# Noninsured Crop Disaster Assistance Program

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### What is it?

- The Noninsured Crop Disaster Assistance Program (NAP) provides financial assistance to farmers of crops/commodities that are otherwise considered noninsurable
- NAP is used to minimize financial losses due to natural disasters or eligible causes of loss





### **Eligible Producers**

- An individual who shares in the risk of producing an eligible crop and is entitled to an ownership share of that crop
- Producer's with an average adjusted gross income of \$900,000 or less





### **Eligible Crops**

- Crops grown for food, fiber, or livestock consumption
- Crops grown in a controlled environment, such as mushrooms & floriculture
- Specialty crops, such as honey & maple sap, or sea oats & sea grass
- Sweet sorghum & biomass sorghum
- Industrial crops, including crops used in manufacturing or grown as a feedstock for renewable biofuel, renewable electricity, or biobased products
- Value loss crops\*, such as aquaculture, Christmas trees, ginseng, ornamental nursery and turf-grass sod
- Seed crops where the propagation stock is produced for sale as seed stock for other eligible NAP crop production

### **Ineligible Crops**

- Crops for which other crop insurance is available
- Home gardens or crops not being produced for commercial sale
- Experimental crops
- Volunteer stands, except native forage
- Livestock and their by-products
- Trees grown for lumber or paper products

### Eligible Causes of Loss

- Damaging Weather
  - Drought or excessive moisture
  - Freeze or hail
  - Tornado, hurricane, or excessive wind
- Adverse Natural Occurrence
  - Earthquake
  - Flood
  - Volcanic eruption
- Conditions resulting from above eligible causes of loss
  - Excessive heat
  - Plant disease
  - Some insect infestations
  - Volcanic smog





### Ineligible Causes of Loss

- Failure to carry out good farming practices
- Variance from normal temperatures unless due to an eligible cause of loss
- Deviation from best planting practices & proper containment devices in aquaculture
- Failure to follow organic farming practices
- Weeds
- Negligence or mismanagement





### What is a NAP Unit?

A unit is all eligible acreage of the crop in the administrative county on the date coverage begins for the crop year where the producer has either

100% interest in the crop

A shared interest in the crop

### Coverage Levels

#### Basic coverage

Equivalent to the catastrophic level risk protection plan of insurance coverage, which is based on the amount of loss that exceeds 50% of expected production at 55 % of the average market price for the crop (27.5% of revenue)

#### Buy-up coverage

- Famers can purchase higher levels of coverage ranging from 50-65% of production, in 5% increments, at 100% of the average market price
- Additional coverage must be elected by a producer by the application closing date
- Producers who elect additional coverage must pay a premium in addition to the service fee
- Crops intended for grazing are not eligible for additional coverage

# NAP Coverage Levels

Policy Type	Yield Level	Price Level
NAP Basic	50%	55%
	50%	100%
NIAD Dinatio	55%	100%
NAP Buy-up	60%	100%
	65%	100%

### **Applying for Coverage**

- Eligible producers must apply at their local FSA office
- Service fees are due at the time the application is submitted
- Application closing dates will vary depending on crop type
- <u>https://www.fsa.usda.gov/state-offices/Tennessee/index</u>
- https://www.fsa.usda.gov/programs-and-services/disasterassistance-program/noninsured-crop-disasterassistance/index

### Service Fees and Premiums

- For all coverage levels, the NAP service fee is the lesser of \$250 per crop or \$750 per producer per administrative county, not to exceed a total of \$1,875 for a producer with farming interests in multiple counties.
- Producers electing higher coverage levels must pay an additional premium equal to the lesser of \$6,562.50 or the product of:

Premium = Share of crop \* Acres \* Approved yield \*
Coverage level \* Average market price \*
A 5.25% premium fee

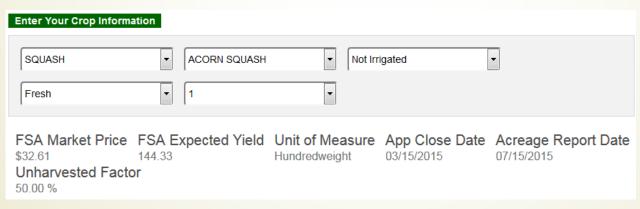
### How to Estimate your Premium

- Go to this website: <a href="http://fsa.usapas.com/NAP.aspx">http://fsa.usapas.com/NAP.aspx</a>
- Select "Tennessee" from the drop down menu
- Select your county
- Select your crop type (if it isn't listed, then RMA doesn't cover it and you are eligible for coverage)
- Click the tab titled "NAP Crop Information"

# NAP Crop Eligibility, Premium, and Payments Estimator Enter Your Location Information Tennessee Anderson Reset Page NAP Crop Information Select Crop Select Crop

