Order Code RL34069

CRS Report for Congress

Technical Assistance for Agriculture Conservation

June 29, 2007

Megan Stubbs
Presidential Management Fellow
Resources, Science, and Industry Division

Prepared for Members and
Committees of Congress

Technical Assistance for Agriculture Conservation

Summary

Defining exactly what conservation technical assistance is and does, and reaching agreement on a definition, is difficult. Broadly defined, it is information, technical expertise, and a delivery system for providing assistance to landowners and users with respect to conservation and use of natural resources. The Natural Resources Conservation Service (NRCS) — the federal agency that provides this assistance — defines it as "getting conservation on the ground." While this definition lacks specificity, it is the one most often used.

Technical assistance has been discussed extensively at congressional hearings on agriculture conservation. Producers, ranchers, environmentalists, and wildlife advocates continue to raise the issue of technical assistance and the need or desire for additional support. Though Congress is to discuss conservation technical assistance in the 2007 farm bill, other issues related to it exist outside of the traditional farm bill debate. A broader perspective on technical assistance raises questions about the capacity of the current technical assistance structure as well as future limitations. A perceived lack of definition and understanding of what technical assistance is and is not creates questions around this capacity that are not easily answered or understood.

Technical assistance is provided and funded (if only partially) within most conservation programs. There is no single overarching description of technical assistance for all programs. Similarly, there is no single method of providing technical assistance. It involves multiple disciplines working together to provide a collective pool of conservation knowledge. The full scope of technical assistance is best understood by examining how it operates within each conservation program.

Historically, technical assistance has evolved in the range of topics addressed; it currently addresses a wide variety of natural resource concerns. Recent farm bills have repeatedly added natural resource concerns to the conservation mission, leaving many to question whether the current technical assistance delivery system has retained the capacity to function effectively. Demands on available capital (both human and financial), combined with additional questions for technological capacity and an ever-expanding list of natural resource concerns, has caused discussion in the current farm bill debate.

Though technical assistance can only be broadly defined, this report is intended to offer information about aspects of the definition. Future policy changes affecting technical assistance may include funding levels, spending caps, accountability, and staff capacity. Immediate discussion of the topic in the context of the 2007 farm bill likely will center on common themes such as demand and capacity; cost and funding; conservation mission and priorities; and technology and advancement. Long-term issues regarding technical assistance are expected to extend beyond the farm bill debate.

Contents

List of Figures

Technical Assistance for Agriculture Conservation

In the immediate future, Congress is expected to discuss technical assistance for agriculture conservation in the context of the 2007 farm bill. Although this is an issue in the 2007 farm bill, most technical assistance is funded through appropriations legislation rather than mandatory spending authorized in the farm bill.[1] Questions concerning the current and future capacity of the technical assistance system are highlighted by a perceived lack of definition and understanding of what technical assistance is and is not. One challenge for Congress lies in finding an acceptable balance between how much technical assistance capacity currently exists and how much is needed to meet demand. In the search for this balance many policy questions arise regarding what technical assistance is and does, especially in the areas of definition, funding, and implementation. This report does not attempt to directly answer these questions, but rather provides a framework for the debate.

Conservation technical assistance has taken on a number of dimensions over its long and continuously evolving history. This report describes the past progressions that made conservation technical assistance what it is today, and also comments on where it might be headed in the future. After discussing what technical assistance is (and is not), this report poses additional topics for discussion. Throughout this report, conservation technical assistance refers to conservation as applied to activities on or affecting agricultural lands.

Definition, Funding, and Implementation

Definition

There is no single definition of agriculture conservation technical assistance in law or regulation. In the most general terms, technical assistance is any technical service. It is a basic service that provides conservation knowledge to producers and landowners beyond their level of knowledge. It includes information, technical expertise (e.g., engineering, biological, etc.) and a delivery system for assisting landowners and users to conserve and use natural resources. In broader terms it involves outreach, education, and training in practices and technological advances that create compatibility between production and the land. Definitions and

---

[1] Technical assistance is funded through both mandatory and discretionary programs. Discretionary programs are funded annually through the appropriations process. Most mandatory funding currently is authorized under the Farm Security and Rural Investment Act of 2002 (P.L. 107-171, the 2002 farm bill), and provided through the U.S. Department of Agriculture's (USDA) Commodity Credit Corporation (CCC). Given this distinction, programs are presented separately in this report as either mandatory or discretionary.

perceptions of technical assistance vary by region, land use type, accessibility, and individual stewardship. Technical assistance is considered by some to be science-based and therefore subject to the continuous progression of advances in the field. By this definition, inflexibility and static change is undesirable. Others view conservation technical assistance as limited to preparing a conservation plan. The scientific underpinnings add to the stability of the plan; however, without additional follow-through this definition remains narrow, implying that technical assistance is just a plan, and nothing more. Increasingly, this service is not only provided through the federal government by the Natural Resources Conservation Service (NRCS), but also by other public and private experts.

Technical assistance is — most simply — a service. This service is provided voluntarily and at the request of a wide client base including private landowners, conservation districts, local and state government agencies, tribes, and other partnership organizations.[2] This service includes various activities and actions by a service provider. The extent to which one includes certain activities and not others depends on how one defines technical assistance. The more narrow definition might be limited to conservation planning, practice implementation, and perhaps technology transfer activities. A broad definition might also include education, outreach, local coordination, training, mapping, research, technical guidance, demonstrations, site specific consultations, and program development, implementation, delivery, and monitoring.

Funding

The confusion over how technical assistance is defined could be closely tied to the complexity over how it is funded. Technical assistance is funded through every U.S. Department of Agriculture (USDA) mandatory and discretionary conservation program. Most of the funding for technical assistance is provided through six discretionary conservation programs.[3] Mandatory funding for certain conservation programs is currently authorized primarily under the Farm Security and Rural Investment Act of 2002 (P.L. 107-171), and provided through the USDA Commodity Credit Corporation (CCC). Funding for mandatory conservation programs is provided at the level authorized in law unless limited to a smaller amount during the appropriations process. Mandatory funding for conservation technical assistance

