

Conclusions

Compliance mechanisms were enacted primarily as a method of removing inconsistencies between farm income support and conservation programs. However, compliance mechanisms are also unique policy tools that, when used in conjunction with existing commodity programs, possess some desirable economic properties. Compliance mechanisms are less likely than subsidies to produce unintended consequences and may be effective when subsidy programs can be especially difficult or costly to use. Because compliance mechanisms depend on other programs, however, their effectiveness is limited. Problems associated largely with program crop production, such as soil erosion and nutrient runoff from fertilizer application, are good candidates for a compliance requirement. The design of the compliance requirement (i.e., environmental standards or practice requirements) will determine the cost and enforceability of the compliance requirement.

While USDA's Compliance Status Review process appears to have flaws, it is also likely that compliance rates are high and that significant erosion reduction has been achieved on land subject to Conservation Compliance. Our analysis shows that most highly erodible cropland (HEL), particularly wind-erodible cropland, is located on farms that receive government payments. More important, reduction in excess erosion on HEL cropland—the erosion specifically targeted by Conservation Compliance—has been larger on farms receiving payments (farms subject to compliance) than on farms not receiving payments, particularly for wind-erodible soils. Placing compliance in a larger context, however, we find that soil erosion rates have declined on both HEL and non-HEL cropland, in all regions of the country, and on farms receiving program payments as well as those not receiving program payments.

These results could be consistent with more than one hypothesis about the role of Conservation Compliance in reducing soil erosion. Compliance could be viewed as prompting the adoption of soil conservation practices. On the other hand, one could argue that practices like conservation tillage would eventually have been adopted where they are cost-effective, regardless of Conservation Compliance. In other words, the compliance requirement happened to coincide with a period of technical change favorable to soil erosion reduction. Finally, Conservation Compliance may have accelerated the adoption of low- or no-cost practices. For example, conservation tillage may have spread more rapidly in areas where it was shown to be cost-effective by producers who adopted it in response to compliance.

Likewise, evidence suggests that Swampbuster was only one factor among several that could have explained the rapid drop in wetland conversion for agricultural production. A dwindling number of easily convertible wetland acres and long-term declines in real prices for agricultural commodities may also be contributing to reductions in wetland drainage for crop production. In the aftermath of the Supreme Court's decision in *Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers*, however, Swampbuster may be a more important component of U.S. wetland conservation policy.

Extending compliance to address nutrient runoff and leaching from land in crop production, whether through management of nutrient application or interception of nutrients with buffer practices (or both), could provide some additional environmental benefits. Farms where nutrient runoff to water is high are quite likely to receive substantial government payments. Moreover, our analysis shows that the value of government payments will generally exceed the cost of addressing nutrient loss through either nutrient management or buffer practices, suggesting that a compliance mechanism could be effective in leveraging the adoption of practices designed to reduce nutrient runoff. It is important to note that some producers who are already bearing the cost of HEL or wetland conservation requirements are also located in areas where nutrient-related compliance requirements would likely be most significant. Where crop production is predominant (the Heartland and Mississippi Portal regions), farm program payments are also large and would likely provide ample incentive for the additional requirement. Where much of the excess nutrient is generated by livestock production (Pennsylvania and Maryland), compliance alone might be less effective, but could complement other policies designed to reduce nutrient loss to the environment.