### How to Estimate your Premium cont...

- From the drop down menu, select your crop
- Select Crop Type
- Select Practice
- Select Intended Use
- Select Planting Period
- This will give you the market price, expected yield, unit of measure, the application closing date, the date that the acreage must be reported by and the unharvested factor %



You can use this information to make the calculation

### Buy-up Coverage Premium Calculation Example

- Chris holds a 100% share in his 5 acres of acorn squash production
- His approved yield is 140 CWT & market price for acorn squash is \$32.61
- He wants to purchase buy-up coverage at the 60% level

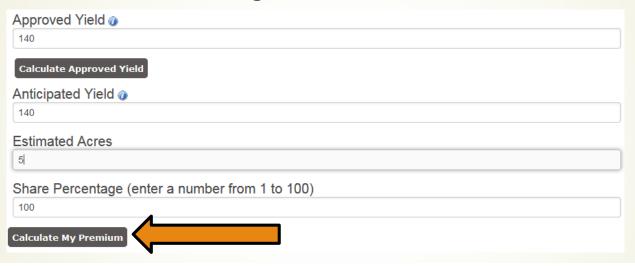
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Premium = 1.0 * 5.0 acres * 140 CWT * 0.60 * 32.61 * 0.0525%

Premium = $719.05
```

The premium for Chris is \$719.05

# Estimate your Premium Using the Online Tool

You can also enter your Approved Yield, Anticipated Yield, # of acres for crop, & your share of the crop in & click "Calculate My Premium", and it will give the premiums for each coverage level



Your NAP Estimated Premium and Guarantees						
Coverage	Yield Guarantee per Acre	Unit of Measure	Yield guarantee valued at NAP Market price (\$/Acre)	Premium (\$/acre)	Premium (\$/crop)*	
Basic	70.0	Hundredweight	\$1,255.49	N/A	N/A	
50%	70.0	Hundredweight	\$2,282.70	\$119.84	\$599.21	
55%	77.0	Hundredweight	\$2,510.97	\$131.83	\$659.13	
60%	84.0	Hundredweight	\$2,739.24	\$143.81	\$719.05	
65%	91.0	Hundredweight	\$2,967.51	\$155.79	\$778.97	

NAP 2017 Application Closing Dates						
Crops	Application Closing Date	Comments				
Nursery	May 1 <sup>st</sup> 2016	Ornamental & non-ornamental shrubs, trees, & foliage				
Barley, Canola, Christmas Trees, Grass, Oats, Peas, Radishes, Rye, Strawberries, Triticale, Wheat	September 1st 2016	Grass for Sod, Peas for Grazing, & Daikon Radishes & Radishes marketed as Fresh or Seed				
Apples, Blueberries, Caneberries, Cherries, Grapes, Peaches, Plums	November 1st 2016					
Honey	December 1st 2016					
Beets, Broccoli, Cabbage, Carrots, Cauliflower, Greens, Onions, Radishes	January 31st 2017	Hybrid Radishes marketed as Fresh				
Turnips	February 1st 2017					
Sunflowers	February 28th 2017					
Alfalfa, Beans, Cantaloupes, Corn, Eggplant, Grass, Leeks, Lespedeza, Millet, Mixed Forage, Okra, Peas, Peppers, Potatoes, Sweet Potatoes, Pumpkins, Scallions, Sorghum Forage, Soybeans, Squash, Tomatillos, Tomatoes, Vetch, Watermelon	March 15 <sup>th</sup> 2017	Grass for Forage & Grazing & Peas for Fresh, Seed, & Forage				

<sup>\*</sup> This list is not all inclusive for every crop or commodity that may be covered under NAP

ttps://offices.sc.egov.usda.gov/locator/app?state=us&agency=fsa

<sup>\*</sup> All crops are not covered in all counties

<sup>\*</sup> Some crops may be covered for certain uses but not for others (ie., corn used for grain is not covered in the majority of counties whereas corn marketed as fresh corn is covered)

<sup>\*</sup> For more information, contact your local FSA office. To find your local FSA office, follow this link:

### Coverage Period-Annual Crops

- Begins the later of:
  - 30 days after application is accepted & the services fees are paid
  - The date the crop is planted (cannot exceed the final planting date)
- Ends the earlier of:
  - Date harvest is completed
  - The latest normal harvest date for your specific area
