## Considerations for taking Prevent Plant in 2022 because of Drought Conditions

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In a year where the world really needs grain to make up for lost production and exports from Ukraine, unfortunately much of the Great Plains is facing drought conditions. The current <u>U.S. Drought Monitor</u> for Kansas shows nearly 70% of the state in a D1-D4 drought, with 55% in the D2-D4 category (Figure 1). USDA has recently declared 54 counties in Kansas as Primary Natural Disaster Areas with numerous other contiguous counties also being eligible for <u>emergency disaster loans</u>. The <u>Kansas State University Mesonet</u>, shows the severity of the drought firsthand, with many counties in the central and western regions going over 200 days without a rain event of 0.5 inches or more (Figure 2). While recent precipitation in some areas of the state has improved soil moisture conditions in the seed zone, profile soil water remains below average levels in many areas.

Figure 1. U.S. Drought Monitor for Kansas-April 26th

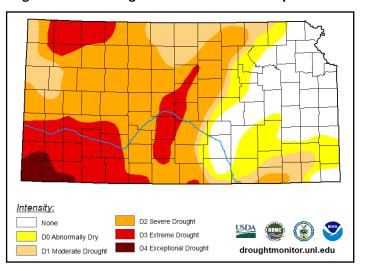
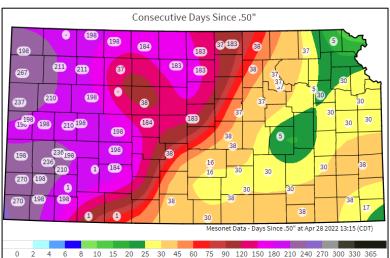


Figure 2. Kansas Mesonet days since 0.50" rain-April 26th



As corn, soybeans, and soon grain sorghum will be planted, Kansas farmers are facing the question if it is better to take prevented plant on their crop insurance or plant the crop in hopes of improving moisture conditions. This article discusses the pros and cons of that decision, but recognizes that each operation is unique in the diversity of crops it can plant and the risk management considerations it needs to consider. Field to field variability in productivity, current rotation, surface residue, precipitation received, and historical APH means that these decisions likely need to be made on a field-by-field basis by farmers.

Eligibility for prevent plant is determined on a case-by-case basis, but in general you must provide evidence of a prolonged period of drought that is general to the surrounding area and that prevents other producers from planting acreage with similar characteristics (see <a href="RMA factsheet">RMA factsheet</a>). This should be fairly easy for many parts of the state, given the information above. A producer needs to be in very close contact with their crop insurance agent as they consider this decision, however, to make sure they are keeping the required documentation.

To claim prevent plant, notice must be given to the crop insurance agent within 72 hours of the final planting date if there is no intention to plant during the late planting period. For corn, this is May 15<sup>th</sup> for southeast Kansas, May 25<sup>th</sup> for the eastern and central crop reporting districts, and May 31<sup>st</sup> for the western three crop reporting districts. For Kansas grain sorghum, final planting date is June 25<sup>th</sup>. For Kansas soybeans, final planting date ranges from June 15<sup>th</sup> in the northern counties to June 30<sup>th</sup> in the southeast. During the late planting period, which lasts for two weeks after the final planting date, the crop insurance guarantee will be reduced by 1% each day and claiming prevent plant is still an option. Again, it is prudent to be in contact with the crop insurance agent throughout the planting period, if a producer is considering prevent plant, to make sure all needed information is recorded and conveyed and all deadlines are adhered to.

If prevent plant is claimed, the payment will be equal to 55% of the crop insurance guarantee on corn, and 60% of the crop insurance guarantee for grain sorghum or soybeans. For example, a corn contract with a 120-bushel APH, 75% coverage selection, and \$5.90 corn base price would have a guarantee of \$531 per acre. The prevent plant payment would be 55% of that guarantee, or \$292.05 per acre. Note that prevent plant calculations use the projected price (Base Price), not the harvest price. It was possible to buy-up on prevent plant coverage by the sales closing date of March 15<sup>th</sup>, 2022, raising those prevent plant values by 5%, but it required additional premium.

Base prices on 2022 crop insurance policies are at historically high levels, but much potential exists for harvest prices to be even higher given the war in Ukraine and tight global supplies. The crop insurance base prices and how they were determined are listed in Table 1.

