



TESTIMONY OF
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WASHINGTON REPRESENTATIVE
SOIL CONSERVATION SOCIETY OF AMERICA
BEFORE THE
SUBCOMMITTEE ON CONSERVATION,
CREDIT AND RURAL DEVELOPMENT
OF THE
COMMITTEE ON AGRICULTURE
U.S. HOUSE OF REPRESENTATIVES

September 20, 1983

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Mr. Chairman, members of the Subcommittee for Conservation, Credit, and Rural Development, I appreciate this opportunity to represent the Soil Conservation Society of America at your hearing on legislative proposals designed to strengthen soil and water conservation work on farms and ranches. *request my full statement be made part of record. I would also*

As you are probably aware, I serve as Washington Representative of the Soil Conservation Society of America (SCSA).

Founded in 1945, with over 13,000 professionals of most resource disciplines as members, SCSA has, since its inception been dedicated "to advance the science and art of good land use, with emphasis on the conservation of soil and water". Our Journal of Soil and Water Conservation, published six times a year, is world reknown for its excellent scientific reporting and thought-provoking writings on a broad array of conservation issues. *Have copies to show*

~~The~~ special edition issue of May-June 1983 on Conservation Tillage is timely and most valuable for the information it provides for all those concerned about soil and water conservation. It has been widely distributed, including not only to our own members, but to each of the 3,000 conservation districts, to key officials in government and to members of Congress. SCSA was able to do this because of the generous financial support of four agribusiness firms: BASF-Wyandotte, Deere and Company, Pioneer Hi-Bred International and Monsanto. They too recognized the rapidly growing interest in reduced tillage ^{methods} for conserving soil and water.

2
We who have experienced, over many years, the dynamic conditions that continually face agriculture are not surprised to find ourselves in a different setting than when we last appeared before you on May 4, 1983. Too much moisture

In Job done
In much of the ~~Middle~~ West and Southeast, the summer of 1983 ranks among the 10 hottest and driest since the government started keeping records in the late 19th century.

The Secretary of Agriculture last week was quoted as saying, the weather would have "a severe impact on producers, especially those who are not in the PIK program or have no crop insurance -- It is very sad to see a drought like this sweep across the country."

We start next year with a clear playing field, he said, acknowledging that the summers intense heat and minimal moisture will have "staggering" costs for farmers reeling from four straight years of lagging income.

General
It is even more obvious than last spring that agriculture *specifically* and conservation need better government policies. They must be flexible, but as long-range and as compatible as possible.

Mr. Chairman, in a nutshell, of the bills pending before your committee *and* of interest to conservationists, SCSA supports: H.R. 3457 (all titles); H.R. 568; and H.R. 2714 (although *obviously* USDA now has the authority it needs to do the work).

SCSA does not agree with H.R. 2903, unless the programs of the Farmers Home Administration and the Federal Crop Insurance are included in the final "Sodbuster" legislation.

SCSA also favors the administration's proposal *introduce H.R. 3903 w/ mod* that would provide authority for the Secretary of Agriculture to establish a voluntary salinity control program for the enhancement and protection of the quality of water available in the Colorado River for use in the United States and the Republic of Mexico.

3/ In regard to legislation now on the books,
Presentation" along with legislation and \$

Some of the answers to soil and water conservation problems lies in better understanding the science and art of good land use. The key is how to persuade the individual user that the rate of annual soil erosion depends primarily on the physical characteristics of the land itself, and how each acre is used. This includes the management of site-specific conditions on the farmers' fields.

Soil erosion on such land areas is initiated when soil particles become detached from the soil mass and are made accessible to transport by surface runoff water. Preventing soil detachment and inhibiting the accumulation and flow of surface water at erosive depths and velocities are accomplished most effectively by cover and surface management practices. Structural practices designed to control surface runoff, after it has been allowed to accumulate and flow, constitute a second line of defense (a "fall back" position.)

Cover and management practices make ^{the} greater contribution to soil erosion reduction and control ^{and the} first line of defense against cropland or rangeland soil erosion. (to quote a non-famous philosopher) is each square yard (or meter, if preferred) of the land surface.

