

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 <mark>,</mark> 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

| United States Department of Risk Managemen | of Agriculture It Agency | | | | | Cost Estima Welcome Gue |
|---|--|----------------------------|--|-------------------------------|---|----------------------------|
| Quick Estimate 49920 | | | | | | |
| Back Save Print/ En | xport | | | | | |
| * Commodity * County | : Whole Farm Revenue Protection 0076 : Duplin 061 | * Commodity Year * Type | : 2018 | * State * Practice | : North Carolina 37 | |
| Individual Coverage | | туре | Calendar Year Filer 670 | Fractice | No Practice Specified 997 | |
| Whole Farm Revenue P | Protection 76 | | | | | |
| * MPCI Liability | : 0 | * Allowable Revenue | : 2012 : 1000000 2013 : 1000000 2014 : 1000000 2015 : 1000000 2016 : 1000000 | [•] Commodity Values | :Select A Commodity- ▼ Add Add Multiple Remove All Commodity Total Value Delete Sweet Potatoes 0085 (M) : 500000 ¥ Tobacco Burley 0231 (M) : 500000 ¥ | |
| Show In Grid | O Total Premium Amount | | Producer Premium Amount | | Subsidy Amount | |
| - Individual Coverage | | | Producer Premium Amount | | | |

| Individual coverage | | | | | | | | | | | | |
|----------------------------------|-------|-------------|-------------|-------------|-------------|------------|------------|------------|-------------------|------|------|-----|
| | PE % | 75 % | 70 % | 65 % | 60 % | 55 % | 50 % | View | | | | |
| Whole Farm Revenue Protection 76 | 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)
 - 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



