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Conservation & Risk, Part 3: Exploring the Risk-Payment Gap

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Previous articles in this series explored the hypothesis that conservation practices such as cover crops may alter or increase production risks due to the interaction of weather, field conditions, and narrow spring planting windows (*farmdoc daily*, May 7, 2026; May 21, 2026). In particular, Part 2 examined how spring weather conditions can reduce suitable fieldwork opportunities, increasing the likelihood that delays in termination or planting push operations into periods of greater soybean yield risk. This article builds on those discussions by examining a related economic question: how do potential uninsured losses compare with conservation incentive payments?

Background

Conservation policy has increasingly recognized that producers implementing conservation practices may face not only direct costs but also increased economic risks and potential revenue losses. Congress expanded EQIP authorities in the 2018 Farm Bill to include "increased economic risk" and revenue losses associated with conservation implementation and transition challenges (*farmdoc daily*, May 7, 2026). These policy developments suggest growing recognition that conservation practices can interact with production risk in important ways.

At the same time, EQIP and similar conservation programs generally rely on fixed per-acre payment structures, while spring operational risks vary substantially across years, regions, and weather conditions. The result may be that the practical value of conservation payments changes considerably depending on spring field conditions. Part 2 of this series illustrated these differences by comparing fieldwork suitability conditions in McLean County during 2012 and 2019 (*farmdoc daily*, May 21, 2026). The comparison highlighted how favorable spring conditions can provide extended stretches of suitable fieldwork days, while adverse years may fragment workable periods and compound planting delays.

These differences become economically important when compared with conservation incentive payments. For illustrative purposes, this article focuses on Illinois single-species cover crop contracts because they represented approximately 63% of cover crop contract observations in the available EQIP contract data for fiscal year 2019. Table 1 reports Illinois implementation cost estimates, EQIP payments, and uncovered producer costs for single-species cover crops from 2017 through 2026. Estimated implementation costs generally ranged from approximately $60 to $100 per acre over the period, while EQIP payments reflected 75% of those estimated costs. The remaining uncovered costs ranged from approximately $15 to $25 per acre, depending on the year. We obtained Illinois EQIP contract and payment schedule data through a USDA NRCS cooperative agreement and supplemental Freedom of Information Act (FOIA) requests.

Table 1. Illinois Cover Crop Implementation Cost Estimates, EQIP Payments, and Uncovered Costs for Single-Species Contracts ($/ac)

Fiscal Year	Implementation Cost Estimates	EQIP Payments (75% of Cost)	Uncovered Costs
2017	83.48	62.61	20.87
2018	85.24	63.93	21.31
2019	68.43	51.32	17.11
2020	60.45	45.34	15.11
2021	69.61	52.21	17.40
2022	70.13	52.60	17.53
2023	82.52	61.89	20.63
2024	82.87	62.15	20.72
2025	85.65	64.24	21.41
2026	99.85	74.89	24.96

Importantly, the EQIP payment rate for cover crops is not an observed average payment received by producers, but a scheduled payment rate based on estimated implementation costs. As discussed previously in *farmdoc daily* analyses of conservation payment inflation, those implementation cost estimates can themselves vary substantially over time due to changes in seed, chemical, machinery, labor, and other input expenses (*farmdoc daily*, October 24, 2024). The framework below examines the potential additional gap for farmers between the payment rates designed around estimated adoption costs and variable uninsured production exposure under adverse spring conditions.

In years with favorable spring conditions, a payment structure based on estimated implementation costs may reduce most of the costs associated with cover crop adoption. In adverse years such as 2019, however, even relatively modest yield losses may further increase producer exposure. EQIP payment rates do not currently cover these additional costs and would not be indemnified by crop insurance if they remain within the deductible range of the policy. Such losses remain the responsibility of the producer implementing the practice and are not currently offset through conservation payments or crop insurance support. These additional costs are also avoided by farmers who do not implement conservation practices like cover crops.

Importantly, losses within the deductible range of crop insurance are generally borne directly by the producer. Because soybean yields can decline rapidly as planting extends later into May, delayed planting during adverse spring conditions may create additional uninsured revenue exposure beyond the uncovered implementation costs already reflected in EQIP payment structures (*farmdoc daily*, April 3, 2025).

To explore this issue further, this article introduces a simple illustrative "risk-payment gap" framework comparing EQIP payments with rough estimates of potential uninsured production exposure across years and conditions. In this framework, uncovered costs refer to the portion of estimated implementation expenses not covered by EQIP payments. The "risk-payment gap" refers to additional uninsured operational or yield-related revenue losses associated with adverse spring conditions.

