

Testimony of
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Senate Committee on Agriculture, Nutrition & Forestry Hearing on Working Land
Conservation: Conservation Security Program and Environmental Quality Incentives Program.

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Mr. Chairman, Senator Chambliss, members of the Committee, I want to thank you for the opportunity to appear before you today representing the Soil and Water Conservation Society (SWCS). My name is Craig Cox; I serve as Executive Director of the Soil and Water Conservation Society.

SWCS is an international, not-for-profit professional society, founded in 1943. Its mission is to foster the science and art of natural resource conservation. Our 6,000 members include professionals ranging from technicians who work one-on-one with landowners to researchers who seek to improve our basic understanding of conservation problems and solutions. Our members provide the scientific and technical foundation for implementing farm bill conservation programs. Agricultural policy and the farm bill, therefore, are critically important to our members.

Working Land Conservation

I would like to applaud you for holding this hearing on working land conservation. The most important and enduring contribution of the 2002 farm bill was to increase the emphasis on working land in our conservation portfolio. The environmental and conservation challenges agriculture faces today are daunting:

? Agriculture is the largest source of impairment in rivers and streams, affecting nearly half of stream and river miles with water quality problems.

? Agriculture is the source of more than 40 percent of impairments in lakes, including nutrients, siltation, and pesticides.

? According to the US Geologic Survey, 44 percent of the total phosphorus entering the Mississippi River drainage is from cropland sources, and another 33 percent from pastureland.

? Fertilizer used in agriculture and manure from livestock were estimated to account for 22 percent and 14 percent of total nitrogen and for 17 and 26 percent of total phosphorus that entered major river basins in the United States.

? On 102 million acres of cropland, soil erosion remains above tolerable levels.

? Of the 663 species listed as threatened or endangered under the Endangered Species Act, 412 are listed, at least in part, due to agricultural development, grazing, and use of agricultural chemicals.

? Invasive weeds have quadrupled their range from 1985 to 1995--currently 100 million acres of land moderately to heavily infested with invasive grasses.

? The first ever assessment of the biological condition of U.S. wadeable streams concluded that 42% of the U.S. stream miles are in poor condition compared to best available reference sites in their ecological regions, 25% are in fair condition, and only 28% are in good condition.

The environmental challenges agriculture faces are so broad because agriculture controls most

of the nation's landscape. Cropland, pasture and rangeland make up half of the U.S. land area. Adding private forest land brings the total to over 80 percent. That agriculture faces a compelling environmental challenge should not surprise us; in most of the United States agriculture is the environment.

Agriculture is not meeting today's environmental challenges. And tomorrow's challenges promise to be even greater than today's. Water, energy, and climate change--these three issues will create challenges for conservationists as great as, or greater than the challenges we faced at the birth of the agricultural conservation movement during the Dust Bowl days of the 1930's. Meeting accelerating demands for water and energy will put tremendous demands on our resources, ecosystems, and environment. Already 4 out of 10 people on the globe live in river basins experiencing water scarcity. By 2025 it is estimated that 3.5 billion people--nearly half the world's population will face shortages. Some are predicting that water will replace oil as the resource of greatest concern to the global community--there are alternative fuels, but there are no alternatives to water.

Agriculture will play a critical role in providing those alternative fuels as everyone on this Committee knows--and hopes. But meeting the energy challenge will require intensification of biomass production on agriculture and forest land to unprecedented levels. As anyone who experienced the fencerow to fencerow production of the late 1970's knows, intensification of production brings both risks and benefits. Biomass production in agricultural landscapes holds great promise for the environment, but that promise will not materialize on its own. Intensive conservation must go hand-in-hand with intensive biomass production or we are likely to find ourselves trading soil, water, and wildlife for oil. That would be a terribly unfortunate missed opportunity.

Climate change, moreover, will make our task much harder. The evidence is compelling that the climate is already more variable than it was in the past and that variability will grow in the future. We will be hotter, colder, wetter, and/or drier. The climate in the places we work will very likely be marked by more extreme storms and wider swings between wet, dry, hot, or cold periods. A report SWCS published in 2003 found that increases in precipitation intensity could increase erosion and runoff from cropland by as much as 90 percent.

Truly sustainable solutions to these challenges will require much more than simply minimizing effects on resources--we will have to meet demands for water and energy in ways that restore and enhance resources, ecosystems, and our environment. I think this task will be among the most compelling challenges of this new century--the "never-ending life work or our species" as Wendell Berry has written.

