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# Minnesota Crop Insurance Conference

## Margin Protection, ECO, or Neither: How do I decide?

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September 16, 2021

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## Margin Protection, ECO, or Neither?

- Introductions
- Quick Refresher
  - Margin Protection
  - Enhanced Coverage Option
- Considerations for 2022
- Take Away Messages



# Margin Protection, ECO, or Neither?

## Introductions

- Watts and Associates is an Agricultural Economics consulting firm specializing in Crop Insurance and Farm Policy development.
- W&A Developed both Margin Protection and Enhanced Coverage Option (and countless other Federal and private crop insurance products)



# Margin Protection, ECO, or Neither?

## About 508(h) Products:

- Both Margin Protection and Enhanced Coverage Option were developed under 508(h). Products developed in this way:
  - Are offered through every AIP and through every Agent
  - Are Federally Reinsured, Federally Subsidized, and Agent Commissions paid through A&O Reimbursement under the terms of the Federal Crop Insurance Act and the SRA.
  - Developers may receive a modest reimbursement for development costs and maintenance, but earn NO commission from sales



## Margin Protection Review

- Margin Protection has a September 30 SCD
  - Price discovery for Projected Prices is August 16 to September 15.
  - MP and RP use the same harvest prices.
- Margin Protection is Area-Based
  - The same expected county yields used for ARP are used for MP
  - MP offers coverage levels from 95% to 70% and protection factors from 0.8 to 1.2
- Margin Protection is Unique
  - Growers can choose to also buy (RP) in the spring. Growers who do so get a premium credit on the MP premium and receive the greater of the MP or RP indemnity in the fall.

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## Simple Example: MP-HPO

### Calculating an MP Trigger

- Expected Margin  
(Expected Yield x Projected Price) – Expected Cost  
 $(196 \text{ bu/ac} \times \$5.10) - \$300/\text{ac} = \$700/\text{ac}$
- Margin Deductible  
Expected Revenue x (1-Coverage Level)  
 $(196 \text{ bu/ac} \times \$5.10 \times (1-95\%)) = \$50/\text{ac}$
- Trigger Margin  
Expected Margin – Margin Deductible  
 $\$700/\text{ac} - \$50/\text{ac} = \$650/\text{ac}$

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## Simple Example: MP-HPO

### Calculating an MP Trigger

- Final Margin  
(Final County Yield x Harvest Price) – Final Cost  
(180 bu/ac x \$5.00) - \$300/ac = \$600/ac
- Margin Loss  
(Trigger Margin - Final Margin)  
\$650 - \$600 = \$50/ac
- Margin Indemnity  
(Margin Loss x Protection Factor)  
\$50/ac x 1.20 = \$60/ac

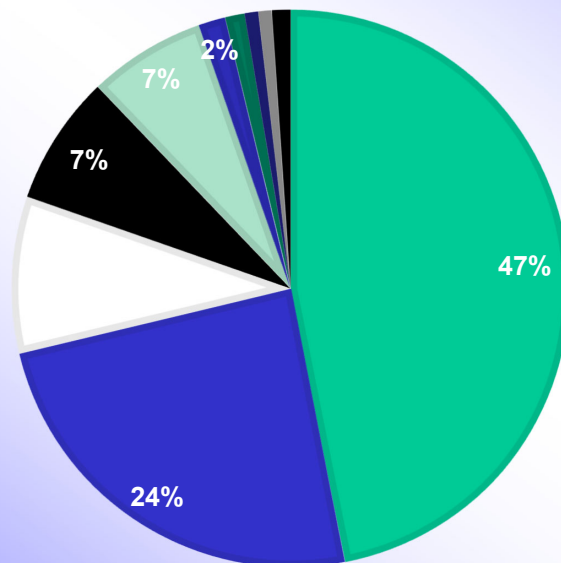
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## Margin Protection Sales Trends

### 2020 MP ACRES BY STATE

■ IL ■ IN ■ IA ■ MI ■ OH ■ NE ■ MN ■ AR ■ WI ■ All Others



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## Enhanced Coverage Option Review

ECO is an area-plan:

- ECO expected and final yields are based on RMA data and NOT producer yields.
- ECO will pay indemnities in the summer following the crop year; NOT at harvest time.
- ECO and individual coverage trigger independently; it is possible for a grower to have:
  - An ECO indemnity, but no individual indemnity
  - An Individual Indemnity, but no ECO indemnity
  - Indemnities from both programs
  - No indemnities.

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## Enhanced Coverage Option Review

Example: ECO on an RP policy (wheat)

The Area Expected Yield is 75 bu/ac and the Projected Price is \$7.25/bu. The producer elects 95% ECO coverage.

- The Coverage Range is the selected ECO coverage level less 86%.

$$95\% - 86\% = 9\%$$

- The producer has an approved yield of 80 bu/ac.
- The ECO Amount of Insurance is determined as the Expected Revenue multiplied by the Coverage Range.

$$\{\$7.25 \times 80 \text{ bu/ac}\} \times 9\% = \$52.20/\text{ac}$$

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## Enhanced Coverage Option Review

Example: ECO on an RP policy

The Harvest Price is \$6.70/bu and the Area Final Yield is 70 bu/ac; the Final Area Revenue is \$470/ac.

