

#### Should I consider Whole-Farm Revenue Protection (WFRP) for my farm operation?



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#### **Goals for Today**

- WFRP Overview
  - How it came about?
  - Features of WFRP
- NC Experience with WFRP
- Take-Home Message(s)







#### Introduction

- 2014 Farm Bill required development of a whole farm crop insurance policy (Title XI, Sec. 11022)
  - Resulted in Whole-Farm Revenue Protection (WFRP)
- Primarily because specialty, organic, and diversified crop farmers have historically been underserved
  - Specialty crops: fruits, nuts, vegetables, and some field crops (including sweet potatoes)







#### Federal Crop Insurance: 2015 Market Penetration of Other Field Crops

Сгор	2015 Insured Acres	US Acres/NASS*	Market Penetration				
	Other Field Crops						
ALFALFA SEED	32,381	89,218	36%				
BUCKWHEAT	11,960	33,678	36%				
CANOLA	1,718,996	1,777,000	97%				
COFFEE	4,019	6,900	58%				
CULTIVATED WILD RICE	25,685	47,333	54%				
DRY BEANS	1,382,006	1,764,700	78%				
DRY PEAS	1,717,931	1,670,000	99%				
FLAX	425,533	463,000	92%				
FORAGE PRODUCTION	2,716,256	54,447,000	5%				
FORAGE SEEDING	214,762	1,155,758	19%				
GRASS SEED	31,209	268,149	12%				
HYBRID CORN SEED	271,522						
HYBRID SORGHUM SEED	35,977						
MILLET	363,665	445,000	82%				
MINT	19,821	96,129	21%				
MUSTARD	22,991	44,000	52%				
OATS	538,745	3,089,800	17%				
POPCORN	217,727	218,461	99%				
RYE	45,166	1,584,000	3%				
SAFFLOWER	121,867	170,200	72%				
SESAME	68,156	17,501	99%				
SILAGE SORGHUM	63,132	306,000	21%				
SUGAR BEETS	1,039,169	1,159,800	90%				
SUGARCANE	760,348	887,300	86%				
SUNFLOWERS	1,696,766	1,859,100	91%				
SWEET POTATOES	6,738	156,900	4%				
Total Hay/Forage	4,707,661	54,447,000	9%				
Total Other Field Crops w/ NASS Data in Crop Production Report (Excluding Hay)	10,528,773	17,309,927	61%				





#### Federal Crop Insurance: 2015 Market Penetration of Fruit and Nuts

Сгор	2015 Insured Acres	US Acres/NASS	Market Penetration	
		Fruits and Nuts		
ALMONDS	737,313	890,000	83%	
PECANS (Trees)	156,867	N/A	N/A	
PRUNES	43,945	47,000	94%	
ORANGES	497,889	575,900	86%	
GRAPEFRUIT	62,698	67,300	93%	
CRANBERRIES	32,560	40,900	80%	
MACADAMIA NUTS	11,948	16,000	75%	
BLUEBERRIES	68,822	89,820	77%	
LEMONS	43,015	55,300	78%	
CHERRIES	88,744	127,880	69%	
PLUMS	13,740	17,800	77%	
APPLES	239,181	315,880	76%	
TANGELOS/MANDARINS	48,981	66,400	74%	
GRAPES	662,961	1,022,700	65%	
PEACHES	67,959	142,790	48%	
FRESH NECTARINES	15,276	20,200	76%	
FIGS	4,103	6,800	60%	
OLIVES	26,250	36,000	73%	
AVOCADOS	36,964	59,280	62%	
PEARS	33,209	48,940	68%	
FRESH & PROC APRICOTS	6,373	9,620	66%	
PISTACHIOS	105,640	233,000	45%	
WALNUTS	153,567	300,000	51%	
STRAWBERRIES	1,378	58,950	2%	
BANANA	199	830	24%	
PAPAYA	351	1,500	23%	
Total Insured Fruits & Nuts	3,159,933	4,250,790	74%	







#### Introduction

- WFRP meant to expand and improve upon prior whole-farm revenue programs:
  - AGR and AGR-Lite
- AGR & AGR-Lite have been lightly used since its introduction in 1999
  - In NC, only 3 AGR-Lite policies in each year from 2012 to 2014
  - Started offering WFRP in 2015 (as a pilot)
    - Now available in all states







#### What does WFRP cover?

- Revenue from all commodities produced on the farm:
  - Including animal and animal products
  - Commodities purchased for resale (up to 50% of total)
  - Excluding timber, forest products, & animals for sport, show or pets
- Replant costs for annual commodities
  - With approval from insurance company







