

Testimony before the
Senate Committee
on
Agriculture, Nutrition, and Forestry

Subcommittee
on
Soil and Water Conservation
Forestry and Environment

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Mr. Chairman and Members of the Committee, we appreciate the opportunity to appear before you today and discuss soil conservation policy.

The American Farmland Trust is a private non-profit organization dedicated to finding ways to conserve our nation's top soil and protect agricultural land from conversion to non-agricultural uses. Our efforts include initiatives and activities in both the private and public sector. The majority of our projects involve work directly with individual land owners and state and local officials. In the past three years AFT has developed a membership of 25,000 individuals from all parts of the United States.

As you know, Mr. Chairman in the past year AFT has undertaken an extensive, indepth analysis of our soil conservation problems and programs. We believe our conservation project is one of the most detailed analysis of these programs ever undertaken by the private sector.

AFT's basic goals, as we designed and carried out the soil conservation study, were to:

- 1) Evaluate the effectiveness of traditional cost-sharing and technical assistance programs for controlling soil erosion;
- 2) Analyze various voluntary incentives for implementing soil conservation practices;
- 3) Investigate current use, and prospective uses, of mandatory controls specifying goals or methods of

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soil erosion controls including regulatory and
and cross compliance provisions;

- 4) Interview farmers in areas experiencing severe erosion to determine the response of farm operators and absentee landowners to the current soil conservation programs, and to test their reaction to possible new policy initiatives;
- 5) Develop policy recommendations for submission to Congress and to state governments.

I am pleased to report, Mr. Chairman, we are nearly completed with the project and will be releasing our findings and recommendations very soon. Because of the importance of this hearing, we thought it would be appropriate to share with the Committee this morning a number of the more important findings and recommendations that will be more thoroughly discussed in the project's full report.

Specifically, we would like to discuss two facets of our project that we believe will be of particular interest to this committee. We will present some of the results of the extensive field interviews we conducted with about 700 farmers and ranchers in six important agricultural states. Secondly, we want to go over a number of the policy recommendations that we believe are promising and necessary if the nation's public conservation programs are to become more cost-effective and responsive to contemporary conservation needs.

Let me go directly through our most surprising conclusion. We strongly believe that soil erosion can, and should be reduced

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significantly to or below acceptable levels on the vast majority of agricultural land now experiencing excessive erosion losses. Furthermore, AFT believes that this achievement can be attained in a relatively short period of time, and without additional funds for traditional conservation programs if the basic thrusts behind our policy recommendations are incorporated, one way or another, into contemporary conservation programs and policies. There are no bold, new initiatives or program changes behind this conclusion. Our confidence rests in the Department of Agriculture's growing ability to identify conservation needs, and our hope that a much more systematic and effective approach to the administration of our public conservation programs will soon be adopted by the U.S. Department of Agriculture.

Returning now to the findings of AFT's survey, we would like to focus on what farmers and ranchers told us they were doing, and what they were thinking about soil conservation. We interviewed about 700 farmers and ranchers in six study areas. Information on these areas is presented in Table 1 of our testimony.

Each interview took more than one hour to conduct. The farm owners and operators were asked to assess the efforts of public agencies to control soil erosion on agricultural land; to reveal what conservation practices they were using; and to describe how they felt about different public policies and programs that might be used to help them control soil erosion.

Our research design for the interviews involved a number of steps: The selection of specific agricultural areas; the selection within each area of study site, usually corresponding

Table 1. Characteristics of Counties in Which the Study Sites Are Located:
1978 Census of Agriculture

