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THE PROMISE AND PERIL OF TECHNICAL SERVICE PROVIDERS

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I am pleased to be asked to discuss the promise and peril of technical services providers. The Soil and Water Conservation Society (SWCS) supported and worked for the provision in the Farm Security and Rural Investment Act of 2002 (FSRI 2002) that opened the way for wider use of technical advisors who are not U.S. Department of Agriculture (USDA) employees as sources of technical assistance to implement USDA conservation programs. We supported that provision because we think building a technical services infrastructure—research, education, and technical assistance—that is on the cutting edge of science must be the single highest priority for public investment in conservation on our working land in this new millennium.

There are many reasons to be excited about the potential the technical services provider initiative holds to help build part of that infrastructure. There also are reasons to be worried about unintended consequences. I would like to address both issues, but first I would like to talk about what is at stake.

What Is At Stake?

What is at stake is whether the promise made to U.S. taxpayers and producers by the conservation title will be kept. The nature, quality, and capacity of our technical services infrastructure, more than any other single factor, will determine if that promise will be kept.

If the new funding and authorities in the FSRI 2002 are fully realized, USDA will manage, by far, the nation's most important private land conservation effort. The scale of that effort could, if well-directed, be substantial enough to make historic progress in managing environmental quality and ensuring the commercial viability of American agriculture.

The additional investment and new authorities provided in the conservation title of FSRI 2002 must produce tangible results for taxpayers and producers. New funding and authorities:

- Must pay off for taxpayers through environmental and ecological enhancement.
- Must pay off for agricultural producers by dealing with environmental performance as an important determinant of commercial viability.
- Should take advantage of every opportunity to bring producers, programs, and partners together through initiatives and projects that address compelling conservation problems or opportunities.
- Should put agriculture on a more sustainable path by supporting the development and implementation of farming and ranching systems that enhance the environment, the economic opportunities for producers, and the vitality of rural communities.

Technical services—research, education, and technical assistance—are the foundation for putting conservation on the ground. The strength and effectiveness of the technical services infrastructure, more than any other factor, will determine how big the pay off from FSRI 2002 will be for taxpayers and producers.

Technical services have always been primarily responsible for the conservation outcomes of conservation programs, but the new farm law includes important changes in policy that will make technical services more important now than ever. By far the most important change in policy is a shift in purpose for conservation programs from sustaining the agricultural productivity of soil and water resources to managing agriculture's effect on environmental quality. That shift in purpose also requires a shift in the focus of conservation programs from taking marginal land out of production to integrating conservation into farming and ranching systems on our most productive lands. Finally, FSRI 2002 envisions a major increase in the scale of conservation effort in the United States.

Shift to Environmental Management

The advent of the environmental agenda into agricultural policy began with the 1985 farm bill. Its impact on the purpose of conservation policy and programs is signaled by the way we changed the names of USDA conservation programs. The *Agricultural* Conservation Program (ACP) had, for five decades, been the premier program delivering financial help to producers for conservation on their operations. In 1990, a new program—the *Water Quality* Incentives Program (WQIP)—was added to the mix. Six years later, the 1996 farm bill combined ACP, WQIP and two other programs to create the *Environmental Quality* Incentives Program (EQIP).

These name changes reflected a much more fundamental shift in the purposes those programs were to serve. The Soil Conservation and Domestic Allotment Act of 1935 set out the following purposes for USDA conservation programs:

- Preservation and improvement of soil fertility.
- Promotion of economic use and conservation of land.
- Diminution of exploitation and wasteful and unscientific use of national soil resources.
- Protection of navigability of rivers and harbors and flood prevention.
- Restoration of parity in purchasing power of net farm and nonfarm income.