---

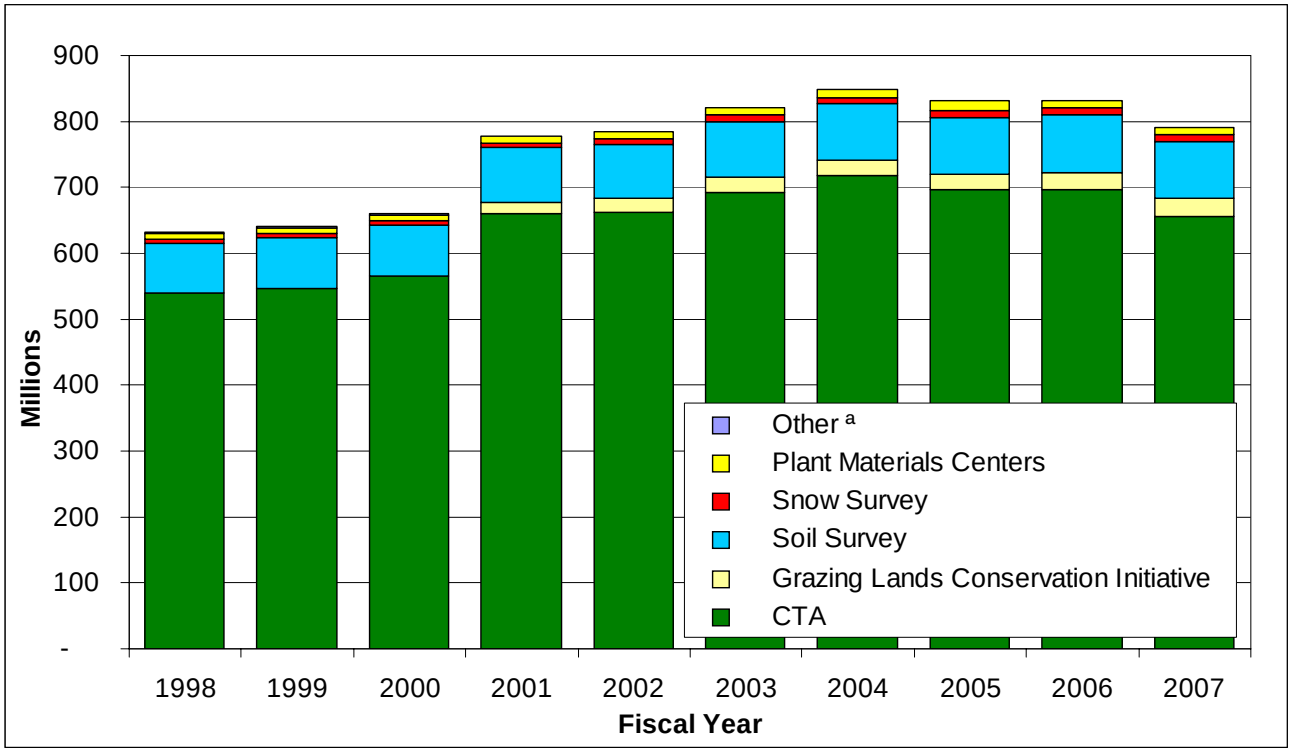
[2] Partnerships with NRCS involve a diverse group of organizations interested or affected by conservation at the national, state, and local level. These partnerships may or may not include official cooperative agreements with NRCS that include federal funding. Types of partnering organizations include conservation districts, local communities, state and federal agencies, NRCS Earth Team volunteers, agricultural and environmental groups, conservation districts employees, professional societies, Resource Conservation and Development (RC&D) Councils, universities, conservation organizations, agribusiness, and sportsman groups.

[3] The discretionary conservation programs within USDA include Conservation Operations, Watershed Surveys and Planning, Watershed and Flood Prevention Operations, Watershed Rehabilitation Program, Resource Conservation and Development, and Healthy Forests Reserve Program, which received $997.1 million in total in FY2006. Discretionary programs are funded annually through the appropriations process.

often supports financial assistance to producers who provide specified forms of conservation.[4]

Conservation Operations (CO) is the largest discretionary account, and also provides the greatest amount of technical assistance through the Conservation Technical Assistance (CTA) program. CTA provides technical support, conservation planning, and implementation assistance through local field offices in almost every county in the United States (and territories). Funding for CTA increased to its highest appropriation level in 2004, and has slowly declined since then (see **Figure 1**).

Figure 1. Conservation Operations Appropriations, 1998-2007



Source: U.S. Department of Agriculture, Natural Resources and Environment, "Budget Explanatory Notes for Committee on Appropriations," Volume 2, fiscal years 1998-2008.
a. The Urban Resources Partner and American Heritage Rivers Programs, combined as 'Other' in **Figure 1**, were funded between 1998 and 2001. These programs represent a very small amount of technical assistance funding.

Other discretionary programs include four watershed programs (Watershed Surveys & Planning, Watershed & Flood Prevention Operations, Watershed Rehabilitation, and Emergency Watershed Protection) that provide technical assistance using various approaches to watershed planning, local coordination efforts,

[4] The primary mandatory USDA conservation programs include the Conservation Reserve Program, Environmental Quality Incentives Program, Ground and Surface Water Conservation Program, Klamath Basin Program, Wetlands Reserve Program, Conservation Security Program, Wildlife Habitat Incentives Program, Farmland Protection Program, Grasslands Reserve Program, and Agricultural Management Assistance.

and flood prevention structures. The Resource Conservation and Development Program and Healthy Forests Reserve Program are two additional small discretionary programs. Some of these programs also provide limited financial assistance funding, usually cost-shared with sponsoring entities.

Unlike discretionary programs, mandatory programs derive their funding authority from legislation that specifies an annual amount, unless reduced in the appropriations process. Authorizing legislation for mandatory programs does not set specific spending levels for technical assistance. Funding allocated to technical assistance in mandatory programs is determined by the Administration, not through appropriations. One exception to this is the Conservation Security Program (CSP), authorized in the 2002 farm bill (P.L. 107-171) which limits the amount of funding for technical assistance to no more than 15% of the total amount expended in the fiscal year.[5]

Conservation program advocates prefer mandatory funding to discretionary because supporters believe that it is easier to protect mandatory funding levels than it is to protect spending subject to annual appropriations.[6] Discretionary spending has declined as a share of total federal spending over the last 40 years.[7] Likewise for agriculture conservation technical assistance, discretionary funding has decreased in recent years while mandatory funding has increased. The 2002 farm bill provided much of this increase in mandatory conservation funding and continues to shift a large number of NRCS staff years from technical assistance funded though discretionary programs to those funded through mandatory programs. Despite this shift, discretionary funding still remains the largest source of technical assistance funding (see **Figure 2**).

Funding History for Mandatory Programs. Section 2701 of the 2002 farm bill, states that the Secretary shall provide technical assistance to eligible producers either directly (through NRCS) or through approved third party providers.[8] In late 2002, the Office of Management and Budget (OMB) determined that technical assistance funding for mandatory programs was limited by a cap established in Section 11 (15 U.S.C. 714i) of the Commodity Credit Corporation (CCC) Charter Act and enacted in the 1996 farm bill.

