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Report to the Chairman, Committee on Agriculture, House of Representatives

September 1990

FARM PROGRAMS

Conservation Compliance Provisions Could Be Made More Effective

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Resources, Community, and
Economic Development Division

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September 24, 1990

The Honorable E (Kika) de la Garza
Chairman, Committee on Agriculture
House of Representatives

Dear Mr. Chairman:

In response to your request and subsequent discussions with your office, this report discusses the Department of Agriculture's administration of the conservation compliance, sodbuster, and swampbuster provisions of Title XII of the Food Security Act of 1985.

As requested by your office, we obtained oral comments from the Department of Agriculture. Department officials generally agreed with a draft of the report. We plan to distribute this report today to the Secretary of Agriculture and other interested parties.

This report was prepared under the direction of John W. Harman, Director, Food and Agriculture Issues (202) 275-5138. Other major contributors to this report are listed in appendix II.

Sincerely yours,

J. Dexter Peach
Assistant Comptroller General

substantial erosion. Expanding the criterion would provide additional soil savings, but would also involve additional costs. Second, the act does not fully protect highly erodible land or wetlands from conversion because violations are not recognized until crops are actually planted on converted land.

Although USDA has successfully helped farmers develop conservation plans, it faces implementation obstacles. Because of budget constraints, USDA expects that it will not have sufficient technical and financial resources to help farmers implement their plans, which will adversely affect farmers' ability to achieve the soil savings anticipated by the plans. As of July 1990, USDA's Soil Conservation Service (SCS) had not calculated the national savings expected when producers implement their plans.

Since USDA concentrated on developing conservation plans to meet the deadline set by law, it has only identified about 7.5 million acres of wetlands of the estimated 82 million acres of wetlands on nonfederal land.[1] USDA plans to make wetland determinations on those lands on or near cropland of farm program participants, but has not made any estimate of the number of wetland acres it expects to identify for compliance with the act. Further, in permitting some wetlands to be drained, USDA has not consistently applied criteria established to make these decisions nor has it always consulted the Fish and Wildlife Service as required.

Principal Findings

Opportunities to Protect More Land

USDA conservation criteria, implementing the act for highly erodible land, do not protect all erodible lands and wetlands. USDA requires conservation plans for cropland that has a potential to erode eight or more times the erosion rate at which the land would remain productive—142 million acres using this erosion criterion. The Department's data show that millions of other cropland acres have an erosion potential just below this level. For example, about 75 million acres of land are eroding at 5 to 8 times the soil tolerance level. Any increased soil savings associated with changing USDA's criterion should be balanced against the additional implementation costs.

[1]Identification of wetlands refers to the process whereby USDA determines if a land area exhibits the soil, water, and plant characteristics that define a wetland.

the Fish and Wildlife Service in a number of instances when allowing certain wetlands to be drained, as required by the act.

Matters for Congressional Consideration

If the Congress wishes to protect more erodible land, it may wish to consider requiring USDA to lower its criterion to a level that would protect more lands that erode at substantial rates but at less than the current USDA criterion. While such a change would reduce erosion, it would also increase USDA's costs for administering the act's provisions on more land. Among other things, the Congress may also wish to consider amending the act so that benefits are lost when highly erodible land or wetlands are converted for planting, and require the restoration of such converted wetlands or the mitigation of such damages before eligibility can be regained. (See chs. 2 and 3.)

Recommendations

GAO makes several recommendations to the Secretary of Agriculture to improve the administration and effectiveness of the conservation provisions of the act.

Agency Comments

USDA officials received a draft copy of this report, and GAO met with agency officials to obtain their oral comments. USDA offered a number of observations about GAO's findings and recommendations, including the following: (1) its selected erosion level covered lands with the greatest need for soil erosion treatment, (2) wetland determinations were necessary only on lands on or adjacent to cropland and, as such, not all of the wetlands would need to be identified, and (3) GAO's draft did not fully recognize USDA's ongoing efforts to review and correct previous commenced conversion decisions.

Regarding the first observation, GAO did not recommend that USDA change its criterion, but suggested that if the Congress wishes to protect more erodible land, considering the increased costs, lowering the criterion could be used to do so. (See ch. 2.) While USDA's second observation is reasonable, until it identifies wetlands, it will be difficult for it to enforce the swampbuster provisions of the act. (See ch. 4.) Finally, GAO modified the report to reflect USDA's efforts on commenced conversions. (See ch. 4.)

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Abbreviations

ASCS	Agricultural Stabilization and Conservation Service
FCIC	Federal Crop Insurance Corporation
FmHA	Farmers Home Administration
GAO	General Accounting Office
SCS	Soil Conservation Service
USFWS	U.S. Fish and Wildlife Service
USDA	U.S. Department of Agriculture

Why Soil Erosion and Loss of Wetlands Are a Problem

Erosion is a natural process whereby water and wind move soil. Erosion decreases soil productivity by removing nutrients and organic matter and by thinning and modifying the soil zone where plants grow. Erosion on land covered by vegetation is probably no more than 1 inch every 100 years, and much of this loss is offset by the formation of new soil. However, wind and water erosion on bare cropland can gradually reduce productivity. Erosion also contributes to sedimentation of streams and other water bodies and damage to surface and groundwater quality.

A variety of benefits are lost when wetlands are drained. Wetlands are essential habitat for a variety of fish and wildlife species. Some wetlands play an important role in the life cycle of many fish species. Waterfowl depend on wetlands for breeding areas, and fur-bearing and other game species depend on wetlands for food, cover, or water. Wetlands store flood waters, may retard flood peaks, and can improve water quality by trapping sediment and removing nutrients, pesticides, and other toxic substances. Wetlands are also popular recreation sites.

How the Conservation Provisions Work

The act's conservation provisions restrict the use of highly erodible land and wetlands through the sodbuster and swampbuster provisions, respectively. To remain eligible for USDA benefits, producers must apply an approved conservation system to highly erodible land that they farm, and they must not convert and plant an agricultural commodity on certain wetlands. Violations are subject to loss of USDA benefits.

Conservation Compliance and Sodbuster Provisions

The conservation compliance and sodbuster provisions of the act prohibit the cropping of highly erodible land without applying an approved conservation system. The distinction between the two provisions is that the conservation compliance provisions apply to cropland that was being farmed at the time the act was passed[4] and the sodbuster provisions apply to land that was converted to cropland after the act was passed.[5]

Farmers of highly erodible land must develop and implement a plan that uses approved conservation systems to reduce erosion to an acceptable

[4]The conservation compliance provision applies to highly erodible cropland that was used for planting an agricultural commodity (a crop planted and produced by annual tilling of the soil, or sugarcane) or set aside at least 1 year between 1981 and 1985.

[5]The sodbuster provision applies to highly erodible land that was not used for planting an agricultural commodity or set aside between 1981 and 1985.

with the Department of the Interior's U.S. Fish and Wildlife Service (USFWS) on certain questions involving wetlands.

Objectives, Scope, and Methodology

The Chairman of the House Committee on Agriculture asked us to review USDA's implementation of the Food Security Act's conservation provisions. The Committee was interested in learning how the programs have been working to determine if changes to the act were needed. As agreed with the Chairman's office, our objectives were to address the following questions:

- What is the status of USDA's implementation of the conservation programs, and how many acres have been affected? (See chs. 2, 3, and 4.)
- As a result of these activities, what soil and wetland savings have resulted? (See chs. 3 and 4.)
- How has USDA enforced the conservation provisions, and how many producers have lost benefits? (See ch. 5.)
- What changes in the conservation provisions of the Food Security Act or in their implementation should be made? (See chs. 2, 3, 4, and 5.)

The scope of our work and methodology used to meet the objectives consisted of reviewing pertinent implementation and enforcement information and interviewing knowledgeable officials at the national, state, and county levels. This included ASCS and SCS headquarters; state offices in Iowa, Kansas, Minnesota, Missouri, and North Dakota; and six county offices in these states. We also obtained information and reports from FmHA, FCIC, the Economic Research Service, USFWS, and environmental and farm organizations.

