

Exhibit Name: Premium Calculation
 Exhibit Number: P11-2, Plan 04, 05, 06, & 13
 Record Name: Acreage
 Record Code: P11

Reinsurance Year: 2022
 Version: Draft
 Release Date: 9/2/2021

Insurance Plan Code	04 Group Risk Plan/Area Yield Protection	05 Area Revenue Protection	13 Rainfall Index
	06 Area Revenue Protection with the Harvest Price Exclusion		
Commodity Code	0011 Wheat	0041 Corn	0081 Soybeans
	0018 Rice	0043 Popcorn	0088 Pasture, Rangeland, Forage
	0021 Cotton	0051 Grain Sorghum	0091 Barley
	0033 Forage Production	0075 Peanuts	0115 Oysters
			0332 Annual Forage
			1191 Apiculture

Calculations	Field Name	Record Number	Field Number	Field Format	Field Rounding	Rules
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Section 1: Dollar Amount of Insurance

Area Yield Protection, "04", Area Revenue Protection, "05", or Area Revenue Protection with Harvest Price Exclusion, "06":

<p>When Commodity Code equals Wheat, "0011", Rice, "0018", Cotton, "0021", Forage Production, "0033", Corn, "0041", Popcorn, "0043", Grain Sorghum, "0051", Peanuts, "0075", Soybeans, "0081", and Barley, "0091", and Coverage Type Code equals Additional, "A":</p> $\text{Dollar Amount of Insurance} = \text{Round}(\text{Expected County Yield} * \text{Projected Price} * \text{Price Election Percent}, 2)$	Dollar Amount of Insurance	Internal		99999999.99	Round to 2 decimals.	
	Expected County Yield	ADM		99999999.9999	None	Edit with ADM Area Price, "A00810". Expected County Yield will be stored in Expected Index Value in A00810.
	Projected Price	ADM		99999.9999	None	Edit with ADM Price, "A00810".
	Price Election Percent	P14	35	9.9999	None	Protection Factor. Edit with ICE Price Election Percent, "D00007". Protection Factor must be greater than or equal to 0.80 and less than or equal to 1.20, in 1% increments. If Native Sod applies to this record, the Price Election Percent must equal 0.65 (65%).

Area Yield Protection, "04":

<p>When Commodity Code equals Wheat, "0011", Rice, "0018", Cotton, "0021", Forage Production, "0033", Corn, "0041", Popcorn, "0043", Grain Sorghum, "0051", Peanuts, "0075", Soybeans, "0081", and Barley, "0091", and Coverage Type Code equals Catastrophic, "C":</p> $\text{Dollar Amount of Insurance} = \text{Round}(\text{Expected County Yield} * \text{Catastrophic Price} * \text{Price Election Percent}, 2)$	Dollar Amount of Insurance	Internal		99999999.99	Round to 2 decimals.	
	Expected County Yield	ADM		99999999.9999	None	Edit with ADM Area Price, "A00810". Expected County Yield will be stored in Expected Index Value in A00810.
	Catastrophic Price	ADM		99999.9999	None	Edit with ADM Price, "A00810". For CAT Area Yield Protection, "04", with Coverage Type Code, "C" this value will be the CAT price (45 percent of base Projected Price).
	Price Election Percent	P14	35	9.9999	None	Protection Factor. Edit with ICE Price Election Percent, "D00007". Protection Factor must equal 1.20.

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 0033 Forage Production 0075 Peanuts

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Group Risk Plan, "04":

When Commodity Code equals Oysters, "0115":

$$\text{Dollar Amount of Insurance} = \text{Projected Price} * \text{Price Election Percent}$$

Dollar Amount of Insurance	Internal			99999999.99	Round to 2 decimals.	If Coverage Type Code equals Catastrophic, "C", then round up to the 2nd decimal place. If Dollar Amount of Insurance = 5.321, Dollar Amount of Insurance will equal 5.33.
Projected Price	ADM			99999.9999	None	Edit with ADM Price, "A00810".
Price Election Percent	ICE			9.9999	None	Edit with ICE Price Election Percent, "D00007". Price Election Percent must be greater than or equal to 0.6000 and less than or equal to 1.0000, when Coverage Type Code equals Additional "A". Price Election Percent must equal 0.4500, when Coverage Type Code equals Catastrophic "C".

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Rainfall Index, "13":

<p>When Commodity Code equals Pasture, Rangeland and Forage, "0088", Annual Forage, "0332", or Apiculture, "1191":</p> <p>Dollar Amount of Insurance = Round(County Base Value * Coverage Level Percent * Price Election Percent, 2)</p>	Dollar Amount of Insurance	Internal		9999999.99	Round to 2 decimals.	
	County Base Value	ADM		9999.99	None	Edit with ADM Price, "A00810".
	Coverage Level Percent	P14	34	9.9999	None	Coverage Level Percent must equal 0.6500, when Coverage Type Code equals Catastrophic "C" and Commodity Code equals Annual Forage, "0332".
	Price Election Percent	ICE		9.9999	None	Productivity Factor. Edit with ICE Price Election Percent, "D00007". Price Election Percent must equal 0.4500, when Coverage Type Code equals Catastrophic "C" and Commodity Code equals Annual Forage, "0332". For Native Sod records with buy-up coverage levels, if the elected Price Election Percent is greater than 0.65 (65%), set the value to 65%; otherwise, use the elected Price Election Percent.

