}}{\displaystyle\sum_{j=}^{\text{all commodities}}(covlvl_{commodityj} * AY_{commodityj} * ProjPrice_{commodityj} * Acres_{commodityj})}$	Coverage Level Percent$_{commodityj}$ (covlvl)	P14	34	9.9999	None	For Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) this will be Effective Coverage Level Percent. See Section 16 for Option Code "TA" (Trend Adjustment) and "YE" (Yield Exclusion).
	Revenue Protection with Harvest Price Exclusion Whole Farm Rate	Internal		9999999999.99999999	Round to 8 decimals.	
	Projected Price or Contract Price$_{commodityj}$ (ProjPrice)	ADM		99999.9999	None	Edit with ADM Price, "A00810". Projected Price or Contract Price (as addressed in Section 1) for each Commodity/Acreage report line in the Whole Farm Unit.

Exhibit Name: Premium Calculation **Exhibit Number:** P11-1, Plan 01, 02, 03 **Record Name:** Acreage **Record Code:** P11			**Reinsurance Year:** 2019 **Version:** Approved **Release Date:** 12/6/2019			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
When Insurance Plan Code equals Revenue Protection, "02": Whole Farm Base Premium Rate = Revenue Protection Whole Farm Rate	Whole Farm Base Premium Rate	Internal		9999999999.99999999	None	
When Insurance Plan Code equals Revenue Protection with Harvest Price Exclusion, "03": Whole Farm Base Premium Rate = Revenue Protection with Harvest Price Exclusion Whole Farm Rate	Whole Farm Base Premium Rate	Internal		9999999999.99999999	None	
Section 8: Premium Rate						**The Premium Rate for ALL Unit Structures should be capped at .999 in the event various adjustments to the Base Premium Rate would cause it to exceed 1.0.**
When Unit Structure Code equals Whole Farm Unit, "WU": Premium Rate = MIN(.999, Round(Whole Farm Base Premium Rate * Sum ((Reported Acreage * Multiplicative Optional Rate Adjustment Factor) / Sum(Total Reported Acreage) for Whole Farm including Prevented Planting) + Sum ((Reported Acreage * Additive Optional Rate Adjustment Factor) / Sum(Total Reported Acreage) for Whole Farm including Prevented Planting), 8))	Premium Rate	Internal		9999999999.99999999	Round to 8 decimals.	Premium Rate is capped at 0.99900000. For situations where the option factors vary by Commodity, a reported Acreage weighted average of the Option Factors should be used to determine the Multiplicative and Additive Optional Rate adjustments to be used in the computation of the Premium Rate for Whole Farm Unit.
	Total Reported Acreage	Internal		99999999.99	None	Total Reported Acreage for the Whole Farm including Prevented Planting.

Exhibit Name: Premium Calculation					
Exhibit Number: P11-1, Plan 01, 02, 03		**Reinsurance Year:** 2019			
Record Name: Acreage		**Version:** Approved			
Record Code: P11		**Release Date:** 12/6/2019			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
When Unit Structure Code DOES NOT EQUAL Whole Farm Unit, "WU": Premium Rate = MIN(.999, Base Premium Rate * Unit Structure Discount Factor * Multiplicative Optional Rate Adjustment Factor+ Additive Optional Rate Factor + Capped Revenue Add On Factor)	Premium Rate	Internal		9999999999.99999999	Round to 8 decimals.	**Set Capped Revenue Add On Factor as follows:** If Insurance Plan Code equals 01, Capped Revenue Add On Factor will equal zero. If Unit Structure Code does not equal Whole Farm (WU), set Capped Revenue Add On Factor as follows: If Section 6 is applicable, Capped Revenue Add On Factor will equal Capped Revenue Protection Add On Rate when Insurance Plan Code equals 02 or Capped Revenue Protection with Harvest Price Exclusion Add On Rate when Insurance Plan Code equals 03. If Section 6 is not applicable, Capped Revenue Add On Factor will equal Preliminary Revenue Protection Add On Rate when Insurance Plan Code equals 02 or Preliminary Revenue Protection with Harvest Price Exclusion Add On Rate when Insurance Plan Code equals 03.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 9: Total Premium Amount, Subsidy Amount, and Producer Premium Amount							
Preliminary Total Premium	= Premium Liability Amount * Premium Rate * Experience Factor * Premium Surcharge Percent * Total Premium Multiplicative Optional Rate Adjustment Factor	Preliminary Total Premium	Internal		9999999999	Round to whole number.	
		Experience Factor	P11	47	9.999	None	Experience Factor is only applicable for Insurance Plan Code Yield Protection, "01".
		Premium Surcharge Percent	Internal				Use when the Approved Yield Had a Cup or Surcharge applied. Does not apply when option "YC" is elected. Set to 1.00.
		Total Premium Multiplicative Optional Rate Adjustment Factor	ADM		9.9999	None	If Option Rate with Rate Method Code equal "T". Edit with ADM Option Rate, "A01060". Currently this will be used for Short Rate Option.
Total Premium Amount =	Preliminary Total Premium * Multiple Commodity Adjustment Factor	Total Premium Amount	P11	95	9999999999	Round to whole number.	
		Multiple Commodity Adjustment Factor	ICE		9999.999	None	Edit with ICE Multiple Cropping, "D00063". Used when there is a first Commodity Loss.
Subsidy Amount =	Total Premium Amount * Subsidy Percent	Subsidy Amount	P11	93	9999999999	Round to whole number.	If this record qualifies for Beginning Farmer and Rancher or Native Sod, see Section 18 for subsidy calculations.
		Subsidy Percent	ADM		9.999	None	Edit with ADM Subsidy Percent, "A00070".
Producer Premium Amount	= Total Premium Amount - Subsidy Amount	Producer Premium Amount	P11	94	9999999999	Round to whole number.	