Many ^{more} farms of the future will be based on residue management systems ^{for several reasons:}

Conservation tillage is perceived ^{by farmers} and used primarily as a crop cultural practice, and is adopted and used to great degree because of its potential for reducing fuel, labor and machinery costs. Its soil conservation benefits are understood and appreciated also, of course, but it is not by any means exclusively a conservation measure. Moreover, a farmer who uses conservation tillage methods is likely to apply this same cultural technique on all of his ~~own~~ ^{cultivated} fields, not only on those of high erosion hazard.

But there are many obstacles that need attention and must be overcome.

It is ~~very~~ ^{manage} important that the public, and those who ~~manage~~ ^{adept} the soil conservation bureaucracy ~~learn to appreciate the fact~~ that the great majority of the occurrences of severe soil erosion are located on a relatively minor portion of the croplands and rangelands. We must learn how to identify those key areas, at the national, state, and local levels,

We also know that a majority of farmers are either blessed with land that is not highly erodible and/or they are taking the necessary soil conservation measures to reduce soil loss. Based on the 1977 National Resource Inventory (NRI) we note that 32 percent of the acreage used for cropland (131 million acres) suffered annual sheet and rill erosion rates of less than one ton per acre/year.

→ However, by contrast, those lands that are intensively cropped, but based on their physical characteristics should be used primarily to grow grass or trees, contributed nearly one-fifth of the total sheet and rill erosion in 1977. Our priority concern, of course, is the ^{very} high soil loss on some ^{land now called} cropland.

About 25 million acres -- 6 percent of the ^{U.S.} cropland -- accounted for 43 percent of the annual cropland sheet and rill erosion in 1977.

^{Crop} production had, until recently, been gradually gravitating toward the better quality land. This was the result, largely, ^{past commodity} of production controls. It paid farmers to remove their more marginal land from production first. Conversion to cropland often means a shift out of livestock or dairy production. Such shifts have occurred on a vast scale throughout the Corn Belt over the past ^{1940s -} two decades, but the weakened market for grain and oilseeds of ^{very recent} the ~~past~~ few years had slowed the often expensive shift to continuous cash grains in some areas.

We will have better information when the results of the 1982 NRI are fully released. At SCSA's annual ^{international} convention in Hartford, Connecticut in August, the Soil Conservation Service reported ^{for the first time on '82 NRI results} that soil erosion continues to damage millions of acres of cropland, but that the rate of soil loss nationwide has grown no worse since the last inventory in 1977. Agency officials

cautioned against complacency, however, saying state-by-state erosion data is still being compiled and may show that erosion has gotten worse in some key farm states. The ^{IR} 4.82 tons/acre/year figures included only water-caused erosion and not wind erosion. This was slightly below the 1977 ^{NRI} figure of 5.07 tons/acre/year. ^{Answer} That drop was not statistically significant and was within the margin of error in survey methods. We also believe that some of the Great Plains states may suffer worse wind erosion due to the plowing up and intensive use of land previously covered with grasses. Once all the survey work, including computer editing, is finished, ^{and we hope it will be soon} we'll know the latest about soil erosion in major farm states and on fragile lands.

As a reminder
The 1977 survey showed about one-third of all U.S. cropland had excess erosion, at rates slowly impairing the lands productivity.

We know that
Governments at all levels -- in varying degrees -- have promoted soil conservation for 50 years; billions of private and public monies have been spent to cope with man-caused soil erosion, and for the most part practical and proven technologies are widely known and available for bringing soil losses down to tolerable levels. There has been good progress, but ^{too often} for each step forward, we seem to fall back two. Why do we still have difficulty solving this seemingly intractable problem?

^{general}
There are related areas that need to be discussed to best understand the alternatives available to those who decide policy.

See stress two
First, the importance of accepting that farm policy is a significant driving force in the conservation of soil and water,

mixed results
Good - Bad

and second, the wealth of scientific information that is available about the quantity and quality of our land base.

