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The Next Farm Bill May Present Opportunities for Hybrid Farm-Conservation Policies

Jonathan Coppess

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Natural resource conservation policies have long been a part of American farm policy. They predominantly consist of voluntary incentives and cost-share assistance in programs that have grown in number, scope and in terms of Federal outlays since the Food Security Act of 1985. This expanding suite of programs has become increasingly important in the omnibus farm bill legislation that Congress works to reauthorize approximately every five years. Recent lawsuits, State and Federal actions, as well as voluntary commitments made by major food retailers and manufacturers, may well magnify that importance for the 2018 and future farm bill debates.

The public perception of modern farming created by water quality hotspots such as the Great Lakes, Gulf of Mexico, Chesapeake Bay, and key drinking water sources for cities such as Des Moines appears to be increasing pressure on elected officials, private food companies, and farmers to undertake greater efforts to address water quality concerns. This further sharpens the focus on farm bill conservation programs. It coincides, however, with a significant downturn in commodity prices and farm incomes in an increasingly difficult political environment for farm bills. Reducing nutrient losses, improving water quality and meeting industry sustainability goals by financially-stressed farmers calls into question not only the design of existing policies and programs, but also the compartmentalized system of farm policy. Conservation concerns intersect with farm risks on the same fields covered by crop insurance and farm programs. This may present opportunities for creative, hybrid policies in the next farm bill that help farmers stay in business while being good stewards of natural resources and sustainable suppliers.

Reviewing Nutrient Loss Reduction and Sustainable Sourcing Efforts

Nutrient loss and sustainable sourcing are built upon the same realities of Midwestern row crop farming. Growing crops require nutrients such as nitrogen, phosphorus and potash, but they do not consume all that is applied or available; significant quantities of these nutrients are exported from farm fields or leached through soils into drainage tiles by water (Cameron 2013; Ribaudo et al., 2011; Royer et al., 2006; Kladivko et al., 2004). Nutrient loss is largely a function of the weather, especially rain. As large concentrations of these exported or lost nutrients collect in water bodies, they can cause hypoxia or dead zones such as in the Gulf of Mexico (Petrolia and Gowda, 2006; Rabalais et al., 2002). They can also contaminate drinking water supplies requiring expensive removal and treatment efforts by municipal suppliers that are required to meet standards for safe drinking water (EPA, 2016b). The public response to nutrient loss and water quality degradation has thus far been regulatory or quasi-regulatory. For example, the Environmental Protection Agency (EPA) has moved forward with regulatory actions under the Clean Water Act that impact farmers in regions such as the Chesapeake Bay (Fowler, 2013). Additionally, many States have implemented wide-scale strategies to reduce the nutrient loads from both point and nonpoint sources within their borders (David et al., 2015). A second response has recently become more prominent: litigation. The Des Moines Water Works (DMWW) lawsuit against three drainage districts is arguably the most consequential because it challenges existing exemptions for, and has the potential to impose significant costs on, farmers (Coppess, 2016).

Many leading food companies, retailers and grain companies are also joining efforts to reduce farming's impact on water quality under the broader banner of sustainable farm production (SUSTAIN News, 2016; Keystone Policy Center, 2016; Acharya et al., 2010). Some predict that within less than five years, nearly all food companies in the United States and the European Union will have publicly committed to sustainable sourcing, an objective unknown as recently as 2004 (Hamilton and Reaves, 2014). For example, the Midwest Row Crop Collaborative (MRCC) was recently formed by founding partners such as Cargill, the Environmental Defense Fund, General Mills, Kellogg Company, Monsanto, PepsiCo, The Nature Conservancy, Walmart, and the World Wildlife Fund. The MRCC pledges to support farmers in the improvement of soil health and water quality. Its goals include farmer adoption of sustainability measures on 75% of Iowa, Illinois, and Nebraska row crop acres by 2025, a 45% nutrient loss reduction goal to be met by these pilot states by 2025, and partnership efforts with other states in the upper Mississippi watershed. These goals notably align with the EPA's Mississippi River/Gulf of Mexico Hypoxia Task Force (2001) strategies for reducing the hypoxic zone in the Gulf of Mexico (EPA, 2016a).

A Brief History of Farm Support and Conservation Policies

Today's omnibus farm bill legislation includes commodity support programs, crop insurance and conservation programs. These policies have long, interconnected histories that date to the New Deal responses to the Great Depression. Commodity programs have provided price and income support to producers, while Congress initially created crop insurance as an experimental effort to provide assistance in cases of yield losses. Conservation policy began as an attempt to preserve soil in response to the devastating conditions of the Dust Bowl. Combined, these policies focus on fundamental farm risks: market prices; weather-related production; and natural resource consequences.

