Compliance Mechanisms: A Primer

Compliance mechanisms require that agricultural producers undertake certain resource conservation activities as a condition of eligibility for selected Federal agricultural programs, including commodity price and income support programs and voluntary conservation programs such as CRP, WRP, and the Environmental Quality Incentives Program (EQIP). Producers who violate compliance requirements or who fail to take the required actions to reduce existing environmental damage may become ineligible for all program benefits, not just on those acres where the violation has occurred. Under Swampbuster, for example, program payments can be denied to producers who take action to convert wetland to crop production. Under Conservation Compliance, producers who fail to act to reduce soil erosion on HEL cropland can be similarly sanctioned.

Compliance mechanisms can be viewed in two ways. As a method of policy coordination, they can reduce unintended adverse environmental consequences of farm programs. As an agri-environmental policy tool, compliance can be used to further agri-environmental objectives. In this latter role, compliance mechanisms have properties that set them apart from other agri-environmental policy instruments—especially subsidies designed to encourage good environmental performance—making them useful in situations where subsidies would be difficult or especially costly to use.

Program coordination was a key motivation for adoption of compliance provisions in the 1985 Food Security Act (FSA). In the 1970s and early 1980s, evidence suggested that farm commodity programs encouraged production of relatively erosive crops on erosion-prone land, even as conservation programs attempted to mitigate these damages (Reichelderfer, 1985). High commodity prices of the mid-1970s probably spurred the conversion of highly erodible land from pasture or native grass to crop production—a process commonly referred to as sodbusting—although evidence linking this practice with farm commodity programs is limited (Watts et al., 1983; Heimlich, 1986). Likewise, evidence showing that government payments were an important incentive to swampbusting is quite limited (see Heimlich et al., 1998, for a survey), even though the purpose of most wetland drainage has, historically, been to allow or improve crop production (Dahl, 1990).

Even if government payments are not a critical underlying motivation for agricultural production on HEL or wetland, linking payments with compliance requirements can encourage improved environmental performance and deter producers from expanding crop production onto environmentally sensitive land. Withholding payments on the entire farm, rather than only on acres in violation of a compliance requirement, makes the potential sanction quite serious for many farms.

Compliance is a unique policy tool that is not easily placed in traditional categories of subsidy, tax, or regulation (Heimlich and Claassen, 1998a). Compliance mechanisms are similar in some ways to both environmental regulation and environmental taxes, but bear little resemblance to environmental subsidies. Like regulation, compliance mechanisms prescribe limits on producer actions and provide for penalties (loss of farm program benefits

in the case of noncompliance). Like taxes and fees, however, violation does not imply illegal activity and maximum penalties are limited and known in advance. Unlike an environmental subsidy program (e.g., EQIP¹), producers do not receive a benefit in exchange for taking an action that enhances (or is designed to enhance) environmental performance. Instead, they are penalized, through withholding of benefits from otherwise unrelated programs, when an environmental standard is not achieved. One could argue that programs with a compliance requirement actually seek a "bundle" of benefits including environmental protection. However, there is no evidence to suggest that commodity program design is influenced by the potential for environmental benefits through compliance. Thus, the economic properties of compliance mechanisms are quite different from those of a classic environmental subsidy program.

In general, compliance mechanisms are not subject to some of the problems that can arise with the use of environmental subsidies. For example, poorly designed subsidies for environmental improvement can encourage producers to continue or expand crop production where it would not otherwise be profitable, sometimes undercutting environmental gains (see Claassen et al., 2001, for a full discussion). Moreover, compliance mechanisms do not require subsidy payments *in addition* to those already in place through price and income support or other programs.² Note, however, that the effective level of income support provided to complying producers is reduced by the cost of complying with soil and wetland conservation requirements. These farm commodity programs provide much of the underlying incentive for producers to comply.

Compliance mechanisms may be particularly well suited to deter certain environmentally damaging actions. For example, a hypothetical subsidy program designed to prevent wetland drainage would require policymakers to pay for protection of all wetlands on agricultural land—a potentially expensive proposition—or decide which wetlands are sufficiently vulnerable to agricultural conversion as to warrant protection—a potentially difficult task (Heimlich and Claassen, 1998b). In contrast, Swampbuster penalties are assessed when a violation occurs, eliminating the need for broad-based subsidies or the need to anticipate the potential for a violation to occur on any given wetland. No direct costs are imposed on producers, although there may be an opportunity cost associated with production forgone on wetlands that would otherwise have been converted to crop production.

The success of compliance mechanisms depends on the commodity programs that provide most of the compliance incentive. Farm commodity programs have been in place for more than 65 years and their benefits have been largely capitalized into the value of farmland (Goodwin et al., 2003; Ryan et al., 2001; Barnard et al., 1997; Duffy et al., 1994).³ For many producers, the ability to purchase land or pay cash rent depends significantly on government payments. In addition to introducing compliance mechanisms, the 1985 FSA shifted the emphasis of commodity programs from price support to income support. With a market price support program, farmers could benefit from farm programs without direct participation (sometimes referred to as "free riding"). With income support payments, producers must participate to receive benefits. Consequently, many producers may feel that they

¹Through EQIP, the Federal Government shares the cost of installing or adopting conservation practices that address key resource concerns.

²The Government does bear some cost for existing compliance programs. USDA provides conservation planning and technical assistance to producers without charge. Effective monitoring and enforcement by USDA can also be costly. These costs, however, are not specific to compliance mechanisms. They would generally be incurred with the implementation of other types of agri-environmental programs as well.

³A compliance requirement, to the extent it reduces a producer's net return to farm program participation, may also reduce capitalization.

have little choice but to accept compliance requirements, even though, strictly speaking, participation in these programs is voluntary and producers could opt out to avoid compliance requirements. The 1996 Federal Agriculture Improvement and Reform (FAIR) Act ended annual acreage setaside programs, reducing the cost of program participation and increasing the compliance incentive.

Although working within the context of existing programs has some advantages over a subsidy mechanism, it also limits the potential effectiveness of compliance mechanisms. Unlike an environmental subsidy program or regulation, the design of compliance mechanisms is, by definition, constrained by the existence and design of other farm programs. In other words, the scope and features of other farm programs largely determine how effective a compliance mechanism can be. In designing a compliance mechanism, policymakers can determine:

- the environmental objective(s);
- minimum standards of environmental performance or practice implementation;
- the programs and payments that are subject to the compliance sanction.

But the effectiveness of compliance mechanisms will also depend on other factors related to commodity programs and the agri-environmental problems targeted by compliance. These include:

- whether targeted environmental problems occur largely on farms that participate in Federal farm programs subject to compliance;
- the producer's net benefit from farm program participation before the compliance requirement;
- the producer's cost of meeting the compliance standard or requirement.

In other words, the effectiveness of compliance mechanisms—relative to other agri-environmental policy tools—depends largely on the size and spatial distribution of government payments relative to the spatial distribution of targeted agri-environmental problems and the costs involved in mitigating those problems.

Given the configuration of current farm programs, compliance mechanisms have the potential to address many cropland-based conservation and environmental problems. Data from the Agricultural Resource Management Survey (ARMS) show that farms receiving some type of government payment accounted for 86 percent of U.S. cropland. Other environmental issues, such as livestock waste management and disposal problems, occur more frequently on farms that do not participate in current farm programs and, thus, are less likely candidates for compliance mechanisms.