CORN AND COTTON PRODUCERS PREVENTED PLANTING DECISION TOOL

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BACKGROUND

Prevented planting is a provision within the United States (US) federal crop insurance program that compensates producers for losses from delayed planting or not being able to plant an eligible crop within the crop and region-specific planting period. Under the prevented planting provision, revenue protection (RP), revenue protection with harvest price exclusion (RP-HPE), and yield protection (YP) crop insurance policies provide producers with an indemnity payment if they are impeded from planting an insured crop by a designated final planting date, or within any applicable late planting period. If a producer who purchased a qualifying policy is unable to plant by the final planting date, there are four options:

- Plant the original crop in the late planting period. This option comes with reduced insurance; the farmer's production guarantee would decrease 1 percent per day, for each day of delay after the final planting date until the crop is planted or the end of the late planting period. Production guarantee is the guaranteed revenue or yield offered by the crop insurance policy. For an RP policy, the guarantee is calculated by multiplying the insurance price by actual production history (APH) yield, which is a 4-to-10-year trend adjusted average yield used for future crop insurance purchases, by insurance coverage level.
- 2. Take the full prevented planting payment. The full prevented planting payment is the farmer's production guarantee multiplied by the prevented planting coverage factor. The prevented planting coverage factor for cotton is 50 percent and corn is 55 percent. This option requires leaving the land fallow or planting a summer cover crop after the late planting period that cannot be harvested or grazed before November 1. This option does not impact the producer's APH.
- 3. Receive 35 percent of their full prevented planting payment for the original crop and switch to an uninsured second crop. If a partial premium was paid and a partial indemnity payment was received for the first crop, the second crop would be uninsured. A farmer must wait until after the late planting period for the first crop to plant the second crop.
- 4. Forgo the prevented planting payment for the first crop and plant an insured second crop. If a farmer did not receive an indemnity payment for the first crop, they can switch their insurance to a second crop and plant immediately.

PREVENTED PLANTING DECISION AID

The Prevented Planting Options decision aid was developed to assist producers in determining which prevented planting decision is best for their circumstances. It considers farmer's specified variables including commodity market prices, planting costs, average production history (APH), coverage level, and insurance premium cost. The decision aid was developed to display estimated profit-ability for the four different prevented planting options using the farmer's information. We have set up two decision aids: 1) when corn is the originally insured crop with potential to switch to soybeans; and 2) when cotton is the originally insured crop with the potential to switch to soybeans. We recognize there are other possible secondary crops a producers could switch to, but we do not have data to include this in the decision aid.





Figure 1. Preventing Planting Decision Aid Start Page



HOW TO USE

When opening the prevented planting decision aid, an introduction page, which includes a disclaimer, and the creation information of the decision aid will appear (figure 1). The first step after reading the information found on the introduction page is to select the start button that is located towards the bottom of the page (figure 1).

In the user input page (figure 2), producers will enter market prices for the first crop (corn or cotton) and the second crop (sovbeans). Pre and post plant costs of the first crop as well as the cost of planting a second crop also will need to be provided. Producers will provide their insurance coverage level, premium cost, and average production history (APH) for their first and second crops. To edit the values of the decision aid producer will need to click in the gray highlighted cell to the right of the variable. After inserting all values into the decision aid, producers will click on the results tab in the bottom right of the screen to display results (figure 2).

DECISION AID EXAMPLE

The next page will show results from using the information entered from the user input page. The results page displays an average net return table as well as a net return per acre by day of year chart (figure 3). The average net return per acre (shown in the lower left corner) is the net return on average for the four different prevented planting options. If a producer would like to see what their net return would be in a specific time frame, the net returns by day of year figure shows how net returns change during the late planting window. This chart displays how the four different preventing planting option's net returns differ depending on the day of year. This information allows producers to determine which prevented planting option will fit their operation goals the best for the given values.



Figure 3. Preventing Planting Decision Aid User Results Page

In this example, taking 35 percent of the full prevented planting payment and planting uninsured soybeans would provide the highest net returns during the time frame from June 4 to July 2 (yellow line in figure 3). However, this declines daily, and taking the full prevented payment (blue line in figure 3) is slightly below the returns of taking 35 percent of the full prevented planting payment and planting uninsured soybeans. By planting an uninsured second crop and taking the 35 percent of the full prevented planting payment the risk is higher than taking the full prevented planting payment. The average net returns allow producers to see the effect the four options have on average across the preventing planting time frame. In this example, taking the full preventing planting payment or taking 35 percent of the full preventing planting payment and planting uninsured soybeans will provide the highest net returns given the variables provided. Furthermore, this information shows planting corn late is the worst option for this scenario.

The four different preventing planting options can impact producer's operations differently depending on price, costs, and APH. The prevented planting options decision aid allows producers to understand the impacts of each option specific to their scenario. By being provided with this information the producer can determine which of the four preventing planting options is best for their operation. The corn and cotton prevented planting decision aid can be found <u>here</u>.



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