- All farm revenue is insured together under one policy
  - Individual commodity losses are not considered, it is the overall farm revenue that determines losses
- Coverage levels available: 50% to 85%
  - In 5% increments
  - Diversification requirement at 80% and 85% coverage: at least 3 commodities (commodity count)
  - No catastrophic coverage level for WFRP







- Costs for 'market readiness operations' may be left in the approved revenue
  - Minimum required to make commodity market ready
  - On farm, in-field or close proximity to field
  - No added-value costs may be included
- Historic revenue can be adjusted to reflect farm expansion (i.e., indexing process)
  - Allows for 35% growth over historic average (with insurance company approval)







- Can still purchase other Federal crop insurance policies covering individual commodities
  - Must be at buy-up coverage levels
  - Any indemnities from these individual policies will count as revenue earned under WFRP
  - May reduce WFRP premium subsidy







- Premium subsidies are available & depends on farm diversification
  - Farms with 2 or more "commodities" (commodity count) receive whole-farm premium subsidy
  - Farms with 1 "commodity" receive basic premium subsidy







### **WFRP Premium Subsidy**

Coverage Level	50%	55%	60%	65%	70%	75%	80%	85%
Qualifying Commodity Count: 1	67%	64%	64%	59%	59%	55%	N/A	N/A
Qualifying Commodity Count: 2	80%	80%	80%	80%	80%	80%	N/A	N/A
Qualifying Commodity Count: 3 or more	80%	80%	80%	80%	80%	80%	71%	56%

- WFRP subsidy % total premium paid by government
- Line 1 Basic Subsidy
- Lines 2 & 3 Whole-Farm Subsidy







- The extent of diversification matters for WFRP
  - Number of commodities produced are counted toward the diversification requirement in WFRP
  - Each commodity must provide a certain percentage of the expected farm revenue to be counted
  - Commodities providing small amounts of revenue may be grouped to meet the qualification
  - Diversification measure determines:
    - Eligibility for WFRP, eligibility for the 80% and 85% coverage levels, and premium/premium subsidies







### **Premium Example**

- WFRP Premium Calculators
  - Quick Estimate from RMA Website
    - <u>https://ewebapp.rma.usda.gov/apps/costestimator/Estimates/Quick</u>
       <u>Estimate.aspx</u>
  - Cornell Ag-Analytics WFRP Premium Calculator
    - <u>https://ag-analytics.org/Calculators/WFRPCalculator</u>
- Gives an idea of how much WFRP will cost you!







#### **Premium Example**

Quick Estimate 499268            Back         Back         Selected Initial Criteria         " Commodity         : Whole Farm Revenue Protection 0076         " Commodity Year         : Calendar Year Filer 670         " Practice         : North Carolina 37         : Nor Practice Specified 997	United States Department of Age	riculture Agency					Cost Estima Welcome Gue
Selected Initial Criteria         * Commodity       : Duplin 061         * County       : Duplin 061         * Type       : Calendar Year Filer 670         * County       : No Practice Specified 997         Individual Coverage         Whole Farm Revenue Protection 76         * MPCI Liability         : MPCI Liability         : MPCI Liability         : More and the revenue         : Duplin 061         : More and the revenue         : MPCI Liability         : MPCI Liability         : MPCI Liability         : More and the revenue         : Duplin 061         : More and the revenue         : Duplin 061         : MPCI Liability         : Duplin 061         : MPCI Liability         : Duplin 061         : Duplin 061         : MPCI Liability         : Duplin 061         : Duplin 061 <tr< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th></tr<>							
Whole Farm Revenue Protection 76       * Allowable Revenue       : 2012 : 100000       * Commodity Values       :Select A Commodity • Add         * MPCI Liability       : 0       : 100000       : 100000       Add Multiple       Remove All         2013 : 100000       : 2015 : 100000       : 2015 : 100000       : * Commodity • Total Value Delete         2015 : 1000000       : 2015 : 1000000       : * Tobacco Burley 0231 (M) : 500000       : * *         Show In Grid       • Total Premium Amount       • Producer Premium Amount       • Subsidy Amount	* Commodity * County	: Whole Farm Revenue Protection 0076					T
Liability Amount       Total Premium Amount       Producer Premium Amount       Subsidy Amount	Whole Farm Revenue Prot		* Allowable Revenue	2013 : 1000000 2014 : 1000000 2015 : 1000000	* Commodity Values	Add Multiple Remove All Commodity Total Value Delete Sweet Potatoes 0085 (M) : 500000 X	
Producer Premium Amount		O Total Premium Amount		Producer Premium Amou Producer Premium Amount	int	O Subsidy Amount	

