Crop Insurance for Organic Operations

Montana Organic Association Virtual Conference Organic University

December 2, 2020 Jeff Schahczenski Agricultural and Natural Resource Economist National Center for Appropriate Technology





JARGON

Terms

- Liability- the value of what is insured (never 100% for crop insurance)
- Indemnity- the value of the pay-out for insurable loss
- Premium- the cost of insuring (farmer & taxpayer)
- Let me know when I use insurance jargon you don't know

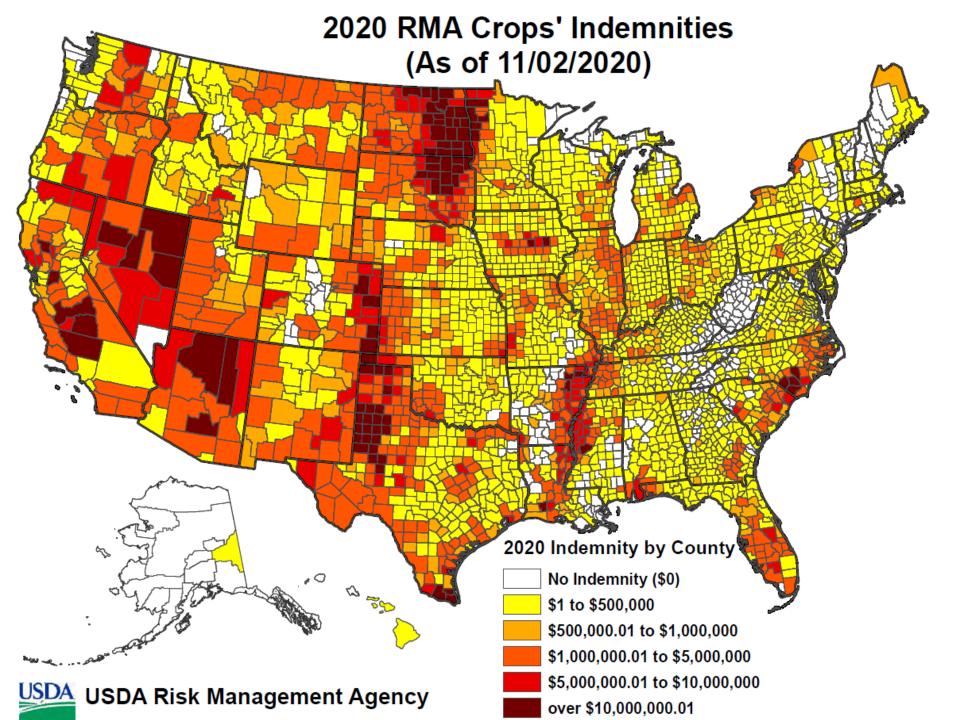


Do Organic Farmers & Ranchers Need Insurance?



Image source: <u>https://www.rma.usda.gov/en/Topics/Prevented-Planting</u>





AG Risk Viewer Assessment

Ag Risk Viewer



Yield or Revenue Protection?

2019 Data

	Liability*	Subsidy*
Major Yield Policies:	\$ 21.60	\$ 1.08
Major Revenue Policies:	\$ 80.00	\$ 5.18
Totals:	\$111.60	\$ 6.36

* Billions of \$



Federally Subsidizd Organic Crop Insurance

2018 Data

% of Total Liability \$ Indemnity*

Organic Revenue	52%	66
Organic Yield	41%	70
Non-organic Revenue	69%	4700
Non-organic Yield	12%	1220
WFRP organic & Non	2.5%	110

* Millions of \$

Options for Organic farmers

- Individual commodity-based: revenue or yield per crop
- There are some livestock related products, not covered in this presentation
- Whole Farm Revenue Protection (WFRP)



What's Available by County

RMA Map viewer

Actuarial Information Browser



WHY Whole Farm Revenue Protection?

- Is major purpose of insurance to assist farmers to stay in business and keep farming?
- Farmer decides what to grow, taxpayers help protect revenue of farmers whatever they grow.
- Covers almost any product in any place in U.S.
- Incentivizes crop and livestock diversity, good for productive and economic sustainability
- Revenue risk spread across all products grown
- Package deal, premiums less then buying separate policies for each crop.