Exhibit Name: Premium Calculation			
Exhibit Number: P11-1, Plan 01, 02, 03		**Reinsurance Year:** 2019	
Record Name: Acreage		**Version:** Approved	
Record Code: P11		**Release Date:** 12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Cottonseed Endorsement Option 'SE'						Information (Approved Yield, Reported Acreage, Insured Share Percent) will be obtained from Cotton P11 record and Rate Yield from P15 record associated with the Cottonseed record. CAT does not apply to Plan 01 Cottonseed. Unit Structure Code 'WU' does not apply to Cottonseed.

Section 10: Liability Calculation

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Modified Yield = Approved Yield * Option Conversion Factor	Modified Yield	Internal		99999999.99	Round to whole Number.	
	Approved Yield	P11	42	99999999.99	None	From Cotton P11 record. For skip row cotton, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Option Conversion Factor	ADM		9.9999	None	Edit with ADM Option Rate, "A01060".
Premium Guarantee Per Acre Amount = Modified Yield * Coverage Level Percent	Premium Guarantee Per Acre Amount	Internal		999999999.99	Round to whole number.	
	Coverage Level Percent	P14	34	9.9999	None	
Guarantee Per Acre Amount = **When Guarantee Adjustment Type Code equals Late Planting, "L" OR Prevented Planting, "P":** Premium Guarantee Per Acre Amount * Guarantee Adjustment Factor	Guarantee Per Acre Amount	Internal		999999999.99	Round to whole number.	
	Guarantee Adjustment Factor	P11	69	0.999	None	Edit with the Guarantee Adjustment ICE, "D00068" or ADM Guarantee Adjustment, "A01220" for Prevented Planting.
Price Election Amount = Projected Price * Price Election Percent	Price Election Amount	Internal		9999.9999	None	Cottonseed will equal the Projected Price from ADM regardless of Price Election Percent for Cotton Lint.
	Projected Price	ADM		99999.9999		
	Price Election Percent	ICE		9.9999	None	Will always be 1.000 for Cottonseed.
Premium Total Guarantee Amount = Premium Guarantee Per Acre Amount * Price Election Amount * Reported Acreage	Premium Total Guarantee Amount	Internal		99999999.99	Round to 2 decimals.	
	Price Election Amount	Internal		9999.9999	None	
	Reported Acreage	P11	48	99999999.99	None	From Cotton P11 record.

<table>
<tr><td>Exhibit Name: Premium Calculation</td><td></td></tr>
<tr><td>Exhibit Number: P11-1, Plan 01, 02, 03</td><td>Reinsurance Year: 2019</td></tr>
<tr><td>Record Name: Acreage</td><td>Version: Approved</td></tr>
<tr><td>Record Code: P11</td><td>Release Date: 12/6/2019</td></tr>
</table>

<u>Insurance Plan Code</u>	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
<u>Commodity Code</u>	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Total Guarantee Amount =	Guarantee Per Acre Amount * Price Election Amount * Reported Acreage	Total Guarantee Amount	P11	103	99999999.99	Round to 2 decimals.	
		Price Election Amount	Internal		9999.9999	None	
		Reported Acreage	P11	48	999999.99	None	From Cotton P11 record.
Premium Liability Amount =	Premium Total Guarantee Amount * Insured Share Percent	Premium Liability Amount	Internal		9999999999	Round to whole number.	
		Insured Share Percent	P11	43	9.9999	None	From Cotton P11 record.
Liability Amount = Total Guarantee Amount * Insured Share Percent		Liability Amount	P11	94	9999999999	Round to whole number.	
		Insured Share Percent	P11	43	9.9999	None	From Cotton P11 record.

Section 11: Premium Rate

Calculations		**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Premium Rate =	MIN(.999, Base Premium Rate * Unit Structure Discount Factor * Multiplicative Optional Rate Adjustment Factor+ Additive Optional Rate Factor)	Premium Rate	Internal		9999999999.99999999	Round to 8 decimals.	To Determine the Premium Rate for the Cottonseed records: 1) Use the Rate Yield as determined under normal procedures. 2) Process the Rate Yield through section 3 of these procedures using the rating components for regular Cotton offer. If Yield Exclusion is elected, see section 24 for the current year base premium rate calculation when the Effective Coverage Level exceeds the MAX ADM coverage level. 3) Find the Unit Structure Discount Factor to be applied later from section 2 of these procedures for regular Cotton offer. 4) Find the applicable Option Factors to be applied later from section 4 for regular Cotton offer. 5) Sections 5, 6, 7 are not applicable for Cottonseed records.
		Multiplicative Optional Rate Adjustment Factor	Internal		999999.9999		
		Additive Optional Rate Adjustment Factor	Internal		999999.9999		

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03			**Reinsurance Year:** 2019			
Record Name: Acreage			**Version:** Approved			
Record Code: P11			**Release Date:** 12/6/2019			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 12: Total Premium Amount, Subsidy Amount, and Producer Premium Amount						
Preliminary Total Premium = Premium Liability Amount * Premium Rate * Experience Factor * Premium Rate Surcharge Percent	Preliminary Total Premium	Internal		9999999999	Round to whole number.	
	Experience Factor	P11	47	9.999	None	Experience Factor is only applicable for Insurance Plan Code Yield Protection, "01".
	Premium Rate Surcharge Percent					Does not apply when option "YC" is elected. Set to 1.00.
Total Premium Amount = Preliminary Total Premium * Multiple Commodity Adjustment Factor	Total Premium Amount	P11	95	9999999999	Round to whole number.	
	Multiple Commodity Adjustment Factor	ICE		9999.999	None	Edit with ICE Multiple Cropping, "D00063".
Subsidy Amount = Total Premium Amount * Subsidy Percent	Subsidy Amount	P11	93	9999999999	Round to whole number.	If this record qualifies for Beginning Farmer and Rancher or Native Sod, see Section 18 for subsidy calculations.
	Subsidy Percent	ADM		9.999	None	Edit with ADM Subsidy Percent, "A00070".
Producer Premium Amount = Total Premium Amount - Subsidy Amount	Producer Premium Amount	P11	94	9999999999	Round to whole number.	
APH Yield Trend (Trend Adjustment Option 'TA'), Yield Cup (Option 'YC') and Yield Exclusion (Option 'YE')						Trend Adjustment Option (TA), Yield Cup Option (YC), and Yield Exclusion Option (YE) ONLY available in select counties for selected crops. See "white papers" for examples.
Section 13: Effective Coverage Level Calculation						
When Commodity Code equals Dry Beans "0047" and Type Code equals Contract "62", or Commodity Code equals Dry Peas "0067" and Type Code equals Spring Contract "98":						
Effective Coverage Level Percent = Coverage Level Percent * Round(Approved Yield * Contract Price,0) / Adjusted Yield	Effective Coverage Level Percent	Internal		99.9999	Round to 2 decimals.	
	Coverage Level Percent	P14	34	9.9999	None	
	Approved Yield	P11	42	99999999.99	None	For APH Trend, Yield Cup, and Yield Exclusion, the Approved Yield will be the greater of the calculated Approved Yield and the Adjusted Yield.
	Contract Price	P11	46	9999.9999	None	
	Adjusted Yield	P15	44	99999999.99	None	