---

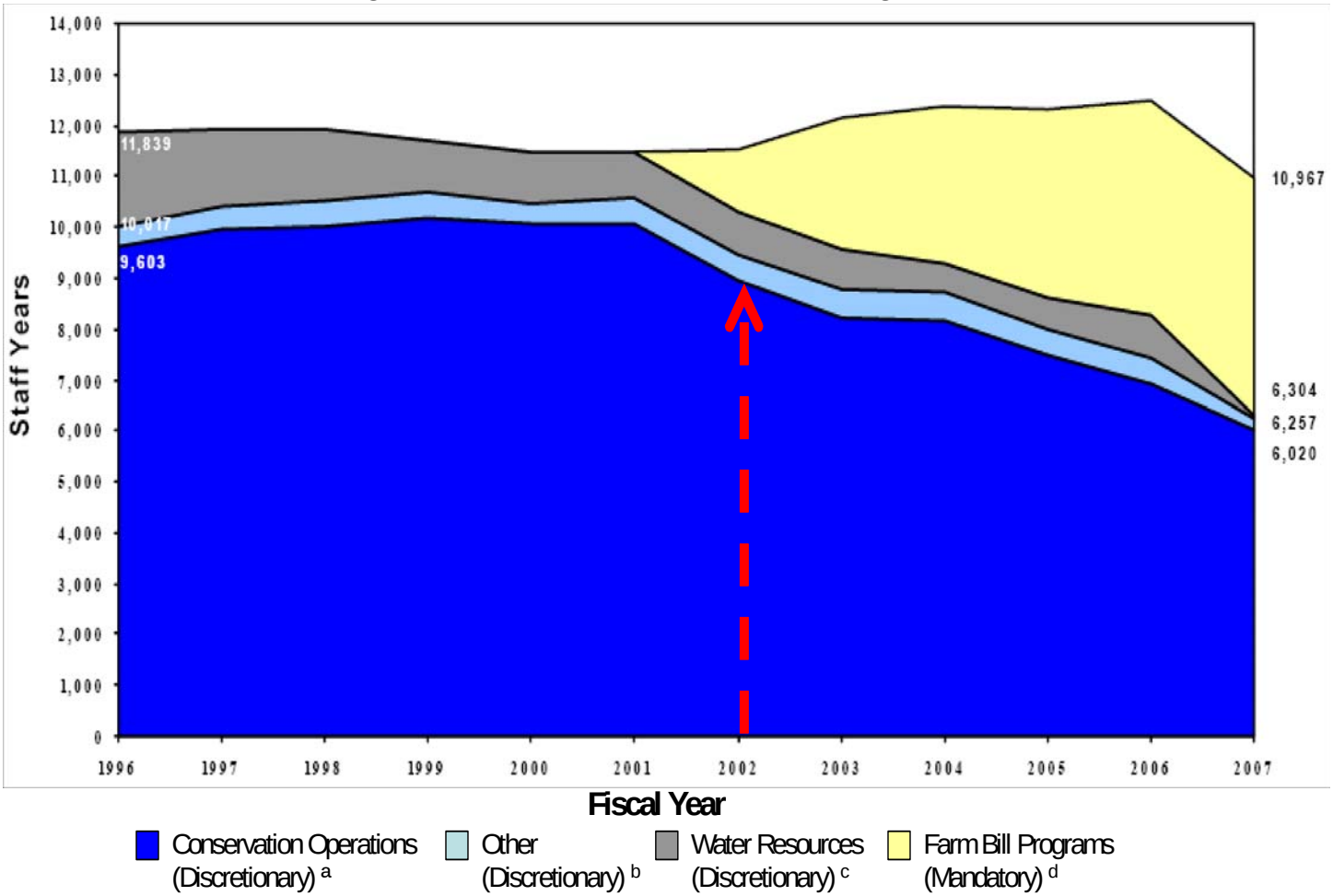
[5] Sec. 2001 of P.L. 107-171

[6] For more information on Mandatory Programs, see CRS Report RS22243, *Mandatory Funding for Agriculture Conservation Programs*, by Jeffrey Zinn.

[7] For additional information on overall discretionary spending, see CRS Report RS22128, *Discretionary Spending: Prospects and History*, by Philip Winters.

[8] Third party providers, also known as technical service providers (TSPs), are discussed later in this section.

Figure 2. NRCS Historical Staff Funding Source Trends



Source: Communications and documentation received from USDA, Natural Resources Conservation Service staff, May 2007.

a. Includes: Conservation Technical Assistance (CTA), Soil Survey, Snow Surveys & Water Supply Forecasting, and Plant Materials Center.
b. Includes: Resources Conservation & Development (RC&D) Program, Healthy Forest Reserve Program, Great Plains Conservation Initiative (GPCI), Colorado River Salinity Control (CRSC) Program, Rural Abandoned Mines Program (RAMP), and Trust Funds.
c. Includes: Watershed Surveys & Planning, Watershed & Flood Prevention Operations, and Watershed Rehabilitation.
d. Includes: Wetlands Reserve Program (WRP), Environmental Quality Incentives Program (EQIP), Ground and Surface Water Conservation Program (GSWC), Klamath Basin Program, Wildlife Habitat Incentives Program (WHIP), Farmland Protection Program (FPP), Conservation Security Program (CSP), Grasslands Reserve Program (GRP), Agricultural Management Assistance (AMA), and Conservation Reserve Program (CRP).

In the mid-1990s, the Farm Service Agency (FSA), who manages the operations of commodity programs, began to utilized CCC funding for large computer expenditures. These purchases were met with criticism of being too expensive and outdated. An amendment to the CCC Charter Act was made in the 1996 farm bill that limited the amount of funds that could be transferred for reimbursement of administrative expenses, referred to as the "Section 11 cap." The 1996 amended language states that "the total amount of all allotments and fund transfers from the Corporation under this section (including allotments and transfers for automated data processing or information resource management activities) for a fiscal year may not exceed the total amount of the allotments and transfers made under this section in the

fiscal year 1995."[9] While this cap was not specifically directed toward NRCS and technical assistance, the agency was affected because FSA had been reimbursing NRCS for technical assistance provided in support of the Conservation Reserve Programs (CRP) and Wetlands Reserve Program (WRP), both funded through the CCC.

In late 2002, after the 2002 farm bill was enacted, OMB determined that the Section 11 cap was still in effect, and used it to limit technical assistance funding in mandatory conservation programs. OMB was supported in an opinion by the Department of Justice, which stated that CO appropriations (discretionary funds) could fund technical assistance for farm bill programs (mandatory funds).[10] Congress disagreed with this determination, believing that the language it had added in the 2002 farm bill allowed for technical assistance for each program to be funded out of allocations for each program. Congress was supported by a Government Accountability Office (GAO, then known as the General Accounting Office) opinion stating that USDA improperly obligated CO appropriations to fund technical assistance for farm bill programs.[11]

For three years following these opinions, the President's budget included a proposal to fund farm bill program technical assistance through a new separate account using annual appropriations. Congress rejected these proposals and prohibited using any discretionary CO appropriations for technical assistance to implement mandatory farm bill program technical assistance. The combination of this congressional prohibition and OMB's opinion on the Section 11 cap led to the "shifting" of funds for technical assistance between mandatory programs, thereby reducing the amount of financial assistance funding available in the "donor" programs. In FY2003, the Environmental Quality Incentives Program (EQIP), authorized at $700 million,[12] used $145 million for technical assistance. However, technical assistance shortfalls in other programs led to the shifting of more than $107 million in additional technical assistance funding from EQIP to those programs, thereby reducing the available EQIP financial assistance funding to $442 million. The Farmland Protection Program (FPP), Grassland Reserve Program (GRP), and Wildlife Habitat Incentives Program (WHIP) shifted a total of $50 million to other programs in FY2003.

In late 2004, Congress addressed the funding situation when it enacted P.L. 108-498, requiring technical assistance for each mandatory program to be paid from funds provided to that program annually. It prohibits the use of discretionary program

---

[9] 15 U.S.C. Sec. 714i.

[10] U.S. Department of Justice, "Funding for Technical Assistance for Agricultural Conservation Programs," January 3, 2003, at [http://www.usdoj.gov/olc/usdasection11.htm].

[11] Government Accountability Office, "Use of Conservation Operations Appropriation to Fund Technical Assistance for Conservation Program Enumerated in Section 2701 of the 2002 Farm Bill," December 13, 2002, at [http://www.gao.gov/decisions/appro/300325.htm].

[12] EQIP was authorized in the 2002 farm bill (P.L. 107-171, Sec. 2701) at $700 million for FY2003, but was limited to $695 million in the FY2003 agriculture appropriations act.

funds for technical assistance in a mandatory programs, and the transfer of funds among mandatory programs.

Determining Funding for Mandatory Program Technical Assistance. Since FY2002, annual agriculture appropriations acts have placed limits on funding below authorized levels for certain mandatory conservation programs. Many of these reductions support Administration requests through the President's proposed budget each year. While program reductions vary from year to year, two trends are clear: (1) there is a growing gap between authorized and appropriated levels; and (2) overall funding for conservation initially grew steadily after 2002, then leveled off in recent years.[13]

Technical assistance for mandatory programs is a percentage of the overall annual funding. NRCS uses a model to estimate the total cost of technical assistance necessary to administer each mandatory program. This model came under scrutiny by GAO in 2004, when it reported the model's inaccuracies in estimating technical assistance costs.[14] According to GAO, these inaccuracies were a result of delays in technical assistance work, the inclusion of external costs not reported in actual costs, and inaccurate assumptions. In 2006, NRCS conducted a national update to more accurately ascertain the true workload cost of providing technical assistance, called Activity Based Costing (ABC) data. These data were collected at national, state, and county levels.