Characteristics	Study Area-County					
	Washington Co. Colorado	Marion Co. Iowa	Haywood Co. Tennessee	Grant Co. Wisconsin	Jackson Co. Illinois	Perry Co. Missouri
Average Farm Size (Ac.)	1,534	237	354	249	255	219
Average Market Value of Products Sold	\$56,060	46,567	27,370	50,993	30,834	25,853
Percent of Value of Products Sold from:						
Crops	44%	28%	91%	9%	72%	32%
Livestock	56%	72%	9%	91%	28%	68%
Principal Crops and Percent of Cropland Planted to Each:						
1st	Wheat 36%	Corn 39%	Soybeans 57%	Corn 37%	Soybeans 46%	Hay 18%
2nd	Corn ^a 4%	Soybeans 21%	Corn 15%	Hay 37%	Corn 18%	Corn 18%
3rd	Hay 4%	Hay 13%	Cotton 5%	Oats 9%	Hay 8%	Soybeans 17%
4th	Sorghum 1%	Oats 4%	Hay 4%	Soybeans 1%	Wheat 7%	Wheat 10%
Dominant Livestock Enterprises	Cattle/Calves	Hogs	-	Dairy	Hogs	Hogs/Cattle
Tenure:						
Full Owner						
% Farms	39%	52%	48%	66%	55%	70%
% Land in Farms	23%	31%	16%	53%	28%	53%
Part Owners						
% Farms	46%	31%	37%	21%	34%	23%
% Land in Farms	69%	48%	72%	33%	60%	41%
Tennants						
% Farms	15%	17%	15%	12%	11%	7%
% Land in Farms	8%	21%	12%	13%	11%	6%

^a grown under irrigation

Source: 1978 Census of Agriculture

to a watershed; enumerating, sampling and interviewing farmers in each study site; and analyzing the collected data. We tried to build into our study as much diversity as possible in the land resources and the nature of agriculture found among the areas. All of the areas were characterized by high levels of soil loss.

To accomplish this objective, we met with SCS personnel and obtained National Resources Inventory data on a number of counties located in major land resource areas (MLRAs). Additionally, data on the nature of the agriculture in each one of the counties were obtained from the 1978 and 1974 Censuses of Agriculture, and a series of meetings were held with Cooperative Extension, SCS, and ASCS personnel in each prospective county.

Six study sites were selected in five MLRAs: Nixon Creek watershed in Haywood County, Tennessee; Rattlesnake Creek watershed in Grant County, Wisconsin; Coal Creek watershed, located between Warren and Marion counties in Iowa; the Ora-Bradley watershed area of Jackson County, Illinois; portions of the Menfro soil association of Perry County, Missouri; and the Cope Soil and Water Conservation District of Washington County, Colorado.

With the selection of the six sites for the study, interviews were conducted with representatives of public, agricultural agencies and private farm organizations. The purpose of these interviews was to gauge the form and extent of agency involvement in combating soil erosion in the county, and with the farmers and ranchers chosen for the detailed interviews.

The farm owners and operators we interviewed were engaged in a wide range of conservation practices. In our opinion, some

of the more significant findings from the interviews involved the reasons given by farmers for using a particular conservation practice. The vast majority -- 70 percent -- explained that the major reason for their using a particular practice was the clear expectation that the practice would reduce their operating costs. This finding contrasted sharply with the importance of farmers expectations of receiving cost-sharing funds and technical assistance from the Federal government. Only an average of 21 percent gave the availability of technical and/or financial assistance as the primary reason for adopting a certain conservation practice.

Once a conservation practice was in place, and if government funds had helped to pay for it, an overwhelming proportion of the farmers (71 percent) felt that the cost-sharing money should be repaid if the practice was not maintained.

With the exception of only one county, there was also strong support for government payments to take highly erosive land out of intensive cultivation. We view this as a clear signal that many farmers have not only noticed, but are concerned about the substantial acreage of marginal, highly erosive land that has been coming into cultivation in recent years. Many farmers shared with us their fears that farming more and more poor land would be disastrous for the land, for grain markets, and for rural America in general.

We also found overwhelming support for the targeting of technical assistance and cost-sharing funds. Over 83 percent of the farmers interviewed agreed that assistance should be concentrated in the areas of the country where soil erosion problems are the most severe. Surprisingly, there was also strong support (63 percent) for targeting assistance even if it meant less money and technical assistance for other areas.