Exhibit Name: Premium Calculation					
Exhibit Number: P11-1, Plan 01, 02, 03		**Reinsurance Year:** 2019			
Record Name: Acreage		**Version:** Approved			
Record Code: P11		**Release Date:** 12/6/2019			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
For all others:						
Effective Coverage Level Percent = Coverage Level Percent * Approved Yield/Adjusted Yield	Effective Coverage Level Percent	Internal		99.9999	Rounded to 2 decimal places.	
	Coverage Level Percent	P14	34	9.9999	None	
	Approved Yield	P11	42	99999999.99	None	For APH Trend, Yield Cup, and Yield Exclusion, the Approved Yield will be the greater of the calculated approved yield and the adjusted yield. For skip row commodities, the approved yield is the converted approved yield from the P15 record with skip row (yield conversion factor) applied.
	Adjusted Yield	P15	44	99999999.99	None	For skip row commodities, the adjusted yield is the converted adjusted yield from the P15 record with skip row (yield conversion factor) applied.

Exhibit Name:	Premium Calculation					
Exhibit Number:	P11-1, Plan 01, 02, 03		**Reinsurance Year:**	2019		
Record Name:	Acreage		**Version:**	Approved		
Record Code:	P11		**Release Date:**	12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 14: Rate Differential Factor						When Trend Adjustment Option (TA) was chosen and yield reflects a trend or when Yield Cup Option "YC" was chosen or when Yield Exclusion Option "YE" was chosen.
When the Insurance Option Code List contains Options "YE" or "YC":						
	Rate Differential Factor	Internal		9.999999999	Round to 9 decimal places	
	Base Rate Differential Factor	ADM		9.999999999	None	Base Rate Differential Factor is equal to Rate Differential for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
Rate Differential Factor $=$ $(1+ (ROUND (MIN (((MAX (0.85, Effective Coverage Level Percent) -0.85) / 0.15) ,1)^3 ,7)) * 0.05) * (Round(Base Rate Differential Factor + (Upper Bound Rate Differential Factor - Lower Bound Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9))$	Upper Bound Rate Differential Factor	ADM		9.999999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

	Exhibit Name:	Premium Calculation				
	Exhibit Number:	P11-1, Plan 01, 02, 03		Reinsurance Year:	2019	
	Record Name:	Acreage		Version:	Approved	
	Record Code:	P11		Release Date:	12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Rate Differential Factor (continued)	$=$ (1+ (ROUND (MIN (((MAX (0.85,Effective Coverage Level Percent) -0.85) / 0.15) ,1)^3 ,7)) * 0.05) * (Round(Base Rate Differential Factor + (Upper Bound Rate Differential Factor - Lower Bound Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9))	Lower Bound Rate Differential Factor	ADM		9.999999999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Prior Year Rate Differential Factor	= Round(Base Prior Year Rate Differential Factor + (Upper Bound Prior Year Rate Differential Factor - Lower Bound Prior Year Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9)	Prior Year Rate Differential Factor	Internal		9.999999999	Round to 9 decimal places.	
		Base Prior Year Rate Differential Factor	ADM		9.999999999	None	Base Prior Year Rate Differential Factor is equal to Prior Year Rate Differential for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
		Upper Bound Prior Year Rate Differential Factor	ADM		9.999999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

	Exhibit Name:	Premium Calculation		
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
	Record Name:	Acreage	Version:	Approved
	Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Prior Year Rate Differential Factor = (contintued)	Round(Base Prior Year Rate Differential Factor + (Upper Bound Prior Year Rate Differential Factor - Lower Bound Prior Year Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9)	Lower Bound Prior Year Rate Differential Factor	ADM		9.999999999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

<table>
<tr><td colspan="6">
Exhibit Name: Premium Calculation
Exhibit Number: P11-1, Plan 01, 02, 03
Record Name: Acreage
Record Code: P11
Reinsurance Year: 2019
Version: Approved
Release Date: 12/6/2019
</td></tr>
</table>

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
When Trend Adjustment Option "TA" is elected alone (excludes "YC" and "YE")
		Rate Differential Factor	Internal		9.999999999	Round to 9 decimal places	
		Base Rate Differential Factor	ADM		9.999999999	None	Base Rate Differential Factor is equal to Rate Differential for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
Rate Differential Factor =	Round(Base Rate Differential Factor + (Upper Bound Rate Differential Factor - Lower Bound Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9)	Upper Bound Rate Differential Factor	ADM		9.999999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.
		Lower Bound Rate Differential Factor	ADM		9.999999999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	

Exhibit Name: Premium Calculation			
Exhibit Number: P11-1, Plan 01, 02, 03		**Reinsurance Year:** 2019	
Record Name: Acreage		**Version:** Approved	
Record Code: P11		**Release Date:** 12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Rate Differential Factor =	Round(Base Rate Differential Factor + (Upper Bound Rate Differential Factor - Lower Bound Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9)	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