  - Date the crop is abandoned
  - Date the entire crop is destroyed

### Coverage Period-Perennial Crops

- Begins the later of:
  - 30 days after application closing date
  - 30 days after the application is accepted for coverage
- Ends the earlier of:
  - 10 months from the application closing date
  - Date harvest is completed
  - Normal harvest date for the crop
  - Date the crop is abandoned
  - Date the entire crop is destroyed

# Coverage Period-Perennial Forage Crops

- Begins the later of:
  - 30 days after application closing date
  - 30 days after the application is filed
  - Date following the normal harvest date of previous crop year
- Ends the earlier of:
  - Normal harvest date for the crop
  - Date the crop is abandoned
  - Date the entire crop is destroyed

# Coverage Period-Value Loss & Controlled Environment Crops

- Aquaculture, Christmas trees, ginseng, floriculture, mushrooms, & turf grass sod coverage
  - Begins October 1st
  - Ends September 30<sup>th</sup>
- Ornamental nursery coverage
  - Begins June 1st
  - Ends May 31st

# Information Required to Remain Eligible for NAP

- Name, Type, & Variety of crop
- Location and acreage (report this shortly after planting)
- Your share of the crop as well as the names of other producers with an interest in the crop
- Whether the crop is irrigated or non-irrigated
- Date the crop was planted & intended use
- Quantity of all harvested production of the crop in which the producer held an interest
- The disposition of the harvested crop (ie., marketable, unmarketable, salvaged, or used differently than intended)
- Verifiable or reliable crop production records

### Reported Acreage and Production

- Acreage & production reports are used to calculate the approved yield
  - The approved yield is an average of a producer's actual production history (APH) for a minimum of four to a maximum of 10 crop years (5 years for apples and peaches)

 $APH = \frac{Producer's\ Total\ Production}{Producer's\ Crop\ Acreage}$ 

Approved yield may be substantially lower than actual yield if the producer does not properly report production

### **Approved Yield Calculations**

	IF	THEN the current year approved yield will be calculated based on the simple average of
	You certify production, or have any combination of actual, replacement, zero credited, substitute, or assigned yields for 4–10 years	Those yield years
/	You certify production records for 3 years & there are no zero credited, substitute, or assigned yields in the APH database	The 3 yield years plus 100% of the applicable T-yield for the missing year
	You certify production records for 2 years & there are no zero credited, substitute, or assigned yields in the APH data base	The 2 yield years plus 90% of the applicable T-yield for the 2 missing years
/	You certify production records for 1 year & the are no zero credited, substitute, or assigned yields in the APH database	The 1 yield year plus 80% of the applicable T-yield for the 3 missing years
	There has not previously been an approved yield calculated & there are no production records	65% of the applicable T-yield for each of the missing years or 100% of the applicable T-yield for each of the missing years if you are a new producer

## **Approved Yield Calculations**

Jo's Seedless Watermelon Farm								
Scenarios	Yield Calculation	Approved Yield						
<b>1</b> - Jo is a new farmer with no production history	$=\frac{248+248+248+248}{4}$	248.00						