A Framework for Examining the "Risk-Payment Gap"

To help conceptualize the issue, we propose a simple illustrative framework linking estimated uninsured production exposure with conservation incentive payments. In general, the "risk-payment gap" reflects additional uninsured yield-related revenue loss that may emerge under adverse spring conditions despite the presence of conservation incentive payments. The purpose is not to estimate realized farm-level profitability or causal yield impacts attributable to cover crops. Instead, the framework is intended to illustrate how fixed conservation payments may leave a gap relative to highly variable operational risk under changing spring conditions; it is an initial look at this issue, not a final or complete evaluation.

The policy question raised by this framework is whether fixed conservation payment structures adequately account for highly variable operational and production risks across years and conditions. Because spring weather conditions can change substantially from one season to the next, the effective economic value of conservation incentives may likewise vary considerably depending on fieldwork opportunities, planting delays, and other operational constraints.

Example Year Comparisons

Part 2 of this series compared suitable fieldwork conditions in McLean County during the favorable 2012 spring and the unusually wet 2019 spring, illustrating how adverse weather conditions can fragment workable field days and compound planting delays (*farmdoc daily*, May 21, 2026). Building on those findings, Table 1 shows that EQIP payment schedules already leave producers responsible for a portion of estimated implementation costs. The framework below examines how delayed planting risks during an adverse spring could substantially increase producer exposure beyond the baseline uncovered costs.

Using estimated planting window shortfalls and delayed planting yield assumptions for McLean County during 2019, Table 2 estimates producer exposure under adverse spring conditions. Relative to the benchmark suitable fieldwork expectations discussed in Part 2, the 2019 spring included shortfalls of approximately one day in the early planting window, seven days in the middle window, and ten days in the late window. Following the delayed planting literature discussed previously, the framework applies estimated yield-loss assumptions across those planting windows to estimate approximately 4.52 bushels per acre of soybean yield risk of loss. Valued at the 2019 crop insurance projected price of $9.54 per bushel, this implies an estimated risk of revenue loss of approximately $43.11 per acre.

Under the 2019 EQIP payment benchmark, producers also remained responsible for approximately $17.11 per acre of estimated implementation costs not covered by the conservation payment. Combined with the illustrative risk-payment gap associated with delayed planting exposure, total producer burden increases to approximately $60.22 per acre. By contrast, no additional delayed planting exposure was assumed for the favorable 2012 example because suitable fieldwork conditions remained substantially more continuous across the spring planting window (*farmdoc daily*, May 21, 2026). The results suggest that adverse spring conditions may substantially reduce the effective value of conservation payments supporting conservation practice adoption.

Table 2. Illustrative Producer Exposure Under Contrasting Spring Conditions

County	Year	Uncovered Costs ($/ac)	Estimated Yield Loss (bu/ac)	Estimated Revenue Loss ($/ac)	Total Producer Burden ($/ac)
McLean	2019	17.11	4.52	43.11	60.22

These findings may help explain some producer hesitation regarding conservation adoption or continuation under uncertain spring conditions. As discussed previously in this series, producers operate under substantial production, financial, and operational uncertainty. Conservation practices may provide important long-run benefits while simultaneously increasing short-run operational exposure in adverse years.

Policy Considerations

These initial comparisons raise important questions for conservation policy design. Existing conservation payment structures generally remain fixed despite substantial variation in weather-related production risk. Congress has begun to recognize that conservation implementation may involve economic risks beyond direct establishment costs.

Future policy development could explore whether conservation incentives might better account for operational and production risk variability. For example, future policy discussions could consider weather-responsive supplemental payments, county or regional risk adjustments, integration with crop insurance concepts, or additional support during transition years. Additional research is needed to evaluate these possibilities more rigorously.

Concluding Thoughts

Conservation practices operate within dynamic biological, operational, and economic systems shaped heavily by weather variability. Previous articles in this series explored how spring planting windows and fieldwork conditions may alter risks associated with timing-sensitive conservation practices such as cover crops. This article extended that discussion by comparing those potential risks with conservation incentive payments.

The initial examples presented here suggest that fixed conservation payments may leave producers with substantially different risk-payment gaps depending on spring operational conditions. In some years, payments may substantially offset implementation challenges; in others, deductible-range production losses could absorb much of the payment value. Understanding these dynamics could improve conservation policy design by more fully accounting for the short-term economic realities producers face while implementing practices intended to generate long-term environmental benefits.

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