In contrast, the FSRI 2002 states that the primary purpose of EQIP is to "promote agricultural production and environmental quality as compatible goals, and to optimize environmental benefits." EQIP is to achieve that purpose by:

- Helping producers to comply with local, State and national regulatory requirements.
- Avoiding the need for resource and regulatory programs by assisting producers in meeting environmental quality criteria established by Federal, State, tribal, and local agencies.
- Providing flexible assistance to producers to enhance soil, water, and related natural resources (including grazing land and wetland) and wildlife while sustaining production of food and fiber.
- Assisting producers to make beneficial, cost-effective changes to cropping systems, grazing management, nutrient management associated with livestock, pest management, or irrigation management.
- Consolidating and streamlining conservation planning and regulatory compliance processes to reduce administrative burdens on producers and the cost of achieving environmental goals.

In a little more than 15 years (1985 to 2002), we have fundamentally transformed the purposes of conservation activity within the U.S. Department of Agriculture (USDA) that had held sway for the previous 50 years. We have transformed conservation from an activity intended primarily to develop soil and water resources for use as inputs to agricultural production to an activity intended primarily to help agricultural producers improve their environmental performance.

The FSRI 2002 reinforced this fundamental change in purpose with historic increases in funding for the new agenda. A decades-long decline in funding for ACP culminated in 1995 with the Administration's proposal to fund the program at only $50 million—$20 million less than the $70 million provided for the program in the previous year. One year later, the new EQIP was funded at $200 million a year—a four-fold increase from the funding projected for ACP. This year, the new farm bill more than triples EQIP funding to $700 million. Next year, funding will increase again to $1.0 billion and peak at $1.3 billion in 2007—over 25 times more funding than was scheduled for ACP only six years ago.

Environmentalism and its agenda occupied the margins of farm and conservation policy following enactment of the Food Security Act of 1985. The FSRI 2002 anchors the new environmental agenda at the center of conservation and farm policy.

Emphasis on Working Land

That new environmental agenda also means our attention must shift from treating marginal, unproductive, or highly erodible land to treating our most productive and intensively utilized cropland, pasture, and rangeland. Instead of taking agricultural land out of production or shifting agricultural land to a less intensive use, conservation now will focus primarily on integrating state-of-the-art conservation systems into the production systems used intensively on our best land.

Fortunately, FSRI 2002 recognized the need for a better balance in conservation programming between land retirement and land management. In fiscal year 2000, about 85 cents of every financial assistance dollar was spent taking land out of production; about 15 cents was spent to manage land in production. As a result of the new farm law, just over 40 cents of every financial assistance dollar will be directed to management of working land. More than 80 percent of the new conservation investment provided for by FSRI 2002 is targeted at conservation on working land.

Scale of Operation

The major increases in funding, coupled with a shift in emphasis to conservation on working land, means the scale of conservation effort in the United States will increase dramatically. When conservation funding peaks, USDA conservation programs may be touching hundreds of millions of acres a year instead of the tens of millions of acres a year those programs touch today.

That scale of effort means that the technical services infrastructure will be spread over many, many more acres and many, many more producers than at present.

Technical Services versus Financial Aid

The new environmental agenda, the shift in attention to highly productive working land, and the scale of operation envisioned by FSRI 2002 means technical services are more important than ever. Unfortunately, the assumption embedded in current conservation policy and programs is that cost is far and away the most important barrier to bringing conservation to scale on enough working farms and ranches to meet the new environmental agenda. Therefore, U.S. policy leans heavily on reducing the cost of improving conservation and environmental management through a panoply of cost-share or other financial assistance programs. In some cases, cost is the fundamental problem, especially where effective conservation requires taking land out of production or implementing capital-intensive structural solutions to conservation problems.

But producers' knowledge of and skill at ongoing, adaptive management of conservation and production systems is a much more important constraint for many of the most important pollution prevention practices that need to be brought to scale in the United States. Sophisticated nutrient and pest management, tillage by prescription, intensive rotational grazing, managing water in the soil profile, and taking full advantage of the soil as a partner in production and pollution prevention often, perhaps even usually, reduce direct costs. What these technologies do demand is more management attention, better tools to inform and facilitate adjustment of production systems in real-time, and far greater understanding of the interactions of soil, water, and agricultural production systems. In short, producers need to know more to conserve more.