Though NRCS uses the updated model to estimate the level of technical assistance funding needed for each program, the agency does not determine the actual level of funding provided for technical assistance. Instead, this level is set nationally by an OMB apportionment.[15] After NRCS receives an apportionment, the funding available for both financial and technical assistance is allocated to NRCS state offices. The NRCS State Conservationist is then responsible for administering the state allocation. In FY2007, technical assistance funding for mandatory programs was distributed to states, by program, using the formulas unique to each program.[16]

---

[13] Total funding for 2002 farm bill conservation programs has risen almost $720 million, or 25% since FY2003 authorization. If these programs had been funded at full authorization levels in FY2006, the increase would have been more than 35% from FY2003. For information on funding for each mandatory conservation program see CRS Report RS22243, *Mandatory Funding for Agriculture Conservation Programs*, by Jeffrey A. Zinn.

[14] Source: Government Accountability Office, "USDA Should Improve Its Methods for Estimating Technical Assistance Costs," November 2004, at [http://www.gao.gov/new.items/d0558.pdf].

[15] Source: USDA, Natural Resources Conservation Service. "Fiscal Year 2007 Program Allocation Formulas & Methodologies," entered into testimony by Mark Rey, Under Secretary for Natural Resource and Environment, before the Appropriations Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies, March 6, 2007.

[16] Also see USDA, Natural Resources Conservation Service, "Fiscal Year 2007 Program Allocation Formulas & Methodologies," at [http://www.nrcs.usda.gov/programs/pdf_files/FY_2007_Methodology_Report_Final_V3_w_revised_EQIP.pdf].

Current Issues

Understanding how conservation technical assistance works addresses only a portion of the misconceptions and questions about this topic. As Congress assesses the current need and demand for technical assistance, many questions remain. A brief discussion follows on how this system is implemented and the results since its inception in the 2002 farm bill. A more recent means of addressing the capacity to meet technical assistance demand is through third party providers. The confusion surrounding two terms - "technical assistance" and "administrative support" - is also discussed, as well as the current impact of congressional directives on technical assistance.

Third Party Providers. Section 2701 of the 2002 farm bill (P.L. 107-171) amended Section 1242 of the 1985 farm bill to allow producers to retain approved third party providers for technical assistance. NRCS refers to these individuals as technical service providers (TSPs). NRCS sets the qualifications for approving individuals and entities to provide specified types of technical assistance including conservation planning and design, layout, installation, and checkout of approved conservation practices. Producers pay the TSPs and are then reimbursed by USDA for technical assistance activities received.

Technical assistance can be provided by TSPs through three different means: (1) individual producers contract individually with certified TSPs; (2) NRCS enters into contracts or cooperative agreements directly with certified TSPs; and (3) through the pilot Agricultural Conservation Enrollees Seniors (ACES) program, in which retired individuals work part-time on a temporary basis with NRCS for a stipend. NRCS may not reimburse TSPs for more than it costs NRCS to perform the same task(s). These funding limitations are specific for each task TSPs are permitted to perform in each county and are referred to as "not-to-exceed rates."

In a March 6, 2007, appropriations hearing, NRCS Chief Arlen Lancaster testified that NRCS maintained more than 1,600 certified TSPs and obligated more than $62.6 million to these services in FY2006.[17] This number has steadily increased since the inception of the program in 2003. Between 2003 and 2006, more than 2,100 TSP services have been used and more than $163.5 million have been obligated.[18]

Technical Assistance vs. Administrative Support. Though these two terms, technical assistance and administrative support, are generally considered separate, in the case of funding technical assistance, the terms do not appear mutually

---

[17] USDA, Natural Resources Conservation Service, statement entered by Arlen Lancaster, Chief, before the House Appropriations Subcommittee on Agriculture, Rural Development, Food and Drug Administration, and Related Agencies, March 6, 2007, at [http://www.nrcs.usda.gov/about/legislative/pdf/FY_2008_NRCS_Chief_Lancaster_Budget_Testimony.pdf].

[18] USDA, Natural Resources Conservation Service, statement entered by Sara Braasch, Regional Assistant Chief, before the Senate Subcommittee on Forestry, Conservation, and Rural Revitalization, July 27, 2006, at [http://www.nrcs.usda.gov/about/legislative/pdf/TSP_Testimony_SARA_BRAASCH_7_25_06_pm.pdf].

exclusive and are occasionally used interchangeably. A debate still continues between the Administration and Congress over whether funding provided in the name of technical assistance is preferred to providing funding in the name of salaries and expenses. Within Congress and between the Administration there are different interpretations of the two terms. The Administration tends to favor the term technical assistance, while Congress is divided on the issue. Some observers claim that both terms would appear to provide the same service with different titles.

The lack of definition for technical assistance has heightened a longstanding point of confusion between technical assistance and administrative support. By NRCS' definition, the two are not mutually exclusive. NRCS describes technical assistance as funds received to "get conservation on the ground." This is an imprecise definition and there are two distinct viewpoints about how this spending is categorized. One is to include all personnel costs as technical assistance, and all non-personnel costs as administrative support. Administrative support includes non salary support costs such as travel, rent, utilities, transportation, equipment, and supplies, while technical assistance include the personnel cost of employing individuals who provide a technical capacity.

The second view is that technical assistance costs are all *direct costs* incurred while serving a customer; administrative support costs are all *indirect costs* incurred while serving others (i.e., NRCS, other parts of USDA, etc.). In this view, technical assistance is the cost of providing professional expertise through trained individuals (including third party providers or NRCS employees) and all of the costs associated with maintaining the working environment to serve customers (landowner, state or local government, tribe, or partnering organization). For example, the direct costs associated with an NRCS District Conservationist making a field visit to survey an EQIP contract's practice implementation could be considered technical assistance. This would include the salaries and benefits associated with employing the District Conservationist, the cost of the truck to drive to the field, the fuel for the truck and all other supplies necessary for the evaluation. However, an NRCS Human Resources specialist working in the State Office to serve other NRCS employees could be considered administrative support. By contrast, following the first view, only the personnel cost of employing the District Conservationist would be considered technical assistance. The cost of vehicles, fuel, and supplies would be considered administrative support. The second view is much broader.

This debate appears to have grown out of the 2002 farm bill, which brought an increase in funding for conservation program financial assistance. The increased attention on administrative costs by Congress was of little debate in the past when NRCS' sole purpose was to provide technical assistance. The increase in financial assistance has led to congressional inquiries to distinguish between providing technical assistance and administering financial assistance. In agriculture conservation programs, the two services - technical assistance and administering financial assistance - overlap, creating confusion in terminology. If Congress decides to place spending restrictions on administrative costs, the conflict in defining these two terms could lead to reduced technical assistance service and capacity to administer financial assistance programs.

Congressional Directives. The level of funding that is congressionally directed through conference report and bill language in the annual appropriations act

has increased in recent years.[19] As demand for technical assistance continues to grow, the role of congressionally directed funding could place additional strain on the current capacity to deliver technical assistance. What impact these directives have on this capacity remains to be seen. Virtually all of the directed funding in agriculture conservation programs is for discretionary programs.