We considered the amounts of highly erodible land and wetlands identified by SCS, the number of sodbuster and swampbuster violations reported by ASCS, and the time and resources available for our review in selecting Iowa, Kansas, Minnesota, and Missouri, and the four counties visited in those states. The number of commenced conversion requests and the resulting decisions were considered in selecting North Dakota and the two counties visited in that state. (The five states we visited contained a total of 38.9 million acres of highly erodible land, or 27.5 percent of the total highly erodible land in the United States as identified by USDA.)

To determine USDA's status of implementing the conservation programs, the acres affected, and the soil and wetland savings, we reviewed USDA's procedures, status reports, and national resources inventories, and we

The Act Does Not Protect All Highly Erodible Land and Wetlands

The act's conservation compliance, sodbuster, and swampbuster provisions do not protect all of the nation's erodible land and wetlands. The act protects only those lands that are farmed by USDA program participants. The amount of land actually protected is further limited by USDA's criteria for requiring conservation systems on erodible cropland. USDA requires that land have a high erosion potential to qualify for conservation compliance or sodbuster protection. This erosion potential is the only criterion used by the Department to determine land that will be protected. This contrasts with the conservation reserve program, where USDA considers other factors besides erosion potential, such as whether trees are planted or if there is serious gully erosion, to qualify land for enrollment and rental payments. The act withdraws farm benefits on highly erodible land and wetlands converted for planting purposes.

Land Protected by the Act

The 1.94 billion acres of the United States includes about 423 million acres of cropland and 82 million acres of wetlands that are not federally owned.[1] Figure 2.1 shows the amount of the nation's cropland and wetlands relative to other land uses.

[1]Both federally owned and nonfederally owned (private) lands are covered by the act. However, most of the nation's farming activities occur on private lands.

As implemented by SCS, the conservation compliance provisions focused primarily on reducing soil erosion on some of the nation's most erodible cropland. On the other hand, the conservation reserve program, while similarly designed to reduce soil erosion on cropland, was also envisioned as a program to improve water quality and fish and wildlife habitat, and as a means to curb the production of surplus commodities, among other things. As such, the conservation reserve program uses a number of criteria for determining soil erodibility. For example, under this program, land can be enrolled if it has an actual erosion as low as twice the soil loss tolerance level—2T—if trees are planted or if there is serious gully erosion.[3] Further, in this example, if a field were to have trees planted, only one-third of the field would have to be eroding at 2T instead of two-thirds of the field as is normally the requirement under the program.

USDA identified 142 million acres of highly erodible cropland using its erosion potential criterion of 8 times the soil tolerance level. As shown in figure 2.2, this USDA criterion does not cover about two-thirds of the nation's cropland. On the basis of USDA data, millions of other acres of land are eroding at substantial rates within the 281 million acres of cropland not covered by USDA's criterion. For example, about 75 million acres of land are eroding at five to eight times the soil tolerance level. Reducing the erosion criterion to a level below eight times the soil tolerance level would result in increased soil savings through reduced erosion, but would also increase program costs. As such, USDA would have to use its limited resources to develop additional conservation plans on these cropland acres as well as provide technical and financial assistance in some cases in order to implement the plans. Therefore, including additional lands in USDA's coverage of highly erodible acres would have to be considered in light of the cost of this additional coverage and competing Department objectives. Nonetheless, as existing conservation plans are implemented to meet the 1995 requirement set by the act, conservation planning for other highly erodible lands could be phased-in as departmental resources allow, thereby increasing the environmental benefits associated with reduced soil erosion.

[3]The soil loss tolerance level, or T as it is commonly referred to, is the rate at which soil can erode and maintain continued productivity. 2T refers to twice this erosion level. The T level varies depending on the geographic area, soil type, and water and wind conditions, among other things.

Conclusions

Producers who do not participate in USDA's farm programs are exempt from the act's conservation provisions. For farmers participating in farm programs, USDA is applying the conservation compliance and sodbusterprovisions to the most erodible land. There are opportunities for USDA to cover more erodible cropland by expanding its criterion to include, among other factors, lower erosion potential and actual erosion. However, the additional soil savings would have to be considered in light of the added cost to protect these lands and other departmental objectives. In addition, the sodbuster and swampbuster provisions of the act do not come into effect when highly erodible land and wetlands are converted. The act could protect more erodible lands and wetlands if farm program benefits are withheld when these lands are converted for planting and benefits are reestablished if wetlands are repaired or restored.

Matters for Congressional Consideration

If the Congress wishes to increase the amount of erodible land and wetlands protected and the amount of soil erosion and wetlands saved by the act's conservation provisions, it could consider revising the provisions to

- require the Secretary of Agriculture to use a lower erosion potential or other factors to define land covered by the conservation compliance and sodbuster provisions and
- withhold benefits when highly erodible lands or wetlands are converted for planting, and require the restoration of such converted wetlands or mitigation of damages to converted wetlands before farm program eligibility can be regained.

Agency Comments and Our Evaluation

USDA took issue with our matter for congressional consideration that discussed the possibility of lowering the erosion level used to define highly erodible lands. The Department told us that an erosion level of 8T was selected because it included those lands estimated to have the greatest need for soil erosion treatment. USDA also said that resource constraints would have significantly affected its ability to cover more land had the erosion level been set at a lower level. Further, the Department believes that few additional farms would be involved if USDA subjected more land to the act and thus, only a small additional soil loss reduction would occur.

Planned Conservation Systems Will Reduce Erosion, but All May Not Be Implemented by the Deadline

As of January 1990, SCS had identified virtually all of the nation's highly erodible cropland and most producers had prepared plans to reduce erosion on this land. To ease the financial burden on producers in planning conservation measures, SCS relaxed its initial requirement that all producers generally reduce erosion to the T level. Thus far, SCS has not calculated the total soil savings expected for the nation when producers fully implement their conservation plans. Our review of a limited sample of conservation plans in six counties in five states indicates that, when implemented, soil erosion will be reduced on most of the fields in these counties. However, despite the relaxed soil loss erosion requirement, many of the systems planned may not be implemented by the deadline of January 1, 1995. According to SCS, this is because it will not have the staff or cost-share funding needed to assist producers in implementing the plans.

Producers Have Prepared Conservation Plans for Most Highly Erodible Cropland

SCS estimates that it has identified virtually all of the nation's highly erodible cropland and that participants have planned conservation systems to reduce soil erosion on most of this land. In January 1990, SCS reported that, including land in the conservation reserve program

- it had identified 142 million acres, or an estimated 99 percent, of the nation's highly erodible cropland;
- producers had prepared conservation plans for about 135 million acres, or about 95 percent, of the highly erodible cropland; and
- producers had applied conservation systems to 36 million acres of this highly erodible land.

Although USDA initially required that all producers generally reduce erosion to the T level, it later relaxed the requirement to ease the financial burden on producers for installing conservation systems. USDA's interim rules that applied through June 1987 required producers to adopt conservation plans that would generally reduce soil erosion to the T level. Subsequent interim rules and the September 1987 final regulation allowed producers to meet a lesser or alternative erosion reduction requirement in those areas where reducing erosion to the T level could impose an economic hardship.[1] Later, in May 1988, USDA announced that

[1]The alternative level that farmers must meet varies by geographical area.

Soil Savings Will Occur as Conservation Plans Are Implemented

As conservation plans are implemented between 1990 and 1995, soil erosions on these farms will be decreased in most cases. However, SCS has no national estimate of the amount of soil that will be saved when the conservation systems planned for 135 million acres of highly erodible land are implemented. Our sample of conservation plans for farms in six counties in five states shows that, in most instances, soil savings will be realized when the conservation systems planned are fully implemented. The two exceptions are sodbusted land on which a net soil loss occurs, and land where no changes in farming practices were required to meet the T level or alternative T level.