USDA has long had a Land Capability Classification System (I-VIII). It provides three major categories: capability unit, subclass, and class. It is based on the information derived from the Cooperative National Soil Survey. When properly interpreted, land can be labeled, by class, that is best suited long-term for use as forestland, rangeland, grassland for hay or pasture, or most importantly, land for productive, intensive cropping year after year. Land permanently covered with vegetation obviously will have lower soil erosion rates than croplands.

Therefore, to the extent possible, government programs should require that land be used within its capability and treated in accordance with its conservation needs. The challenge is how to get it done and to have the method accepted in a free society. First, a "Sodbuster" type legislation sponsored by several in Congress and specifically proposed in Titles I and II of H.R. 3457 needs to become law and should be in place to at least stop further federal subsidies for those highly erodible lands, that by capability class, should not be intensively cropped. SCSA urges early enactment and implementation of this idea whose time has come.

Second, with millions of acres temporarily diverted from producing certain commodities we should quickly take advantage of every possible means of encouraging those land users who have highly erosive lands to dedicate them to a long-term use (grass or trees) that best fits their natural capability. Some have

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Second, with millions of acres temporarily diverted from producing certain commodities we should (quickly) take advantage of every possible means of encouraging those land users who have highly erosive lands to *consider now to* dedicate them to a long-term use (grass or trees) that best fits their natural capability. Some have

spoken of a voluntary long-term conservation land reserve.

(The American Farmland Trust (AFT) ^{in hearings in May} and others have offered ideas along this line. A properly and fully implemented program could ^{within a reasonable} reduce cropland sheet and rill erosion by about .8 billion tons annually. This would be a one-third reduction of 1977 losses -- a dramatic start on a long-term land non-degradation policy in this decade. We, therefore, also ^{strongly} support Title IV of H.R. 3457.

→ Title III of H.R. 3457 is ^{also} needed to help solve a long standing problem ^{of conservation} when all out crop production of certain commodities is needed to meet domestic and export demands, too many land users ^{have not} farm for future farm programs and are rewarded when controls are again needed. However, those who use lands within their capabilities, who maintain ^{or rotate} their hay and pasturelands, who resist intensive cropping continuously of their highly erodible lands are too often penalized. The history to date is to penalize those who have practiced sound land use -- and when commodity controls are again needed to reward those who have over-utilized their marginal lands. Those who have practiced sound conservation and land use have not been given proper credit for those acres when recording their crop history acreage for set-aside (PIK) type programs.

Without a certified voluntary set-aside we simply perpetuate the conflict between conservation and commodity programs. The RCA program ^{sent to Congress in Dec 82} promised to eliminate these inconsistencies. One way is the adoption of Title III, ^{there may be others} another would be to base commodity control programs on quotas (bushels, pounds, etc.) instead of land acreage. We need to have programs to encourage conservation

whenever farmers participate in Federal programs. SCSA supports this Title ^{III} and recommends its enactment.

H.R. 568 ^{as Congressman Evans testified} would put Federal Land Bank loans in the same category as FmHA credit. SCSA supports this proposal as a condition for land user eligibility for specified Federally subsidized loans.

It strengthens
The RCA program sent to Congress by the President in December, 1982 specifically called for:

"Requiring conservation plans for recipients of some FmHA loans. -- The eligibility requirements for certain Farmers Home Administration loans -- the farm ownership and soil and water loans -- will be modified. Prospective borrowers will be required to have, or to have applied for, conservation plans in order to obtain these loans.

SCS will assist borrowers in developing conservation plans that are consistent with locally adopted conservation standards. SCS will request that local conservation districts review and concur in the plans. As soon as the borrowers apply for this technical help, the loans will be processed.

As a condition for approval, applicants for farm ownership loans and soil and water loans will be expected to make a commitment to apply conservation treatment to any parts of their units that are eroding excessively. Borrowers will be expected to apply all treatments that the Farmers Home Administration loan officer or county committee determines are physically and economically feasible.

FmHA and SCS will jointly develop national guidelines and procedures for this conservation initiative and will solicit advice from their state- and county-level officials."