These congressional directives can be viewed in three ways. First, some define where specific technical assistance funding is to be applied and for what purpose. For example, in FY2006 the manager's report directed technical assistance funding for the NRCS plant materials center in Fallon, Nevada.[20] A second type is similar to the first, but it directs financial assistance funding to specific projects. These directives are seen more in the watershed programs. For example, in FY2006, congressional language directed over $3 million in Watershed and Flood Prevention Operations program funding to specific watershed projects located in Illinois, Ohio, Arkansas, Alaska, Missouri, Hawaii, Iowa, and Utah.[21] A third type is "pass-through" funding, in which the agency is directed to enter into agreements with specific external entities (ranging from non profits to state or local governments) for congressionally specified amounts. These funds are not used for technical assistance provided by NRCS and are therefore passed through directly to the external entity. In FY2006, "pass-through" agreements were directed in Conservation Operations program funding for over $68 million.[22]

Congressional directives direct most funding within the Watershed Operations programs (P.L. 78-534 and P.L. 83-566). In FY2006, approximately 85% of appropriations funding (both financial and technical assistance) for these programs was directed by Congress to specific projects.[23] Between 2001 and 2006, congressional directives for Watershed Operations projects increased from $8 million to $63 million. Conservation Operations (CO) also has seen an increase in congressional directives in recent years. In FY2006, congressional directives accounted for over 15% of total discretionary program appropriations (see **Figure 3**). CO contains the largest number of pass-through directives and the highest level of funding directed. Between 2001 and 2006 congressional directives funded through CO has increased from $65.6 million to $126.6 million (see **Figure 4**).[24] The resulting reduction in available technical assistance funding creates concerns as the demand for technical assistance continues to grow.

---

[19] Congressional directives refer to funding directed to specific projects, locations, or entities in conference report and bill language. These are often referred to as earmarks.

[20] H.Rept. 109-255, Section 785, p. 44.

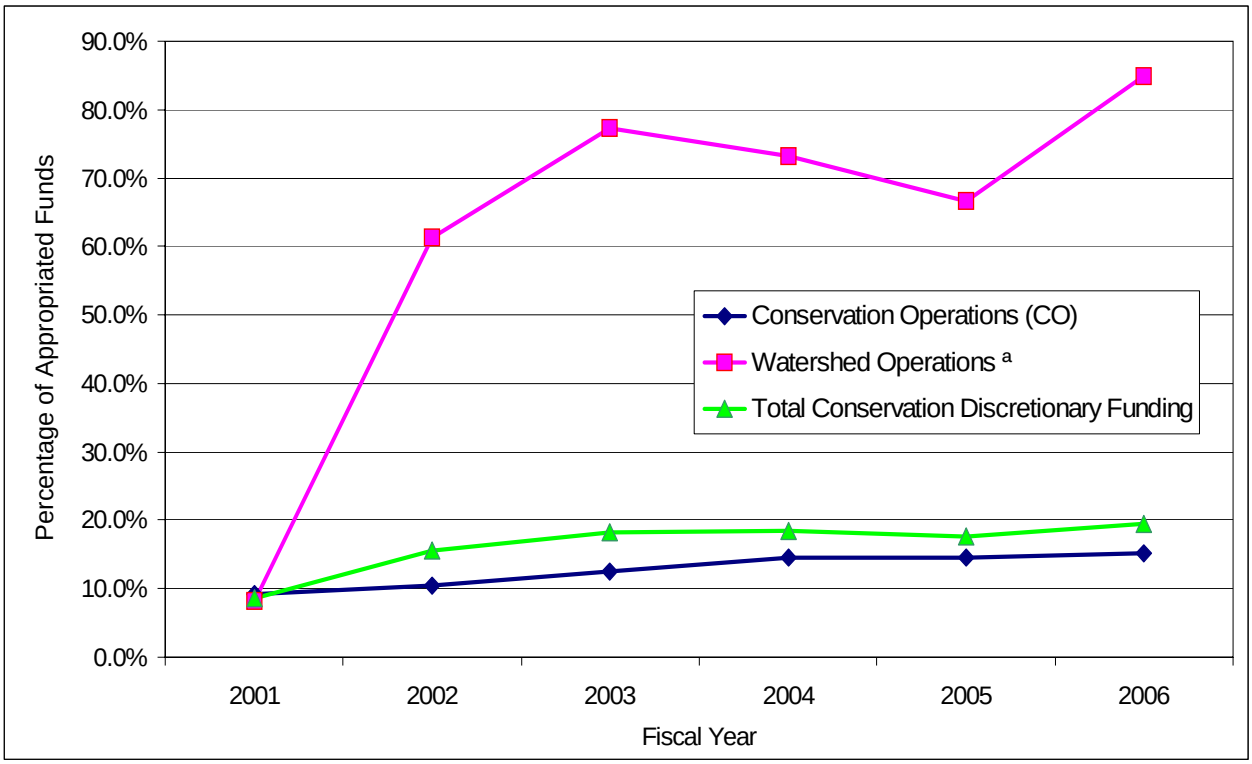
[21] H.Rept. 109-255, Section 785, p. 35.

[22] H.Rept. 109-255, Title II, pp. 84-87.

[23] Communications and documentation received from USDA, Natural Resources Conservation Service staff, April 2007.

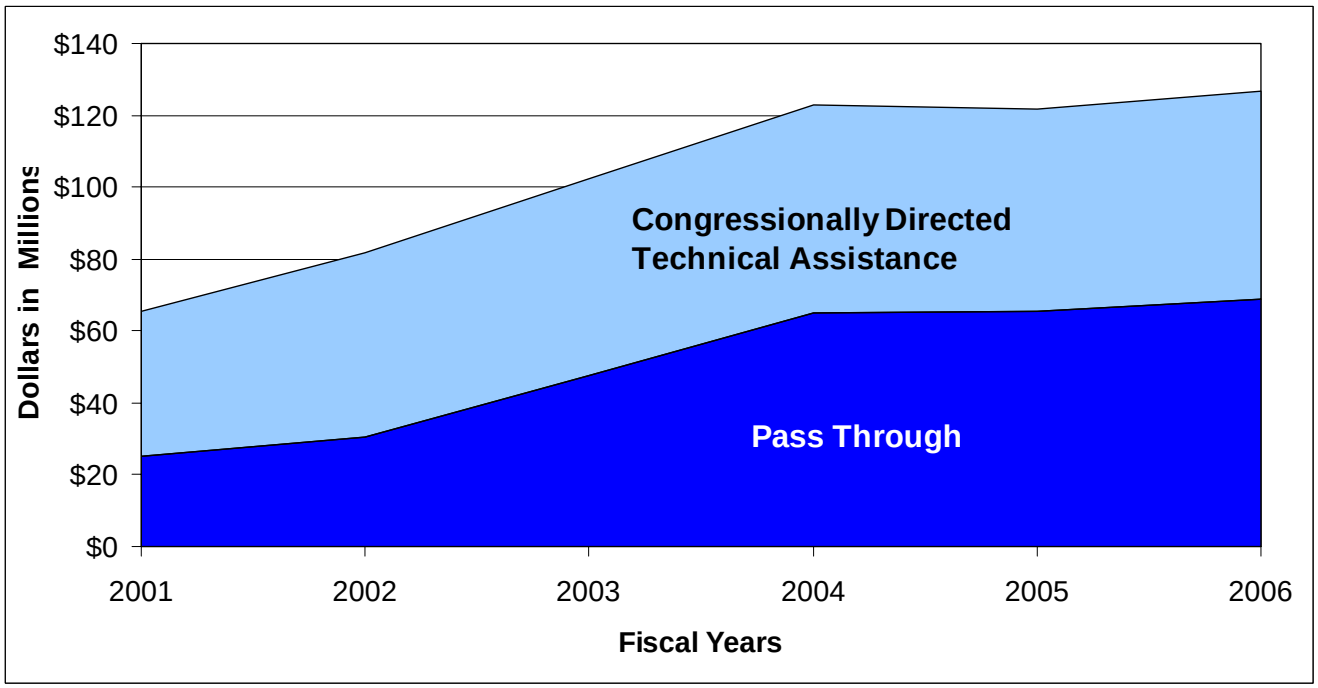
[24] USDA, Natural Resources and Environment, Under Secretary Mark Rey, before the House Committee on Agriculture, Subcommittee on Conservation, Credit, and Rural Development, July 27, 2006, at [http://www.nrcs.usda.gov/about/legislative/pdf/02_Farm_Bill_Cons_Prg_Oversight_Testimony_07_27_06.pdf].