Exhibit Name:	Premium Calculation					
Exhibit Number:	P11-1, Plan 01, 02, 03		**Reinsurance Year:**	2019		
Record Name:	Acreage		**Version:**	Approved		
Record Code:	P11		**Release Date:**	12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
		Prior Year Rate Differential Factor	Internal		9.999999999	Round to 9 decimal places.	
Prior Year Rate Differential Factor	= Round(Base Prior Year Rate Differential Factor + (Upper Bound Prior Year Rate Differential Factor - Lower Bound Prior Year Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9)	Base Prior Year Rate Differential Factor	ADM		9.999999999	None	Base Prior Year Rate Differential Factor is equal to Prior Year Rate Differential for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
		Upper Bound Prior Year Rate Differential Factor	ADM		9.999999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

Exhibit Name: Premium Calculation		**Reinsurance Year:** 2019	
Exhibit Number: P11-1, Plan 01, 02, 03		**Version:** Approved	
Record Name: Acreage		**Release Date:** 12/6/2019	
Record Code: P11			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Prior Year Rate Differential Factor = (contintued)	Round(Base Prior Year Rate Differential Factor + (Upper Bound Prior Year Rate Differential Factor - Lower Bound Prior Year Rate Differential Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 9)	Lower Bound Prior Year Rate Differential Factor	ADM		9.999999999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 15: Unit Residual Factor						The lookup/interpolation/extrapolation procedure for 'Unit Residual Factor and Prior Unit Residual Factor' when Trend Adjustment Option (TA) was chosen and yield reflects a trend or when Yield Cup Option was chosen or when Yield Exclusion Option "YE" was chosen.
When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU", use the following calculations for Unit Residual Factor and Prior Year Unit Residual Factor:						
	Unit Residual Factor	Internal		999.999	Round to 3 decimal places.	The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels within the chosen unit structure regardless of Coverage Type Code where applicable (Buy-up/CAT).
Unit Residual Factor = Round(Base Unit Residual Factor + (Upper Bound Unit Residual Factor - Lower Bound Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Base Unit Residual Factor	ADM		999.999	None	Base Unit Residual Factor is equal to Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
	Upper Bound Unit Residual Factor	ADM		999.999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Unit Residual Factor (contintued) = Round(Base Unit Residual Factor + (Upper Bound Unit Residual Factor - Lower Bound Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Lower Bound Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
	Effective Coverage Level Percent	Internal		99.9999	None	
	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

<table>
<tr><td colspan="2">Exhibit Name: Premium Calculation</td><td></td><td></td></tr>
</table>

Exhibit Name: Premium Calculation			
Exhibit Number: P11-1, Plan 01, 02, 03		**Reinsurance Year:** 2019	
Record Name: Acreage		**Version:** Approved	
Record Code: P11		**Release Date:** 12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
	Prior Year Unit Residual Factor	Internal		999.999	Round to 3 decimal places.	The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels within the chosen unit structure
	Base Prior Year Unit Residual Factor	ADM		999.999	None	Base Prior Year Unit Residual Factor is equal to Prior Year Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
Prior Year Unit Residual Factor = Round(Base Prior Year Unit Residual Factor + (Upper Bound Prior Year Unit Residual Factor - Lower Bound Prior Year Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Upper Bound Prior Year Unit Residual Factor	ADM		999.999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.
	Lower Bound Prior Year Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
	Effective Coverage Level Percent	Internal		99.9999	None	

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03				**Reinsurance Year:** 2019		
Record Name: Acreage				**Version:** Approved		
Record Code: P11				**Release Date:** 12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Prior Year Unit Residual Factor = (continued)	Round(Base Prior Year Unit Residual Factor + (Upper Bound Prior Year Unit Residual Factor - Lower Bound Prior Year Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

Exhibit Name: Premium Calculation	
Exhibit Number: P11-1, Plan 01, 02, 03	**Reinsurance Year:** 2019
Record Name: Acreage	**Version:** Approved
Record Code: P11	**Release Date:** 12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
When Unit Structure Code is equal to Enterprise Unit, 'EU' or 'EP', use the following calculations for Enterprise Unit Residual Factor and Prior Year Enterprise Unit Residual Factor:						
	Enterprise Unit Residual Factor	Internal		999.999	Round to 3 decimal places.	The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels within the chosen unit structure
	Base Enterprise Unit Residual Factor	ADM		999.999	None	Base Enterprise Unit Residual Factor is equal to Enterprise Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
Enterprise Unit Residual Factor = Round(Base Enterprise Unit Residual Factor + (Upper Bound Enterprise Unit Residual Factor - Lower Bound Enterprise Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Upper Bound Enterprise Unit Residual Factor	ADM		999.999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

	Exhibit Name:	Premium Calculation		
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
	Record Name:	Acreage	Version:	Approved
	Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Enterprise Unit Residual Factor = (contintued)	Round(Base Enterprise Unit Residual Factor + (Upper Bound Enterprise Unit Residual Factor - Lower Bound Enterprise Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Lower Bound Enterprise Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

	Exhibit Name:	Premium Calculation		
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
	Record Name:	Acreage	Version:	Approved
	Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Prior Year Enterprise Unit Residual Factor = Round(Base Enterprise Prior Year Unit Residual Factor + (Upper Bound Prior Year Enterprise Unit Residual Factor - Lower Bound Prior Year Enterprise Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Prior Year Enterprise Unit Residual Factor	Internal		999.999	Round to 3 decimal places.	The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels within the chosen unit structure
	Base Enterprise Prior Year Unit Residual Factor	ADM		999.999	None	Base Enterprise Prior Year Unit Residual Factor is equal to Enterprise Prior Year Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
	Upper Bound Prior Year Enterprise Unit Residual Factor	ADM		999.999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

	Exhibit Name:	Premium Calculation		
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
	Record Name:	Acreage	Version:	Approved
	Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Prior Year Enterprise Unit Residual Factor = (continued)	Round(Base Enterprise Prior Year Unit Residual Factor + (Upper Bound Prior Year Enterprise Unit Residual Factor - Lower Bound Prior Year Enterprise Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Lower Bound Prior Year Enterprise Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	**Reinsurance Year:**	2019
Record Name:	Acreage	**Version:**	Approved
Record Code:	P11	**Release Date:**	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
When Unit Structure Code is equal to Whole Farm Unit, 'WU', use the following calculations for Whole Farm Unit Residual Factor and Prior Year Whole Farm Unit Residual Factor:						
	Whole Farm Unit Residual Factor	Internal		999.999	Round to 3 decimal places.	The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels within the chosen unit structure
	Base Whole Farm Unit Residual Factor	ADM		999.999	None	Base Whole Farm Unit Residual Factor is equal to Whole Farm Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
Whole Farm Unit Residual Factor = Round(Base Whole Farm Unit Residual Factor + (Upper Bound Whole Farm Unit Residual Factor - Lower Bound Whole Farm Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Upper Bound Whole Farm Unit Residual Factor	ADM		999.999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.