Montana Use of WFRP Products and Expected Value, 2017 Top Twenty

Non-Organic	Value in 2017	Organic	Value in 2017
Wheat	\$41,209,662	Wheat	\$929,110
Dry Peas	\$11,950,421	Other Small Grains	\$206,048
Lentils	\$11,442,047	Dry Peas	\$193,338
Cattle	\$8,051,000	Barley	\$173,433
Barley	\$5,475,950	Lentils	\$111,674
Canola	\$2,697,580	Clover Seed	\$72,000
Dry Beans	\$1,919,197	Wheat Seed	\$68,530
Corn	\$1,728,335	Cattle	\$106,017
Alfalfa	\$856,094	Flax	\$31,639
Flax	\$846,599	Oats	\$27,922
Mustard	\$556,623	Wheat (Seed)	\$21,286
Нау	\$543,367	Seed (Other)	\$21,000
Other Small Grains	\$391,805	Alfalfa	\$8,100
Wheat Seed	\$250,689		
Dry Pea Seed	\$226,410		
Other Crops	\$166,184		
Canola Seed	\$165,376		
Seed (Other)	\$164,707		
Grass Hay	\$146,283		
Forage Production	\$143,683		
Totals	\$88,932,012		\$1,970,097

35 distinct products insured \$90,902,109 worth of products

11

WFRP Limitations

- Have to have to be in 6th year of farming or 4th year of farming if a beginning farmer (10 years or less)
- Livestock and Nursery/Greenhouse Restrictions
 - Coverage of expected revenue from animals and animal products is limited to \$2 million in liability;
 - Coverage of expected revenue from greenhouse and nursery is limited to \$2 million in liability;
- Good records are required and significant forms to fill out



Coverage Limits Depend on # of Products Insured

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 Opportunitie and Limitations

- Hemp and WFRP
 - The Whole-Farm Revenue Protection, or WFRP, is available beginning the 2020 crop for hemp grown for fiber, flower, or seeds.
- New direct marketing option. Combine crops and products into one commodity.



WFRP Practical Limitations

Recordkeeping

- WFRP requires farmer to provide yield and revenue data per crop/livestock product
- Some farms may need to start collecting this data
- Recordkeeping less onerous on farms that
 - Grow on contract
 - Sell to wholesale
 - Derive the majority of their income from 3-7 crops or animal products



Montana Hill County An Example of WFRP





How to Request a Quote

- Contact crop agent
 - Agent locator tool:
 - https://www.rma.usda.gov/en/Information-Tools/Agent-Locator-Page
- Provide the agent with
 - Your farm's tax forms (Schedule F's or equivalent)
 - Your expected revenue in year of insurance. (based on history or valid third party sources)
 - Organic System Plan can help with this effort



- This is just an example!
 - WFRP policies are unique and individual to each farm and ranch.
 - The premium cost and indemnity payment for your operation may differ considerably from the information provided in this example.
 - Contact a crop insurance agent for information for your operation.



Historic Approved Revenue and Expenses

• Historic *approved** average revenue based on tax forms (5 years or 3 years if beginning farmer)

* Approved is sorted out by agent...



Gross Revenue History (from tax records) 3500 acre organic dryland grain farm in Hill County, Montana

	YEAR	Gross Revenue			
	2014	\$	400,000		
	2015	\$	190,000		
	2016	\$	600,000		
	2017	\$	100,000		
	2018	\$	500,000		
Total		\$	1,790,000		
Average		\$	358,000		



Insurance Year Expectations

3500 acre organic dr	yland	grain farm in Mor	ntana					
Hill County								
	Acres	2019 T-Yield** (bu or lbs)	Price * 2019 Projected	Rev	enue/acre	Tota	al Revenue	
Winter Wheat (cc),bu		18	9.82	\$	176.76	\$	176,760.00	
Spring Barley (cc),bu	1000	11	6.68	\$	73.48	\$	73,480.00	
Spring Lentils, lbs	1000	408	0.16	\$	65.28	\$	65,280.00	
Hemp Seed, lbs	200	320	0.68	\$	217.60	\$	43,520.00	
Safflower, lbs	300	715	0.27	\$	193.05	\$	57,915.00	
Totals	3500			\$	726.17	\$	416,955.00	

** There is no T-yield for Hemp seed, data from yield from MSU experiment station field trials.



3500 acre organic dryland grain farm in Hill County, Montana

Historical Approved Average Gross Revenue: \$358,000 Expected Whole Farm Gross Revenue, 2020: \$416,955

