MAKING YOUR 2024 CROP INSURANCE DECISION

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Key Crop Insurance Terms

✓ Crop Insurance Units:

- 1. <u>Enterprise</u>: addition of all basic units in one county for a single crop
- 2. <u>Basic:</u> all of one crop in a county for a specific share of production is insured separately
- 3. Optional: each farm and crop is insured separately

✓ Revenue Protection:

- 1. Insures against revenue loss due to change in price, low yield, or combination of these two items (based on individual farm revenue)
- Revenue protection guarantee =
 Trend Adjusted or APH approved yield X coverage level X greater of projected price or harvest price

✓ Projected Price:

Based on settlement prices for future contracts during February

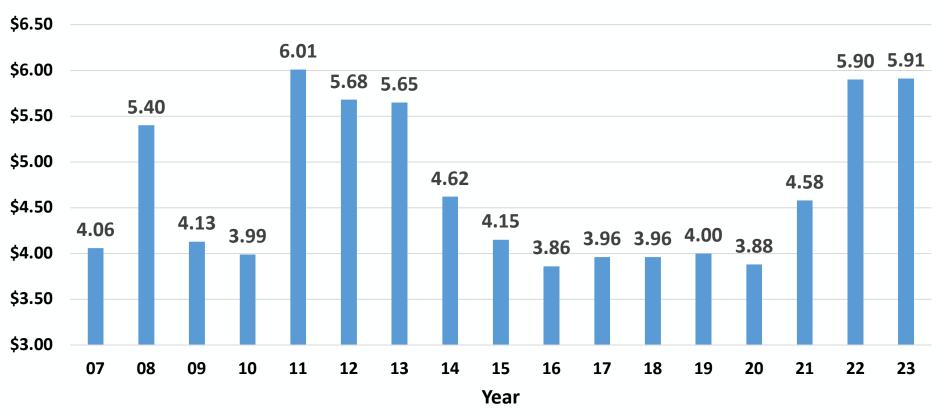
✓ Harvest Price:

Based on settlement prices for futures contracts during October

2024's Price Guarantee Won't Be Available Until March 1st ... But Average Up Through 2/23/23 =\$4.67

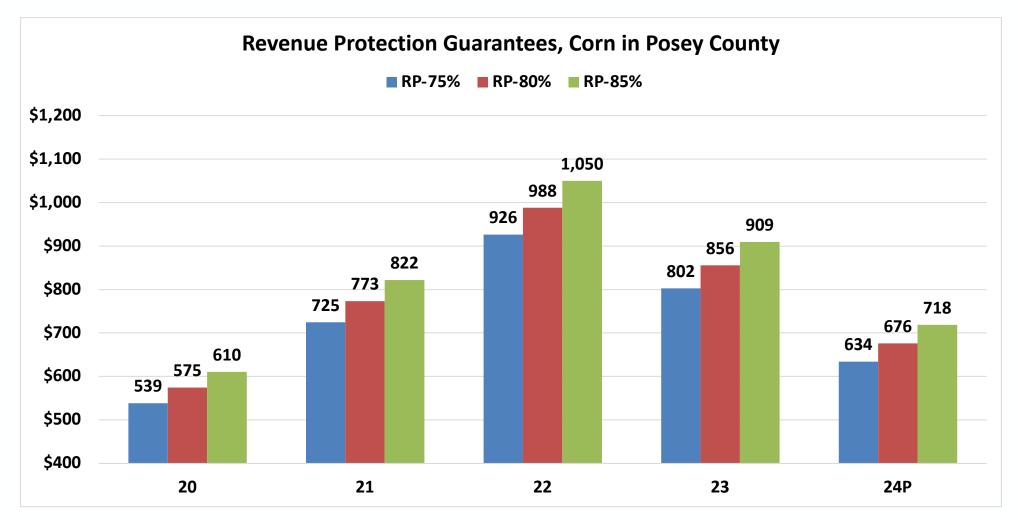
Projected Crop Insurance Prices for Corn (\$ per bushel)

Source: USDA-RMA



Projected price for 2024 is about 21% below the 2023 price

Revenue Guarantee in 2024 is Substantially Lower than Last Year's Guarantee





Managing Price Risk Using Crop Insurance

Why do most producers purchase revenue insurance?

Crop Insurance does provide a "put option" to help manage downside price risk between spring and fall

2024's projected price means the implied put option's "strike price" is much lower than in 2023

The "put option" component is only effective ("in the money") if the harvest price falls by one minus the coverage level

In the case of 85% coverage, that means price has to decline by more than 15% for the put option to be effective

How often does that occur?