The 2007 farm bill comes at an auspicious moment in conservation history. Agriculture simply cannot meet today's, let alone tomorrow's, environmental challenges without an intensive, focused, and strategic conservation effort on working land. It is imperative that we use this moment to build a working land conservation effort that can meet those challenges. Conservation science and technology is advancing at a rapid pace. The 2002 farm bill provided unprecedented funding and authority to fuel a working land conservation effort. We have a strong foundation to build on and reason for optimism that we can meet the challenges we

confront.

Technical Assistance

Technical assistance is not in the title of this hearing but technical assistance is the foundation of working land conservation. Let me be clear about what I mean by technical assistance. Technical assistance is about getting conservation on the ground; technical assistance is not about administering programs. Technical assistance is about translating science and professional judgment into action on farms and ranches that conserves resources, enhances the environment, and ensures the commercial viability of agriculture. Technical assistance is not about writing contracts and cutting checks.

I have no doubt that the administrative tasks required to "get the money out" to producers through conservation programs will be completed. I do have serious and growing doubts that the scientific and technical support will be there to make those programs really work for producers and taxpayers. Since 1985, inflation adjusted funding for financial assistance has nearly tripled while funding for technical assistance has been nearly flat. NRCS has fewer conservation professionals on board today than they did in 1985.

The technical know-how needed to drive effective working land conservation is great. Integrating state-of-the-art soil, nutrient, pest, grazing, irrigation, and wildlife management into the production systems used on working farms and ranches requires sophisticated and more ongoing technical assistance. Technical assistance can work alone, or in combination with financial assistance to conserve resources and enhance the environment. In many cases, the management-intensive, knowledge-based conservation systems so important to working land conservation, may reduce input costs and provide other advantages to producers. In such cases, know-how and risk are bigger barriers than cost. Technical assistance can help producers get through the learning stages much faster and also reduce risk. The result is cost-effective conservation that tends to stay in place over the long-term, because it has become part and parcel of the farm or ranch operation.

Technical assistance multiplies the benefits of financial assistance and financial assistance multiplies the benefits of technical assistance. Sometimes, technical assistance alone is enough. Sometimes technical assistance needs to be coupled with small and perhaps short-term incentive payments. In other cases, no change can occur without substantial financial assistance. The key is to get the right mix. I am concerned we no longer have the right mix.

Congress recognized the importance of technical assistance in 2002 by mandating that the Secretary of Agriculture use funding from the Commodity Credit Corporation (CCC) for conservation programs to provide both financial and technical assistance to participants in those programs. Congress also provided for the certification of "third-party providers"--individuals and entities not employed by USDA with the technical expertise needed to help implement conservation practices funded by conservation programs. I urge this Committee to take additional steps in 2007 to shore up our technical assistance network:

? Remove arbitrary caps on use of CCC funds for technical assistance to implement financial assistance programs.

? Focus TSP provisions on umbrella contracts with organizations, firms, agencies, and other entities for ongoing work or work over a geographic area/resource concern; lower the match for contribution agreements. Ongoing agreements tap into more extensive support network, knowledge base, and the reputation of the organization. Ongoing agreements provide incentive for the organization to build their capacity to provide technical assistance.

? Allow producer's to sign-up for "technical assistance only" contracts under EQIP and other conservation programs to ensure they get the assistance needed to implement conservation practices and systems they are willing to invest their own time and money to put in place.

? Ramp up Conservation Innovation Grants to \$100 million annually and focus those grants on accelerating the development, testing, and transfer of innovative conservation technology and conservation systems for working farms and ranches.

The actions recommended above will be very helpful, but it is clear those actions alone will not be enough to build the 21st century technical infrastructure producers and taxpayers need. We need a coordinated investment plan to build a technical infrastructure suitable for working land conservation--a plan that couples the new CCC-funding with strategic increases in discretionary funds for research, education and technical assistance and allocates those resources to federal, state, local government, NGOs, and private sector based on ability to deliver. Such a plan would have to reach well beyond the confines of a farm bill and would require sustained support from the Administration and Congress.