<table>
<tr><td colspan="2">**Exhibit Name:** Premium Calculation</td><td></td></tr>
<tr><td colspan="2">**Exhibit Number:** P11-1, Plan 01, 02, 03</td><td>**Reinsurance Year:** 2019</td></tr>
<tr><td colspan="2">**Record Name:** Acreage</td><td>**Version:** Approved</td></tr>
<tr><td colspan="2">**Record Code:** P11</td><td>**Release Date:** 12/6/2019</td></tr>
</table>

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Whole Farm Unit Residual Factor = (continued)	Round(Base Whole Farm Unit Residual Factor + (Upper Bound Whole Farm Unit Residual Factor - Lower Bound Whole Farm Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Lower Bound Whole Farm Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	
		Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level Percent equals an existing ADM Coverage Level then this will be the Effective Coverage Level Percent. If the Effective Coverage Level Percent falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level Percent is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

Exhibit Name: Premium Calculation			
Exhibit Number: P11-1, Plan 01, 02, 03		**Reinsurance Year:** 2019	
Record Name: Acreage		**Version:** Approved	
Record Code: P11		**Release Date:** 12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Prior Year Whole Farm Unit Residual Factor =	Round(Base Whole Farm Prior Year Unit Residual Factor + (Upper Bound Prior Year Whole Farm Unit Residual Factor - Lower Bound Prior Year Whole Farm Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Prior Year Whole Farm Unit Residual Factor	Internal		999.999	Round to 3 decimal places.	The cap value for the Residual Factors is the MAX(Residual Factor) from all coverage levels within the chosen unit structure
		Base Whole Farm Base Prior Year Unit Residual Factor	ADM		999.999	None	Base Whole Farm Base Prior Year Unit Residual Factor is equal to Whole Farm Base Prior Year Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".

Exhibit Name: Premium Calculation		**Reinsurance Year:** 2019	
Exhibit Number: P11-1, Plan 01, 02, 03		**Version:** Approved	
Record Name: Acreage		**Release Date:** 12/6/2019	
Record Code: P11			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0075 Peanuts 0051 Grain Sorghum 0078 Sunflowers 0067 Dry Peas 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Prior Year Whole Farm Unit Residual Factor = Round(Base Whole Farm Prior Year Unit Residual Factor + (Upper Bound Prior Year Whole Farm Unit Residual Factor - Lower Bound Prior Year Whole Farm Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Upper Bound Prior Year Whole Farm Unit Residual Factor	ADM		999.999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.
	Lower Bound Prior Year Whole Farm Unit Residual Factor	ADM		999.999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
	Effective Coverage Level Percent	Internal		99.9999	None	

	Exhibit Name:	Premium Calculation		
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
	Record Name:	Acreage	Version:	Approved
	Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Prior Year Whole Farm Unit Residual Factor = Round(Base Whole Farm Prior Year Unit Residual Factor + (Upper Bound Prior Year Whole Farm Unit Residual Factor - Lower Bound Prior Year Whole Farm Unit Residual Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 3)	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.
Section 15: Unit Discount Calculation						The lookup/interpolation/extrapolation procedure for 'Optional Unit Discount Factor, Basic Unit Discount Factor, and Enterprise Unit Discount Factor' when Trend Adjustment Option (TA), Yield Cup Option (YC), or Yield Exclusion Option (YE) was chosen and yield reflects a trend.

When Unit Structure Code is equal to Optional Unit, "OU", "UA", or "UD", use the following calculation for Unit Structure Discount Factor:

<table>
<tr><td colspan="2" rowspan="2">Exhibit Name: Premium Calculation
Exhibit Number: P11-1, Plan 01, 02, 03
Record Name: Acreage
Record Code: P11</td><td></td></tr>
</table>

Exhibit Name: Premium Calculation		**Reinsurance Year:** 2019	
Exhibit Number: P11-1, Plan 01, 02, 03		**Version:** Approved	
Record Name: Acreage		**Release Date:** 12/6/2019	
Record Code: P11			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
		Unit Structure Discount Factor	Internal		9.999999999	Round to 4 decimal places.	Capped at 1.0
		Base Coverage Level Percent Optional Unit Discount Factor	ADM		9.999999999	None	Base Coverage Level Percent Optional Unit Discount Factor is equal to Percent Optional Discount for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
Unit Structure Discount Factor =	Round(Base Coverage Level Percent Optional Unit Discount Factor + (Upper Bound Coverage Level Percent Optional Unit Discount Factor - Lower Bound Coverage Level Percent Optional Unit Discount Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 4)	Upper Bound Coverage Level Percent Optional Unit Discount Factor	ADM		9.999999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.
		Lower Bound Coverage Level Percent Optional Unit Discount Factor	ADM		9.999999999	None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	