Estimated Soil Savings

While SCS has soil savings data on individual farms at its county offices, an SCS representative said that there are significant differences between SCS county offices' capability to aggregate this information and arrive at a national savings estimate. Some SCS county offices have the information readily available on computers, while others have only handwritten estimates. Although SCS is upgrading and modernizing its computer system in order to report progress, it does not know when national estimates of the soil savings resulting from implementing conservation plans will be available. Without a national estimate of soil savings, SCS will not be able to determine how well conservation systems are working to reduce overall erosion on cropland in the United States.

Most of the conservation plans we reviewed will reduce soil erosion when implemented. In our sample of conservation plans for 58 farms in 6 counties, we estimate that, when implemented, between about 59 and 100 percent of the plans will result in some soil savings. The soil savings ranged from 1 ton per acre per year to 109 tons per acre per year. Table 3.1 shows examples of savings for fields (with identical soil losses prior to conservation planning) under each of the three conservation alternatives. As shown, erosion is reduced in all three conservation alternatives. However, land taken out of productive use in the conservation reserve program reduced erosion most.

SCS has traditionally assisted producers in designing, laying out, and supervising the application and construction of conservation systems. SCS estimated the major conservation practices included in producers' conservation plans that it will help implement. Table 3.2 shows SCS' national estimate of the major conservation practices planned. These practices include agronomic and engineering applications. An agronomic practice involves changing farming practices. An engineering practice involves construction or changes to the layout of the land.

Table 3.2: SCS' Estimate of Major Conservation Practices Planned[a]

Figures in thousands

Applied practice	Unit of measure	Amount
Agronomic practices		
Cropping system	Acres	85,200
Crop residue	Acres	55,000
Conservation tillage	Acres	45,500
Contouring	Acres	25,800
Contour strips	Acres	3,300
Field strips	Acres	2,000
Critical area	Acres	552
Engineering practices		
Grassed waterways	Acres	1,300
Terraces	Miles	216
Sediment basins	Quantity	91
Structures	Quantity	46
Diversions	Miles	5

[a]More than one practice may be applied to the same field

On the basis of its estimated workload, SCS representatives estimate that SCS will not have sufficient staff to provide producers the technical assistance necessary to design and install the planned conservation systems. SCS representatives said that field office staffing will be 37 percent less than the estimated average 9,500 staff-years needed during each of fiscal years 1990 through 1994.

ASCS, SCS, and states have also traditionally assisted producers in paying for up to 75 percent of the cost of conservation practices and their installation. USDA has three programs—the Agricultural Conservation Program, the Great Plains Conservation Program, and the Watershed Protection and Flood Prevention Program—that provide cost-sharing

even if the additional cost-share funds and needed staffing were provided, the state lacks sufficient contractors to install the conservation systems planned.

Conclusions

SCS has largely met the January 1, 1990, requirements of the Food Security Act of 1985 to (1) identify highly erodible cropland and (2) assist producers in developing conservation plans for reducing erosion on the land identified. However, according to SCS, meeting the January 1, 1995, requirement of implementing the conservation plans will be difficult because SCS estimates that it will not have enough staff and cost-share funds. As such, these limitations may make the deadline impractical for some farmers. As of July 1990, SCS had not determined what plans can be implemented by January 1, 1995, with the resources it will have available and had not developed a plan to use these resources most effectively.

Although one objective of the conservation provisions is to reduce soil erosion, SCS has not estimated soil savings resulting from the implementation of conservation plans. Without a national estimate of soil savings, SCS will not be able to determine how well conservation systems are working to reduce overall erosion on cropland in the United States.

In instances where sodbusting has occurred, soil erosion increased when the land was converted to cropland use. The increase is greater on land where SCS allowed producers to apply alternative conservation systems. These alternative systems do not reduce erosion to the level prior to sodbusting or the T level set by USDA.

Recommendations to the Secretary of Agriculture

We recommend that the Secretary of Agriculture direct the Administrator, SCS, to

- prioritize its limited cost-share funds so that the Department's resources are allocated in a manner that achieves the greatest conservation benefit and
- build on ongoing efforts and report accomplishments (soil erosion savings) achieved by implementing the conservation compliance and sodbuster provisions

Implementation Delays and Inconsistently Applied Criteria May Result in Further Wetland Losses

Implementation of the act's swampbuster provisions lags behind those of the conservation compliance and sodbuster provisions. SCS gave priority to identifying highly erodible land and developing the conservation plans, rather than identifying wetlands, because the act required such plans by January 1, 1990.[1] Critical to saving the wetlands covered by the act is SCS' identification of wetlands so that ASCS, in checking compliance, can ensure that wetlands are protected. However, SCS has identified only about 7.5 million acres of wetlands of the estimated 82 million acres of wetlands on nonfederal lands in the continental United States.[2] USDA plans to make wetland determinations on only those lands on or near cropland of farm program participants. SCS expects to complete its wetlands identification by the end of 1991. As a result, some wetlands may have been converted to cropland that otherwise could have been protected.

Implementing the act's swampbuster exemption provision has, in some instances, been a source of controversy because the criteria used to make decisions for group projects have frequently changed.[3] Further, application of the criteria has not always been consistent; the documentation provided does not, in many instances, support the exemption decisions; and consultation with the Fish and Wildlife Service was not always carried out as required by law.

Implementation of Swampbuster Provision Has Been Delayed

SCS has not identified and classified all wetlands. As of January 1990, SCS reported that it had made more than 860,000 wetland determinations and identified almost 7.5 million wetland acres in the process.[4] USDA estimates, on the basis of its National Resource Inventory, 1987, that there are about 82 million acres of wetlands on nonfederal land in the continental United States. However, an SCS official responsible for overseeing USDA's wetland determinations said that SCS is not making determinations for all of this land. Wetland determinations are only being made for cropland and land adjacent to cropland on farms of USDA

[1]Identification of wetlands refers to the process whereby USDA determines if a land area exhibits the soil, water, and plant characteristics that define a wetland.

[2]No data exist on the extent of nonfederal wetlands in Alaska. Therefore, our discussion is limited to the 48 continental states.

[3]Group projects involve two or more farmers or producers.

[4]Only one state we visited, North Dakota, had a complete inventory of its wetlands.

number of individuals within a group project area. For reporting purposes, the county recorded all persons involved in the projects even though the individuals did not file separate requests.

ASCS issued new instructions to state and county offices in March 1990 for summarizing commenced conversion activity that occurred prior to January 1990 and then reporting on this activity on a monthly basis. ASCS advised us that a new national report was planned, but that its issuance date was unclear.

Exemption Criteria

ASCS has amended or modified the exemption criteria for commenced conversion decisions several times since the publication of the interim rules in June 1986. These changes occurred for a variety of reasons, such as litigation by environmental groups and requests from special interests. Table 4.1 highlights changes in USDA's criteria between June 1986 and December 1989.

Changing Criteria Resulted in Draining Wetlands

Because of the changing criteria and sometimes contradictory nature of commenced conversion decisions, county committees and other ASCS officials made decisions which would allow the draining of wetlands. The impacts of the changes, which have primarily affected group projects, and the differences in the application of the criteria are illustrated by the following example of an actual situation in one county we visited.

During the 5-year period, 1981 to 1985, assessed landowners voted for and approved the installation of five separate group drainage projects. In mid-1986, the county water resource district sought advice and clarification from ASCS on whether two of the projects met the commenced conversion criteria since earth moving had not been started, nor had a contract committing substantial funds for earth moving been entered into. Responding to this request, ASCS amended the provisions on September 19, 1986, so that persons assessed for the drainage activity would be exempt from swampbuster if the drainage plan was approved before December 23, 1985, and the ASCS county committee determined that the plan reasonably contemplated each person's drainage activity. Using this criterion, the ASCS county committee approved the requests on October 1, 1986.

As a result of requests from conservation groups, the criterion used to make commenced conversion decisions was changed in February 1987. Consequently, in March of that year the county committee was instructed by USDA to rescind its earlier approval. As a result, only those persons who took actions such as earth moving or contracting for earth moving between October 1, 1986, and the February 4, 1987 amendment, would be exempt. Other persons, in order to be exempt, would be required to meet the new criteria, including the specific identification of drainage activity in the plan. Subsequently, special interests convinced ASCS to reverse its decision in May 1987, and thus ASCS did not require the specific identification of wetlands to be drained.