Section 2: Liability Calculation

<p>When Commodity Code equals Oysters, "0115":</p> <p>Total Guarantee Amount = Dollar Amount of Insurance * Reported Pounds</p>	Total Guarantee Amount	P11	110	99999999.99	Round to 2 decimals.	
	Reported Pounds	P11	32	9999999999	None	See Section 4 for additional information regarding Reported Pounds.
<p>When Commodity Code equals Apiculture, "1191":</p> <p>Total Guarantee Amount = Dollar Amount of Insurance * Total Insured Colonies * Percent of Value</p>	Total Guarantee Amount	P11	110	99999999.99	Round to whole number.	
	Total Insured Colonies	P11	73	9999999	None	Total Insured Colonies must equal the total number of all colonies for a unit, for Commodity Code equal Apiculture, "1191".
	Percent of Value	P11	71	9.99	None	

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When Commodity Code equals Pasture, Rangeland and Forage, "0088", or Annual Forage, "0332": Total Guarantee Amount = Dollar Amount of Insurance * Total Insured Acreage * Percent of Value	Total Guarantee Amount	P11	110	99999999.99	Round to whole number.	
	Total Insured Acreage	P11	72	999999.99	None	Total Insured Acreage must equal the total number of all acres for a unit for Commodity Code equal Pasture, Rangeland and Forage, "0088". For Commodity Code equal Annual Forage, "0332", all acres must be insured in a growing season (can be spread out through the index intervals or units).
	Percent of Value	P11	71	9.99	None	Percent of Value must equal 1.00, when Coverage Type Code equals Catastrophic "C" and Commodity Code equals Annual Forage, "0332". Percent of Value for Annual Forage, "0332", will be pulled from P14 field 45.
All other Commodities: = Dollar Amount of Insurance * Reported Acreage Total Guarantee Amount	Total Guarantee Amount	P11	110	99999999.99	Round to whole number.	
	Reported Acreage	P11	48	999999.99	None	Reported Acreage must equal the sum of all Land, P27, Reported Acreage.
All Commodities: Liability Amount = Total Guarantee Amount * Insured Share Percent	Liability Amount	P11	101	9999999999	Round to whole number.	Cup at \$1.
	Insured Share Percent	P11	43	9.9999	None	
Section 3: Total Premium, Subsidy, and Producer Premium Calculation						
Preliminary Total Premium Amount = Liability Amount * Base Rate	Preliminary Total Premium Amount	Internal		9999999999	Round to whole number.	
	Base Rate	ADM		9.9999	None	Edit with ADM Area Rate, "A01135".
Total Premium Amount = Preliminary Total Premium Amount * Multiple Commodity Adjustment Factor	Total Premium Amount	P11	102	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	100	9999999999	Round to whole number.	If this record qualifies for Beginning Farmer and Rancher or Native Sod, see Section 5 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	103	9999999999	Round to whole number.	

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When Commodity Code equals Oysters, "0115":

Section 4: Average Landings, Apportionment Factor, Reported Pounds

Landings = Three Years of Annual Yield accumulated	Landings	Internal		9999999999	Round to whole number.	Landings must equal the sum of 3 Years of Yield History, P15A, Annual Yield.
	Annual Yield	P15A	10	99999999.99	None	
Average Landings = Landings / 3	Average Landings	Internal		9999999999	None	
Apportionment Factor = Average Landings / Average Index Value	Apportionment Factor	Internal		9.9999	Round to 4 decimals.	
	Average Index Value	ADM		99999999.9999	None	Edit with ADM Price, "A00810".
Adjusted Expected County Landings = Expected Index Value * Expected County Landing Adjustment Factor	Adjusted Expected County Landings	Internal		9999999999	Round to whole number .	
	Expected Index Value	ADM		99999999	None	Edit with ADM Price, "A00810".
	Expected County Landing Adjustment Factor	ADM		99.99	None	Edit with ADM Price, "A00810".
Reported Pounds = Apportionment Factor * Adjusted Expected County Landings	Reported Pounds	P11	32	9999999999	Round to whole number.	

Section 5: 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 Farmer Rancher 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	118	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	100	9999999999	Round to whole number	Subsidy Amount cannot exceed Total Premium Amount. Subsidy Amount will be cupped at \$0.

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Producer Premium Amount = Total Premium Amount - Subsidy Amount	Producer Premium Amount	P11	103	9999999999	Round to whole number	