The new environmental agenda will put a premium on producers need to know because most of our environmental problems and opportunities are linked to the way our best and most productive lands are managed. We could effectively reduce soil erosion by retiring marginal or highly erodible land from production. Air and water pollution, however, are closely associated with our best agricultural land—land we want to keep producing, not retire. Integrating conservation into production systems on our working land is much more technically challenging than retiring land. The Conservation Reserve Program (CRP) for example, has about 25 practices covering all of the options—across the entire United States—for planting retired acres to some form of permanent vegetative cover. In contrast, EQIP potentially involves over 200 different practices in my home state of Iowa alone.
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High-quality technical assistance and education, I think, is emerging as the most binding constraint to closing the conservation gap. Money can buy more management attention and knowledge, but only if a producer has the time to invest in educating himself or herself, or can find the technical help and knowledge he or she needs in government, the private sector, or nonprofit organizations.

I think the single most important role for pubic policy in addressing the new environmental agenda is to build a vastly more effective and accessible technical services infrastructure. That infrastructure must ensure that every producer has access to the right technical help and education he or she needs when each needs it. Building such an infrastructure will require substantially increased investment strategically directed to all three components of the infrastructure—research, education, and technical assistance. And it means a strategic partnership and investment plan among government, for-profit, and not-for-profit providers of research, education, and technical assistance.

What's at stake, then, in the technical service providers initiative, will lead us toward or away from the technical services infrastructure we need so desperately in this new century. What's at stake is whether this new partnership will help us keep the promise that FSRI 2002 made to U.S. taxpayers and producers.

Realizing the Promise of Technical Service Providers

There are good reasons to think that the technical services provider initiative will make an important contribution to building our 21st-century technical services infrastructure.

The most important reason for optimism is that technical service providers already make important contributions to the conservation effort in the United States. Partners in federal, state and local government agencies, nonprofit organizations, and businesses already are important to—in some cases central to—the successful implementation of USDA conservation programs. Building on this successful track record is the best way to ensure the new initiative will make an even more important contribution to our technical services infrastructure in the future.

The second reason for optimism is that we really have no other choice. Partners in federal, state and local government agencies, nonprofit organizations, and businesses simply have to play a more important role in implementing USDA conservation programs. The scale of the conservation effort and the speed at which we will reach that scale means USDA's Natural Resources Conservation Service (NRCS) and Farm Service Agency (FSA) simply cannot do this job alone. Necessity, we know, is the mother of invention. I am confident that we will invent the most effective way to take full advantage of the technical expertise that resides outside USDA in the governmental and nongovernmental sectors.

The final reason for optimism is that the pay-off from taking full advantage of the technical service providers initiative is so large. Technical service providers could be a step toward the team-based, multidisciplinary, multifunctional, and adaptive technical services infrastructure that producers need. No single individual or organization can expect to command the spectrum of technical knowledge and experience needed today, given the complexity and interdependence of the environmental agenda that confronts producers and U.S. taxpayers.

The only answer is to build teams at the local, state, regional, and national scales that bring a critical mass of technical expertise and experience to bear to develop and implement solutions to the complex, interdependent problems that are inherent in the new environmental agenda. Dave Swaim, an independent crop consultant in Indiana has spoken and written about a general contractor-subcontractor model for such a team-based approach. I have explored the general practitioner-specialist-technician model we all experience in our health care system for its relevance to a conservation technical services infrastructure. What both models envision is a single point of contact for the client—a point of contact who develops a long-term relationship with the client and who brings to bear the knowledge and experience of multiple technical specialists—to develop a plan or prescription that meets the client's need.

Technical service providers could and should be critical components of such a team-based technical services infrastructure. In many cases, technical service providers could fill important technical niches in the infrastructure that USDA staff will never fill adequately. In some cases, technical services providers could and should be the leaders of such teams and the single point of contact for the producer. Building such a team-based approach would provide the flexibility needed at all geographic scales to tailor the technical services infrastructure to the environmental issues and technical resources available at each location. Such a team-based approach would enhance the capacity to adapt solutions to constantly changing circumstances—and provide the annual, ongoing technical assistance producers need to implement the management-intensive conservation and production systems the new environmental agenda demands.