**Table 1. Crop Insurance Base Prices for Kansas** 

CORN	SOYBEANS	GRAIN SORGHUM	
February Average of the December CBOT Futures	February Average of the November CBOT Futures	99.6% of February Average of the December CBOT Corn Futures	
\$5.90	\$14.33	\$5.88	

Harvest prices for Kansas crop insurance policies will be determined as outlined in Table 2. Settlements of those future contracts on April 26<sup>th</sup> are also listed in Table 2 for a perspective on where these contracts are currently running, but have the potential to be much different by the month of October. Commodity markets are very volatile with so many factors in the world influencing supply and demand. While projections are for prices to be

even higher this fall than the crop insurance base prices, there is still potential that they would not be. For Revenue Protection policies, which most producers use, the crop insurance policy uses the higher of the base price or harvest price to set the guarantee (unless the producer claims prevent plant).

Table 2. Crop Insurance Harvest Prices formulas for Kansas and current futures market settlements

CORN	SOYBEANS	GRAIN SORGHUM
October Average of the December CBOT Futures	October Average of the November CBOT Futures	99.6% of October Average of the December CBOT Corn Futures
\$7.49	\$15.25	\$7.46

Potential harvest prices levels are a key determinant in if it makes sense to take a prevent plant claim now, or plant a crop and take it to harvest. As outlined above, a prevent plant claim will only pay on 55% of the original insurance guarantee, not taking into account the harvest price even on a Revenue Protection policy. Therefore, if the harvest price is significantly higher than the base price, it would be more profitable to plant the crop, even if the potential for crop failure is high. Figure 3 outlines the economics of making this decision, which can be found HERE as an Excel spreadsheet for producers to run their own numbers.

The example scenario assumes that cash rent, crop insurance costs and fertilizer and chemical already applied are sunk costs and therefore not included in the corn budget. If some of these inputs were not yet applied, they should be added to input costs in the scenario of planting the crop. It should be recognized that fertilizer already applied will likely be available for the next crop, if prevent plant is taken. When comparing Net Returns from both scenarios, this should be kept in mind. Also, burndown chemical already applied will reduce weed control costs on fallow ground, if prevent plant is taken. All of these factors, along with using a producer's own APH and insurance level, are why it is important to use the spreadsheet or similar method to run numbers for the individual situation. The example in Figure 3 also shows where the harvest price is higher than the base price. A producer should also run different scenarios for what the harvest price might actually come in at.

Figure 3 Partial Budget Analysis of Planting Corn or taking Prevent Plant

APH yield (bu per acre)	120
Insurance guarantee level	<b>75%</b>
Projected Price (\$ per bu)	\$5.90
Revenue guarantee (\$ per acre)	\$531.00

TAKE PREVENT PLANT	
Prevented Planting payment factor	55%
Prevented Planting payment	\$292.05
Weed control costs per acre	\$50.00
Net return (\$ per acre)	\$242.05

PLANT CORN	
Expected Harvest Price for insurance	\$7.50
Adjusted revenue guarantee, \$/acre	\$675.00
Adjusted revenue guarantee, 37 acre	Ş073.00
Expected yield	60
Expected actual revenue for insurance	\$450.00
Crop insurance payment	\$225.00
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Expected cash price, \$ per bu	\$7.30
Expected crop revenue, \$ per acre	\$438.00
Total revenue, \$ per acre	\$663.00
Input costs, \$ per acre	\$156.00
Machinery & field operations	\$34.00
Harvesting costs	\$40.00
Total expenses	\$230.00
Net return (\$ per acre)	\$433.00

In this example, it is much better from a Net Return perspective to plant the crop, even though it yielded only half of the APH. This is because the expected harvest price of \$7.50 raised the crop insurance guarantee to \$675 per acre, creating a \$225 per acre payment along with \$438 per acre in crop income. In this example, even if the crop was planted and completely failed (zero yield), the \$675 per acre crop insurance payment along with no harvest costs (assuming Custom Hire), would yield a Net Return higher than prevented plant.

The same spreadsheet can also be used for a grain sorghum or soybeans scenario. Again, it is very important for a producer to assess their own APH, coverage level, input costs, and expectations for harvest price. The decision to take prevent plant or not will be very individualized and there are many other factors that should be considered. Some operations may not have applied full fertilizer rates at this time, which could add significantly to input costs if the crop was planted (i.e. not a sunk cost). Some operations may have hired employees that will need to be paid regardless if a crop is planted or not, so is not a cost savings by taking prevented plant. Many operations run their own equipment which will incur overhead costs (interest, depreciation, etc.), even if not used.

Another important item to consider in western Kansas is, if prevent plant is taken, summer fallow wheat can be sown in the fall and yield a potentially larger crop next year compared to continuous crop wheat. With current cash wheat prices over \$11.00 per bushel, this could produce a better Net Farm Income in 2023. Figure 4 outlines an example of this.