<b>2</b> - Jo is a 4 year farmer with no certified production records	$=\frac{65\%*(248+248+248+248)}{4}$	161.20						
3- Jo is a 4 year farmer with 1 year of certified production records	$=\frac{340 + (80\% * (248 + 248 + 248))}{4}$	233.80						
<b>4</b> - Jo is a 4 year farmer with 2 years of certified production records	$=\frac{340 + 320 + (90\% * (248 + 248))}{4}$	276.60						
<b>5</b> - Jo is a 4 year farmer with 3 years of certified production records	$=\frac{340 + 320 + 320 + (100\% * (248))}{4}$	307.00						
<b>6</b> - Jo is a 10 year farmer with 10 years of certified production records	$= \frac{340 + 320 + 320 + 315 + 310 + 300 + 280 + 270 + 260 + 250}{10}$	296.50						

# Providing Notice of Loss and Applying for Payment

- Must be completed within 15 days of the earlier of:
  - A natural disaster
  - Final planting date if planting is prevented by a natural disaster
  - Date that damage or loss of production becomes evident
  - Normal harvest date
- Producers of hand-harvested crops and certain perishable crops must notify FSA within 72 hours of when a loss becomes apparent
- To receive NAP benefits, producers must complete form CCC-576, within 60 days of the last day of coverage for the crop year
  - This requires acceptable appraisal information
  - Must provide evidence of production & note whether the crop was marketable, unmarketable, salvaged, or used differently than intended

# Information FSA uses to Calculate a Payment

- The NAP payment is calculated by unit using:
  - Crop acreage
  - Approved yield
  - Net production
  - Coverage level elected by the producer
  - An average market price for the commodity established by the FSA state committee
  - A payment factor reflecting the decreased cost incurred in the production cycle for a crop that is not harvested or prevented from being planted

### How to Calculate a Payment

#### **Payment**

= (Production Guarantee – Actual Production) \* (Market Price \* % Price Guarantee)

#### Production Guarantee

= # Acres \* Producer Share \* Approved yield \* Coverage Level

#### **Actual Production**

= # Acres \* Actual Yield

# Who are Beginning, Limited Resource, and Underserved Farmers?

- Beginning
  - Farmers who have been farming less than 10 years
- Limited resource
  - Farmers earning less than \$176,800 per year and having a total household income below the poverty line
- Socially disadvantaged or Underserved farmers
  - Farmers who are women, African American, Native American, Asian, and Hispanic
- This tool can be used to determine producer status: http://lrftool.sc.egov.usda.gov

# Beginning, Limited Resource, and Underserved Farmers Adjustments

- If farmers in these categories file form CCC-860, they can receive a waiver which will entitle them to the following:
  - Service fees are waived
  - Buy-up premiums are reduced by 50%
  - If they are a beginning farmer and don't have the production history, 100% of the expected county yield will be used for each of the 4 previous years

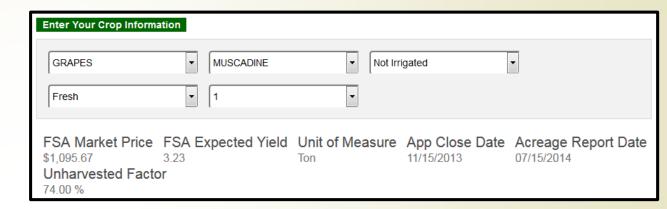
### Grapes Example: Background

- Sam grows 10 acres of Muscadine grapes in Macon County, Tennessee
- He holds a 100% share in his crop
- His grapes are non-irrigated & he markets them as fresh
- His approved yield is 4 tons/acre
- He wants to purchase buy-up coverage at the 65% level