Individual coverage												
	PE %	75 %	70 %	65 %	60 %	55 %	50 %	View				
	100 %	\$17,400.00	\$14,700.00	\$12,350.00	\$10,440.00	\$8,690.00	\$7,200.00	Worksheets	Detailed Estimate	CEPP	SPOI	AIB







#### **WFRP Qualification Limits**

Coverage Level	Commodity Count (Minimum Required)	Maximum Farm Approved Revenue
85	3	\$10,000,000
80	3	\$10,625,000
75	1	\$11,333,333
70	1	\$12,142,857
65	1	\$13,067,923
60	1	\$14,166,167
55	1	\$15,454,545
50	1	\$17,000,000

- WFRP available in every county in the US
- But there are limits:
  - Only covers up to \$8.5 million of revenue
  - Only producers with up to \$1 million in expected revenue from: (a) animals & animal products, and (b) greenhouse/nursery may qualify







- How is insured revenue determined?
  - WFRP insured revenue (or liability amount) is <u>the</u> <u>lower of</u>:
    - Your current year's expected revenue (as determined by your farm plan) at the selected coverage level, or
    - Your historic revenue adjusted for growth at the selected coverage level







- What causes a loss payment under WFRP?
  - Natural causes of loss and decline in market price during the insurance year
  - When revenue-to-count for the insurance year is lower than insured revenue, a loss payment will be made
  - Note: Taxes must be filed for the insurance (loss) year before any claim can be made (e.g., 2017 insurance year requires 2017 year farm taxes to be filed)



### **Other WFRP Facts & Features**

- WFRP only covers revenue 'produced' in the insurance year
  - A commodity not harvested or sold will not count as revenue
  - A commodity grown last year and sold this year will not be covered
  - For commodities that grow each year, like cattle, only the growth for the insurance year counts
    - Example: Calves worth \$800 at beginning of the year and to be sold at \$2000, the value insured will be \$1200
  - Inventory and Accounts Receivable are used to get to the 'produced' amounts
  - Prices used to value commodities need to meet policy guidelines







# What will my agent need?

- Five years of farm tax forms (Schedule F)
  - For 2019, from 2013-2017
- Need to know if you are:
  - Calendar year tax filer
  - Fiscal year filer (and your fiscal year)
- What you plan to produce for insured year
   To complete Intended Farm Operation Report
- Other information as applicable
  - Such as supporting records, organic certification, etc.







#### Timeline

- Sales Closing Date: Feb. 28 for NC producers
  - For calendar year and early fiscal filers
  - Intended Farm Operation Report is completed
  - Late fiscal filers: Nov 20
- Revised Farm Operation Report (like acreage report) due
  - July 15 for calendar year and early fiscal filers
  - Late fiscal filer: last day of the month in which your fiscal year begins, but no later than October 31







#### Timeline

- Billing Dates:
  - Calendar year and early fiscal filers: Aug 15
  - Late fiscal filers: Dec 20
- Final Farm Operation Report (where actual production and revenue information provided):
  - Due when:
    - A claim is submitted for indemnity, or
    - By next year's sales closing date (if no claim)
  - If not provided, limited to 65% coverage next year







#### What farms benefit from WFRP?

- Attractive option for:
  - Diversified farms (especially those with specialty crops)
  - Farms with integrated grain & livestock systems
  - Single commodity farms not insurable by other RMA policies
  - Organic crop producers (who grow crops without adequate organic price elections for insurance)
  - Farms that sell to direct markets, local markets, specialty markets







### **WFRP Experience in NC**

Year	Policies Sold	Liability	Total Premium	Subsidy	Indemnity	Loss Ratio
2015	23	24,420,238	1,759,835	1,351,511	969,441	0.55
2016	61	87,934,030	5,290,762	3,997,604	8,552,678	1.62
2017	104	159,473,675	8,791,365	6,563,949	8,193,560	0.93
2018	104	138,046,333	8,903,061	6,603,247	460,326	0.05

- Steadily increasing participation over the last four years
- Recall, only 3 AGR-Lite policies sold each year from 2012-2014







# **Top 5 WFRP Counties in 2017**

County	Policies Sold	Liability	Total Prem.	Subsidy	Indemnity	Loss Ratio
Johnston	15	15.17M	566,179	450,549	363,101	0.64
Nash	12	32.02M	1,883,949	1,91,884	1,509,664	0.82
Sampson	10	17.04M	1,237,317	904,094	1,638,144	1.32
Duplin	9	7.77M	556,389	437,001	153,761	0.28
Edgecombe	7	22.90M	798,231	584,131	243,560	0.30