Conservation science and technology has advanced rapidly in the past decade and is providing tools and understanding I could only dream about, if I could imagine them at all when I started work 30 years ago. We are using much less than we know, however, because our technical assistance network is not up to the task of translating science into practice. As a result, we are missing critical opportunities every day to get more out of the taxpayers' and producers' investment in conservation. Given the challenges we face, we simply cannot afford to let those opportunities slip away. The most fundamental federal role in working land conservation must be to build, maintain, and support the technical assistance network that, in the end, will determine whether we meet the environmental challenges agriculture faces.

Environmental Quality Incentives Program (EQIP)

The Environmental Quality Incentives Program (EQIP) has emerged as the most important USDA program providing financial assistance for conservation on working farms and ranches and--as measured by number of participants and the number of acres under contract--the largest financial assistance conservation program in the USDA toolbox. By the end of fiscal year 2006 there were 138,993 active EQIP contracts covering 80,597,302 acres. If one includes completed EQIP contracts in the total, then EQIP has improved stewardship on over 125 million acres. Funding for EQIP increased five fold from 2002 to 2005 as a result of the 2002 farm bill--among the most important achievements of the 2002 farm bill.

EQIP coupled with the Conservation Technical Assistance Program is the centerpiece of the nation's conservation effort on working land. Given its importance, it is essential the program be deployed as effectively as possible to address the environmental challenges agriculture faces.

Over all, our ongoing assessments of EQIP to date suggest reason for optimism. NRCS has

devoted and continues to devote considerable attention to measures to improve the effectiveness of the program particularly at the farm and ranch level. NRCS conservationists deserve praise for their efforts at national, state, and local levels to make the program work--especially given the administrative burden created by such a large increase in funding. There are, however, major opportunities to make a good program much better.

By far the most promising opportunity to improve the effectiveness of EQIP is to focus more of its resources on special projects. Let me be clear. I'm not talking about drawing arbitrary lines on maps and telling producers you are in or out of the program depending on which side of the line you are on. I am talking about focusing technical and financial resources on projects--like Lake Rathbun in Iowa--designed to strategically and effectively address conservation issues of great importance to local communities.

Special projects do two important things. First they get producers working together to achieve the critical mass needed in a particular location to really make a difference on the ground. Second, they allow us to take advantage of new science and new tools to focus our efforts where they will do the most good. At Lake Rathbun, for example, employing that new science has pinpointed the 17 percent of the watershed that is the source of nearly all of the sediment and nutrients that threaten the health of this critical drinking water and recreational resource. The EQIP special project funds are helping local conservationists and producers direct their effort at those critical acres and are already paying off with measurable improvements in water quality.

We at SWCS call this new combination of science, understanding, and technology "precision conservation"--getting the right practices, in the right places, at the right time and at the right scale. The potential of precision conservation to ramp up the effectiveness of working land conservation is remarkable. Using precision conservation to focus on that 17 percent of the cropland responsible for most of the pollution in Lake Rathbun will dramatically reduce the cost and increase the effectiveness of conservation efforts in the watershed.

And Lake Rathbun is not unique. In fact current science suggests it is the rule rather than the exception. At a recent SWCS conference--Managing Agricultural Landscapes for Environmental Quality--a keynote speaker stated "...there is irrefutable scientific evidence that some locations in the landscape have a high pollutant-generating potential (sensitive sites), can function especially effectively to intercept and treat pollutants, and /or have features that comprise critical habitat for wildlife." Study after study is showing the potential gains to be made by focusing effort through special projects to foster collaboration among landowners to make sure those most critical portions of the landscape get priority attention.

Those same studies, however, also point out the risk of not taking advantage of precision conservation in special projects. If 17 percent of the cropland in the Lake Rathbun produces most of the sediment and nutrient pollution, then treating as much as 83 percent of the watershed at great expense could produce negligible results--if they are the wrong acres.

The potential of special projects in EQIP could and should be multiplied by full implementation of the Partnerships and Cooperation Section of the 2002 farm bill--one of the most overlooked opportunities provided in that legislation. That provision--implemented as the Conservation

Partnership Initiative--is only scratching the surface of the potential to help communities through this nation focus effort on environmental issues critical to their quality of life, and in many cases, central to their plans for local economic development. A stronger Partnerships and Cooperation Section should facilitate bringing the financial and technical resources of multiple USDA conservation programs and agencies together with other federal, state, local, and private sources of support to fuel a national network of community-driven cooperative conservation projects. The potential of such projects to accelerate progress and build meaningful local support for working land conservation is vast. EQIP special projects and the Conservation Partnership Initiative demonstrate the power of such projects.