Figure 3. Congressional Directives as a Percentage of Discretionary Program Appropriations (2001-2006)



Source: Communications and documentation received from USDA, Natural Resources Conservation Service staff, April 2007.
a. Watershed Operations includes P.L. 78-534 and P.L. 83-566 projects.

Figure 4. Conservation Operations Congressional Directives, 2001-2006



Source: USDA, Natural Resources and Environment, Under Secretary Mark Rey, before the House Committee on Agriculture, Subcommittee on Conservation, Credit, and Rural Development, July 27, 2006, at [http://www.nrcs.usda.gov/about/legislative/pdf/02_Farm_Bill_Cons_Prg_Oversight_Testimony_07_27_06.pdf].

Historical Context

One might wonder how technical assistance became this complex. This complexity has emerged through incremental policy changes over time. When the federal agriculture conservation effort was limited primarily to soil erosion control and water supply, technical assistance was limited in resource concerns as well as funding. Technical assistance has expanded in both scope and funding recently, and has been brought to the forefront of the debate for both implementation and funding levels. How this process evolved is discussed below.

Federal Conservation Assistance

Federal technical assistance for agriculture conservation, as we now understand it, originated with the creation of the Soil Conservation Service (SCS). Not until the 1930s and the occurrence of the Dust Bowl did soil conservation became a national priority. On August 25, 1933, through the use of public works program funding, the Department of the Interior (DOI) created the Soil Erosion Service. In March 1935, the President ordered Soil Erosion Service moved to the USDA.

The severity of soil erosion at the time helped gain congressional support for the passage of the Soil Conservation and Domestic Allotment Act (P.L. 74-46, 49 Stat. 163) in April 1935, establishing the SCS within the USDA. The SCS was established for the purpose of providing "permanently for the control and prevention of soil erosion and thereby to preserve natural resources, control floods, prevent impairment of reservoirs, and maintain the navigability of rivers and harbors, protect public health, public lands and relieve unemployment."[25]

Following the passage of the 1935 legislation creating the SCS, most of the services provided to landowners were through demonstration projects. Agreements (usually five years in length) were entered into with landowners who agreed to contribute access to their land, labor, and some resources in exchange for following a conservation plan. The SCS provided technical assistance, materials, labor (using the Civilian Conservation Corps and Emergency Conservation Work camps). The overlapping mission with other federal and state agencies (the Extension Service and land grant universities in particular), and limited landowner buy-in forced the USDA to look toward more localized entities to carry out these demonstrations. This brought about the establishment of the soil conservation districts.

Model state legislation to create and operate districts was presented to state governors in February 1937 by President Franklin D. Roosevelt, who encouraged adoption. This level of interest directly from the President highlights the significant level of political support for soil conservation during this time. In 1937, twenty-two states passed legislation creating districts. Following the creation of these districts, SCS increasingly concentrated on providing technical assistance to farmers through these new local entities. The current role of Conservation Districts is discussed in the "Outlook for Technical Assistance" section, below.

---

[25] Simms, D. Harper, *The Soil Conservation Service* (New York, NY, 1970).

Expansion of Technical Assistance

The SCS mission has expanded beyond soil erosion and conservation assistance through multiple legislative and administrative mandates. The focus of conservation technical assistance has shifted with changes in national priorities. Technical assistance has fluctuated between addressing a limited number of resources and most or all natural resources on agricultural lands.

Small Watershed Programs (P.L. 83-566). The addition of water resources as a technical assistance responsibility added to the scope of SCS functions. The passage of the Flood Control Act of 1936 authorized SCS to measure, study, and plan run-off and erosion prevention activities in selected watersheds through technical assistance. The Flood Control Act of 1944 (P.L. 78-534) and the Watershed Protection and Flood Prevention Act of 1954 (P.L. 83-566),[26] expanded the watershed program to include, not only the traditional planning function created in the 1936 act, but also added financial assistance funding for projects. These projects involved a holistic approach to watershed planning and included a multi-disciplinary team consisting of a wide range of technical experts (e.g., geologists, hydrologists, engineers, economists, etc.). SCS provided this technical assistance and federal support through a coordination role. Local communities were expected to provide land rights and maintenance responsibility upon project completion. Projects were intended to treat the whole watershed, therefore providing benefit beyond flood control and prevention, including drainage, recreation, municipal and industrial water supply, fish and wildlife enhancement, irrigation, and water quality protection.[27]

Compliance. Provisions in the 1985 farm bill (P.L. 99-198) changed technical assistance functions and responsibilities. It authorized conservation compliance (commonly referred to as sodbuster) and wetlands compliance (commonly referred to as swampbuster) regulations, transforming many technical assistance functions that SCS historically performed by requiring enforcement of conservation under certain circumstances. Sodbuster prohibits participation in numerous specified USDA programs when annually tilled commodity crops are produced on highly erodible land (HEL) without adequate erosion protection. Swampbuster provisions prohibit participation in numerous specified USDA programs when annually tilled commodity crops are produced, or land is drained to make production possible, on certified wetlands. SCS had, and NRCS (successor to SCS) continues to have, primary responsibility for providing technical assistance for determining whether land should be classified as highly erodible or a wetland. This task of certifying and determining cropland across the country required time and shifted resources away from the whole farm planning approach to a narrower focus on soil erosion. Whereas the conservation technical assistance movement had begun with the Dust Bowl and soil erosion, over time it had broadened and expanded to include other resource

---

[26] The Flood Control Act of 1944 (P.L. 78-534) authorized 11 of the projects created in the 1936 Flood Control Act. The Watershed Protection and Flood Prevention Act of 1954 (P.L. 83-566) expanded the watershed program to watersheds of 250,000 acres or less. These projects, because of this limit, became known as the small watershed program.

[27] Helms, Douglas, "Natural Resources Conservation Service Brief History," March 2007, at [http://www.nrcs.usda.gov/about/history/articles/briefhistory.html].

concerns. With the emergence of conservation compliance much of the focus had moved back to an old issue, soil erosion (and a new one, wetlands).

New Name, Expanded Responsibilities. The 1990s brought about a new trend in technical assistance, linking financial incentives to technical assistance in many new ways. Traditionally, technical assistance provides the planning, design, and technical consultation functions, while financial assistance offers monetary support for implementation capacity. In 1994, national priorities changed and the Soil Conservation Service was reorganized by Congress as part of an overall reorganization of USDA. Its name was changed to reflect its expanded responsibilities; the Natural Resources Conservation Service (NRCS). Also in 1994, NRCS assumed administrative responsibility of the Wetlands Reserve Program (WRP), which expanded technical assistance responsibility into easement management. Authorized in the 1990 farm bill, the WRP purchases long-term or permanent easements and funds restoration on wetlands. In the 1996 farm bill, NRCS became responsible for administering the Environmental Quality Incentives Program (EQIP), a combination of several financial assistance programs. Then in 2002, the Conservation Security Program (CSP) was created to reward conservation stewardship on private lands. Along with this additional increase in responsibility and an expanding list of natural resource concerns came a significant increase in funding authority. [28]

Outlook for Technical Assistance

Today technical assistance varies in its activity, implementation, and in funding across conservation programs. When conservation programs received a large increase in funding in the 2002 farm bill, some questioned whether the traditional technical assistance infrastructure could meet the increase in demand that would accompany additional conservation funding. Now, as the 2007 farm bill is being written, an evaluation of this capacity will likely influence how technical assistance will look in the future.

