

# Conservation Practices and the Federal Crop Insurance Program (FCIP)

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Federal crop insurance is a key risk management strategy for most commodity crop farmers. In 2019, more than 370 million acres of farmland were covered by federal crop insurance. Crop insurance is also one of the largest expenditures under the farm bill, representing about 37% of the total farm portion of the farm bill or around \$10 billion per year.

Mounting scientific evidence shows that conservation practice implementation reduces crop yield risk during times of drought, heavy precipitation, and flooding. Additionally, conservation practices provide multiple environmental benefits, including improved water quality and soil moisture management, carbon sequestration, and habitat.

Given the high enrollment and significant federal subsidization, crop insurance has the potential to drive broader adoption of agricultural conservation practices that reduce risk and provide a host of economic and ecological co-benefits including, for example, sequestering carbon and improving water quality. However, the FCIP also contains rules and restrictions that limit how farmers can practice conservation while maintaining eligibility for crop insurance. While several improvements have been made to crop insurance policies in recent years to better support practices like cover crops, both real and perceived barriers remain. There is also a challenge of communicating clearly what the policies are, as in many cases both insurance agents and farmers are unclear about the rules and the relative flexibility for farmers to adopt innovative climate-smart conservation approaches.

This paper highlights some crop insurance areas where there are significant hurdles and other areas where existing guidelines are not sufficiently clear for farmers and insurance agents to know how to proceed in relation to adoption of climate-smart management practices. This

document outlines AGree's current understanding of the barriers to conservation that currently exist in the Federal Crop Insurance Program, which fall into two categories:

- Policy barriers to conservation within the FCIP, which include Good Farming Practice rules that producers must follow in order to be eligible for crop insurance.
- Ways that federally subsidized crop insurance products are designed that disincentivize conservation practices and systems.

## **Policy Barriers to Conservation within the FCIP**

The barriers within the FCIP identified below impede adoption of innovative conservation practices that would improve conservation outcomes and farm profitability. Many of the barriers below address the Risk Management Agency's (RMA) Good Farming Practices (GFP), which are the procedures a farmer must use to receive a full crop insurance indemnity when they have a loss. A farmer's indemnity payment is reduced based on the amount of the loss attributed to their failure to employ GFP. GFP are important because without them, farmers could inadequately care for their crops knowing that they could collect a full insurance payout. However, they also limit the practices a producer can employ while remaining eligible for full indemnity payments.

### **INTERSEEDING COVER CROPS**

RMA Good Farming Practices do not appear to support early interseeding cover crops with corn and soybeans. Planting cover crop between rows of corn and soybeans allows earlier establishment of a cover crop, providing more cover crop growth going into fall for erosion protection, soil health, and creating opportunities to graze the cover crop after harvesting the primary crop. If cover crops are not interseeded early in the season, producers must apply them shortly before harvest (which can worsen the cover crops' stand) or apply after the corn/soy harvest, when there may be little time to get the cover crop growing before winter weather. Late seeding of cover crops also has the downside of not leaving enough time to get adequate cover crop for grazing or achieve its highest conservation benefit potential.

## TERMINATION TIMING

RMA Good Farming Practices require that cover crops are terminated before the cash crop comes up. However, allowing cover crops to grow longer and gain more biomass can help farmers manage their fields by decreasing weeds. In some geographies, for example, rye may keep adding biomass for 2-3 weeks after planting soybeans, depending on the time of soybean planting. Keeping rye growing longer to accumulate more biomass and residue helps prevent weeds from germinating and getting established.

## RELAY CROPPING

Most fields with relay cropping are not insurable, and relay cropping rules differ from state to state, making understanding insurability complicated. Relay cropping is also a term with multiple meanings, depending on the region and cropping system, but generally referring to some overlap in growth cycles of two or more crops, where one crop is planted into another before the second is harvested (a type of interseeding). The definition of relay cropping used by RMA is “A cropping practice where a second-planted crop (“relay crop”) is planted into an established crop (other than a cover crop) where the crops are planted in a manner that allows separate agronomic maintenance and harvest of the crops unless otherwise defined in the Crop Provisions.”

Relay cropping for soybeans seeded into a small grain crop is now [insurable](#), but only by individual written agreements for which data is difficult to compile. Farmers in the western U.S. must provide three years of data to qualify, while farmers in the eastern U.S. do not need to submit data. The 2022 change to make relay cropping insurable is only a small step in the right direction because of the data and written agreement requirements for the policy.

Relay cropping can be used to get more biological diversity in a field during a calendar year and improve soil health and farm profitability. Depending on the region, it may be a way to more profitably grow seeds for the cover crop seed market. One possible relay cropping system would be to plant a cover crop in alternating skip rows with the cash crop. The cover crop can be sold for seed, the yield can potentially be good for both crops, and fewer inputs are needed for weed control because of the cover crop. High demand for cover crop seed makes selling into that market viable in many regions.

In areas with enough rainfall and a long enough growing season, producers can potentially relay crop with three crops. For example, a producer may plant cereal rye in the fall, then soybeans in the spring. The rye grows taller than the beans and can be harvested over the young soybean canopy. Then, the producer plants buckwheat between the soybean rows. The rye controls weeds in the soybeans as they come up, then the buckwheat controls aphids. The soybeans and buckwheat are harvested together, then separated during the cleaning process. However, having the expertise and equipment required for this specific three-crop approach would be challenging for most farmers.