### Grapes Example: Fees

- Sam should file his application by November 15<sup>th</sup>
- At the 65% level of coverage, he will need to pay a premium of \$1,495.59 to insure his grapes & he will have a yield guarantee of 2.6 tons/acre
- He will also incur a \$250 service fee since he is insuring one crop in one county
- His total cost to insure his grapes will be \$1,745.59



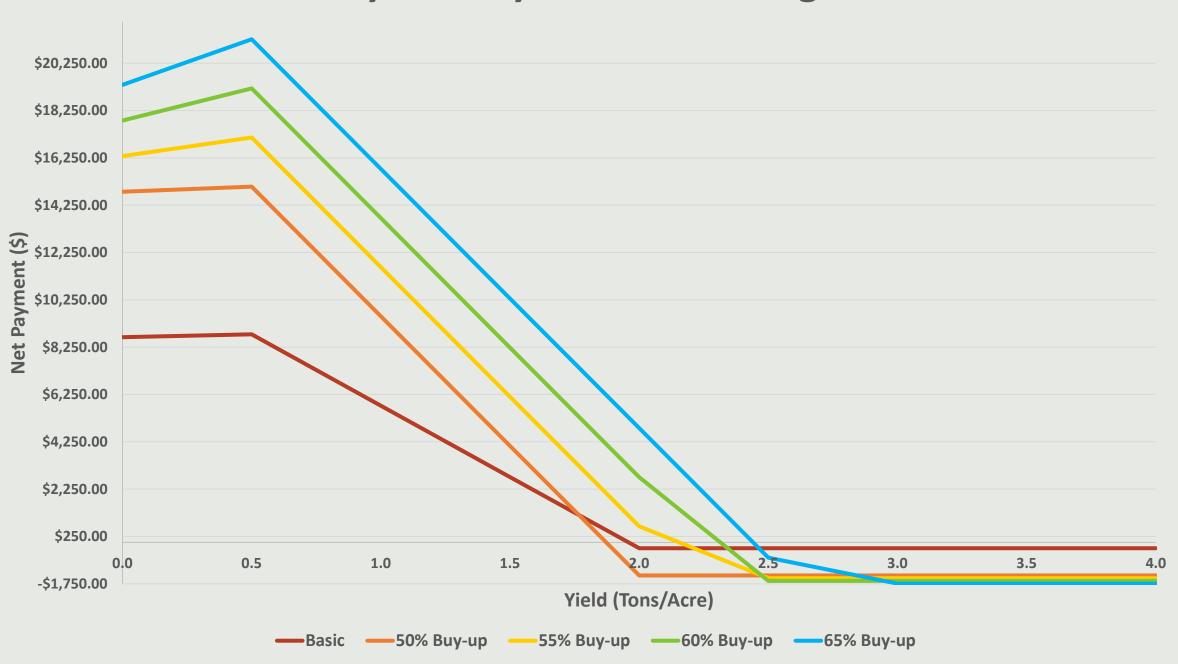
Your NAP Estimated Premium and Guarantees							
Coverage	Yield Guarantee per Acre	Unit of Measure	Yield guarantee valued at NAP Market price (\$/Acre)	Premium (\$/acre)	Premium (\$/crop)*		
Basic	2.0	Ton	\$1,205.23	N/A	N/A		
50%	2.0	Ton	\$2,191.33	\$115.05	\$1,150.45		
55%	2.2	Ton	\$2,410.47	\$126.55	\$1,265.50		
60%	2.4	Ton	\$2,629.60	\$138.05	\$1,380.54		
65%	2.6	Ton	\$2,848.73	\$149.56	\$1,495.59		

### Grapes Example: Payment

- If Sam's yield was 4 tons per acre, he would have a revenue of \$43,826.80
- However, a tornado destroyed 85% of his crop leaving him with a yield of 0.60 tons per acre which would leave him with a revenue of \$6,574.02 if he were not insured
- Since he had less than the guaranteed yield of 2.6 tons per acre, Sam is entitled to a payment of \$20,417.75 after deducting the price of the premium

Estimated Results									
Coverage at									
Yield Per Acre	Basic	50%	55%	60%	65%	Commodity Revenue			
	Total Payments, in Dollars (Less Premium, If applicable)								
6.00	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	(\$1,495.59)	\$65,740.00			
5.40	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	(\$1,495.59)	\$59,166.00			
4.80	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	(\$1,495.59)	\$52,592.00			
4.20	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	(\$1,495.59)	\$46,018.00			
3.90	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	(\$1,495.59)	\$42,731.00			
3.60	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	(\$1,495.59)	\$39,444.00			
3.30	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	(\$1,495.59)	\$36,157.00			
3.00	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	(\$1,495.59)	\$32,870.00			
2.70	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	(\$1,495.59)	\$29,583.00			
2.40	\$0.00	(\$1,150.45)	(\$1,265.50)	(\$1,380.54)	\$695.75	\$26,296.00			
2.10	\$0.00	(\$1,150.45)	(\$169.83)	\$1,906.46	\$3,982.75	\$23,009.00			
1.80	\$1,205.23	\$1,040.88	\$3,117.17	\$5,193.46	\$7,269.75	\$19,722.00			
1.50	\$3,013.08	\$4,327.88	\$6,404.17	\$8,480.46	\$10,556.75	\$16,435.00			
1.20	\$4,820.93	\$7,614.88	\$9,691.17	\$11,767.46	\$13,843.75	\$13,148.00			
0.90	\$6,628.78	\$10,901.88	\$12,978.17	\$15,054.46	\$17,130.75	\$9,861.00			
0.60	\$8,436.63	\$14,188.88	\$16,265.17	\$18,341.46	\$20,417.75	\$6,574.00			
0.30	\$10,244.48	\$17,475.88	\$19,552.17	\$21,628.46	\$23,704.75	\$3,287.00			
0.00	\$8,918.73	\$15,364.53	\$16,900.99	\$18,437.44	\$19,973.89	\$0.00			

### **Net Payment by Yield & Coverage Level**



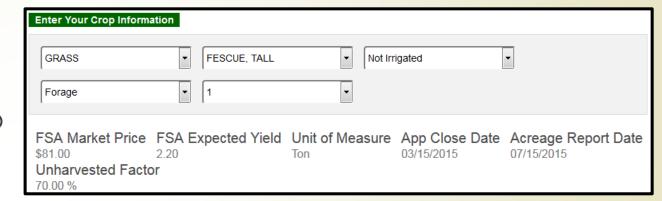
### Grass Example: Background

- Ellen has 25 acres of Tall Fescue grass that she markets as forage in Lewis County, TN
- She holds a 100% share in her crop
- She has an approved yield of 4 tons per acre
- Ellen elects to go with the basic coverage level rather than paying a premium for the buy-up coverage



### Grass Example: Fees

- Ellen needs to have her application in by March 15<sup>th</sup> to be considered eligible for coverage