Comparison of Crop Insurance Bundles for Corn ... Should You Increase Your Coverage Level?

Assumptions (Posey County, Indiana): 1) \$4.67 projected price; volatility = 0.21 2) Farm and county trend yield = 190 3) Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 75%	\$15.42	\$665	\$0 - \$45.00
\$10.88/\$45.00 = 24% + \$10.88 < RP: 80%	\$26.30	\$710	\$0 \$44.00
\$19.62/\$44.00 = 45% + \$19.62 < RP: 85 %	\$45.92	\$754	\$0



Crop Insurance Endorsements (Additional coverage)

- 1. Supplemental Coverage Option (SCO):
 - SCO provides coverage from 86% to the coverage level of the underlying RP or YP policy
 - SCO can only be purchased on FSA Farms on which PLC is chosen
 - Coverage is based on county yields rather than farm yields
 - SCO indemnity payments are capped
 - Two examples,
 - if we have 85% RP and expected county revenue for corn of \$887 (\$4.67 harvest price x trend adjusted county yield of 190), the maximum indemnity payment would be \$8.87 (1% of \$887)
 - if we have 75% RP and expected county revenue for corn of \$887 (\$4.67 harvest price x trend adjusted county yield of 190), the maximum indemnity payment would be \$97.57 (11% of \$887)

Crop Insurance Endorsements, Continued

2. Enhanced Coverage Option (ECO):

- ECO (90% or 95% coverage level) can be purchased as an endorsement to an eligible individual insurance plan such RP or YP
- Coverage extends from the selected level down to 86%, the point where SCO begins to offer coverage
- Coverage is based on county yields rather than farm yields
- A producer can purchase ECO and not SCO, and vice versa
- ECO indemnity payments are capped
 - For example, if we have 85% RP, 95% ECO, and expected county revenue of \$887 (\$4.67 harvest price x trend adjusted county yield of 190), the maximum indemnity payment would be \$80 (9% of \$1,089)

Comparison of Crop Insurance Bundles for Corn ... Should You Increase Your Coverage Level?

Assumptions (Posey County, Indiana): 1) \$4.67 projected price; volatility = 0.21 2) Farm and county trend yield = 190 3) Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 75%	\$15.42	\$665	\$0
RP: 80%	\$26.30	\$710	\$0
RP: 85%	\$45.92	\$754	\$0
RP: 85%, SCO, and ECO: 90%	\$57.72	\$754	+\$45
RP: 85%, SCO, and ECO: 95%	\$74.06	\$754	+\$89

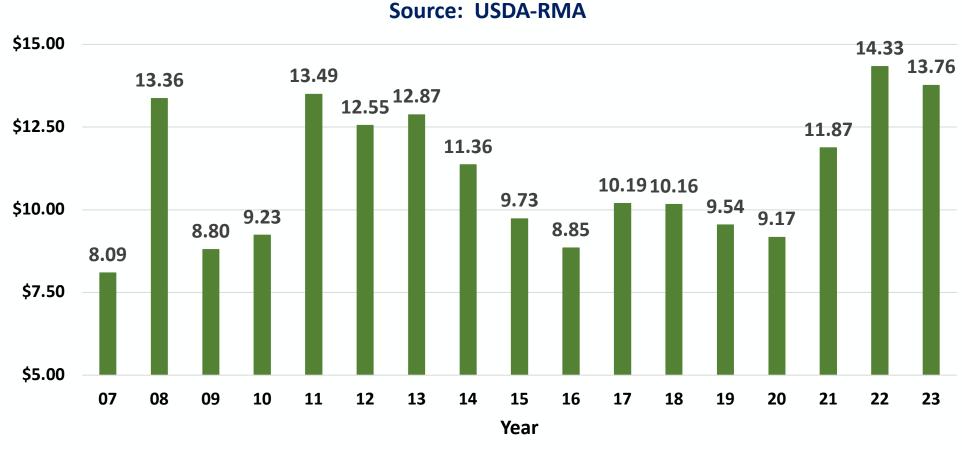


Comparison of Crop Insurance Indemnity Payments for Corn

Assumptions (Posey County, Indiana): \$4.67 projected price; volatility = 0.21 farm and county trend yield = 190	PP = \$4.67 HP = \$4.20 Farm Y = 190 County Y = 190	PP = \$4.67 HP = \$4.67 Farm Y = 150 County = 190	PP = \$4.67 HP = \$5.14 Farm Y = 150 County Y = 150
RP: 75%	\$0	\$0	\$0
RP: 80%	\$0	\$9	\$10
RP: 85%	\$0	\$54	\$59
RP: 85%, SCO, and ECO: 90%	\$0 + \$1	\$54 + \$0	\$59 + \$49
RP: 85%, SCO, and ECO: 95%	\$0 + \$45	\$54 + \$0	\$59 + \$98