One of the key policy questions that we asked involved the issue of cross compliance, a term that has been used in reference to literally dozens of policy ideas. We found that much of the negative response among farmers and operators to this term can be traced to misunderstanding of it. When we asked farmers directly how they felt about one of the most extreme forms of cross compliance -- farmers who grow crops on erosive land without conservation protection should not be eligible for participation in government commodity price support programs or other assistance programs -- a clear majority of the farmers/operators supported this approach. Obviously, there is a clearer understanding and more of a general acceptance of this particular policy question than heretofore recognized by many conservation policy leaders both in Congress and the Executive Branch.

In keeping with the state of Iowa program, and other state and local programs, we also found strong support among the farmers we interviewed for the ability of an individual to recover damages when their property has been harmed by sediment eroding from land adjacent to their properties. Offsight damages seem to be a very real, continuing concern to many farmers.

And finally, on the policy side, there continues to be an extremely high rate of support for federal expenditures on soil and water conservation programs. In fact, the support for a continued federal role in soil conservation programs run almost 75 percent.

Our interviews produced a number of other important findings that we would like to bring to the attention of the Committee. In general, the farming operations taking advantage of available soil

conservation programs tend to be larger in size than the average farm in the area, and tend to be operated by individuals who are older. Also, participating farms were, in most cases, livestock enterprises.

Farmers were basically well aware of their soil erosion problems, with a number of them reporting erosion on more than one third of the acreage they were operating. One of the more surprising findings that emerges from the interviews involved the amount of conservation work taking place on rented land. Although there was not a consistent trend in all six of the farming regions where the interviews took place it was nonetheless clear that many farmers were using conservation practices on rented land. In the case of either minimum tillage or no-till production systems, it became clear that most farmers find it more practical and rewarding to maintain and use one set of machinery for all their cultivated land whether owned or rented.

I would like to turn now to a brief description of some of the major recommendations that will be explained in detail in the forthcoming AFT soil conservation report. We lay out in the report the reasons why AFT is decidedly optimistic about the prospects for substantial progress in conserving agricultural resources. We explain what we see as major new opportunities for advancing sound agricultural resource management systems. We highlight many areas of research and analysis pursued patiently during the 1970's by the USDA which can and should now be used to great advantage by conservation program administrators. Conservation needs can now, for the most part, be identified reliably. Exciting new tools are becoming available to USDA and local conservationists

for assisting land managers in selecting cost-effective conservation strategies compatible with their land, type of enterprise, and complement of machinery. We found all over the country that people working the land are discovering new ways to conserve soil, water, energy and labor. During this period of economic stress on the farm, much greater attention is being directed toward the role of conserving all kinds of inputs as a way to reduce cash production expenses. Most new conserving techniques also help save soil. Farmers are responding eagerly, and with typical Yankee ingenuity, to new conservation opportunities and technologies. They appreciate that conservation systems almost always conserve their money as well as their resources. Public concern and support for conservation programs continues strong, as does the support for conservation in state legislatures and the Congress.

Our optimism is based on the belief that all these positive themes can be focused with great success on new conservation opportunities. These factors can be shaped into powerful forces in support of new and more effective conservation policies and programs. AFT believes it is now possible to have a highly productive and responsive agricultural sector which also effectively and efficiently conserves the nation's land and water resources. Our program recommendations are offered with this goal in mind. We recognize, of course, that our recommendations are rough-cut, and will be improved and sharpened markedly as they become part of the on-going debate on conservation and farm policies. Also, we want everyone to understand that our recommendations build on the work of many other groups, agencies, and individuals who have struggled so conscientiously with these issues in the past. And last, no

conservation policy proposal or set of initiatives should be expected to solve all conservation problems. No program will ever be so compelling and effective that all conservation problems will disappear. Our agricultural system is far too diverse and dynamic to expect such a miracle. AFT's recommendations should be judged in this light, not as the answer, but steps in the right direction. We don't need miracles to conserve America's soil resources, just more common sense and determination to farm wisely and administer sensible conservation programs.