- The Loss Percentage is determined by taking to the Loss Trigger less the Final Area Revenue divided by the Expected Area Revenue.

$$\text{Max}(95\% - \{\$470/ \$544\} = 8.6\%), 0$$

- The Payment Factor is determined as the loss percentage divided by the Coverage Range.

$$8.6\% / 9\% = 95.59\%.$$

- The Payment Factor is then multiplied by the ECO Amount of insurance to determine the ECO indemnity

$$\$52.20/\text{ac} \times 95.69\% = \$50/\text{ac}.$$

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## Comparing MP to ECO

Margin Protection



Enhanced Coverage Option



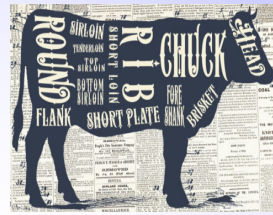
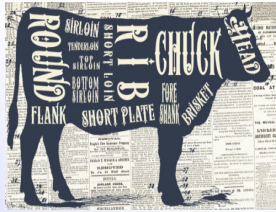
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# Comparing MP to ECO

## Margin Protection

## Enhanced Coverage Option



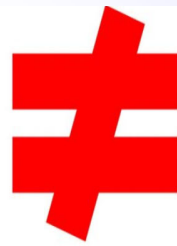
- Both offer coverage up to 95% on an area basis
  - Both enjoy a 44% subsidy rate
- Both support Area coverage with underlying Individual coverage
  - Both use RMA yield data based on production reports
    - Pay indemnities in July of the following year
    - Both were developed by Watts and Associates



# Comparing MP to ECO

## Margin Protection

## Enhanced Coverage Option



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| <ul style="list-style-type: none"> <li>• Uses Fall Price Discovery</li> <li>• Protects against Price or Yield falls and input cost increases</li> <li>• Provides a 0.8 to 1.2 Protection Factor</li> <li>• Offered for Corn, Soybeans, Rice, and Spring Wheat in 12 states</li> </ul> | <ul style="list-style-type: none"> <li>• Uses Spring Price Discovery</li> <li>• Protects against Price or Yield falls</li> <li>• Does not use a Protection Factor</li> <li>• Offered nationwide for 2022</li> </ul> |
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# 2022 Considerations

Some perspective on Projected Price:

Corn			Soybeans			Spring Wheat		
Past Years	Projected Price	Harvest Price		Projected Price	Harvest Price		Projected Price	Harvest Price
2021	\$3.82	???	2021	\$9.36	???	2021	\$5.68	???
2020	\$4.03	\$3.99	2020	\$9.32	\$10.55	2020	\$5.51	\$5.06
2019	\$3.95	\$3.90	2019	\$9.02	\$9.25	2019	\$6.21	\$5.05
2018	\$3.97	\$3.68	2018	\$9.66	\$8.60	2018	\$6.30	\$5.95
2017	\$3.74	\$3.49	2017	\$9.38	\$9.75	2017	\$5.40	\$6.76
2016	\$3.98	\$3.49	2016	\$8.75	\$9.75	2016	\$5.61	\$5.04
2015	\$4.03	\$3.83	2015	\$10.33	\$8.91	2015	\$6.55	\$5.10
2014	\$5.09	\$3.49	2014	\$11.97	\$9.65	2014	\$7.54	\$6.17

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# 2022 Considerations

Some perspective on Projected Price:

December Corn 2022



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# 2022 Considerations

Some perspective on Projected Price: Dec 2021 Futures



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# 2022 Considerations

Some perspective on Projected Price: Dec 2022 Futures



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## 2022 Considerations

Some perspective on Premiums:

Blue Earth County, MN – Non-Irrigated Corn  
95% 1.00 MP-HPO Policy comparison

ADM Year	Projected Price	Volatility	Total Premium	Producer Premium	\$'s/\$100 of Liability	Liability	Change from 2021
2021	\$3.82	0.16	\$48.35	\$27.08	\$3.82	\$851.36	0%
2022	\$3.82	0.16	\$51.84	\$29.03	\$3.97	\$877.06	7%
2022	\$5.06	0.16	\$67.81	\$37.98	\$3.92	\$1,161.75	40%
2022	\$5.06	0.22	\$91.30	\$51.13	\$5.28	\$1,161.75	89%

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## 2022 Considerations

Some perspective on Premiums:

Blue Earth County, MN – Non-Irrigated Corn  
95%-85% 1.00 ECO Policy for 2021

ADM Year	Projected Price	Volatility	Premium Per Acre	% Increase over 2020
<b>2020</b>	\$3.88	0.15	\$12.21	NA
<b>2021</b>	\$3.88	0.15	\$12.39	1%
<b>2021</b>	\$3.88	0.20	\$17.29	42%
<b>2021</b>	\$4.50	0.15	\$14.37	18%
<b>2021</b>	\$4.50	0.20	\$20.05	64%

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## Which choice makes the most sense?

### Considerations:

- Is my farmer a good candidate for an area plan?
- High Volatility and Prices have lead to very high premiums
- Will prices be higher or lower next February? How about next October?
- Is Prevented Plant a consideration for my farmer?
- Is Crop Insurance the best solution for this problem?



## Which choice makes the most sense?

### Take Away Messages:

- There are pricing opportunities for grains right now
- Do we take MP now or do we wait and see, remembering that ECO is available in the spring?
- We have a responsibility to reach out to our farmers and to keep them engaged with the best information and tools possible.



## Questions?

Please ask any questions you may have. If you are more comfortable asking outside a group meeting setting, please contact me.

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