	Exhibit Name:	Premium Calculation			
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019	
	Record Name:	Acreage	Version:	Approved	
	Record Code:	P11	Release Date:	12/6/2019	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Unit Structure Discount Factor = (continued)	Round(Base Coverage Level Percent Optional Unit Discount Factor + (Upper Bound Coverage Level Percent Optional Unit Discount Factor - Lower Bound Coverage Level Percent Optional Unit Discount Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 4)	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
When Unit Structure Code is equal to Basic Unit, 'BU', use the following calculation for Unit Structure Discount Factor:							
		Unit Structure Discount Factor	Internal		9.999999999	Round to 4 decimal places.	Capped at 1.0
		Base Coverage Level Percent Basic Unit Discount Factor	ADM		9.999999999	None	Base Coverage Level Percent Basic Unit Discount Factor is equal to Basic Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
Unit Structure Discount Factor	= Round(Base Coverage Level Percent Basic Unit Discount Factor + (Upper Bound Coverage Level Percent Basic Unit Discount Factor - Lower Bound Coverage Level Percent Basic Unit Discount Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 4)	Upper Bound Coverage Level Percent Basic Unit Discount Factor	ADM		9.999999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.
		Lower Bound Coverage Level Percent Basic Unit Discount Factor	ADM			None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03				**Reinsurance Year:** 2019		
Record Name: Acreage				**Version:** Approved		
Record Code: P11				**Release Date:** 12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Unit Structure Discount Factor = (continued) Round(Base Coverage Level Percent Basic Unit Discount Factor + (Upper Bound Coverage Level Percent Basic Unit Discount Factor - Lower Bound Coverage Level Percent Basic Unit Discount Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 4)	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

Exhibit Name: Premium Calculation					
Exhibit Number: P11-1, Plan 01, 02, 03			**Reinsurance Year:** 2019		
Record Name: Acreage			**Version:** Approved		
Record Code: P11			**Release Date:** 12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations		Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
When Unit Structure Code is equal to Enterprise Unit, 'EU' or 'EP', use the following calculation for Unit Structure Discount Factor:							
		Unit Structure Discount Factor	Internal		9.999999999	Round to 4 decimal places.	Capped at 1.0
Unit Structure Discount Factor	= Round(Base Coverage Level Percent Enterprise Unit Discount Factor + (Upper Bound Coverage Level Percent Enterprise Unit Discount Factor - Lower Bound Coverage Level Percent Enterprise Unit Discount Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 4)	Base Coverage Level Percent Enterprise Unit Discount Factor	ADM		9.999999999	None	Base Coverage Level Percent Enterprise Unit Discount Factor is equal to Enterprise Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
		Upper Bound Coverage Level Percent Enterprise Unit Discount Factor	ADM		9.999999999	None	Based on the 'upper bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the higher ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the highest ADM Coverage Level.
		Lower Bound Coverage Level Percent Enterprise Unit Discount Factor	ADM			None	Based on the 'lower bound' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be based on the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be based on the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be based on the second highest ADM Coverage Level.
		Effective Coverage Level Percent	Internal		99.9999	None	

Exhibit Name:	Premium Calculation		
Exhibit Number:	P11-1, Plan 01, 02, 03	**Reinsurance Year:**	2019
Record Name:	Acreage	**Version:**	Approved
Record Code:	P11	**Release Date:**	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Unit Structure Discount Factor = (continued)	Round(Base Coverage Level Percent Enterprise Unit Discount Factor + (Upper Bound Coverage Level Percent Enterprise Unit Discount Factor - Lower Bound Coverage Level Percent Enterprise Unit Discount Factor) * (Effective Coverage Level Percent - Floored Effective Coverage Level Percent) * 20, 4)	Floored Effective Coverage Level Percent	Internal		99.9999	None	Based on the 'floored' Coverage Level. Edit with ADM Coverage Level Differential, "A01040". If the Effective Coverage Level equals an existing ADM Coverage Level then this will be the Effective Coverage Level. If the Effective Coverage Level falls between existing ADM Coverage Levels then this will be the lower ADM Coverage Level. If the Effective Coverage Level is greater than the maximum ADM Coverage Level then this will be the highest ADM Coverage Level.

Exhibit Name:	Premium Calculation					
Exhibit Number:	P11-1, Plan 01, 02, 03		**Reinsurance Year:**	2019		
Record Name:	Acreage		**Version:**	Approved		
Record Code:	P11		**Release Date:**	12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Downed Rice Endorsement (DRE) Option 'DC'						CAT does not apply to Downed Rice (DRE). Only Unit Structure Codes 'BU and OU' apply regardless of the base Rice selection. Price Election Percent for base Rice will apply to DRE. Subsidy Level will be 38% for DRE regardless of the base Rice Unit Structure or Coverage Level. Insured Share can be different for DRE than base Rice. Insured Share will be 100%. DRE coverage is not available for high-risk CAT acreage if excluded from additional coverage for Base Rice.

Section 16: Liability Calculation

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Premium Liability Amount = Dollar Amount of Insurance * Reported Acreage * Insured Share Percent * Price Election Percent	Premium Liability Amount	Internal		9999999999	Round to whole number.	
	Dollar Amount of Insurance	ADM		99999	None	Edit with ADM Price, "A00810", Fixed Coverage Amount with insurance option = 'DC'.
	Reported Acreage	P11	48	99999999.99	None	
	Insured Share Percent	P11	43	9.9999	None	DRE insured share will always be 100% without regards to base Rice.
	Price Election Percent	ICE		9.9999	None	From base Rice P14 record.
Liability Amount = Dollar Amount of Insurance * Reported Acreage * Insured Share Percent * Price Election Percent	Liability Amount	P11	94	9999999999	Round to whole number.	
	Dollar Amount of Insurance	ADM		99999	None	Edit with ADM Price, "A00810", Fixed Coverage Amount with insurance option = 'DC'.
	Reported Acreage	P11	48	999999.99	None	
	Insured Share Percent	P11	43	9.9999	None	DRE insured share will always be 100% without regards to base Rice.
	Price Election Percent	ICE		9.9999	None	From base Rice P14 record.