Capacity refers to the ability to service the needs of customers in a timely manner. In the case of technical assistance, customers include private landowners, tribes, state and local governments, and cooperative partners. Multiple factors contribute to the capacity to provide technical assistance: human capital, technology, mission goals, and funding. Additional questions about this capacity are raised during this discussion and though the availability of data somewhat limits answering these questions, they are intended to shape and inform future discussions on technical assistance.

The expectations placed upon technical assistance has grown rapidly in recent years, especially since the enactment of the 2002 farm bill. Technical assistance is present in all conservation programs, and the list of expected natural resource concerns for technical assistance to address has expanded. Adding natural resource concerns expected to be addressed by technical assistance expands the pool of

---

[28] Helms, Douglas, "Technical Assistance — The Engine of Conservation," March 2005, at [http://www.nrcs.usda.gov/about/history/articles/CTA_17Mar_Draft3.pdf].

expertise required to address such concerns. In recent years, concerns in the areas of nutrient management, animal waste, air quality, and energy, have placed increased demands on the technical assistance capacity.

Knowing the evolution of technical assistance and the desire to meet expanded needs in the future, changes to the current technical assistance system are being discussed in the 2007 farm bill debate. The following discussion and questions are intended to help frame future deliberation on technical assistance capacity in four broad areas: human capital, technology, mission, and funding.

Human Capital

Currently NRCS employs roughly 12,500 full and part-time employees. Most employees — approximately 12,000 — are located in state, area, county, or regional technology service offices. According to NRCS, 84% of their offices directly provide financial and technical assistance service. This network of local field and state offices has been used to provide conservation technical assistance for decades.

A traditional approach to expanding the capacity to provide technical assistance had been to draw on the capabilities of partnering organizations. The largest are locally led Conservation Districts. Over 3,000 Conservation Districts, authorized by the states and administered at the county level, coordinate conservation and natural resource interests among private landowners. Districts traditionally work closely with federal employees in local and county field offices as well as local officials to provide assistance to private landowners and managers.[29] The Conservation District network adds capacity to the federal network providing technical assistance. Other organizations at state levels, such as state departments of natural resources and wildlife, water districts, environmental, and land management interests contribute to the overall network of technical assistance providers.

Section 2701 of the 2002 farm bill (P.L. 107-171) expanded the human capital capacity that provides conservation technical assistance with the authorization of third party providers, known as technical service providers (TSPs), described earlier. According to NRCS, TSPs have provided the equivalent of 905 NRCS staff years since FY2003.[30] Whether program may expand in the future will likely be important in any discussion about how much additional capacity might be available.

Discussion Questions.

- In 1985, SCS employed roughly 13,900 full and part-time employees.[31] In 2006, NRCS employees numbered approximately 13,100 full and part-time employees. Considering the advances in

---

[29] National Association of Conservation Districts, "What is a Conservation District," April 2007, at [http://www.nacdnet.org/about/aboutcds.htm].

[30] During the same time period, NRCS staff years have declined by 50, from FY2003 with 11,572 to FY2006 with 11,522.

[31] As another historical reference, in 1945, SCS employed 12,328 full and part-time employees, an employment level that has remained constant over time. Simms, D. Harper, *The Soil Conservation Service* (New York, NY, 1970).

technology, expansion of mission, and increases in funding, if mandatory conservation programs were fully funded and provided all authorized financial assistance, is there enough technical assistance capacity currently available to implement them properly?

- Certified third party providers have expanded the pool of available technical assistance to private landowners. How much additional capacity has been provided by third parties and how much additional capacity could they provide? What additional technical services could be provided? If increased capacity is sought using TSPs, related issues are the location and availability of providers. In some cases, third party providers are not available locally. What are the practical limits of the TSP option given the potential limits on availability? Is the cost of certification too high, causing technical providers to not apply or is the reimbursable fee schedule too low, discouraging potential TSPs from participating?

- Nearly 80% of NRCS employees that are considered "mission critical occupations" (most of whom provide technical assistance) will be eligible for retirement within the next four years.[32] Other technical assistance organizations, both public and private, are expected to face similar transitions in the near future. Will the loss of such knowledge affect the capacity to provide technical assistance? Is there adequate technical capacity and replenishing mechanisms in place to fill the gap?

Technology

With a growing demand on resources and time, organizations look to more efficient ways to deliver service by streamlining and reorganizing business processes. Historically, local conservation districts provided a local entity through which conservation technical assistance could be delivered. Different landscapes and limited resources do not allow for multiple specialists to be on hand for each conservation plan or technical consultation. As local soil conservationists (employees of SCS/NRCS) were placed throughout the country, usually at the county level in conservation district offices, materials and handbooks were developed to provide guidance across disciplines. This guidance, known as the field office technical guide, contains technical information about the conservation of soil, water, air, and related plant and animal resources tailored to each county. These guides represent the collective knowledge of technical assistance. Specialists in areas such as engineering, agronomy, and rangeland management, are available at the state or regional level for specific consultation. The field office technical guide remains the primary source of localized information on conservation technical assistance and is

[32] USDA, Natural Resources Conservation Service, "Human Capital Strategic Plan, 2006-2010," at [http://www.nrcs.usda.gov/about/humancapital/index.html]. Mission Critical Occupations include 20 occupational series ranging from economists to soil scientists. In total these occupations encompass 10,626 NRCS employees.

available online for every county.[33] In addition to the field office technical guide, technology has helped provide technical assistance to more producers in many other ways.

How technological advances get put into practice on lands is another function of technical assistance. This technology transfer and education has historically been a service of NRCS, local Conservation Districts and partnering organizations, most notably the Extension Service. NRCS has developed a Science and Technology Consortium to acquire, develop, and transfer technology. The Consortium, consisting of NRCS technology specialists and cooperating scientists, communicates within NRCS and with external partners, including colleges, universities, non-government organizations, and the private sector to transfer technological advances into practical applications.

The number of producer organizations with interest in conservation technology is growing, with many groups organizing relevant management practice and applications. The Iowa Soybean Association, for example, has a program called the On-Farm Network that assists farmers in organizing and conducting on-farm research about nutrient use, to document changes in the efficiency of nitrogen use on crops. The goal is to reduce nitrogen applications for both positive environmental effects and reduced input costs. The beneficial management practices resulting from this on-farm research is then presented to other association members.

A new related program was enacted in Section 2301 of the 2002 farm bill (16 U.S.C. 3839aa-8). It established Conservation Innovation Grants (CIG) within EQIP. CIG awards grants to "stimulate innovative approaches ... in environmental enhancement and protection, in conjunction with agricultural production..."[34] National grants are awarded on a 50% cost-share basis for projects, not to exceed three years. These projects may be watershed-based, regional, multi-state, or nationwide. In addition to the nationwide grant competition, a state component of CIG is available in selected states each year for smaller projects. Following the completion of these grants, the results are intended to provide a "return on Federal investment," primarily because the grants' findings are incorporated into the NRCS consortium of technical tools available. Forty-one projects were funded in 2004 and will be nearing completion this year.[35] It remains to be seen how NRCS will incorporate the results from CIG projects into its technical toolbox and how this transfer will benefit producers.