Premium and liability coverage is based on *lower* of two

\$358,000



Payout for 50% Loss

MT Organic Dryland Fa	arm example 50%	oss Scenarios					
Historic average rever	nue of farm= \$358,	000					
Expected Whole Farm	Revenue in 2020=	\$416,955					
50% loss of revenue in	n 2020= \$208,478						
Previous approved rev	venue: \$ 400,000						
Method	Liability Covered	Farmer		Net	Final	Net Loss	Net
	@ 85%	Premium	Indemnity	Less Premium	Farm Revenue	from Expected	from average
60% substitution	\$ 328,032	\$ 26,702	\$ 119,554	\$ 92,852	\$ 373,470	\$ (187,765)	\$ 15,470
Exclusion of bad year	\$ 354,412	\$ 34,251	\$ 145,934	\$ 111,683	\$ 392,301	\$ (168,934)	\$ 34,301
90 % of last approved	\$ 306,000	\$ 21,946	\$ 97,522	\$ 75,576	\$ 356,194	\$ (205,041)	\$ (1,806)



Alternatives

- Alternative best ways to insure organic crops in Hill County, Montana @ 85% coverage:
 - Organic Wheat Revenue Protection: \$20,845 premium
 - Organic Barley Revenue Protection: \$10,401 premium
 - Organic Spring Lentils Yield Protection: \$18,273 premium
 - Organic Hemp Seed: NO insurance available yet
 - Organic Safflower Yield only (max 75%): \$8,007 premium
 Total Premium with individual policies: \$57,526
 WFRP premium: \$34, 251



Impact of Diversity

Diversity lowers WFRP premium costs. Moving from five to only three products, and using the same historic and expected price and yields but for only winter wheat, barley and hemp:

- The farmer's premium raises to \$35,555 compared to \$34,251 for the five products. So diversity lowers premium costs by 4%, slightly encouraging diversity
- Important to note, the discount amount is dependent on the relative risk of the crops we removed and location. So there is not a standard discount per product insured.



Vegetable Producer Example

Expected 2021 gross revenue is \$40,000

- Potatoes-- \$10,000
- Tomatoes-- \$10,000
- Melons- \$10,000
- All other Direct Market Commodities- \$10,000

Historic approved gross revenue \$38,000 <u>Cost estimator</u> Premium is \$1,663 Revenue Guarantee is \$32,300



Is WFRP Worth the Money/Time

- Time to collect tax forms, yield and price data
- Premium cost (investment or cost? Catastrophic or Price?)
- Alternative methods of protecting against risk



Determining Expected Price

 Work with agent to validate your sources of what your expected prices for products are going to be in the year you insure



Determining Expected Yields

- Must be reasonable, realistic, and consistent with available local agronomic information; and supported by verifiable records.
- Usually based on historic average yields.
- RMA county average yields may be used in some cases if a farm has no historic average yields
- Other sources see agent for details.



DEADLINES

Sales Closing Date	03/15/2021
Cancellation Date	03/15/2021
Acreage Reporting Date	07/15/2021
Premium Billing Date	08/15/2021
Contract Change Date	08/31/2021



Conclusions-Take Homes

- WFRP has improved and needs further improvement, but could be a way to lower public cost of crop insurance while incentivising sustainable diversity. See our detailed recommendations for improvement: <u>https://attra.ncat.org/product/is-organic-farming-risky/</u>
- WFRP may particuarly useful when there is NO alternative to the highly specialized and often very valuable products that organic farmers produce.
- Determining details of a policy is a kind of negotiation between you and the agent/company. With WFRP be satisfied that the historic and expected value of what you are insuring is ok with you, otherwise don't buy it so you won't be disappointed later.
- Crop insurance is not private insurance, only serviced by private companies. Rules are set by USDA RMA. The agent and company serves you, so you have the right to demand good service. If not complain to RMA.



For More information References on Crop Insurance

ATTRA publications about Crop Insurance

- Crop Insurance Options for Specialty, Diversified, and Organic Farmers https://attra.ncat.org/attra-pub-summaries/?pub=413
- Documentation and Recordkeeping for Whole-Farm Revenue Protection (WFRP) https://attra.ncat.org/attra-pubsummaries/?pub=612
- Primer on Whole-Farm Revenue Protection Crop Insurance: Updates for 2018 https://attra.ncat.org/attra-pub-summaries/?pub=595
- Noninsured Crop Disaster Assistance Program and Whole-Farm Revenue Protection: Understanding the Differences https://attra.ncat.org/product/noninsured-crop-disaster-assistanceprogram-and-whole-farm-revenue-protection-understanding-thedifferences/
- Overview of Crop Insurance & Organic Farming: "Is Organic Farming Risky?" with 19 national policy recommendations. https://attra.ncat.org/crop-insurance/



NCAT/ATTRA: informational assistance to farmers and ranchers

Publications and Guides, Videos, Newsletters, Data Bases, Short Courses,

https://attra.ncat.org/ English: 1-800-346-9140 Bilingual: 1-800-411-3222