The full promise of technical service providers will only be realized if USDA integrates them into a long-term vision of a technical services infrastructure suited to the new millennium. Technical service providers should not be seen only as a stop-gap measure to deal with our short-term problem of delivering an expanded set of USDA conservation programs. Getting the conservation provisions of FSRI 2002 implemented is an urgent task. But we should not let the urgency of that task take our eyes off the ultimate prize—a solid 21st-century technical services infrastructure. We need to build long-term capacity and long-term relationships as we implement FSRI 2002.

Avoiding the Perils of Technical Service Providers

The promise of technical service providers as an important piece of a 21st-century technical services infrastructure is clear. But there also are perils in this approach. In the short term, the primary perils are fragmentation and duplication. In the long-term, the primary peril is that we will delay the investments in the public sector we need to build a 21st-century technical services infrastructure.

Potential for Fragmentation

Technical service providers should and will be certified to provide assistance for relatively narrow technical specialties and functions. That is the best approach to ensuring the quality of technical advice provided producers and the applicability of that advice to producers seeking to participate in USDA conservation programs. But there is a real danger that such an approach to certifying and using technical service providers could fragment conservation planning and program delivery and, as a result, create hardships for the client and poor performance for taxpayers.

The potential for fragmentation is greatest is three phases of the conservation planning and application process. First, relying on technical service providers certified to perform relatively narrow technical functions could encourage a single-practice, single-solution approach to conservation and program implementation. Such an approach, however, will take us in the opposite direction the new environmental agenda requires. Systems, rather than individual practices, are the basis for resolving the interdependencies among soil, water, and wildlife and the basis for harmonizing economic and environmental objectives. A fertilizer application recommendation, for example, even if technically sound, is only one part of a pollution prevention system. The most effective, economically feasible, and practical way for producers to reduce pollution from their operations is to implement a system that increase their efficiency and simultaneously manages the pathways pollutants follow from their farms or ranches into the air or into streams, lakes, or aquifers.

Second, as USDA Deputy Secretary Jim Moseley noted at the November 7, 2002 National Technical Service Provider Summit, the critical first step in providing technical assistance is assessing natural resource and environmental conditions and establishing conservation needs. Time spent in the early stages of planning or program participation to assess the underlying causes of conservation problems is critical—but also expensive. If producers are not willing to pay for that assessment—either directly by contracting with technical service providers or indirectly by waiting to get help from "free" government sources of technical advice—then the resulting plans and recommended practices likely will end up treating symptoms instead of curing the disease.

Finally, Deputy Secretary Moseley also noted at the November 7th summit that education is a key part of conservation planning and implementation. Conservation planning and participation in conservation programs should result in more than a set of drawings or a written plan handed to the client. Producers should understand more about their operations and the implications of their decisions for the environment after participating in a USDA conservation program. The time technical advisors spend with producers enhancing their understanding of their operations and the environmental implications of day-to-day management decisions is critical—and again expensive. Will producers be willing and able to pay more for the educational component of good technical assistance? If not, and if as a result the educational component of conservation planning and programs is lost, then producers, taxpayers, and the environmental will suffer. The knowledge and understanding producers gain through their participation in conservation programs is the greatest assurance of long-term benefit to U.S. taxpayers who pay for those programs.

The key to minimizing the potential for fragmentation is to build the capacity to synthesize the recommendations and advice from multiple technical experts and disciplines into a coherent plan that works for producers and the environment. Producers—at least the producers we have worked with in numerous workshops and were represented at the November 7th summit—do not want to manage a team of multiple consultants and government employees. They want a single point of contact who integrates advice from multiple sources into a single plan that takes care of their problems and helps them meet their goals.

The technical service provider initiative will fail unless the capacity for synthesis increases at the same pace that technical service providers enrich the supply of specialized technical expertise. Enhancing our capacity for synthesis is the only way to secure the benefits of technical service providers while minimizing the potential for the damage fragmentation can cause. Finding, hiring, training, and expanding the cadre of conservation professionals skilled in the science and art of integrated conservation planning and application will be critical to the success of the technical service provider initiative. We need to get our conservation general practitioners or general contractors on board and ready to go to work with their expanded team of experts. They are the most important component of the new, team-based model we should be building. They are also the component of the model that is in the shortest supply in both the public and private sectors.