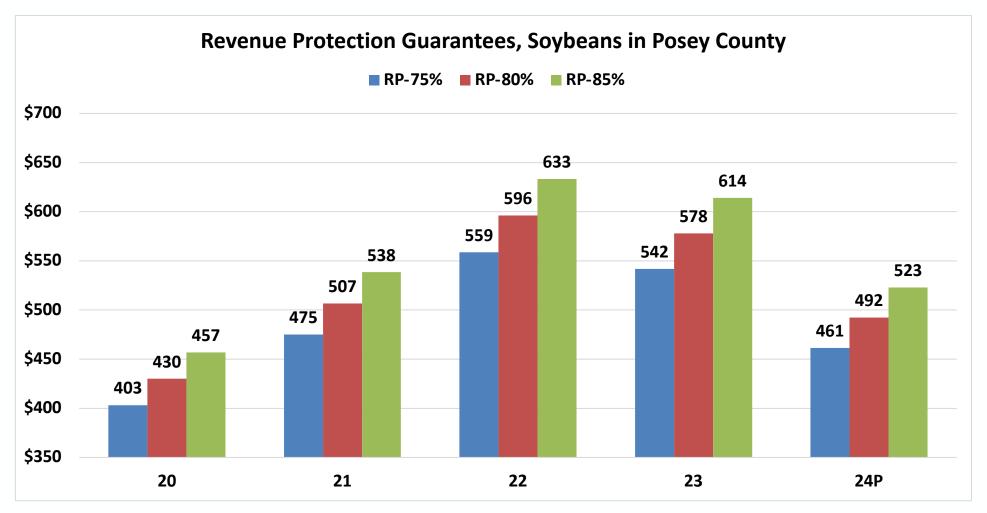
2023's Price Guarantee Won't Be Available Until March 1st ... But Average Up Through 2/23/23 = \$11.61





Projected price for 2024 is about 16% below the 2023 price

Revenue Guarantee in 2024 is Substantially Lower than Last Year's Guarantee





Comparison of Crop Insurance Bundles for Soybeans ... Should You Increase Your Coverage Level?

Assumptions (Posey County, Indiana): 1) \$11.61 projected price; volatility = 0.15 2) Farm and county trend yield = 56 3) Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 75%	\$7.13	\$488	\$0 + \$32.00
\$6.17/\$32.00 = 19% + \$6.17 < RP: 80 % \$11.00/\$33.00 = 33% + \$11.00 <	\$13.30	\$520	\$0 \$33.00
RP: 85%	\$24.30	\$553	\$0



Comparison of Crop Insurance Bundles for Soybeans ... Should You Increase Your Coverage Level?

Assumptions (Posey County, Indiana): 1) \$11.61 projected price; volatility = 0.15 2) Farm and county trend yield = 56 3) Projected Price > Harvest Price	Estimated Premium Enterprise Units	Farm-Level Revenue Guarantee	Additional County Revenue Guarantee
RP: 75%	\$7.13	\$488	\$0
RP: 80%	\$13.30	\$520	\$0
RP: 85%	\$24.30	\$553	\$0
RP: 85%, SCO, and ECO: 90%	\$30.44	\$553	+\$36
RP: 85%, SCO, and ECO: 95%	\$40.10	\$553	+\$71



Comparison of Crop Insurance Indemnity Payments for Soybeans

Assumptions (Posey County, Indiana): \$11.61 projected price; volatility = 0.15; farm and county trend yield = 56	PP = \$11.61 HP = \$10.45 Farm Y = 56 County Y = 56	PP = \$11.61 HP = \$11.61 Farm Y = 45 County = 56	PP = \$11.61 HP = \$12.77 Farm Y = 45 County Y = 45
RP: 75%	\$0	\$0	\$0
RP: 80%	\$0	\$0	\$0
RP: 85%	\$0	\$30	\$33
RP: 85%, SCO, and ECO: 90%	\$0 + \$0	\$30 + \$0	\$33 + \$36
RP: 85%, SCO, and ECO: 95%	\$0 + \$32	\$30 + \$0	\$33 + \$71

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