> H.R. 2714, with an impressive number of co-sponsors has two equally impressive purposes:

1) to facilitate and promote, within the context of modern agricultural technologies, the scientific investigation and understanding of farming systems with the potential to increase agricultural productivity without serious degradation

of the land, reduce soil erosion and losses of water and plant nutrients, conserve energy and natural resources, and maintain high quantity and quality yields of agricultural commodities without relying on energy-intensive agricultural practices, and

2) to provide assistance to family farmers and other producers to use such systems in a manner which is consistent with other provisions of law relating to family farms and which complements the use of modern agricultural technology in agricultural production.

As we understand the proposed measure these purposes would be achieved by:

- setting up twelve (12) on-farm pilot research projects to collect and analyze data about the effects of a transition from energy intensive farming practices to systems which enhance productivity, conserve water and energy, and control erosion, and
- Twelve (12) additional studies would analyze the same data from farms using organic farming practices for at least five years.

The bill would also start a program to assist farmers who use intercropping farming systems to maintain erosion controlling nitrogen-fixing vegetative cover.

It also directs USDA to inventory and assess existing research and extension materials and recommend new research that will help farmers understand and implement low-input farming practices.

Basically, SCSA is favorable to expanding our knowledge and experience in alternate systems of agricultural production. We would remind the Committee that P.L. 95-192 of November 1977,

required the Secretary of Agriculture to develop a national soil and water conservation program. Among the items that the Act stated shall be included in that program included:

- investigation and analysis of the practicability, desirability, and feasibility of collecting organic waste materials, including manure, crop and food wastes, industrial organic waste, municipal sewage sludge, logging and wood-manufacturing residues, and any other organic refuse, composting or similarly treating such materials, transporting and placing such materials onto the land to improve soil tilth and fertility. The analysis shall include the projected cost of such collection, transportation, and placement in accordance with sound locally approved soil and water conservation practices.

Although some early work was done on this requirement of the RCA Act -- in the previous Administration -- and a report and several recommendations sent to Congress by USDA in 1980 as required by an earlier farm bill, P.L. 95-113 (with identical language) the 1982 RCA program was completely silent on this matter. *see Defeat*

This was not an oversight. We think that when the RCA program was sent to Congress in late '82 and USDA stated it will give major emphasis to promoting conservation tillage and other cost-effective conservation methods to protect the productive capacity of soil and water resources, this then was apparently the Department's response to organic farming.

SCSA supports this proposal, urges enactment and early implementation even though the USDA now has necessary authority.

We know even these proposals to encourage farming within the land capabilities are not simple, because land use decisions and farming practices ultimately relate to the economics of soil conservation and the welfare of agriculture. Those who would solve the risk of continued soil degradation would identify and

stop whatever reason triggers the process. But, in most cases, that reason is the way the farmers make their living. We should also be testing the ^{excellent} conservation provisions built into the 1981 Farm Bill, but ^{little} has been done ^{to date} to implement them. Perhaps honed by the conservation possibilities offered under the PIK program, there may be a new awareness of the need to key future Federal farm programs to resource conservation. However, to translate that awareness into policy will require support beyond those who generally share a resource management, rather than a marketplace economic perspective on soil conservation. We look upon soil as a natural resource -- at times mismanaged because its long-term value is underestimated by the marketplace.

We feel the time is ripe for an integrated agricultural and conservation program -- one that takes advantage of the cycles of the farm economy to also deliberately do more to protect the Nation's soil.

There are those who will be reluctant to endorse this linkage and will label it "cross-compliance". By contrast we see these dual problems as a great challenge, but are optimistic that they can be met. This will result from governments willing to act based on improved and scientific understanding of conservation problems facing the nation's farmers in this decade. There are many who want to assist you in any way we can, including SCSA.

Despite the desire and hope for a market-oriented agriculture, farmers and their governments, especially with their Federal government, are linked inextricably. Reluctantly, this off-and-on marriage has finally produced at least a tacit, but fairly candid admission that though each (the government and the

farmer) would prefer the next generation of farm policy to be one with no, or a minimum of, government intervention, it's probably NOT TO BE. There will continue to be a role for government in agriculture and for soil and water conservation. The quest is to enact farm policies that are more compatible and directly supportive of good land and water use.