Commodity programs were first designed to increase crop prices by attempting to control supplies and using price supporting loans, but repeated failures and political problems caused Congress to shift to a system of income supporting deficiency payments when prices were low (Orden and Zulauf, 2016; Glauber, 2013; Winders, 2009; Glauber, 2004; Hansen, 1991). The modern system features direct assistance payments in a decoupled scheme that dates to the 1996 Farm Bill, as well as an emphasis on risk management through crop insurance (Glauber, 2013; Orden, Paarlberg, and Roe, 1999). This system provides farmers more flexibility in making planting decisions and may also benefit conservation efforts because farmers who put land into conserving uses or made better use of beneficial rotations do not lose payments. It also emphasizes risk management. Currently, payments are contingent on price or revenue losses. Moreover, farmers are encouraged to purchase subsidized crop insurance, which has become the largest item of Federal farm spending (CBO, 2016).

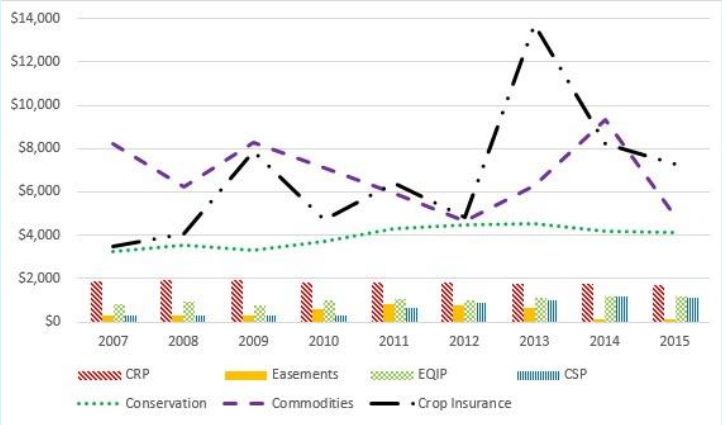
While farm conservation policy was initially a response to the Dust Bowl, it was quickly placed in service of price support policy as a mechanism for taking acres out of production and providing direct assistance to landowners and farmers (McGranahan et al., 2013; Cain and Lovejoy, 2005). The focus for conservation policy changed significantly beginning with the 1985 Farm Bill. Congress emphasized conserving natural resources and addressing environmental concerns when it created the modern Conservation Reserve Program (CRP). CRP was an updated version of earlier policies but with a specific statutory purpose of retiring environmentally-sensitive and highly erodible lands for ten or fifteen years. Over time, the suite of reserve or retirement programs has grown to include easement policies that remove acres—whole fields or portions of fields—from production via property rights on the land for conservation measures such as restored wetlands or permanent grasslands.

The 1985 effort also added a quasi-regulatory component in the form of conservation compliance (Heimlich and Claassen, 1998; Malone, 1986). Conservation compliance is not an assistance program but rather places eligibility requirements on Federal farm support based on conservation practice adoption by the farmer. Specifically, farmers and landowners can lose program eligibility if they fail to comply with restrictions for farming on highly erodible land and wetlands. Failure to comply can result in lost payments and, potentially, a requirement that the farmer repay Federal assistance received while she or he was out of compliance.

Working lands policies provide direct financial assistance to farmers for adopting conservation practices. The 1996 Farm Bill created the Environmental Quality Incentives Program (EQIP) to provide cost-share assistance to the farmer for installing specific and approved conservation practices to help meet or avoid regulations. The 2002 Farm Bill created the Conservation Security/Stewardship Program (CSP), which has been modified each farm bill

thereafter. In general, the program provides five-year contractual payments to farmers for maintaining and improving conservation across the entire farming operation. Funding and interest in these policies has been increasing, while new trends are developing. For example, the 2014 Farm Bill combined various authorities to emphasize a regional focus with coordinated efforts and assistance across multiple farms, while adding funding and requiring non-Federal sources of matching funds (Coppess, 2014; Zulauf, 2014). Figure 1 plots spending on various conservation programs as well as a comparison with outlays for commodity programs and crop insurance.