When presented in the final report, AFT's recommendations will be grouped in eight general categories. These are:

- I. The Need for a National Policy on Conserving Soil Resources
- II. Importance of Developing a Coordinated Conservation Program
- III. Characterizing and Identifying Conservation Needs and Opportunities on Agricultural Lands
- IV. Policy Strategies for Controlling Erosion on Fragile Soils
- V. Coordinating Conservation and Commodity Price Support Programs
- VI. Conservation Strategies on Moderately Erosive Lands
- VII. Improving Conservation Program Cost-effectiveness: The Role of Resource Inventories and Program Evaluation
- VIII. Budgetary, Institutional, and Policy Concerns

I would like now to present 15 of our major recommendations dealing primarily with the third, fourth, and fifth categories above. These recommendations lay out the heart of AFT's proposed new strategy for conserving soil and water resources.

I. National Soil Conservation Policy

Recommendation. A national policy on soil conservation should be developed and adhered to by all agencies of the federal government. It should be the policy of the United States to assist land managers, farmers, conservation groups, and other private organizations protect agricultural land from excessive rates of erosion. The basic goal of all federal activities in this area should be maintaining or improving the inherent productivity and quality of soil and water resources. The U.S. Department of Agriculture should be designated as the lead agency in coordinating federal conservation activities.

While there are hundreds of conservation-related programs annually spending several hundred-million dollars, there is no federal policy on soil conservation. There needs to be a clear and explicit statement of the goal for federal conservation programs. Without such a clear goal, it is not really possible to determine the adequacy of program activities or to evaluate the extent and type of new initiatives that might be advisable to reach the nation's goal for soil conservation.

With this recommendation, AFT is proposing that the U.S. adopt what is, in effect, a non-degradation policy for agricultural land resources. This same standard has been embraced by Congress in several other areas of environmental law and regulation over the last decade. It should be the policy of the U.S. government to support public and private efforts of all sorts to reduce soil erosion rates to levels where the long-run productivity of soil resources is maintained. Because our scientific

understanding of the erosion-productivity relationship is incomplete, the USDA should rely on available soil-loss tolerance limits on individual soils as the best available estimate of the non-degradation goal for erosion control practices. (A greatly expanded effort to refine the accuracy of both the concept and measurement of soil-loss tolerances is called for elsewhere in this Chapter).

II. Toward A Coordinated, National Conservation Program

Recommendation. Conservation activities spanning dozens of programs administered by several agencies across the federal government should be systematically coordinated and balanced into an overall conservation program. Conservation needs should be clearly articulated in meaningful terms, as should the objectives of different conservation programs designed to address these needs.

Conservation issues raise long-term concerns which are best approached incrementally and consistently. Federal policies and programs, on the other hand, tend to shift abruptly and dramatically in response to perceived crises. When a sense of urgency is absent, programs sometimes languish in a sort of bureaucratic malaise. Change in the status quo is viewed suspiciously and often resisted. Because U.S. agriculture is so dynamic, this tendency for bureaucracies and established programs to resist change is a particular danger in the area of conservation.

A mechanism needs to be put in place as soon as possible to help guide the actions of the Congress and Executive Branch toward development of a coordinated, balanced, and complete conservation

program. With the passage of the Resources Conservation Act, Congress sought just such guidance from the USDA. Unfortunately, the goal of the RCA process has not yet been reached. In our next recommendation, AFT urges this and other Congressional Committees to continue an active leadership role in trying to come to grips with this basic conservation problem.