One of the most important contributions the 2007 farm bill could make to working land conservation would be to mandate that at least 30 percent of EQIP funds be allocated to special projects--either alone or through a strengthened Partnerships and Cooperation Section. Given the funding in the conservation title for EQIP and all other conservation programs, we can make a major investment in special projects while still operating a base program in every county funded at levels unprecedented in recent history.

There are other important opportunities to enhance the performance of EQIP--most of which could be accomplished under current statutory authorities--although legislative encouragement to move in this direction would be very helpful. Briefly, those opportunities include:

? Improving the criteria used to select program participants. The criteria used by state and localities to select EQIP participants from among a pool of potential participants has the most direct influence on the ultimate environmental performance of the program. NRCS staff at national, state, and local levels, as well as members of state technical committees, have invested a great deal of effort, expertise, and time developing application ranking systems to select which producers will receive assistance under EQIP. We applaud NRCS for making such a concerted effort; we also think there are important opportunities to improve on the work that has already been done. Substantially increasing the emphasis on and rigor used to evaluate cost-effectiveness, explicitly rewarding higher levels of environmental performance, and improving the locational factors used in EQIP ranking systems hold great promise of both streamlining the implementation of EQIP and improving its effectiveness as a working land conservation program.

? Ensuring fund allocation are based on environmental need and performance. NRCS uses a formula based on 31 factors, each with its own factor weight, to allocate EQIP funding to states. The factors in that formula influence the ultimate environmental performance of EQIP. A recent report from the Government Accountability Office (GAO 06-969, September 2006) concluded that "NRCS's funding process is not clearly linked to EQIP's purpose of optimizing environmental benefits; as such, NRCS may not be directing EQIP funds to states with the most significant environmental concerns arising from agricultural production." A revised formula should heavily weight factors that are closely tied to the extent and magnitude of environmental challenges and opportunities in each state. Factors tied to the extent and magnitude of established national priorities should be weighted most heavily. In addition, NRCS should hold back as much as 20 percent of EQIP funds to use to reward higher performing state EQIP programs through the performance incentives established in the 2002

EQIP rule.

? Placing more emphasis on incentive payments and management-intensive conservation systems. EQIP is heavily weighted toward structural practices. Of the \$786 million NRCS spent on practices in EQIP in contracts signed in 2005, just 18 percent was spent on incentive payments nationally. Some states, however, spent as much as 90 percent of their EQIP funds on cost share payments. Structural practices are important, but more emphasis should be placed on the management-intensive soil, nutrient, pest, water, and grazing management so critical to working land conservation. Incentive should be scaled to higher levels of management intensity within land management practices and EQIP should include a continuous sign up for selected management-intensive practices that are the most cost-effective means of achieving results in a particular location.

Conservation Security Program (CSP)

I have saved my comments on the Conservation Security Program (CSP) for the last not because they are of least importance but rather because CSP is the most challenging and I fear the most imperiled contribution the 2002 farm bill made to working land conservation.

SWCS, like many organizations, celebrated the appearance of CSP in the 2002 farm bill. We hoped CSP marked the beginning of a new approach to supporting agriculture and a new approach to encouraging conservation. As a conservation organization, we were particularly hopeful that CSP would spur widespread adoption of management-intensive conservation systems and innovative farming systems that hold great promise for improving soil, water, and wildlife habitat on our nation's working land.

CSP, however, has fallen far short of that promise. The program implemented to date is not providing an effective alternative to traditional, commodity-based forms of financial support to producers; neither is it spurring widespread adoption of new conservation effort on working farms and ranches. As a result, I fear CSP is caught in a no-man's-land and in danger of losing support from both agricultural and conservation interests. Urgent attention is needed to recover the promise of CSP and find a secure home for the program in agricultural policy.

We face two major challenges to creating that secure home for CSP. The first is money; the second is environmental performance.

The CSP statute envisioned an open-ended stewardship entitlement but the reality has been strict funding caps. Adjusting vision to reality has resulted in many compromises that have drawn intense criticism of CSP. Fixing these problems, however, will require substantial increases in funding. A back of the envelope calculation, for example, suggests an additional \$900 million will be needed just to keep 2005 CSP participants at their 2005 payment levels and reverse the decline in enhancement payments anticipated over the life of their contracts under the current variable rate enhancement policy. Moreover, because all of the annual funding for CSP is used just to meet that year's contract obligations, level funding for CSP--absent the much criticized variable rate enhancement policy--means no new sign-ups and no contract modifications to reward greater conservation effort by current participants.