Continuing concern about the exemptions prompted the National Wildlife Federation to request that ASCS review the decisions again. In its November 1988 response, ASCS concluded that neither of the projects met the commenced criteria in place at the time the projects were exempted. However, since some drainage had started on one of the projects on the basis of the earlier decisions, ASCS exempted this activity but would not allow any additional wetlands to be drained. However, in terms of the second project, ASCS determined that it was still in the planning phase, no funds had been spent toward converting wetlands, and therefore the exemption was being reversed.

as proof of commenced activity.[5] In another instance, the producer indicated that he had done all the work using his own equipment, and the only verification was by visual inspection—no documentation was provided. In none of the cases did the producer submit evidence such as construction receipts or cancelled checks indicating the commitment of funds prior to December 23, 1985, as required by the ASCS handbook.

ASCS Did Not Always Consult With the Fish and Wildlife Service

The final program rules dated September 17, 1987, specifically instruct ASCS to consult with the Fish and Wildlife Service on commenced determinations.[6] Our review of records at the counties visited showed that often, such consultations are not held. Of the 27 cases we reviewed where ASCS county committees approved or denied requests (23 approved and 4 denied), we found that the Fish and Wildlife Service was not consulted on 18, or 67 percent, of the decisions. All of these instances occurred after the final program rules were implemented and the Fish and Wildlife Service was specifically designated as the Department of the Interior's consultation point.

Although the requirement for consultation has existed since the act's passage, county officials informed us that they were not aware of the need to consult until it was incorporated into the ASCS handbook in September 1987. In one instance, the state office advised the county that the Fish and Wildlife Service did not need to be consulted because its opposition to the project was already known. Nonetheless, ASCS's handbook specifically states that the Fish and Wildlife Service should be consulted for commenced conversion decisions.

Conclusions

Given its limited resources and the timetable imposed by law, the Department deferred making wetland identifications until after it developed conservation plans. By delaying the identification of wetlands, USDA's decision may have allowed some wetlands to be drained. Likewise, the lack of firm and clearly understood criteria for exempting certain wetlands and the inconsistent application of the criteria have resulted in additional wetland losses.

[5]The ASCS handbook does not allow tax assessment notices to be used as documentation for wetland conversion activities.

[6]USDA is required by the Food Security Act to consult with the Department of the Interior as of December 23, 1985, on all wetland commenced determinations.

While USDA has undertaken these actions, they have not been completed and as such we did not change our recommendations. Further, as a result of previous ASCS commenced conversions decisions, some wetlands have been converted to cropland that otherwise would have been protected.

programs may not be subject to being selected for this compliance verification.

Although not required by law, the Fish and Wildlife Service in both Minnesota and North Dakota has reported suspected swampbuster violations to ASCS. The Fish and Wildlife Service reported 203 suspected swampbuster violations to the Minnesota state ASCS office in June 1989, but ASCS had not followed up on the suspected violations as of December 1989. We did not identify this condition in the other states visited. As of December 1989, Minnesota and North Dakota required county offices to complete a report detailing the investigation and disposition of suspected violations reported by the Fish and Wildlife Service and other outside parties, to maintain a file of the reports, and to notify the state office of any violations arising from the investigations.

Sodbuster, Swampbuster Data Are Not Current and May Not Accurately Reflect Violations

Until April 1989, ASCS had reported national data that showed the extent to which sodbusting and swampbusting violations were identified and benefits withheld. However, ASCS representatives said that national reporting was suspended because they believed that county and state offices were incorrectly interpreting reporting instructions and therefore the accuracy of the reports was questionable. ASCS issued new reporting instructions in March 1990 and plans to resume national reporting.

ASCS' system for counting sodbuster and swampbuster violations actually counts potential violations and their ultimate disposition. The potential violation may be resolved with ASCS county office representatives if the producer presents additional evidence. In addition, producers can appeal ASCS determinations of violations first to ASCS county committees, then to ASCS state committees, and finally to the ASCS Deputy Administrator for State and County Operations.

As shown in table 5.1, ASCS' latest national report, as of April 1989, showed that most reported violations were resolved in favor of producers.

- develop a procedure to ensure that all USDA farm program participants, including those participating in FCIC or FmHA programs, are included in ASCS' universe for sampling participants' compliance.

Agency Comments and Our Evaluation

In response to our recommendations, USDA noted that (1) it will be on alert for potential violations of swampbuster or sodbuster provisions during the course of its normal business, including random spot checks and (2) it requires all producers requesting USDA benefits to file forms AD-1026 and AD-1026A. Thus, the Department believes that all producers requesting benefits will be represented in the ASCS computer system and subject to spot checks. However, current ASCS procedures are such that not all program participants are involved in its sampling universe.

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Sampling Methodology

A total of 95 farms were sampled—20 farms were selected from Macon County, Missouri, and 15 farms were selected from each of the other 5 counties. However, only those farms (58) that had conservation plans are discussed in chapter 3 or reflected in table I.1 below.

Table I.1: Sample of Farms With Conservation Plans

	Universe with conservation plans		Sample with conservation plans	
County & state	**Farms**	**Acres**	**Farms**	**Acres**
Poweshiek, Iowa[a]	1,298	226,704	13	2,012
Dickinson, Kansas	1,316	126,173	13	1,495
Stearns, Minnesota	531	15,629	7	322
Macon, Missouri	768	90,513	15	2,980
Grand Forks, North Dakota	294	28,784	3	49
Wells, North Dakota	368	60,386	7	683
Total	**4,575**	**548,189**	**58**	**7,514**

[a]Poweshiek County, Iowa, reports on a tract basis The number of farms in the universe was derived by dividing 2,077 tracts with conservation plans in Poweshiek County by the average tracts per farm in that county, 1.6. Our sample included 16 tracts on 13 farms

Table 5.1: Violations Reported and Resolved

Violations	Sodbuster	Swampbuster
Reported	584	427
Appealed	386	393
Decided in favor of producer	330	243
Decided against producer	31	71
Not yet decided	25	79

Our review of reported sodbuster and swampbuster violations showed that they were resolved in favor of the producer for reasons such as the following: (1) violations were reported in error, (2) land was not highly erodible, (3) land was cropped during 1981 to 1985, and (4) a conservation system was being applied. Because these are all legitimate reasons for resolving reported violations in favor of producers, these USDA data tend to overstate the extent of violations. On the other hand, because reporting has been suspended, additional violations could be occurring but are not being identified through USDA's enforcement and reporting process. USDA's report further shows that benefits that had been or would be withheld totaled $970,598 for sodbusting and $843,265 for swampbusting. The number of producers that had benefits withheld was not identified.

ASCS issued new instructions to state and county offices in March 1990 for reporting enforcement activity that occurred prior to January 1990 and monthly activity thereafter. ASCS advised us that a new national report is planned, but that its issuance date is unclear.

Conclusions

ASCS' procedures do not adequately monitor participating producers for violations of the conservation provisions. All participants do not file annual compliance certifications as required, and all participants are not included in ASCS' universe from which producers are sampled for compliance.

Recommendations to the Secretary of Agriculture

To improve ASCS' enforcement of the conservation provisions, we recommend that the Secretary of Agriculture require ASCS to

- develop controls to verify the compliance of all USDA farm program participants who fail to certify their compliance annually with ASCS and

Enforcement Needs Improvement

As a result of USDA's enforcement activities, the Department estimates that farmers forfeited $1.8 million in farm program benefits. However, USDA's procedures do not ensure that all farm program participants are included in annual compliance reviews. Because of the way conservation compliance is currently administered, some producers do not file the necessary forms needed by the Department to enforce these provisions of the act. Further, USDA has no current national statistics on sodbuster and swampbuster violations or on benefits lost due to violations. Data presently used by the Department may not accurately reflect sodbuster and swampbuster violations.