We should be building the capacity for synthesis now, and with some urgency. It takes time to acquire the skill of integrated conservation planning. It takes more than a mastery of technical knowledge and conservation systems. It takes experience working with producers and direct experience with the complexities of agricultural production systems. The art of conservation is the ability to take technical knowledge and translate it into a system that works for a particular landscape, a particular production system, and a particular producer.

I am concerned that the private sector—for solid business reasons—may hesitate to build this capacity. Investing in human capital is expensive and the return on that investment may not seem secure, given the vagaries of annual funding for conservation programs and the willingness of producers to pay now for services they may get free later. State conservation and natural resources agencies are largely cutting rather than building capacity in response to dire budget forecasts. In the short-term at least, NRCS may need to be the primary source of conservation general practitioners—the accountability requirements of USDA financial assistance programs may require that NRCS be the general practitioners.
The best way to ensure the full potential of technical service providers is tapped will likely be for NRCS to build its staff of general practitioners at the same time we build the supply of technical service providers.

Duplication rather than Addition

Certification and third-party vendor programs can be very costly to administer and implement. It is essential that certification fees cover the full costs of administration and implementation of the technical services initiative. Otherwise, the initiative will result in a net decrease in technical services rather than a net increase. The cost of avoiding the potential for fragmentation discussed above will likely fall to NRCS. Those costs could be substantial. It is essential that certification and the technical services provider initiative be designed to fill the most important gaps in the technical services infrastructure, rather than duplicating the capabilities that already exist. Otherwise, the administrative costs and the time spent by federal staff coordinating, approving, and/or inspecting the work of certified providers could actually increase delays and reduce service to landowners, communities and units of government.

Rigorous certification requirements, coupled with adequate fees for certification and training, should minimize the potential for duplication. Rigorous certification requirements should ensure that technical service providers can work independently and with only minimal back-stopping from USDA staff. Fees that cover full administrative and educational costs should ensure that producers get more technical help and taxpayers get more for their investment.

Potential for Delaying Public Investment

The potential for fragmentation and duplication are real and important perils, but they can be managed by the way the technical service provider initiative is implemented. A much more important peril is that the technical service provider initiative will blind us to the critical need to increase our investment in the federal, public-sector component of a 21st-century technical services infrastructure. Clearly, NRCS alone cannot implement all of the conservation provisions in FSRI 2002. Neither can technical service providers alone do the job. What worries me is that we think NRCS and technical service providers jointly will be able to do the job. That conclusion is wrong.

The best, most enlightened implementation of the technical services provider initiative will not produce the 21st-century technical services infrastructure we need. That infrastructure needs to be built—it is not there today and it won't be there unless we make new investments in both public and private sector sources of research, education, and technical assistance.

Earlier, I mentioned the need to build the supply of conservation general practitioners and that most of that supply may need to come from NRCS or other government agencies. The supply of those experienced general practitioners has to increase in step with the supply of disciplinary technical experts—a clear example of the need for more investment in the public sector.

Technical service providers can quickly help—at least in some locations and for some technical specialties—bridge the gap in direct technical assistance to producers eligible for participating in USDA financial assistance programs. Shortly, we will discover just how much of that technical assistance gap technical service providers can close. I hope technical service providers can fill much of that gap, but there are good reasons to be skeptical:

- Will producers be willing to pay the full cost of technical services?
- Will the profit potential for technical services providers be great enough to induce providers who already have a full complement of clients to build capacity to serve additional clients?
- Will liability provisions discourage the private and nonprofit sector from engaging to their full potential as technical service providers?
- Will funding of USDA programs be large enough and certain enough to bring private and nonprofit technical service providers into the market?

I don't know the answer to these questions. But conversations with producers and my members—many of whom hope to be technical service providers—lead me to conclude that we are relying too much on the short-term potential of technical service providers to fill the technical assistance gap.