- At the basic level of coverage, she will have no premium & she will have a yield guarantee of 2.0 tons/acre
- Since she is an underserved farmer & she filled out the waiver form, she will have the service fee waived
- Her total cost to insure her grass will be \$0.00



Your NAP E	our NAP Estimated Premium and Guarantees								
Coverage	Yield Guarantee per Acre	Unit of Measure	Yield guarantee valued at NAP Market price (\$/Acre)	Premium (\$/acre)	Premium (\$/crop)*				
Basic	2.0	Ton	\$89.10	N/A	N/A				
50%	2.0	Ton	\$162.00	\$8.51	\$212.63				
55%	2.2	Ton	\$178.20	\$9.36	\$233.89				
60%	2.4	Ton	\$194.40	\$10.21	\$255.15				
65%	2.6	Ton	\$210.60	\$11.06	\$276.41				

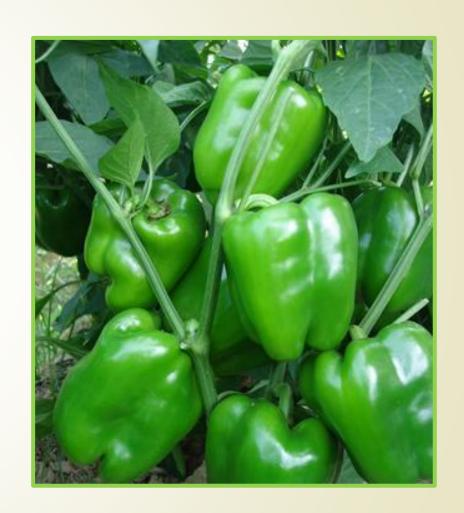
### Grass Example: Payment

- If Ellen's yield would have been 4.0 tons per acre, she would have a revenue of \$8,100.00
- However, drought destroyed 55% of her crop leaving her with a yield of 1.80 tons per acre which would leave her with a revenue of \$3,645.00 if she were not insured
- Since she had less than the guaranteed yield of 2.0 tons per acre, she is entitled to a payment of \$222.75

Estimated Results									
	Coverage at								
Yield Per Acre	Basic	50%	55%	60%	65%	Commodity Revenue			
Total Payments, in Dollars (Less Premium, If applicable)									
6.00	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	(\$276.41)	\$12,150.00			
5.40	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	(\$276.41)	\$10,935.00			
4.80	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	(\$276.41)	\$9,720.00			
4.20	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	(\$276.41)	\$8,505.00			
3.90	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	(\$276.41)	\$7,897.50			
3.60	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	(\$276.41)	\$7,290.00			
3.30	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	(\$276.41)	\$6,682.50			
3.00	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	(\$276.41)	\$6,075.00			
2.70	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	(\$276.41)	\$5,467.50			
2.40	\$0.00	(\$212.63)	(\$233.89)	(\$255.15)	\$128.59	\$4,860.00			
2.10	\$0.00	(\$212.63)	(\$31.39)	\$352.35	\$736.09	\$4,252.50			
1.80	\$222.75	\$192.38	\$576.11	\$959.85	\$1,343.59	\$3,645.00			
1.50	\$556.88	\$799.88	\$1,183.61	\$1,567.35	\$1,951.09	\$3,037.50			
1.20	\$891.00	\$1,407.38	\$1,791.11	\$2,174.85	\$2,558.59	\$2,430.00			
0.90	\$1,225.13	\$2,014.88	\$2,398.61	\$2,782.35	\$3,166.09	\$1,822.50			
0.60	\$1,559.25	\$2,622.38	\$3,006.11	\$3,389.85	\$3,773.59	\$1,215.00			
0.30	\$1,893.38	\$3,229.88	\$3,613.61	\$3,997.35	\$4,381.09	\$607.50			
0.00	\$1,559.25	\$2,686.16	\$2,954.78	\$3,223.39	\$3,492.01	\$0.00			

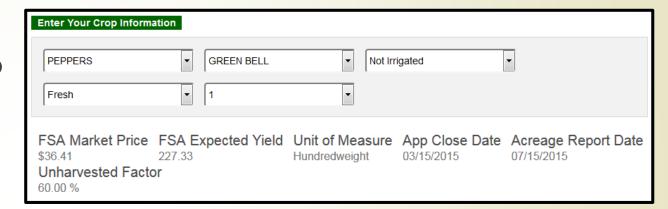
### Peppers Example: Background

- Dean grows 5 acres of Green Bell Peppers in Polk County, Tennessee
- He holds a 100% share in his crop
- His peppers are non-irrigated & he markets them as fresh
- His approved yield is 300 CWT/acre
- He wants to purchase buy-up coverage at the 50% level



### Peppers Example: Fees

- Dean should file his application by March 15<sup>th</sup>
- At the 50% level of buy-up coverage, he will need to pay a premium of \$1433.64 to insure his peppers & he will have a yield guarantee of 150 CWT/acre
- He will also incur a \$250 service fee
- His total cost to insure his grapes will be \$1,683.64



Coverage	Yield Guarantee per Acre	Unit of Measure	Yield guarantee valued at NAP Market price (\$/Acre)	Premium (\$/acre)	Premium (\$/crop)*