## **DOUBLE CROPPING**

Double cropping is similar to the idea of relay cropping in getting more than one harvest in a calendar year. However, in the case of double cropping, normally the harvest of the first crop is completed before the second crop is planted. The most common double crop system in the U.S. is soybeans planted in mid-summer after winter wheat is harvested. Especially common in the South, double cropping provides significant soil health benefits. However, if the second (double) crop is a cover crop, harvesting that cover crop for seed will typically rule out a cover crop incentive payment. Further, that cover crop for seed harvest is typically not eligible for crop insurance either.

## **GOOD FARMING PRACTICES**

Farmers and ranchers trying to develop climate-friendly and resilient systems face significant problems because RMA is the arbitrator of what constitutes a GFP. Any GFP as defined by RMA may not jeopardize the insured crops' "ability to make normal progress toward maturity and produce at least the yield used to determine the production guarantee or amount of insurance." The need to prove that a new practice will not jeopardize yield is often prohibitive for adopting conservation practices whose yield benefits may take several years to realize.

## Barriers to Conservation in FCIP Offerings

The conservation barriers within the FCIP identified in this section relate to the way that crop insurance offerings are designed, rather than administrative rules that govern the program. A major barrier to conservation adoption is the risk or fear that adopting new conservation practices will reduce a producers' actual production history (APH), which determines the level of coverage they are able to purchase. Furthermore, the FCIP offers better insurance coverage and more options for a small number of major commodity crops, effectively disincentivizing the production of a diversity of crops on farms.

### ACTUAL PRODUCTION HISTORY (APH) AND NITROGEN FERTILIZER USE

The level of coverage a producer can receive from federal crop insurance depends on their actual production history (APH). Producers must have a minimum of four years of yield records to calculate their APH for a crop insurance product. With less than four years of records, the producer only has the option of an assigned yield that is 60% of the county average. Because the amount of crop insurance coverage a producer is eligible for depends on yield, the nature of the program inherently pushes farmers to achieve the highest yields over the highest ROI, which at times means applying excess amounts of nitrogen fertilizer. These relatively high levels of nitrogen fertilization may not be the most profitable amounts to use and may in some cases be excessive in terms of extra nitrogen loss from fields that has the potential to degrade water quality and/or contribute to nitrous oxide emissions.

To address farmers' concerns about yield losses if they reduce their nitrogen fertilizer use, RMA approved the [Post-Application Coverage Endorsement](#) (PACE) in January 2022. PACE is a new crop insurance policy offering for non-irrigated corn in select counties in Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. It is designed for corn producers who are looking to strategically apply nitrogen. PACE will provide supplemental coverage when a producer plans on split-applying nitrogen but is prevented due to field conditions caused by adverse weather, resulting in crop yield loss. It gives farmers the opportunity to use split-apply to increase efficiency, decrease nitrogen runoff, and maximize their financial investment.

## **INCENTIVIZING ROW CROP SYSTEMS IN UNSUITABLE ENVIRONMENTS**

The FCIP offers substantially better coverage for major row crops like corn and soybeans than for small crops and fruits and vegetables, thereby incentivizing production of major commodities over alternative crops and systems because the major commodities are the easiest to insure. This discourages farmers from adding new crops to diversify their income and improve resilience.

Producers are financially incentivized to plant corn rather than graze livestock or grow a variety of crops because the corn is insured, even if the land is more suitable for another use. Expanding insurance products for non-rowcrop systems and a wider range of crops would improve producers' resilience by allowing them to use the land in the most suitable way for their climate and geography. For example, expanding the Pasture, Rangeland, Forage Program would help incentivize other types of systems, including rotational grazing and perennials. Insuring resilient operations tailored to their landscapes is more actuarially sound than incentivizing and insuring row crop systems across geographies.

## **SHORT TERM IMPACTS ON APH**

Most farmers enrolled in crop insurance place very high importance on building and maintaining a high APH. Proving a crop's yield takes several years, and even longer if a farmer is rotating crops (including moving to more valuable, specialty versions of commodity crops). If a farmer decides to incorporate new crops into their rotation, insurance will be more costly and offer less coverage until a yield history is established. The more crops in the rotation, the longer the process takes. Because establishing APH is slow and negative impacts show themselves more quickly, producers are reluctant to adopt conservation practices that may have short-term negative impacts on their yields, even if the practice has positive long-term benefits. The FCIP would improve risk management by incentivizing practices that improve long-term resilience and profitability.

## **ISSUES WITH WHOLE FARM REVENUE PROTECTION**

Whole Farm Revenue Protection (WFRP) is the only crop insurance product available that insures multiple crops, yet it is underutilized and does not support producers as well as it could. Low agent commission rates, complex and time-consuming paperwork requirements, issues

with affordability, and questions about the accuracy of the way the policy is rated are major barriers to the sale of WFRP. Producers find it burdensome to meet the paperwork requirements for WFRP, because it requires collecting data and providing yield data for each individual crop, when some diversified producers grow dozens of vegetable species or other specialty crops. Furthermore, if anticipated yields are larger than the APH, or the farmer is significantly expanding production (as beginning farmers are likely to do in the early years of operation) the gap in insurance coverage level is a significant issue in WFRP that causes some producers to overpay for their coverage.