Figure 1: Federal Outlays ($ Billions)



Source: Congressional Budget Office, 2016

Opportunities for Creative Policy Solutions and Hybrid Programs

Farming is complex and full of risk. Production is undertaken by many individual actors spread across large land areas and subject to the vagaries of weather, climate and markets; each farmer is in competition with neighbors and farmers around the world. Nutrient loss and sustainable sourcing are also deeply connected to the weather and similar issues impacting production (Cameron et al., 2013; Kladivko et al., 2004; Gentry et al., 1998). This connects them to the price and yield risks farmers must manage. Adding or revising practices for conservation, sustainability or similar outcomes can add significant expense and management challenges for farmers that, in turn, may increase resistance to both policy and practice changes (Kanter et al., 2015; David et al., 2015; Hamilton and Reaves, 2014; Christianson, 2013). Weather, risk and costs are familiar terrain for farm policy. Current assistance policies, however, are compartmentalized into commodity, crop insurance and conservation programmatic systems; a system which arguably fails to align fully with realities on the farm and in the fields. Nutrient loss reduction and sustainable sourcing raise questions about this policy system, but may also provide opportunities for creative policy solutions that take into account not only conservation but also farm risk.

Efforts to address conservation challenges could benefit from incorporating counter-cyclical and risk components familiar to farm programs and crop insurance. Similarly, farm programs and crop insurance could provide better assistance to farmers if they incorporate aspects of the economic risk farmers may face from nutrient loss reduction and sustainable sourcing. As a result, hybrid conservation-risk policies could benefit farmers who are good stewards of natural resources. They could also push Federal farm payments in the direction of a public good where the taxpayer obtains environmental benefits in return for the assistance. This could be especially beneficial politically in a time of polarization and challenging Federal budgetary scenarios that limit policy effectiveness. The following discussion provides an initial exploration of hybrid programs and how existing policies could be creatively adapted to help farmers reduce nutrient loss and meet sustainable sourcing goals.

Research and experience have developed a set of practices that can help reduce nutrient losses and improve the sustainability of row crop production, commonly known as Best Management Practices (BMP); adopting them can increase the farmer's costs (David et al., 2015; Christianson, 2013). Farmers adopting BMP could potentially be putting themselves at a cost disadvantage to those farmers who do not adopt BMP, a situation that could be magnified in times of low prices. Current conservation programs address this issue generally through cost-share assistance, while current farm programs and crop insurance provide assistance triggered on low prices or decreased revenues. Taking a hybrid policy approach towards encouraging adoption of BMP might prove effective.

To begin with, a hybrid program could be designed to provide enhanced counter-cyclical assistance to the farmer adopting BMP. For example, the price and revenue guarantees in farm programs could be increased for those farmers that adopt BMP based on the estimated additional costs of the BMP adopted. If a certain practice was estimated to cost $0.20 per bushel, then that could be added to the reference price or benchmark price

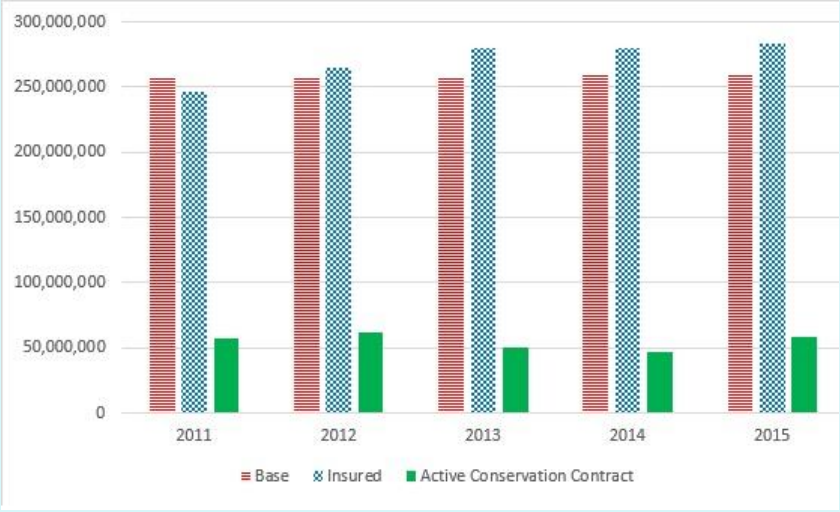
components of the farm programs. Thus, farmers adopting BMP would trigger payments before farmers who do not adopt them. They would also receive larger payments for the same level of decline.

Current farm programs make payments on historical base acres rather than on the actual acres planted to the crop. Most of the programs make payments on 85% of the decoupled base acres for the crop on the farm, known as the payment acres. This could also be adjusted to provide enhancements to farmers who adopt BMP, especially if budget challenges to the farm bill result in efforts to lower payment acres. For example, BMP farmers could continue to receive payments on 85% of base acres but non-BMP farmers could receive payments on only 80% of their base acres. Other features of the programs could be adjusted as well. For example, the revenue programs limit payments to a maximum of 10% of the benchmark average revenue and that limit could be adjusted to enhance the program for farmers adopting BMP.