Basic	150.0	Hundredweight	\$3,003.83	N/A	N/A
50%	150.0	Hundredweight	\$5,461.50	\$286.73	\$1,433.64
55%	165.0	Hundredweight	\$6,007.65	\$315.40	\$1,577.01
60%	180.0	Hundredweight	\$6,553.80	\$344.07	\$1,720.37
65%	195.0	Hundredweight	\$7,099.95	\$372.75	\$1,863.74

### Peppers Example: Payment

- If Dean's yield was 300 CWT per acre, he would have a revenue of \$54,615.00
- Phowever, a flood destroyed 82.5% of his crop leaving him with a yield of 52.5 CWT per acre which would leave him with a revenue of \$9,557.63 if he were not insured
- Since he had less than the guaranteed yield of 150 CWT per acre, Dean is entitled to a payment of \$16,316.23 after deducting the price of the premium

Estimated	Estimated Results								
	Coverage at								
Yield Per Acre	Basic	50%	55%	60%	65%	Commodity Revenue			
	Total Payments, in Dollars (Less Premium, If applicable)								
350.00	\$0.00	(\$1,433.64)	(\$1,577.01)	(\$1,720.37)	(\$1,863.74)	\$63,717.50			
315.00	\$0.00	(\$1,433.64)	(\$1,577.01)	(\$1,720.37)	(\$1,863.74)	\$57,345.75			
280.00	\$0.00	(\$1,433.64)	(\$1,577.01)	(\$1,720.37)	(\$1,863.74)	\$50,974.00			
245.00	\$0.00	(\$1,433.64)	(\$1,577.01)	(\$1,720.37)	(\$1,863.74)	\$44,602.25			
227.50	\$0.00	(\$1,433.64)	(\$1,577.01)	(\$1,720.37)	(\$1,863.74)	\$41,416.38			
210.00	\$0.00	(\$1,433.64)	(\$1,577.01)	(\$1,720.37)	(\$1,863.74)	\$38,230.50			
192.50	\$0.00	(\$1,433.64)	(\$1,577.01)	(\$1,720.37)	(\$1,408.61)	\$35,044.63			
175.00	\$0.00	(\$1,433.64)	(\$1,577.01)	(\$810.12)	\$1,777.26	\$31,858.75			
157.50	\$0.00	(\$1,433.64)	(\$211.63)	\$2,375.75	\$4,963.14	\$28,672.88			
140.00	\$1,001.28	\$386.86	\$2,974.24	\$5,561.63	\$8,149.01	\$25,487.00			
122.50	\$2,753.51	\$3,572.73	\$6,160.12	\$8,747.50	\$11,334.89	\$22,301.13			
105.00	\$4,505.74	\$6,758.61	\$9,345.99	\$11,933.38	\$14,520.76	\$19,115.25			
87.50	\$6,257.97	\$9,944.48	\$12,531.87	\$15,119.25	\$17,706.64	\$15,929.38			
70.00	\$8,010.20	\$13,130.36	\$15,717.74	\$18,305.13	\$20,892.51	\$12,743.50			
52.50	\$9,762.43	\$16,316.23	\$18,903.62	\$21,491.00	\$24,078.39	\$9,557.63			
35.00	\$11,514.66	\$19,502.11	\$22,089.49	\$24,676.88	\$27,264.26	\$6,371.75			
17.50	\$13,266.89	\$22,687.98	\$25,275.37	\$27,862.75	\$30,450.14	\$3,185.88			
0.00	\$9,011.48	\$15,524.31	\$17,076.75	\$18,629.18	\$20,181.61	\$0.00			

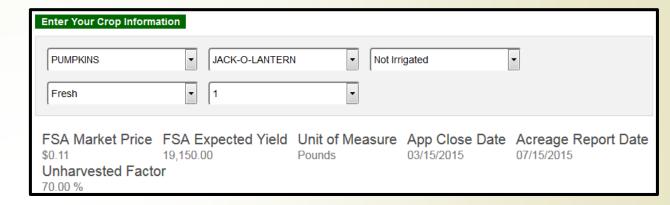
### Pumpkins Example: Background

- Bella has 12 acres of Jack-o-Lantern pumpkins that she grows in Jefferson County, TN which she markets as fresh
- She holds a 100% share in her pumpkin crop
- She has an approved yield of 21,000 pounds per acre
- Bella elects to go with the buyup coverage at the 60% level



### **Pumpkin Example: Fees**

- Bella should file her application by March 15<sup>th</sup>
- At the 60% level of coverage she has a yield guarantee of 12,600 lbs/acre & she will need to pay a premium of \$433.81 to insure her pumpkins which is reduced 50% from what is shown on the website since she is an underserved farmer & she filed the waiver
- She also gets her service fees waived
- Her total cost to insure her pumpkins will be \$433.81



our NAP Estimated Premium and Guarantees							
Coverage	Yield Guarantee per Acre	Unit of Measure	Yield guarantee valued at NAP Market price (\$/Acre)	Premium (\$/acre)	Premium (\$/crop)*		
Basic	10,500.0	Pounds	\$631.21	N/A	N/A		
50%	10,500.0	Pounds	\$1,147.65	\$60.25	\$723.02		