Weaknesses in ASCS' Compliance Monitoring

ASCS is the USDA agency responsible for determining whether producers comply with the conservation provisions, and is to obtain two documents from producers each year that are key to its compliance-monitoring process. These are the producers' (1) certification of compliance with the conservation provisions of the act and (2) land use report. However, our review indicates that ASCS does not always obtain these documents. Further, in one state we visited, ASCS had not followed up on suspected swampbuster violations reported by the Fish and Wildlife Service.

On annual compliance certifications (Form AD-1026), producers must identify land they have sodbusted or swampbusted or plan to convert to cropland. ASCS reviews the certifications for indications of possible violations and, if necessary, follows up to determine whether there has been a violation. Our review of 1989 certifications required from ASCS, FCIC, and FmHA program participants in four Iowa, Kansas, Minnesota, and Missouri counties showed that ASCS did not have certifications from 6 of the 100 ASCS participants, 9 of the 50 FCIC participants, and 7 of the 50 FmHA participants that we checked. Annual certifications could be filed with ASCS, FCIC, or FmHA before 1990. Beginning in 1990, the certification must be filed with ASCS.

Each year, ASCS also selects a sample of 15 percent of the farms of producers who file land use reports (Form ASCS-578) to check their compliance with the conservation provisions. Participants in ASCS programs must submit land use reports and others may voluntarily submit them, but the report is not generally required from producers who only participate in FCIC or FmHA programs. As a result, the universe from which ASCS selects its sample may not include all participating producers' farms. Therefore, some producers who only participate in FCIC and FmHA

Exemptions to the swampbuster provisions because of commenced conversion determinations are sensitive issues, and require consistent decisions. These decisions can be enhanced by using the assistance available from the Fish and Wildlife Service. Consultation with the Fish and Wildlife Service, as required by the act and later through implementing regulations, might have avoided the problems and controversies sometimes accompanying ASCS decisions.

Recommendations to the Secretary of Agriculture

To prevent any further loss of wetlands and to improve program implementation of the swampbuster provisions, we recommend that the Secretary of Agriculture (1) monitor the application of the wetlands commenced conversion criteria so the decisions made are consistent and (2) enforce the requirements for the Fish and Wildlife Service consultations on commenced conversion decisions in order to utilize its expertise in the area.

Agency Comments and Our Evaluation

In terms of identifying wetlands, USDA noted that it needs to make wetland determinations only on those lands on or adjacent to cropland. Therefore, not all of the 82 million acres of wetlands in the United States would need to be identified according to USDA. Although we proposed a recommendation that SCS complete its wetland determinations by the end of 1991, USDA stated that it intends to complete wetland determinations as scheduled. Since USDA plans to meet its 1991 timeframe, we removed our recommendation. USDA also noted that the identification of wetlands will not prevent them from being converted.

We agree with USDA that the wetlands most likely to be converted will be located on or near cropland and that probably something less than 82 million acres would need to be identified. Nonetheless, we believe that until USDA identifies wetlands, it will be difficult for ASCS to enforce the swampbuster provisions of the act and prevent wetlands from being converted. Therefore, it is important that the Department complete its identification of wetlands as scheduled.

USDA also noted that we did not adequately recognize its ongoing efforts to review and correct previous commenced conversion decisions. Specifically, the Department told us that all commenced conversion decisions are being reconsidered, that the Fish and Wildlife Service is being consulted in instances where they were previously overlooked, and that questionable commenced conversion decisions were being reopened.

Less than a year later, in September 1989, ASCS received inquires again from special interests and responded to the inquiries and appeals surrounding these projects by reversing itself. Concerning the first project, ASCS said that any wetlands identified to be drained in the project area could receive an exception, regardless of whether construction activities were underway. USDA also believed that the second project that was previously denied warranted an exemption because the project had been planned, the farmers in the assessed area had been identified, and the plan had been approved by vote before the act became law.

ASCS also concluded that, for both projects, the more appropriate basis to grant an exemption was that undue financial hardship would result in the absence of a commenced determination because individual landowners expended funds both before and after the act's passage, and became obligated for payment of the project costs incurred. This ASCS decision adds another dimension to the established criteria. Up to the time of this decision, only costs, obligations, or activities which took place before the act were considered in determining whether an exemption was warranted.

Documentation for Exemptions Often Lacked Sufficient Information

On the basis of 23 approved commenced conversion requests, we found that producers provided various types of documentation in the form of project plans, assessments, engineering or legal bills, or receipts and cancelled checks for construction work or supplies acquired before December 23, 1985. In 14 of the 23 cases, the documentation was sufficient to verify that funds had been committed, the installation of drainage measures had begun, or other criteria had been met. The nine other approved requests lacked specific documentation to make a commenced determination.

Of the requests lacking specific documentation, the primary support provided in most of the cases was the tax assessment and/or the project plan. However, the ASCS handbook specifically requires that the farmer provide documentation, such as cancelled checks, invoices, or contracts showing that the farmer has spent or is legally committed to spending funds for the primary and direct purpose of converting a wetland. Further, the documentation is to show to whom the funds were committed and the purpose of such funds. In one of the cases we reviewed, the producer furnished, and the county accepted, the tax assessment notice

Table 4.1: Changes in USDA Exemption Criteria for Commenced Conversions

Date	Criteria
June 24, 1986	Defined that a wetland conversion was commenced if, before December 23, 1985, earth moving for purposes of draining was started, or substantial funds had been committed legally and financially by entering into a contract for earth moving, or otherwise, for the conversion.
Sept. 19, 1986	Added a provision that persons within the jurisdiction of a water resources board or similar group project could receive an exemption to drain a wetland if they met the following conditions in place of those spelled out on June 24, 1986: 1 They were or could be assessed for the activities of the drainage project. 2 Their plan was approved by a vote or approval of landowners within the project area before December 23, 1985. 3. An ASCS county committee determined that the approved plan reasonably contemplated such person's drainage activity.
Nov. 20, 1986	Added to the September 19, 1986, criteria a requirement that substantial funds for implementation must have been committed before the act's passage.
Feb 4, 1987	Revised and restated criteria used to make wetland conversion decisions and included the following. 1 Deleting ASCS county committee's authority to approve cases that were reasonably contemplated, but were not included in the drainage plan. 2. Adding that one or more of the following requirements had to be met prior to December 23, 1985. — earth moving or land clearing had begun, — a contract for these activities had been signed, or — substantial funds had been legally committed. 3 Requiring that the person's drainage activity had to be specifically identified in the plan
Sept. 10, 1987	Eliminated the term "earth moving" and changed language to encompass activities such as draining, dredging, leveling, filling, or other manipulation that results in impairing or reducing the flow, circulation, or reach of water that was actually started before December 23, 1985. Further defined what acts constitute the legal commitment of funds to include those listed above, as well as purchasing construction supplies or materials for the primary and direct purpose of converting the wetlands. Added a provision that the Fish and Wildlife Service must be consulted on each request for a commenced determination. Added the requirement that persons must show that the wetland conversion was the basis for a financial obligation, and a specific assessment for project construction or legal obligation to pay a specific assessment was made prior to December 23, 1985. Also, it must be shown that efforts toward the completion of the conversion activity have continued on a regular basis.
Dec. 8, 1989	Added procedures for handling disagreements between SCS and the Fish and Wildlife Service on wetland matters and late filed requests

participants. These wetlands would be most susceptible to cropland conversion. While this seems reasonable, SCS has no estimate of the amount of wetland acres it expects to identify for compliance with the act.

USDA officials told us that they were able to make only a limited number of wetland determinations because of constraints on staff resources and the fact that SCS gave priority to identifying highly erodible land and developing conservation plans to meet the January 1990 deadline set by the act. Nonetheless, most of the wetland determinations that have been made to date reflect only those cases where farmers have indicated that they had converted or planned to convert wetlands. When wetlands are drained, flood control and water quality can decrease, fish and wildlife habitat decline, and recreational opportunities can be lost. SCS' present goal is to complete wetlands determinations by the December 31, 1991 deadline.

Wetlands Exemption Criteria Changed Frequently

Wetland conversions started before the act's passage are exempted from its provisions. Exemptions are granted if the criteria for commenced conversion are met. However, the criteria for exemptions, notably those involving group projects, have changed frequently as ASCS developed the final program rules and regulations. The lack of firm and consistent criteria from the outset of the program has raised questions about some decisions and created controversy.