In short, the CSP we have today must grow in funding every year just to sustain the current limited program. The funding growth will have to be much larger if we are to reverse many of the much criticized compromises that have been made to the statutory vision of CSP. Serious questions are and will continue to be raised about fair treatment of producers in CSP if funding for CSP does not grow. Anecdotal reports indicate serious questions are already being asked about the fairness of large payments going to producers lucky enough to participate in CSP while other producers--already doing exactly the same things for conservation that current CSP participants are doing--must wait years to participate.

Achieving that kind of sustained and secure growth in funding every year will be a daunting task, at least given our current understanding of the fiscal constraints the Committee will face as you work on the 2007 farm bill. If our understanding of those fiscal constraints is correct, it would appear that the most likely way to achieve such sustained funding growth would be to transition current direction payments based on historical levels of commodity production to stewardship payments based on current and ongoing levels of conservation. The troubled budget history CSP has suffered through suggests there is limited support for such a transition--at least to date.

I fear we missed an important opportunity in 2002 to begin that transition. I hope we don't miss that opportunity again in 2007.

The reality of the magnitude of the growth in funding needed to sustain CSP over the long-term also raises an important, but uncomfortable question for conservationists about the environmental performance of CSP--how much can we afford to pay to reward the status quo when there is such an urgent need to change the status quo?

CSP, as currently structured, is spending nearly all of its funding to reward producers for their "benchmark" conservation practices, that is, the conservation practices that were already in place on the farm or ranch for two years before the producer signed up for CSP. Rewarding producers for their past investment in conservation and for the ongoing production of the environmental benefits they are already producing is one of the unique and important features CSP brings to the conservation portfolio. But it also means that, to date, taxpayers are largely paying for the environmental benefits they were already receiving. And the potential to spend large sums of CSP funds in the future to reward farmers for what they are already doing is large because most producers are undertaking at least minimal conservation efforts and some producers are making great conservation strides on their farms and ranches.

Producers, for example, are using no-till conservation systems on about 62 million acres of U.S. cropland--nearly six times the acres enrolled in CSP at the end of 2005. Producers use split applications on nutrients on perhaps one-third of U.S. corn acres, or about 25 million acres--over twice as many acres enrolled in CSP for all land uses in 2005. But as I outlined earlier, this status quo level of conservation effort is not meeting today's environmental challenge, as outlined previously, and will clearly not be enough to meet tomorrow's challenges. The extent and intensity of conservation on working land must expand, and expand quickly. The ethical and practical justification for rewarding good actors is compelling. But conservationists are caught in a dilemma. Rewarding the status quo--even if the producers being rewarded are award-winning conservationists--is simply not sufficient to get us where

we need to go. We must strike a better balance in CSP between rewarding the status quo and spurring new effort if we are to recover the promise of CSP as a conservation program.

There are many ways in which CSP could be adjusted to increase its effectiveness as a tool to change the status quo and spur new effort by U.S. farmers and ranchers. We could "raise the bar" by placing high priority on participation in Tier III or II and strengthen the conservation standards for those higher tiers. Alternatively, we could use stewardship payments as the means to reward producers for what they are already doing while focusing enhancement payments on reward new effort, above and beyond the benchmark practices and systems in place when producers enroll in CSP. There are multiple options that combine these two or other approaches to increase the effectiveness of CSP as a conservation program. We have and will continue to provide technical support to your staff and others working on the details of various options to enhance the performance of CSP.

It is both possible and urgent that we recover the promise of CSP in 2007. By far the most important outcome must be to get CSP out of the no-man's-land it finds itself in today and secure a sustainable home for CSP in agricultural policy. There are many ways to accomplish this goal. Our hope is that CSP find a secure niche in the conservation title, focusing on encouraging the use of management-intensive conservation systems and innovative farming systems. But in any case, it is essential that Congress ensure that funding for CSP is sufficient to match the vision of the CSP statute that emerges in the 2007 farm bill.

In Closing

Again, Mr. Chairman, Senator Chambliss, members of the Committee, I would like to thank you for the opportunity to appear before you today. The potential for the 2007 farm bill to build an effective working land conservation effort is great and the need for such an effort is urgent. We at SWCS will try help as best we can to make that potential a reality.