55%	11,550.0	Pounds	\$1,262.42	\$66.28	\$795.32		
60%	12,600.0	Pounds	\$1,377.18	\$72.30	\$867.62		
65%	13,650.0	Pounds	\$1,491.95	\$78.33	\$939.93		

### **Pumpkin Example: Payment**

- If Bella's yield would have been 21,000 pounds per acre, she would have a revenue of \$27,720.00
- However, hail destroyed just over 33.45% of her crop leaving her with a yield of 13,975 pounds per acre which would leave her with a revenue of \$18,329.61
- Even though hail is an eligible cause of loss and she purchased insurance, she did not have a high enough loss in yield to receive a payment, so she lost the cost of \$433.81 which is what she paid for the premium

Estimated Results						
Coverage at						
Yield Per Acre	Basic	50%	55%	60%	65%	Commodity Revenue
Total Payments, in Dollars (Less Premium, If applicable)						
21,500.00	\$0.00	(\$723.02)	(\$795.32)	(\$867.62)	(\$939.93)	\$28,199.40
19,350.00	\$0.00	(\$723.02)	(\$795.32)	(\$867.62)	(\$939.93)	\$25,379.46
17,200.00	\$0.00	(\$723.02)	(\$795.32)	(\$867.62)	(\$939.93)	\$22,559.52
15,050.00	\$0.00	(\$723.02)	(\$795.32)	(\$867.62)	(\$939.93)	\$19,739.58
13,975.00	\$0.00	(\$723.02)	(\$795.32)	(\$867.62)	(\$939.93)	\$18,329.61
12,900.00	\$0.00	(\$723.02)	(\$795.32)	(\$867.62)	\$43.77	\$16,919.64
11,825.00	\$0.00	(\$723.02)	(\$795.32)	\$148.87	\$1,453.74	\$15,509.67
10,750.00	\$0.00	(\$723.02)	\$253.96	\$1,558.84	\$2,863.71	\$14,099.70
9,675.00	\$595.14	\$359.05	\$1,663.93	\$2,968.81	\$4,273.68	\$12,689.73
8,600.00	\$1,370.62	\$1,769.02	\$3,073.90	\$4,378.78	\$5,683.65	\$11,279.76
7,525.00	\$2,146.11	\$3,178.99	\$4,483.87	\$5,788.75	\$7,093.62	\$9,869.79
6,450.00	\$2,921.59	\$4,588.96	\$5,893.84	\$7,198.72	\$8,503.59	\$8,459.82
5,375.00	\$3,697.07	\$5,998.93	\$7,303.81	\$8,608.69	\$9,913.56	\$7,049.85
4,300.00	\$4,472.56	\$7,408.90	\$8,713.78	\$10,018.66	\$11,323.53	\$5,639.88
3,225.00	\$5,248.04	\$8,818.87	\$10,123.75	\$11,428.63	\$12,733.50	\$4,229.91
2,150.00	\$6,023.52	\$10,228.84	\$11,533.72	\$12,838.60	\$14,143.47	\$2,819.94
1,075.00	\$6,799.01	\$11,638.81	\$12,943.69	\$14,248.57	\$15,553.44	\$1,409.97
0.00	\$5,302.14	\$9,134.15	\$10,047.56	\$10,960.98	\$11,874.39	\$0.00

### Other Alternatives

- Whole-Farm Revenue Protection Program (WFRP)
  - Provides a risk management safety net for all commodities on the farm under one insurance policy
  - Available in all counties in all 50 states
  - Tailored for any farm with up to \$8.5 million in insured revenue, including farms with specialty or organic commodities (both crops and livestock), or those marketing to local, regional, farm-identity preserved, specialty, or direct markets
  - Must have accurate Accrual Adjusted farm records
- Rainfall Index (RI) Pasture, Rangeland, Forage (PRF) insurance program
  - Provides insurance coverage on pasture, rangeland, or forage acres
  - Utilizes a rainfall index to determine precipitation for coverage purposes rather than a measure of production loss
  - Available in all 48 contiguous states with the exception of a few grids that cross international borders

### References

- http://fsa.usapas.com/NAP.aspx
- https://www.fsa.usda.gov/programs-and-services/disaster-assistanceprogram/noninsured-crop-disaster-assistance/index
- http://lrftool.sc.egov.usda.gov
- https://offices.sc.egov.usda.gov/locator/app?state=tn&agency=fsa
  - https://ag.tennessee.edu/arec/Documents/publications/PRFInsurancePub. pdf
- https://www.rma.usda.gov/policies/wfrp.html