- In 2015, only 13 NC counties had WFRP
- In 2016, 19 NC counties had WFRP
- In 2017, 28 NC counties had WFRP







# **Top 5 WFRP Counties in 2018**

County	Policies Sold	Liability	Total Prem.	Subsidy	Indemnity	Loss Ratio
Nash	14	27.7M	1,101,651	822,637	32,222	0.03
Johnston	12	10.8M	676,634	534,236	9,531	0.01
Sampson	11	21.53M	2,391,756	1,768,194	1,853	<0.01
Wayne	8	9.34M	540,686	404,360	7,413	0.01
Wilson	7	15.25M	605,357	395,353	-	-

• In 2018, 29 NC counties had WFRP







# **2017 WFRP Experience in NC**

Coverage Level	Policies Sold	Liability	Total Premium	Subsidy	Indemnity	Loss Ratio
50%	3	5,740,644	137,877	108,244	74,895	0.54
65%	1	525,958	106,769	62,994	103,602	0.97
75%	61	67,546,696	4,812,927	3,819,992	2,543,698	0.53
80%	33	75,077,392	3,211,973	2,280,500	3,988,907	1.24
85%	6	10,582,985	521,819	292,219	1,482,458	2.84

- NC farmers who bought WFRP in2016 mostly insured at 75% coverage level
- Same general pattern in 2015, 2016, and 2018







#### **Issues/Concerns with WFRP**

- Diversified farms already have low revenue risk
  - Do not experience significant revenue variation
  - Some do not experience revenue drops below 85%
  - WFRP may not be a good option in this case
- Premiums perceived to be "high"
  - Premium is a function of county, commodities grown,
     % revenue for each commodity, commodity count
  - Need adjustments over time to better reflect risk experience?







#### **Issues/Concerns with WFRP**

- Policy complexity & paperwork requirement
  - Agents sometimes not familiar and not willing to service this policy
  - Perceived underwriting risk not sure exactly what losses are to be covered
  - Qualification requirements
    - Revenue Limits & Availability of tax records (< 5 years)</li>
  - 2018 Farm Bill language
    - Review WFRP program & improve agent training
    - Reduce paperwork for WFRP producers < \$1M in revenue
    - Reduce impact of loss years on insurable revenue







# WFRP not for you?

- If individual commodities insurable through RMA, then individual policies still an option (e.g., Yield Protection and Revenue Protection)
- If not insurable through RMA, then may consider Non-insured Crop Disaster Assistance Program (NAP) through FSA
  - 2014 Farm Bill authorized higher coverage levels: 50-65% in 5% increments at 100% of price
  - Made it "crop-insurance-like"
  - 2018 Farm Bill increased max payout to \$300k (from \$125k)







# Take Home Message(s)

- WFRP has potential to be an attractive risk management option for diversified operations
  - At least call your agent to explore this option
- Increasing participation in NC
- Issues with program complexity & paperwork requirements that one needs to work through
  - Consider interactions with individual crop insurance policies, NAP, and/or commodity programs







# Thank you!

- Questions?
  - Contact: Rod M. Rejesus, NC State University Tel No. (919)513-4605

Email: rod\_rejesus@ncsu.edu

#### • Website:

- NCSU Dept. of Ag. and Resource Econ. "Crop Insurance Resources"
  - https://cals.ncsu.edu/are-extension/business-planning-andoperations/crop-insurance/













# **Top 5 WFRP Counties in 2016**

County	Policies Sold	Liability	Total Prem.	Subsidy	Indemnity	Loss Ratio
Nash	8	20.36M	1,055,741	826,108	2,060,331	1.95
Edgecombe	6	18.23M	654,434	487,695	1,444,258	2.21
Sampson	6	11.45M	867,774	663,529	440,495	1.66
Harnett	6	7.38M	396,521	274,174	182,465	1.11
Wayne	6	2.97M	195,618	146,891	108,986	0.93

- In 2016, 19 NC counties had WFRP
- In 2015, only 13 NC counties had WFRP







# **2016 WFRP Experience in NC**

Coverage Level	Policies Sold	Liability	Total Premium	Subsidy	Indemnity	Loss Ratio
55%	2	589,047	77,581	50,807	230,523	2.97
65%	2	1,927,887	185,320	125,419	14,316	0.08
75%	36	48,519,227	3,241,345	2,580,982	2,547,367	0.78
80%	15	33,994,238	1,586,009	1,128,112	5,109,622	3.22
85%	6	2,903,631	200,507	112,284	650,850	3.25

- NC farmers who bought WFRP in2016 mostly insured at 75% coverage level
- Same pattern in 2015 and 2017