Recommendation. Appropriate Congressional committees should conduct a series of oversight hearings on how contemporary conservation program activities can be more effectively coordinated and balanced. The hearings should focus on widely recognized conservation program deficiencies other than funding levels. Institutional and policy issues should be examined, drawing upon the findings of the General Accounting Office, Congressional investigations, and private assessments of conservation policy. The Committees holding these hearings should widely circulate pertinent background documents explaining the goal of the hearings and the problems on which the Committee is seeking guidance. Background information should outline, at least in general terms, the types of recommendations and testimony that would be most helpful to Congress. Leaders of both parties in Congress should make a concerted effort to coordinate the activities of the several different Committees of the House and Senate with long-standing interests in conservation. Such leadership can help assure that Congressional input and actions progress without undue delay and in consistent directions.

Recommendation. Private conservation, agricultural and environmental organizations with nationwide memberships should convene a task force to consider how state and local initiatives, both public and private, should be coordinated on a continuing basis with federal conservation programs. This group should consider ways to improve the responsiveness of federal decision-making processes to state and local needs, programs, and conservation initiatives. The findings and recommendations of this group should be communicated to Congress and the Executive Branch, along with concrete suggestions addressing how to achieve and sustain a higher degree of coordination and support between federal and state, local and private conservation activities.

III. Characterizing and Identifying Conservation Needs and Opportunities

Recommendation. Conservation program activities and expenditures should be based on conservation needs.

Recommendation. Cultivated cropland in the United States should be assigned on the basis of simple and measureable physical characteristics into one of three groups. This classification should be undertaken for the purpose of determining eligibility of land for various conservation and commodity price support program alternatives.

Recommendation. Eligibility for alternative conservation and commodity price support program provisions for a given field of land should be based, whenever appropriate, on the land's classification. Other program parameters such as

payment rates and cross compliance provisions should be set and adjusted annually according to land groups when such adjustments are advisable in order to maximize conservation and farm income support benefits.

Recommendation. Land in group 1 should not, under any circumstance, be set-aside, diverted, or retired from cultivated crop production as a requirement for participation in farm programs. Periodic production adjustment requirements and expenditures should be directed exclusively to land in groups 2 and 3, with particular emphasis on attaining high rates of participation in the program among group 3 soils.

IV. Controlling Erosion on Fragile Soils

Recommendation. The highest priority for conservation and commodity price support programs should be the elimination of excess erosion on group 3 soils through the conversion of this land to pasture, hay, range, or other stable land uses. Commodity price support programs should be relied upon whenever possible to accomplish this goal by offering farmers multi-year land retirement contracts consistent with production adjustment goals. For lands not covered by a commodity program, the Agricultural Conservation or Great Plains Conservation Programs should be used to encourage the establishment of permanent vegetative cover on highly erosive land.

Recommendation. A range of economic incentives should be offered to farmers to encourage the enrollment of group

3 lands in multi-year conservation contracts. For land included in a farm's commodity program base acreage, the incentives should include: (i) an annual or lump sum payment in cash or commodities; or (ii) favorable eligibility status for participation in other farm programs or other provisions of the commodity programs available to other land on individual farms. For group 3 land not now part of a farm's base acres and currently eroding excessively, the provisions and funding of the Agricultural Conservation Program should be modified as necessary to encourage the establishment of permanent vegetative cover under long-term contracts on the majority of these lands.

Recommendation. The USDA should make a special effort to provide adequate assistance and tailored incentives to convert group 3 lands to stable land uses and allocate funds on a preferential basis, wherever state or local regulations or conservation programs have been adopted to also encourage this goal.

Recommendation. Either through appropriate legislative or administrative initiatives, group 3 lands not currently included within a farm's commodity program base acreage should be designated as ineligible in the future for participation in commodity programs. The conversion of group 3 lands now planted in grass or pasture to erosive cultivated crop uses should also be discouraged through other penalties and provisions such as restricted eligibility for farm credit loans, crop insurance protection, and other publicly funded programs.

Toward this end, the Congress should act expeditiously on S. 663, the so-called "Sodbuster Bill," as well as other legislative proposals pending before Congress aimed at discouraging the conversion of group 3 lands into cultivated crop uses.