ASCS' latest national statistics reported that producers requested 5,259 exemptions for commenced conversions. Of these requests, 45 percent were approved, 13 percent were denied, and the remaining 42 percent were pending when national reporting was suspended in April 1989. USDA officials told us that reporting was suspended because they believed the data received from states were not accurate.

We found differences in reporting procedures that tend to overstate program statistics on the number of commenced conversion requests and exemptions granted. In two of the six counties visited, we found that the reported activity does not reflect the actual activity. For example, while 1 county reported that 84 commenced conversion requests were denied, our review of the files showed that the county had received only 4 requests. Another county reported the approval of 136 requests, but records showed that the county received just 10 requests. These discrepancies resulted from requests by water resource districts on behalf of a

Matters for Congressional Consideration

If the Congress wishes to increase the protection of erodible lands, it may want to consider requiring that conservation systems applied to sodbusted land, whether or not they are converted from native vegetation, limit erosion to no more than the soil loss tolerance level. Land used for planting a nonagricultural crop during 1981-85 in a long-term rotation approved by SCS should be excluded.

Agency Comments and Our Evaluation

With regard to our first recommendation, we initially proposed that SCS determine which plans are likely to be implemented by 1995 in addition to prioritizing its cost-share funds. In commenting, USDA said that it believes that all plans are likely to be implemented, and that the SCS effort has been based on that assumption. In support of this belief, the Department noted that in many cases the continued eligibility for participation in USDA programs should be sufficient incentive for implementing the plans. USDA also commented that there is no requirement or expectation that cost-share funds would be sufficient to provide for all of the planned conservation practices.

As a result of the Department's comment on this recommendation, we removed our reference to SCS' determining which plans will be implemented since USDA believes all plans are likely to be implemented. However, because the Department believes that not all conservation practices can be funded, it is all the more important that its limited cost share funds are prioritized to achieve the greatest conservation benefit.

In commenting on our second recommendation, USDA noted that SCS is establishing a national sampling system for reporting progress so that details of accomplishments would be readily available. As a result of this comment, we made adjustments to the report where appropriate. However, we did not change our recommendation because this sampling system is not yet in place.

assistance to producers in implementing conservation practices. In addition, states have various cost-sharing conservation programs that are coordinated with USDA's administration of its cost-sharing programs.

SCS had not prepared a national estimate of the cost of installing conservation systems. However, SCS representatives in Iowa, Kansas, and Missouri estimated that the shortage of cost-share funding in their states during the next 5 years will be about $409 million. Table 3.3 shows the SCS representatives' estimated total installation costs, federal and state cost-share funding, and the shortage of these funds.

Table 3.3: Estimated Cost-Share Funding Needed for Conservation Plans in Iowa, Kansas, and Missouri

Dollars in millions

State	Total installation costs	Amount needed from federal/ state sources	Amount projected to be available from federal/ state sources[a]	Estimated shortage
Iowa	$808	$404[b]	$87	$317
Kansas	134	67[c]	46	21
Missouri	268	176[d]	105	71
Total	**$1,210**	**$647**	**$238**	**$409**

[a]Based on current funding projected for fiscal years 1990 through 1994.

[b]Based on 50-percent of total costs.

[c]Based on combined federal and state cost-sharing at 50 percent of total costs.

[d]Based on combined federal and state cost-sharing at 50 to 75 percent of total costs. The percentage varies depending on the conservation practice and the county.

The extent that SCS shares the costs of implementing conservation plans with a producer varies between states. SCS can share up to 75 percent of the cost of specified conservation practices not to exceed an established maximum amount. However, SCS state and county offices may establish priorities and approve cost-sharing at less than 75-percent if they choose to do so. For example, the Missouri SCS office estimated it would share from 50 to 75 percent of the costs, while Kansas limited federal-state cost sharing to 50 percent of the costs so that assistance could be provided to more producers.

Providing additional cost-share funding may not necessarily enable SCS to assist producers in installing all the conservation systems planned by the 1995 deadline. For example, an SCS assistant state conservationist in Missouri said that additional cost-share funds could not be effectively utilized without the additional staff needed to provide the related technical assistance. An SCS state conservationist in Kansas also noted that

Table 3.1: Examples of Planned Soil Savings Under Each Conservation Alternative

Figures in tons per acre per year

Conservation alternative	Erosion before plan	Savings based on plan	Erosion after plan
Conservation reserve program			
Field 1	74.7	74.0	0.7
Field 2	41.6	41.3	0.3
Field 3	10.0	9.0	1.0
Conservation system to meet T level			
Field 4	74.7	67.8	6.9
Field 5	41.6	36.1	5.5
Field 6	10.0	5.0	5.0
Conservation system to meet alternative level			
Field 7	74.7	60.9	13.8
Field 8	41.6	34.9	6.7
Field 9	10.0	5.0	5.0

Estimated Soil Losses

While most conservation plans are designed to reduce erosion on cropland, our sample data show that some conservation plans were for sodbusting. In other words, some producers broke out new cropland and thus had to develop a conservation plan. Of the 354 fields contained in the conservation plans we reviewed for 58 farms, 13 sodbusted fields showed increased soil losses (i.e., soil erosion was higher after the development of the conservation plan for the sodbusted acres than it was prior to being converted to cropland). Plans to bring four fields to the T level indicated increases in expected losses ranging from 1 to 2 tons per acre per year. Plans for the nine remaining fields, which used the alternative level, indicated increased losses ranging from 4 to 5 tons per acre per year.

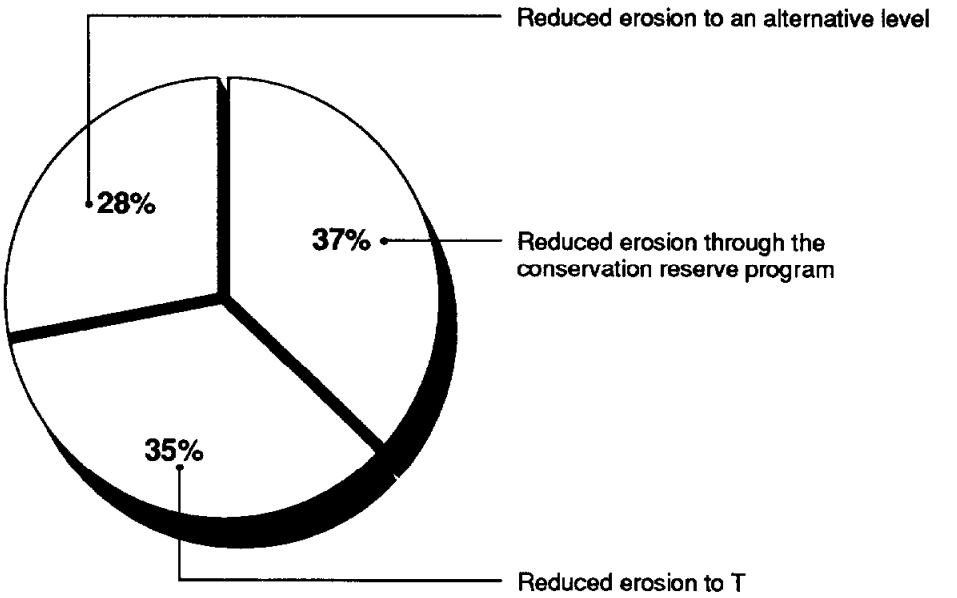
Producers May Not Be Able to Implement Conservation Plans by 1995 Deadline

SCS estimates that it will not have the staffing and cost-share funding needed to assist producers in implementing conservation plans (on the 135 million acres covered) by the deadline of January 1, 1995. SCS officials believe this may limit producers' ability to fully implement conservation plans by the required date, and they would like the deadline extended to about 2000. If plans are not implemented as required by the act, soil savings, associated with reduced erosion, will be less than anticipated.

all producers could elect to meet the alternative requirement without showing economic hardship.[2]

While not required, some producers plan to reduce soil erosion to the T level. We reviewed a sample of conservation plans for 58 farms from a universe of 4,575 farms (covering 548,189 acres) in 6 counties in Iowa, Kansas, Minnesota, Missouri, and North Dakota.[3] As shown in figure 3.1, our sample indicates that, in these 6 counties as a whole, producers plan to meet the conservation requirements by enrolling about 37 percent of their acres in the conservation reserve, reducing erosion to the T level on about 35 percent of the acres, and reducing erosion to the alternative level on the remaining 28 percent of the acres.