---

[33] Access to the Electronic Field Office Technical Guide (eFOTG) is publicly available at [http://www.nrcs.usda.gov/technical/efotg/].

[34] USDA, Natural Resources Conservation Service, "Conservation Innovation Grants," April 2007, at [http://www.nrcs.usda.gov/programs/cig/].

[35] In 2004, over $14 million was awarded to 41 projects in 29 states. In 2005, 42 projects were awarded a total of $15 million and an additional $5 million was awarded to 12 projects in the Chesapeake Bay watershed. In 2006, 65 projects were selected for a total of $20 million. In 2007, 51 projects were selected for a total of $20 million. USDA, Natural Resources Conservation Service, "USDA Awards Nearly $20 Million in Conservation Innovation Grants," June 2007, at [http://www.nrcs.usda.gov/news/].

Discussion Questions.

- Technical assistance historically has been based on science-based principals and application of proven techniques. Conservation Innovation Grants have drawn support since the initial awards in 2004. What role will CIG play in the 2007 farm bill debate? Will the technology transfer from these individual projects be incorporated into national technical assistance toolbox, or does the existing technical assistance structure prevent or hinder that transfer?

- Producer organizations have had mixed success with their own conservation technology initiatives. What, if any, solutions are available to promote or expand the private sector interest in supporting technology transfer within existing producer organizations?

Mission

NRCS, formerly SCS, was authorized in the Soil Conservation and Domestic Allotment Act of 1935 (P.L. 74-46, 49 Stat. 163). This legislation gave SCS responsibility for soil erosion prevention, surveys, and investigations. These duties are very limited in scope when compared to the broad resource concerns NRCS is currently assigned by law or the Secretary. This expansion of duties has required an expansion of technical capacity, and questions are raised about where these expanded responsibilities should be concentrated.

One suggested solution to expanding technical capabilities and meeting the need of additional technical assistance is to reduce or remove the administrative support functions associated with conservation programs.[36] For this suggestion, administrative functions are limited to distributing financial assistance in contractual agreements to producers.[37] Some have suggested that these functions be moved to the FSA or competitively contracted to the private sector. Reception to this suggestion varies.

In its 2007 farm bill proposal, USDA proposed a plethora of conservation program consolidations in the name of streamlining. No cost saving estimates were provided based on these consolidation proposals; however, many other interests involved in conservation support this idea to allow for more resources to be devoted to technical assistance.

---

[36] See testimony presented by Jeff LaFleur, National Farmers Union, to House Subcommittee on Conservation, Credit, Energy and Research, April 19, 2007, at [http://agriculture.house.gov/testimony/110/h70419/LaFleur.doc]; and testimony presented by Craig Cox, Soil and Water Conservation Society, to the Senate Committee on Agriculture, Nutrition & Forestry, January 17, 2007, at [http://agriculture.senate.gov/Hearings/hearings.cfm?hearingid=2471&witnessId=5977].

[37] Many refer to this as "writing checks."

Discussion Questions.

- The Soil Conservation and Domestic Allotment Act of 1935 stipulates only soil erosion as a resource concern for SCS (now NRCS) to address. Have the technical responsibilities placed on NRCS through subsequent legislation expanded the agency's responsibilities beyond its capacity? Should a revision of the 1935 act be considered to prioritize or otherwise redirect the focus of resource concerns addressed by the agency? If this focus were narrowed, what other agencies or departments should be responsible for those resource concerns left unaddressed?

- As additional resource concerns require additional technical assistance, will the technical capacity needed to be expanded as well? New resource concerns such as nutrient management, animal waste, air quality, and energy, are placing increased demands on technical assistance. In what capacity should the current technical assistance system (federal capacity, partnerships, technical service providers) expand to meet this need?

- In 1977, Congress passed P.L. 95-192, the Soil and Water Resources Conservation Act (RCA), which directed USDA to develop a national soil and water conservation program and to periodically assess the condition of the nation's soil, water and other natural resources. Under RCA, reports guide the department's soil and water conservation priorities. Authority under the RCA terminates on December 31, 2008. Would a required reporting mechanism like the RCA focus NRCS responsibilities? Should it be reauthorized in the 2007 farm bill? Would additional reporting measures for technical assistance be helpful for Congress, and if so, should they be tied to changes in spending on technical assistance?

- There is continued discussion about the distinction between technical assistance and administrative support. What are the benefits of making a clearer distinction through legislative language? Should Congress authorize separate accounts to fund both technical assistance and administrative support, or should the two be combined and titled differently? If technical assistance was defined in legislative language, what impact, if any, would this have on the current services provided under technical assistance?

Funding

Congress continues to discuss funding for technical assistance.[38] Several interests would like to see funding increased; however, given current federal budget constraints this action seems unlikely in the 2007 farm bill. Discretionary funding

---

[38] See testimony presented at the Senate Committee on Agriculture, Nutrition & Forestry, January 17, 2007 at [http://agriculture.senate.gov/Hearings/hearings.cfm?hearingId=2471], and testimony presented at the House Subcommittee on Conservation, Credit, Energy and Research, April 19, 2007, at [http://agriculture.house.gov/hearings/statements.html].

for technical assistance still provides the main source of funding for conservation technical assistance, however, funding for Conservation Operations has declined in recent years (see **Figure 1**).

With the passage of the 2002 farm bill (P.L. 107-171), CSP included language for the first time placing a cap on the percentage of funding dedicated to technical assistance. According to Section 2001, technical assistance funding for CSP is limited to no more than 15% of the total amount expended in the fiscal year. Several producer organizations and the Administration oppose this funding cap.[39]

Discussion Questions.

- In 2007, NRCS Chief Arlen Lancaster announced that Comprehensive Nutrient Management Plans, or CNMPs, will be funded out of financial assistance dollars as contracts. The idea of funding technical assistance through contracts using financial assistance funding is new. If proven successful, could the contracting of technical assistance work using financial assistance funding be extended into other areas? What other areas would seem most appropriate? Would additional administrative measures to write contracts offset time savings devoted to technical assistance? Would the expansion of financial assistance funding for technical assistance contracts reduce the backlog for technical assistance?

- Technical assistance is increasingly being offered for a fee in the private sector. What technical assistance costs, if any, are producers willing to cover financially without government compensation? Are more producers willing to cover these costs either to meet regulation requirements (nutrient management) or by pass a slow response and possible limited resources on the part of the government?

- The 2002 farm bill placed a cap on technical assistance funding in CSP. The USDA's 2007 farm bill proposal recommends the repeal of this cap. To what extent would the removal of the funding cap for technical assistance address any other potential issues with CSP, or is there even a correlation between limited technical assistance and program implementation issues? How would technical assistance funding caps alter program implementation if they were enacted for any other mandatory farm bill programs?

- Following the 2002 farm bill (P.L. 107-171) a debate continued for three years regarding technical assistance funding for conservation under the Section 11 cap (15 U.S.C. 714i) in the Commodity Credit Corporation Charter Act. Though the debate for conservation technical assistance appears to be settled, the limitations of the cap

---

[39] See testimony presented by Kathleen Merrigan at the Senate Committee on Agriculture, Nutrition & Forestry, January 17, 2007, at [http://agriculture.senate.gov/Hearings/hearings.cfm?hearingid=2471&witnessId=5978] and recommendations in the USDA 2007 farm bill proposal, January 31, 2007, at [http://www.usda.gov/documents/07finalfbp.pdf].

continues to affect other agencies funded through the CCC. If additional legislative changes are made to the Section 11 cap, what effect would this have on conservation technical assistance?