But my primary concern is that we are forgetting that the public sector plays an even more critical role in the technical services infrastructure—creating technical goods and services that field staff deliver on farms and ranches. Technical service providers can help their colleagues in USDA deliver the conservation goods that come out the end of the conservation technical services infrastructure pipe. But what is in the conservation technical services pipeline isn't good enough to meet current challenges producers face. The technical tools, the training, and the capacity to deliver management-intensive

conservation systems are simply not there, or not to scale, in the federal or nonfederal governmental sector, the private sector, or the nonprofit sector to meet the new environmental agenda. We need to build that capacity. We need to build the basic infrastructure needed to produce more, higher quality, and innovative conservation products to put in the pipeline that technical service providers, along with federal staff, can deliver. Those products include knowledge, tools, applications, systems, and trained people.

Filling the conservation pipeline with the knowledge, products, and people we need requires major new investments in the public sector—particularly investments in the scientific and technical capability of NRCS at all levels.

My greatest fear is that the hope we invest in technical service providers will blind us to the need to invest much more in the basic—and largely public—infrastructure that provides the goods technical service providers can and will deliver.

Where Do We Go from Here?

The stakes are high. Environmental performance already is a key determinant of the commercial viability of important sectors of agriculture. Producers operating animal feeding operations or irrigating cropland or pasture already are facing fundamental questions about the environmental sustainability of their operations. Most producers will face that question in the future—not because agriculture is bad, but rather because agriculture is so big.

FSRI 2002 recognizes that USDA conservation policy and programs must help agriculture manage its environmental performance. The new law, however, also recognizes that we won't succeed in our task without new ways of doing our conservation business. The most important task is to build the technical services infrastructure we need to meet agriculture's environmental challenges.

Thankfully, the conservation title of FSRI 2002 creates an opportunity to strengthen and expand the technical assistance component of the technical services infrastructure. The Administration should take full advantage of its authority to use CCC funding provided for conservation programs to support technical assistance to implement those programs. At a minimum, the administration should ensure that CCC funding of technical assistance is sufficient to guarantee that (1) producers have timely and effective access to the technical assistance they need to fully participate in USDA conservation programs and (2) taxpayers harvest tangible improvements in environmental quality from their investment in conservation. These two objectives will best be achieved through a strategic investment of CCC funds for technical assistance in three key areas: (1) strengthening the number and technical capacity of NRCS staff at all levels, (2) entering into cooperative agreements with governmental and nongovernmental organizations, and (3) securing the services of individual, certified technical service providers.

Settling for strategic investment of CCC technical assistance funds simply to implement the conservation programs FSRI 2002 expanded, however, would be a mistake at this juncture. The Administration should take advantage of the opportunity provided by the major additional investment FSRI 2002 makes in technical assistance to pursue a coordinated investment plan to build a modern technical services infrastructure that will deliver for taxpayers and producers. That investment plan should couple CCC funds for technical assistance with strategic increases in discretionary spending for research, education, and technical assistance.

We should not wait to begin building the federal, public-sector components of the technical services infrastructure until problems in the field demonstrate the limitations of technical service providers. The first casualty of such an approach could be the credibility of and support for the technical service provider idea itself. That would be giant step backward.

It would be much better to make strategic new investments in the federal components of the infrastructure—particularly in USDA agencies—now based on a plan that leads to the technical services infrastructure the new century and new agenda demands. Those investments should focus first on two key areas:

- Developing and delivering to technical staff in the public and private sectors the key technical tools, resource information, and performance data they need to help producers implement the management-intensive conservation systems the new environmental agenda requires.
- Building the cadre of professional, experienced conservation general practitioners who can bring all the pieces—multidisciplinary technical advice, details of USDA conservation programs, goals of producers, and goals of taxpayers—together on U.S. farms and ranches.

If we get those two pieces in place soon, the promise of technical service providers will be secure. In fact, with those two pieces in place, I think the performance of technical service providers will surpass what the authors of FSRI 2002 envisioned.