Exhibit Name: Premium Calculation					
Exhibit Number: P11-1, Plan 01, 02, 03			**Reinsurance Year:** 2019		
Record Name: Acreage			**Version:** Approved		
Record Code: P11			**Release Date:** 12/6/2019		

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 17: Total Premium Amount, Subsidy Amount, and Producer Premium Amount						
Preliminary Total Premium = Premium Liability Amount * Premium Rate	Preliminary Total Premium	Internal		9999999999	Round to whole number.	
	Premium Rate	ADM			None	Edit with ADM Option Rate, "A01060", rate with insurance option = 'DC'.
Total Premium Amount = Preliminary Total Premium	Total Premium Amount	P11	95	9999999999	Round to whole number.	
Subsidy Amount = Total Premium Amount * Subsidy Percent	Subsidy Amount	P11	93	9999999999	Round to whole number.	If this record qualifies for Beginning Farmer and Rancher or Native Sod, see Section 18 for subsidy calculations.
	Subsidy Percent	ADM		9.999	None	Edit with ADM Subsidy Percent, "A00070". Will always be 38% for DRE.
Producer Premium Amount = Total Premium Amount - Subsidy Amount	Producer Premium Amount	P11	94	9999999999	Round to whole number.	
Section 18: Beginning Farmer and Rancher (BFR), Veteran Farmer Rancher (VFR), Native Sod (NS) and Conservation Compliance (CC) Subsidy Calculations						
Base Subsidy Amount = Total Premium Amount * Subsidy Percent	Base Subsidy Amount	Internal		9999999999	Round to whole number	Cupped by the standard rule of $1 if applicable.
	Subsidy Percent	ADM		9.999	None	Edit with ADM Subsidy Percent, "A00070".
BFR/VFR Subsidy Amount = Total Premium Amount * 0.10 * (1 - CC Subsidy Reduction Percent)	BFR/VFR Subsidy Amount	Internal		9999999999	Round to whole number	Beginning Farmer Rancher/Veteran Rancher Farmer Subsidy Amount. If Applicable; else 0. 0.10 (10%).
Native Sod Subsidy Amount = Total Premium Amount * 0.50	Native Sod Subsidy Amount	Internal		9999999999	Round to whole number	If Applicable; else 0. 0.50 (50%). For CAT coverage, Native Sod Subsidy Amount is always 0.
CC Subsidy Reduction Amount = Base Subsidy Amount * CC Subsidy Reduction Percent	CC Subsidy Reduction Percent	P11	76	9.9999	None	If Applicable; else 0.
	CC Subsidy Reduction Amount	P11	111	9999999999	Round to whole number	CC Subsidy Reduction Amount. If Applicable; else 0.
Subsidy Amount = Base Subsidy Amount + BFR/VFR Subsidy Amount - Native Sod Subsidy Amount - CC Subsidy Reduction Amount	Subsidy Amount	P11	93	9999999999	Round to whole number	Subsidy Amount cannot exceed Total Premium Amount. Subsidy Amount will be cupped at $0.
Producer Premium Amount = Total Premium Amount - Subsidy Amount	Producer Premium Amount	P11	94	9999999999	Round to whole number	

Insurance Plan Code	01 Yield Protection	02 Revenue Protection	03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 19: Yield Cup, Yield Exclusion and Trend APH Current Year Base Premium Rate Calculations (only use when the Effective Coverage Level for the record exceeds the highest coverage level for the offer in the ADM)						
Unadjusted Liability Amount = Round((Coverage Level Percent/Effective Coverage Level Percent),10) * Premium Liability Amount	Unadjusted Liability Amount	Internal		9999999999	Round to whole number	
	Coverage Level Percent	P14	34	9.9999	None	
	Effective Coverage Level Percent	Internal		99.9999		
	Premium Liability Amount	Internal		9999999999	Round to whole number	
When Unit Structure Code is equal to Optional Unit, "OU", "UA" or "UD": ROUND(1.00/ Current Year Base Rate,8) – ROUND(Unadjusted Liability Amount/(Current Year Base Rate * Premium Liability Amount),8) + ROUND(ROUND(Base Rate Differential Factor * Base Unit Residual Factor * Base Optional Unit Structure Discount Factor * Unadjusted Liability Amount,8)/Premium Liability Amount,8)	Max Coverage Level Adjustment Factor	Internal		999999999.99999999	Round to 8 decimals.	
	Unadjusted Liability Amount	Internal		9999999999	Round to whole number	
	Current Year Base Rate	Internal		9999999999.99999	Round to 8 decimals.	
	Premium Liability Amount	Internal		9999999999	Round to whole number	
	Base Rate Differential Factor	ADM		9.999999999	None	
	Base Unit Residual Factor	ADM		999.999	None	
Max Coverage Level Adjustment Factor =	Base Optional Unit Structure Discount Factor	ADM		9.999999999	None	Base Optional Unit Structure Discount Factor is equal to Optional Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040". See Section 19 for more info.
When Unit Structure code is Basic Unit, "BU": ROUND(1.00/ Current Year Base Rate,8) – ROUND(Unadjusted Liability Amount/(Current Year Base Rate * Premium Liability Amount),8) + ROUND(ROUND(Base Rate Differential Factor * Base Unit Residual Factor * Base Basic Unit Structure Discount Factor * Unadjusted Liability Amount,8)/Premium Liability Amount,8)	Base Basic Unit Structure Discount Factor	ADM		9.999999999	None	Base Basic Unit Structure Discount Factor is equal to Basic Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040". See Section 19 for more info. When the total planted acres for the unit is 0 (all acres are prevented planted) set to 1.00.