We agree that we should not stifle the viability of agriculture with too much government. However, soil conservation did not fare well in the market-oriented, fence-row to fence-row production, campaigns of the early 1970s. The effect of years of dedicated land users using traditional soil conservation programs -- and the ancillary benefits of past farm policy -- that paid farmers to take land out of production to reduce agricultural output -- almost disappeared during this past decade as farmers patriotically responded to the high export demands and consumer price concerns for agricultural goods.

The 1983 land use and production adjustments, although now only temporary, should benefit soil conservation this year. It depends upon how it is managed. I understand there will be some oversight at the local level of soil conserving uses of the idle lands. Had the RCA and PIK been tightly coupled, offered in tandem, in planning and implementation with the needed forethought and crosswalk and had there been provisions for some needed land use shifts to be long-term, the gains for soil and water conservation would have been dramatic in this decade.

I hope we have not missed what appeared to be a golden, once-in-a-lifetime opportunity. PIK is apt to cost more than surplus grain and cotton. It could further damage Government's

X credibility to act in a responsible manner, and properly consider the public cost of any policy proposed in the face of record budget deficits.

✓ The Chairman of the Senate Committee on Agriculture, Nutrition, and Forestry was recently quoted as follows:

QUESTION: "Are you satisfied with the Administration's payment-in-kind -- the so-called PIK program -- to aid farmers?"

ANSWER: "No, the starlings flew right into a wall on that one; they had nothing to fly by. Nobody anticipated the overwhelming participation in it. Congress will have to do something to control the cost of it this year or next."

We must also make more certain, than in the past, that farm programs, by design and action, buy more soil and water conservation than they do now.

The SCSA appreciated this opportunity to testify. We look forward to working with you in the future. We will be pleased to respond to any questions. We'll help you in any way that we can as you shape the next generation of farm policy that will take us through this decade.

U.S. House of Representatives
Committee on Agriculture
Washington, D.C. 20515

September 20, 1983

CONSERVATION, CREDIT, AND RURAL DEVELOPMENT SUBCOMMITTEE, Public
Hearing, 1302 Longworth Building

Subject: To consider the following bills: H.R. 3457, Soil Conservation Act of 1983; H.R. 568, Fragile Agricultural Lands Act; H.R. 2714, Agricultural Productivity Act of 1983; H.R. 2928, Fragile Lands Preservation Act of 1983; and H.R. 3903, Colorado River Basin Salinity Control Act.

W I T N E S S E S

10:00 a.m.

1. Honorable Virginia Smith, Member of Congress from Nebraska
2. Honorable Hank Brown, Member of Congress from Colorado
3. Honorable Ron Marlenee, Member of Congress from Montana
4. Honorable Charles W. Stenholm, Member of Congress from Texas
5. Honorable Cooper Evans, Member of Congress from Iowa
6. Mr. Richard D. Siegel, Deputy Assistant Secretary for Natural Resources and Environment, U.S. Department of Agriculture
7. Dr. Clare I. Harris, Deputy Administrator for Plant and Animal Sciences, Cooperative State Research Service, U.S. Department of Agriculture

2:00 p.m.

1. Honorable Kay Roberts of Columbia, Missouri, for National Association of Counties, Washington, D.C.
2. Mr. Milton E. "Bud" Mekelburg of Yuma, Colorado, President, National Association of Conservation Districts, Washington, D.C.
3. Mr. Robert Gray, Director of Policy Development, American Farmland Trust, Washington, D.C.
4. Mr. Norman A. Berg, Washington Representative, Soil Conservation Society of America, Washington, D.C.
5. Mr. Michael Strother, Land Improvement Contractors of America, Washington, D.C.
6. Mr. Justin Ward, Natural Resources Defense Council, Washington, D.C.
7. Mr. John Tarburton, President, Delaware Farm Bureau, for American Farm Bureau Federation, Washington, D.C.
8. Mr. Bob Sivertsen of Havre, Montana
9. Mr. Jack A. Barnett, Executive Director, Colorado River Basin Salinity Control Forum, Bountiful, Utah