V. Coordinating Conservation and Commodity Price Support Programs

Recommendation. To the fullest extent practicable, the USDA should attempt to balance the annual supply and demand of basic agricultural commodities through adjustments in the acreage of commodities harvested each year. Production control should be achieved through diverting Group 2 and 3 lands from cultivated crop uses for multi-year periods. The Department should strive to retain at least 15 million, and up to 50 million acres, in long-term retirement contracts under on-going commodity price support programs.

Recommendation. Cultivated cropland in group 1 that is not subject to resource management constraints or erosion hazards should not be periodically idled as a requirement for participation in commodity price support programs. Instead, provisions should be introduced into the commodity programs to assure that necessary, periodic reductions in the supply of commodities are attained through the retirement of moderately and severely erosive lands in groups 2 and 3.

Recommendation. When advisable, the Department of Agriculture should have the flexibility to include in multi-year

land retirement contracts provisions stipulating market conditions that would permit farmers to replant diverted land. Farmers choosing to replant diverted acreage would be required to treat the newly planted land with an appropriate set of conservation practices which would, in combination, reduce estimated erosion on the land to one-fifth or less of its inherent potential to erode.

Mr. Chairman, we have included in our written testimony this morning 15 of more than sixty recommendations contained in our final report. Together, our recommendations would have a very substantial and lasting impact on our public conservation programs. In order to begin this process as soon and as decisively as possible, we would like to further recommend that the Department initiate a special pilot project testing the basic thrust of our recommendations in the next crop season. We at AFT have coined the acronym SCRAP for this project, or Soil Conservation Reserve Acreage Program. SCRAP would involve offering commodity program participants a multi-year land retirement option, targeted to highly erosive soils. In 150 to 200 sample counties, farmers would be granted an opportunity to enroll erosive cultivated cropland in 5 to 10 year contracts. The farmers would agree to establish and maintain the land in non-erosive grass or pasture uses in return for various incentives which would be established in accord with the basic provisions of next year's program whether it involves a PIK approach, or parcel diversion, or other methods to reduce production. The nuts and bolts of this project are laid out in detail in our report. We urge the Committee to carefully

appraise the considerable benefits we think such an approach would produce for U.S. farmers, our soil resources, and society as a whole.

We have already taken more than our share of the Committee's time this morning and have emphasized the proper role of the federal government. However, state and local governments also need to strengthen their policies and programs for soil and water conservation on the non-federal lands of this nation. We are encouraged by the news that the Soil Conservation Task Force of the National Governors Association will soon communicate with the Governors of all 50 states their observations concerning the opportunities that states have in the area of soil conservation.

We thank you for the opportunity to appear today, and look forward to another chance in the near future to discuss with you in more detail the findings and recommendations contained in our report.

CONCENTRATION OF SOIL EROSION IN
SELECTED STATES IN 1977 FOR
MOST ERODIBLE AGRICULTURAL LANDS¹

STATE	MILLIONS OF ACRES	PERCENT OF STATE TOTAL	MILLIONS OF TONS	PERCENT OF STATE TOTAL	AVERAGE RATE TONS/ACRE/YR
ILLINOIS	1.7	6	76	41	45
IOWA	3.5	11	148	53	42
KANSAS*	6.2	13	137	53	22
MISSOURI	3.1	8	131	53	42
NEW MEXICO*	5.0	10	234	60	12
OKLAHOMA*	2.6	6	55	42	21
OREGON*	1.4	5	10	26	7
SOUTH CAROLINA	0.6	4	8	45	15
SOUTH DAKOTA*	2.3	6	49	39	21
TENNESSEE	1.2	5	55	55	48
TEXAS*	15.1	10	794	68	53
VERMONT	0.3	5	3	56	9
WASHINGTON	1.1	4	25	44	24
WISCONSIN	0.8	3	25	39	31

¹ Includes cropland, pastureland, rangeland, and forestland

* Includes wind erosion

Source: Soil Conservation Service/USDA, 1977 National Resource Inventory

CROPLAND SHEET AND RILL EROSION 1977