Figure 3.1: Estimated Frequency of Conservation Applications Planned in Counties We Visited (Percentage of Acres)



Note: Sampling errors for these data are as follows: conservation reserve program, 21 9, conservation systems to reduce erosion to T, 15 7; conservation systems to meet an alternative level, 17.7.

Sampling errors indicate the range within which the actual value would likely fall at the 95-percent confidence level (i.e., 95 times out of 100)

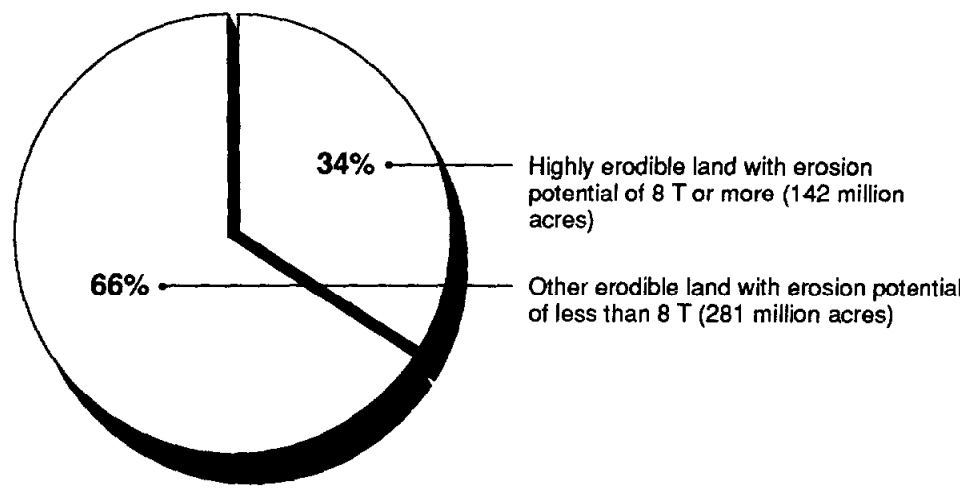
Source: GAO analysis of conservation plans

[2]An exception is highly erodible fields converted from native rangelands or woodland vegetation. Both must meet the T level

[3]These data on soil erosion cannot be extrapolated to other counties in the United States. See appendix I for details about our sample.

In response to this comment, and realizing that USDA may have short-run resource constraints, we did not recommend that the Department change its criterion. Rather, we directed our observation about the amount of land covered by USDA's criterion to the Congress. If the Congress wishes to protect more erodible land, considering the increased costs, lowering the USDA criterion could be used to do so. For example, about 75 million acres of land are eroding at 5 to 8 times the soil tolerance level, and controlling erosion on these lands could produce significant soil savings.

Figure 2.2: Erosion Potential of the Nation's 423 Million Cropland Acres

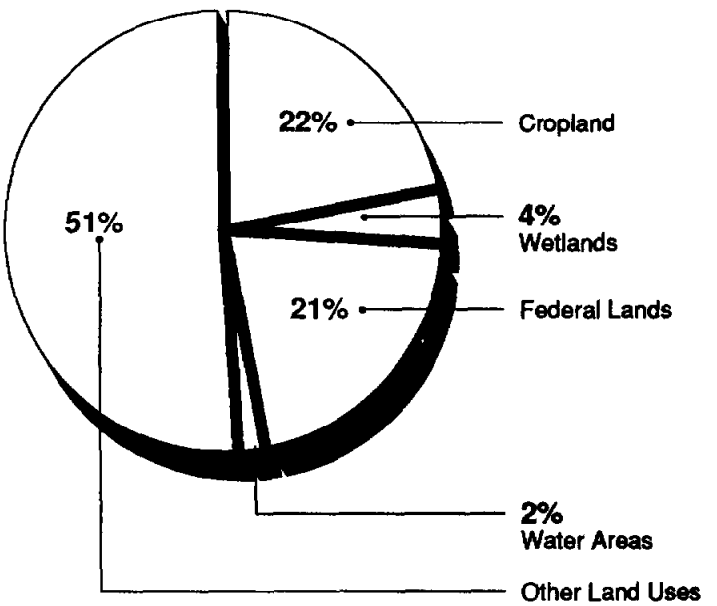


Source: GAO estimate based on 1987 National Resource Inventory, USDA, and Jan. 1990 Food Security Act Progress, USDA

In addition to the criterion used by USDA, in some instances, the act allows producers to convert highly erodible land and wetlands without the loss of farm program benefits—further limiting the protection of fragile lands. For example, with regard to sodbusting, a loss of benefits does not occur unless a producer converts highly erodible land and plants an agricultural commodity on the land without applying an approved conservation system. Similarly, concerning swampbusting, a loss of benefits does not occur unless a producer converts wetlands and plants an agricultural commodity on the land. In both cases, benefits are not lost if the producer does not plant an agricultural commodity during the crop years that he/she chooses to participate in a USDA farm program. Yet, in the case of converted wetlands, the environmental value of the wetlands is lost. The act does not require farmers to restore converted wetlands to remain eligible for federal farm program benefits. Because of the extensive nature of the task, we did not attempt to identify instances where farmers actually drain wetlands and still obtain federal farm benefits. Nonetheless, it appears that the Congress is considering, as part of its changes to the Food Security Act, remedying this situation.[4]

[4]The House passed a bill in August 1990 which will withhold benefits from program participants who convert wetlands for the purpose of producing an agricultural commodity.

Figure 2.1: Amount of Cropland and Wetlands in the United States (Total Surface of the United States Is 1 94 Billion Acres)



Note Data exclude Alaska

Source 1987 National Resource Inventory, USDA.

Only these lands that USDA classifies as highly erodible or wetlands and that are farmed or planned to be farmed by USDA participants are covered by the act. Producers who do not participate in USDA farm programs are not required to comply with the act's conservation provisions.[2]

Other Fragile Lands Remain Unprotected

The act allows USDA to establish criteria for classifying land as highly erodible in carrying out the conservation compliance provisions. USDA's criterion requires land to have the potential to erode at least eight times the soil loss tolerance level to be classified as highly erodible for the conservation compliance and sodbuster provisions. This criterion protects the most erodible land. In contrast, USDA used a broader eligibility criterion for removing land from production and enrolling it in the conservation reserve program for USDA rental payments. This criterion included the land's potential and actual erosion, current and future use, and potential to flood.

[2]According to the National Research Council's report, Alternative Agriculture, 1989, about 70 percent of the nation's cropland was enrolled in federal commodity programs at the time of its report.

interviewed USDA representatives at the offices identified above. We also sampled ASCS and SCS county office implementation records to determine whether producers' annual certifications of compliance were received from USDA program participants, whether highly erodible land and wetland determinations had been made, whether producers had developed conservation plans and determined their effect on soil erosion and farming practices, and the circumstances of commenced conversion requests and decisions and whether USFWS had been consulted.

To determine how USDA enforced the conservation provisions and how many producers lost benefits, we reviewed ASCS enforcement reports and reporting procedures, and ASCS' and SCS' compliance-monitoring procedures. We interviewed representatives at the offices identified above, and we sampled ASCS and SCS county office records to determine the reasons why violations occurred and were appealed and overturned. Samples were also selected to look for unreported violations and to determine whether USFWS had been consulted on wetland decisions.

To identify and recommend changes needed in the conservation provisions and in their implementation, we reviewed the conservation provisions of the act, the implementing regulations, USDA's procedures, and various implementation and enforcement records and reports; interviewed USDA representatives at the offices identified above; obtained opinions from representatives of environmental and farm organizations; and analyzed the results of the samples discussed above.