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Max Coverage Level Adjustment Factor = (continued)	**When Unit Structure code is Enterprise Unit, "EU" or "EP":** ROUND(1.00/ Current Year Base Rate,8) – ROUND(Unadjusted Liability Amount/(Current Year Base Rate * Premium Liability Amount),8) + ROUND(ROUND(Base Rate Differential Factor * Base Enterprise Unit Residual Factor * Base Enterprise Unit Structure Discount Factor * Unadjusted Liability Amount,8)/Premium Liability Amount,8)	Base Enterprise Unit Structure Discount Factor	ADM		9.999999999	None	Base Enterprise Unit Structure Discount Factor is equal to Enterprise Unit Discount Factor for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040". See Section 19 for more info. When the total planted acres for the unit is 0 (all acres are prevented planted) set to 1.00.
		Base Enterprise Unit Residual Factor	ADM		999.999	None	Base Enterprise Unit Residual Factor is equal to Enterprise Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".
	When Unit Structure code is Whole Farm Unit "WU": ROUND(1.00/ Current Year Base Rate,8) – ROUND(Unadjusted Liability Amount/(Current Year Base Rate * Premium Liability Amount),8) + ROUND(ROUND(Base Rate Differential Factor * Base Whole Farm Unit Residual Factor * Unit Structure Discount Factor * Unadjusted Liability Amount,8)/Premium Liability Amount,8)	Unit Structure Discount Factor	Internal		9.99999999	None	Capped at 1.0 See Section 19 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
		Base Whole Farm Unit Residual Factor	ADM		999.999	None	Base Whole Farm Unit Residual Factor is equal to Whole Farm Unit Residual for Minimum of 1) Maximum available Coverage Level or; 2) available Coverage Level less than or equal to Effective Coverage Level. Edit with ADM Coverage Level Differential, "A01040".

<table>
<tr><td colspan="2">Exhibit Name: Premium Calculation</td></tr>
</table>

Exhibit Name: Premium Calculation	
Exhibit Number: P11-1, Plan 01, 02, 03	**Reinsurance Year:** 2019
Record Name: Acreage	**Version:** Approved
Record Code: P11	**Release Date:** 12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Marginal Rate Adjustment Factor =	Max Coverage Level Adjustment Factor /(Rate Differential Factor * Unit Residual Factor * Unit Structure Discount Factor)	Marginal rate Adjustment Marginal Adjustment Rate Factor	Internal		9.99999999	Round to 8 decimals.	
		Max Coverage Level Adjustment Factor	Internal		999999999.99999999	Round to 8 decimals.	
		Rate Differential Factor	ADM		9.999999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
		Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
		Unit Structure Discount Factor	Internal		9.99999999	None	Capped at 1.0 See Section 19 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	When Unit Structure code is Enterprise Unit, "EU" or "EP": Max Coverage Level Adjustment Factor /(Rate Differential Factor * Enterprise Unit Residual Factor * Unit Structure Discount Factor)	Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Enterprise Unit, 'EU' or 'EP'.
	When Unit Structure code is Whole Farm Unit, "WU": Max Coverage Level Adjustment Factor /(Rate Differential Factor * Whole Farm Unit Residual Factor * Unit Structure Discount Factor)	Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Whole Farm Unit, 'WU'.

Exhibit Name: Premium Calculation						
Exhibit Number: P11-1, Plan 01, 02, 03			**Reinsurance Year:** 2019			
Record Name: Acreage			**Version:** Approved			
Record Code: P11			**Release Date:** 12/6/2019			

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

	Calculations	**Field Name**	**Record Number**	**Field Number**	**Field Format**	**Field Rounding**	**Rules**
Current Year Base Premium Rate		Current Year Base Premium Rate	Internal		9999999999.99999999	Round to 8 decimals.	
	When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU": = Round(Current Year Base Rate * Rate Differential Factor * Unit Residual Factor, 8) * MIN(Marginal Rate Adjustment Factor, 1.00)	Rate Differential Factor	ADM		9.999999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
		Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, 'BU'.
		Marginal Rate Adjustment Factor	Internal		9999999999.99999999	Round to 8 decimals.	
	When Unit Structure code is Enterprise Unit, "EU" or "EP": = Round(Current Year Base Rate * Rate Differential Factor * Enterprise Unit Residual Factor, 8) * MIN(Marginal Rate Adjustment Factor, 1.00)	Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Enterprise Unit, 'EU' or 'EP'.
	When Unit Structure code is Whole Farm Unit, "WU": = Round(Current Year Base Rate * Rate Differential Factor * Whole Farm Unit Residual Factor, 8) * MIN(Marginal Rate Adjustment Factor, 1.00)	Whole Farm Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Whole Farm Unit, 'WU'.

	Exhibit Name:	Premium Calculation		
	Exhibit Number:	P11-1, Plan 01, 02, 03	Reinsurance Year:	2019
	Record Name:	Acreage	Version:	Approved
	Record Code:	P11	Release Date:	12/6/2019

Insurance Plan Code	01 Yield Protection	02 Revenue Protection		03 Revenue Protection with Harvest Price Exclusion
Commodity Code	0011 Wheat 0015 Canola 0018 Rice	0021 Cotton 0041 Corn 0043 Popcorn	0047 Dry Beans 0051 Grain Sorghum 0067 Dry Peas	0075 Peanuts 0078 Sunflowers 0081 Soybeans 0091 Barley

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
Section 20: Yield Cup, Yield Exclusion and Trend APH for Cottonseed--Current Year Base Premium Rate Calculations (only use when the Effective Coverage Level for the record exceeds the highest coverage level for the offer in the ADM).						
Current Year Base Premium Rate =	Current Year Base Premium Rate	Internal		9999999999.99999999	Round to 8 decimals.	
When Unit Structure Code is equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, "BU": Round(Current Year Base Rate * Rate Differential Factor * Unit Residual Factor, 8) * MIN(Marginal Rate Adjustment Factor, 1.00)	Rate Differential Factor	ADM		9.999999999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 17 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion).
	Unit Residual Factor	ADM		999.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Optional Unit, "OU", "UA", "UD", or Basic Unit, 'BU'.
	Marginal Rate Adjustment Factor	Internal		9999999999.99999999	Round to 8 decimals.	Copy value over from the base lint line.
When Unit Structure Code is is Enterprise Unit, "EU" or "EP": Round(Current Year Base Rate * Rate Differential Factor * Enterprise Unit Residual Factor, 8) * MIN(Marginal Rate Adjustment Factor, 1.00)	Enterprise Unit Residual Factor	ADM		9.999	None	Edit with ADM Coverage Level Differential, "A01040". See Section 18 for Option Code "TA" (Trend Adjustment), "YC" (Yield Cup), and "YE" (Yield Exclusion) where Unit Structure Code equal to Enterprise Unit, 'EU' or 'EP'.