Aside from farm programs, the hybrid concept could also be applied to crop insurance. The operational aspects of crop insurance, especially the rating of policies and the requirement for actuarial soundness—that is, indemnities must be matched by premium—could limit the options for hybrid components. The most straightforward adjustment would be to provide additional assistance with the cost of insurance premiums to those farmers adopting BMP relative to those who do not. The Federal government currently subsidizes on average 62% of the cost of crop insurance, but that is averaged across all policies and farms. The actual level of premium subsidy a farmer receives depends on the level and policy they purchase (Zulauf, 2016). For example, farmers purchasing 60% coverage on basic and optional units receive a 64% subsidy rate but farmers purchasing 85% coverage on basic and optional units receive a 38% subsidy rate. Congress could provide BMP farmers with a higher subsidy rate than non-BMP farmers, which could play a role if farm bill discussions are consumed by political pressures to reduce premium subsidy rates. BMP farmers could avoid the rate reduction.

The above are only examples for ways to create hybrid policies in the next farm bill and much will depend on the direction the debate takes in Congress. The underlying point is that these policies can be adjusted in ways that encourage conservation but continue the focus on helping farmers with the risks inherent in production via the counter-cyclical and risk-based features of existing farm programs. Moreover, hybrid policies may reach significantly more acres than continuing to limit conservation assistance to the cost-share programs. This potential can be found in comparing the acres reached by the various programs. According to the Farm Service Agency, there are more than 259 million base and generic base acres counted in farm programs (USDA-FSA, 2016). According to the Risk Management Agency, there were nearly 283 million acres insured by crop insurance in the 2015 crop year (USDA-RMA, 2016). Natural Resources Conservation Service program data indicates far fewer acres are covered by the conservation programs of the farm bill, as demonstrated in Figure 2 comparing total base acres, total insured acres and the total acres under active conservation contracts for the major conservation programs: CRP; CSP; EQIP; and easements (USDA-NRCS, 2016). In addition to potentially reaching far more acres, creative hybrid policies might further conservation goals at a lower cost as compared to expanding cost-share assistance to an equivalent acreage. This is due to the counter-cyclical nature of the hybrid policies which would make payments only in years of price or revenue declines. Furthermore, adjusting premium assistance or payment acres to encourage conservation practices might well result in some estimated reductions in program spending.

Figure 2: Total Acres Covered by Programs



Source: USDA, 2016

Budget Challenges and Lessons from History

The key to the next farm bill likely lies in the obscure Federal budgeting process and, more specifically, in the estimates created by the Congressional Budget Office (CBO). Under Federal budget rules and procedures, the funding available for the next farm bill will depend on the 10-year CBO expenditure forecast at the time. Any changes to program authorities that are estimated to spend more will require offsets. In that way, the CBO baseline has outsized influence on the development of farm and conservation policies and the writing of a farm bill. Budgetary pressures on the farm bill coalition can be intense, threatening to split apart the coalition and defeat the legislation. New spending or programs for conservation and farmers will collide at the baseline. These same constraints, however, could also be the catalyst for creative policy design such as the hybrid concepts discussed herein.

History may not repeat itself but it does appear to recycle, certainly in the case of farm policy. For example, the 2014 Farm Bill debate featured many similarities to past farm bill debates, including 1995-1996 and even as far back as 1962. Looking ahead to 2018, the 1985 debate may be particularly relevant. It featured low prices, depressed farm incomes, a strong push for farm program reforms from environmental interests and significant budgetary challenges (Heimlich and Claassen, 1998; Malone, 1986; Infanger et al., 1983). It is not a perfect precedent, however, because the farm economy is not expected to be anywhere near the level of economic crisis as it was in the 1980's. The key is the fact that despite the many challenges it faced, the 1985 Farm Bill initiated modern conservation policy with the CRP and conservation compliance. The latter was arguably the larger legislative achievement because Representatives and Senators agreed to withhold payments from struggling farmers in a time of crisis if they did not abide by conservation measures.

If farm and environmental interests again struggle in 2018 under difficult budgetary and political circumstances, the 1985 debate might provide valuable lessons for capitalizing on the challenges. Opportunities exist where conservation and farm policies intersect. Nutrient loss reduction and sustainable production highlight this because both involve some of the same risks inherent in farm production. Finally, the long history for farm and conservation policies provides valuable lessons to guide the search for mutually-beneficial and workable solutions that can also strengthen the coalitional bonds necessary on the rough legislative road through Congress.

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Author Information
Jonathan Coppess (jwcoppes@illinois.edu) is Clinical Assistant Professor Ag Law and Policy Department of Agricultural and Consumer Economics, University of Illinois, Urbana, IL.