Figure 4 Summer Fallow and Continuous Wheat Comparison after Corn

Summer Fallow Wheat		
Potential Yield (bu.)	45	
Price	\$11.00	
Gross Revenue per Acre	\$495.00	
Input & machinery costs	\$250.00	
Net returns (\$ per acre)	\$245.00	

Continuous Wheat		
Potential Yield (bu.)	30	
Price	\$11.00	
Gross Revenue per Acre	\$333.00	
Input & machinery costs	\$250.00	
Net returns (\$ per acre)	\$83.00	

Cover crops are another consideration if a producer decides to take prevent plant. Assuming some moisture is received during the growing season, this can help with weed suppression and also potentially provide forage for grazing, haying or ensiling, without a penalty on the crop insurance contract. Soil moisture is key however, especially if wheat will be planted in the fall. Table 3 below from the RMA 2022 Prevented Planted Standards Handbook (PPSH) outlines the timing of when a cover crop can be planted and how the prevent plant payment is affected depending on how it is harvested.

**Table 3: Cover Crop Prevented Plant Standards** 

Cover Crop Planted	Disposition	Pay 100%	Pay 35%	Pay 0%
Before the Final Plant Date or during the Late Planting Period of the Prevented Crop*	Hayed/Grazed/Cut for Silage, Haylage, or Baleage	Х		
	Harvested for grain or seed at any time, by the insured or another person			Х
After the Late Planting Period (or Final Planting Date if no Late Planting Period is applicable) of the Prevented Crop	Hayed/Grazed/Cut for Silage, Haylage, or Baleage	Х		
	Harvested for grain or seed at any time, by the insured or another person		X**	

<sup>\*</sup>Example: Fall-Planted Cover Crop; Spring Prevent Plant (PP) Crop.

One more item to consider is how this decision might affect a producer's APH in the future. If prevented plant is claimed at 100%, no corn yield will be shown for 2022 and the APH will remain the same for 2023. If the prevent plant is only claimed at 35% and a different crop is planted, such as grain sorghum (and the insured acreage does not qualify for Double Cropping), the insured will receive a corn yield equal to 60 percent of the approved yield. If the crop is planted and fails or has a very low yield, this yield will affect the APH history and rate yield, lowering future guarantees if yield exclusions or other provisions are not used, as well as potentially affecting

<sup>\*\*</sup>Provided the crop claimed as a cover crop is not the prevented crop and all other policy provisions are met.

premium rate in future years. Again, please consult your crop insurance agent and go over all these possible scenarios and the impacts on your insurance coverage and costs.

In summary, many factors go into the decision to take prevent plant or plant a spring crop in drought conditions. There is still time before the Final Planting Date for soil moisture conditions to improve, so continuous contact with the crop insurance agent is important before making a prevent plant claim.

## References

Considerations for taking Prevent Plant in 2022 because of Drought Conditions, Kansas State University Department of Agricultural Economics, Decision Tool. <a href="https://www.agmanager.info/considerations-taking-prevent-plant-2022-because-drought-conditions">https://www.agmanager.info/considerations-taking-prevent-plant-2022-because-drought-conditions</a>

Disaster Designation Information, U.S. Department of Agriculture. <a href="https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/disaster-designation-information/index">https://www.fsa.usda.gov/programs-and-services/disaster-assistance-program/disaster-designation-information/index</a>

Emergency Farm Loans, U.S. Department of Agriculture. <a href="https://www.fsa.usda.gov/programs-and-services/farm-loans/index">https://www.fsa.usda.gov/programs-and-services/farm-loans/index</a>

Frequently Asked Questions-Prevented Planting Coverage, Risk Management Agency, U.S. Department of Agriculture. <a href="https://www.rma.usda.gov/en/News-Room/Frequently-Asked-Questions/Prevented-Planting-Coverage">https://www.rma.usda.gov/en/News-Room/Frequently-Asked-Questions/Prevented-Planting-Coverage</a>

Kansas Mesonet, Kansas State University. Assessed April 26th, 2022. https://mesonet.k-state.edu/

Prevent Planting Insurance Provisions Drought, Risk Management Agency, U.S. Department of Agriculture. <a href="https://www.rma.usda.gov/Fact-Sheets/National-Fact-Sheets/Prevented-Planting-Insurance-Provisions-Drought">https://www.rma.usda.gov/Fact-Sheets/National-Fact-Sheets/Prevented-Planting-Insurance-Provisions-Drought</a>

U.S. Drought Monitor, National Drought Mitigation Center, University of Nebraska-Lincoln. Assessed April 26<sup>th</sup>, 2022. <a href="https://droughtmonitor.unl.edu/">https://droughtmonitor.unl.edu/</a>

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