We made our review in accordance with generally accepted government auditing standards from July 1989 through February 1990. As agreed with the Chairman's office, we obtained oral comments on a draft of this report from the Department of Agriculture.

level. The USDA's Soil Conservation Service (SCS) must certify that the plan is technically correct, and the local conservation district must approve the plan.

Producers who plant an agricultural commodity on existing cropland must have filed an approved soil conservation plan with the local SCS and have begun actively applying the plan by January 1, 1990. They must fully apply the plan by January 1, 1995.[6]

Producers who plant an agricultural commodity on land converted to cropland after the act's passage (i.e., sodbuster) must file an approved conservation plan with the local SCS and fully apply the plan before planting.

Swampbuster

The swampbuster provision applies to naturally occurring wetlands. Producers cannot plant an agricultural commodity on naturally occurring wetlands that were converted to cropland after December 23, 1985. However, certain wetlands are exempt from the swampbuster provision, such as: wetlands on which conversion was commenced before December 23, 1985, but not yet completed,[7] and wetlands on which the production of an agricultural commodity is possible as a result of natural conditions, such as drought.

Penalties and Administration

Violators of the act's conservation provisions lose their eligibility to participate in USDA farm programs. Eligibility is lost during the crop year of the violation. The programs include: price supports or payments, farm program loans, crop insurance, disaster payments, and payments for storage of agricultural commodities.

Within USDA, SCS and the Agricultural Stabilization and Conservation Service (ASCS) administer and enforce the act's conservation provisions. USDA's Farmers Home Administration (FmHA) and Federal Crop Insurance Corporation (FCIC) are to coordinate with ASCS to ensure that producers participating in their programs are in compliance with the act's conservation provisions. The act also requires SCS and ASCS to consult

[6]Producers who did not prepare a conservation plan by January 1, 1990, must develop and apply an approved plan when growing their first crop. Producers who did not participate in USDA programs between 1986 and 1989 have until January 1, 1995, to apply their plans.

[7]Producers who started to convert wetlands prior to the act are granted exemptions to the swampbuster provision if they meet certain criteria. These exemptions are called "commenced conversions."

Introduction

The Food Security Act of 1985 (P.L. 99-198, Dec. 23, 1985) contains conservation provisions intended to reduce soil erosion and protect wetlands by removing incentives for producing agricultural commodities on highly erodible land or converted wetlands. By removing these incentives, the Congress intended to: reduce soil loss due to wind and water erosion, assist in preserving the nation's wetlands, reduce sedimentation and improve water quality, curb the production of surplus commodities, and protect the nation's long-term capability to produce food and fiber.

Before the act became law, the U.S. Department of Agriculture (USDA) estimated that

- 3.1 billion tons of soil were eroding annually on much of the 420 million acres of cropland in the United States;
- 3.7 million acres of land were being converted from uses such as pasture, range, and wetlands to cropland annually; and
- about 153 million acres of noncropland (including 5.2 million acres of wetlands) had a medium to high potential for conversion to cropland.

The act included provisions on conservation compliance, "sodbuster," "swampbuster," and conservation reserve. The conservation compliance provisions protect highly erodible cropland[1] farmed during 1981 to 1985, while the sodbuster and swampbuster provisions, respectively, protect highly erodible land and wetlands[2] that may be converted to cropland after the act's passage.

This report covers the first three provisions which impose conservation requirements on producers who participate in USDA farm programs. We reported on the act's fourth provision, the conservation reserve program, in November 1989.[3]

[1]USDA classifies highly erodible land as land consisting of fields in which a minimum of one-third or 50 acres of the field contain soil with a potential to erode at least 8 times the soil loss tolerance level. The soil loss tolerance level is defined as the rate at which the soil can erode and maintain continued productivity.

[2]USDA classifies wetlands as areas with a predominance of soils that are inundated or saturated by water to the point where the soil can support water-loving plants.

[3]Farm Programs: Conservation Reserve Program Could Be Less Costly and More Effective (GAO/RCED-90-13, Nov. 15, 1989).

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In some instances, the law allows farmers to convert highly erodible land or wetlands to cropland without losing federal farm program benefits. Farmers who convert these lands can still receive farm program benefits in any year that they do not plant on them. In other years, those farmers can plant on the converted lands, provided they forego participating in federal farm programs. In either case, the lands are lost and farmers are not required to restore them to regain their right to farm program benefits.

Conservation Plans May Not Be Implemented and, Thus, Soil Savings May Be Less Than Anticipated

Our review of a limited sample of conservation plans in six counties in five states shows that soil erosion should be reduced on most of the fields in these counties.[2] However, USDA expects a shortage of staff and funding used to provide farmers with technical and financial assistance in applying conservation systems. SCS told us that field office staffing will be 37 percent below the level needed during fiscal years 1990 through 1994. Also, although SCS has no national estimate of the cost to install conservation systems, SCS personnel in Iowa, Kansas, and Missouri estimate that the shortage in funding assistance in their states during the next 5 years will be about $409 million. As a result, farmers will not apply conservation systems on all of the 135 million acres planned, or they may apply less effective and less costly systems.

Implementation of Wetland Provisions Slow and Inconsistently Applied

Given limited staff resources, USDA deferred making wetland determinations because it gave priority to developing conservation plans which were required by 1990. To date, USDA has identified about 7.5 million acres of wetlands. USDA estimates that there are about 82 million acres of wetlands on nonfederal lands in the continental United States. Of these 82 million acres, USDA plans to make wetland determinations only on cropland and land adjacent to cropland on farms of USDA participants. While this is reasonable, USDA does not know how much of this acreage is susceptible to cropland conversion. Until wetland acres are identified, USDA cannot ensure that they are protected as required by the act. USDA expects to complete wetland determinations by December 31, 1991.

USDA has amended or modified the criteria for exempting wetland conversions several times since it issued interim rules in 1986. As a result, USDA did not consistently apply the criteria to determine which wetlands can be drained without violating the act. USDA also did not consult with

[2]These data on soil savings cannot be extrapolated to other counties in the United States.

Executive Summary

Purpose

Every year billions of tons of soil erode from the nation's cropland while millions of other acres are converted into new cropland. To address this problem, the Food Security Act of 1985 requires farmers who participate in federal farm programs to reduce erosion on highly erodible cropland and, with certain exceptions, prohibits the conversion of wetlands to cropland.

The Chairman of the House Committee on Agriculture asked GAO to review the Department of Agriculture's (USDA) administration of the act's conservation provisions by focusing on, among other things, (1) the number of acres of land affected, (2) the implementation of conservation plans to reduce soil erosion, and (3) the implementation of the wetland provisions to reduce wetland conversions.

Background

Before the act, about 3.1 billion tons of soil eroded annually on over 420 million acres of cropland in the United States, and pasture, range, wetlands, and other lands were converted to cropland at a rate of 3.7 million acres a year. Soil erosion gradually reduces the productivity of land, increases sedimentation of water bodies, and damages surface and groundwater quality. When wetlands are drained, flood control and water quality can decrease, fish and wildlife habitat decline, and recreational opportunities can be lost.

The act requires farmers to conserve highly erodible land and wetlands by linking their conservation activities with eligibility for USDA farm program benefits. To be eligible, farmers must (1) develop plans to apply approved conservation systems by 1995 to reduce erosion on highly erodible lands they farmed between 1981 and 1985 and (2) not convert and farm certain wetlands. Farmers who plant on highly erodible land that was not previously farmed (the act's sodbuster provision) must apply a conservation system before planting. In general, farmers cannot plant on naturally occurring wetlands that were converted to cropland after the act (the act's swampbuster provision).

USDA is responsible for administering these provisions, enforcing compliance, providing technical assistance to producers, and assisting with funding to implement conservation measures.

Results in Brief

Using USDA's criterion, the act covers about 142 million acres of highly erodible farmland. Opportunities exist to increase this amount. First, USDA's highly erodible land criterion does not include certain lands with