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Soil and Water Conservation Issues

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Soil and Water Conservation Issues

SUMMARY

Conservation was a prominent topic as Congress debated the FY2002 farm bill, signed into law on May 13, 2002 (P.L. 107-171). Title II reauthorizes most existing conservation programs and enacts several new ones through FY2007. Agencies at the Department of Agriculture have started to implement these programs. Other titles also contain some conservation provisions.

This farm bill will greatly increase conservation spending. The Congressional Budget Office estimates that it provides \$9.2 billion in new mandatory budget authority (BA) above the April 2001 baseline through FY2007 for conservation programs. This amount is slightly more than the House-passed bill would have provided, but considerably less than the Senate bill would have provided.

Title II makes numerous changes to the conservation effort. It enacts the Conservation Security Program, developed by Senate Agriculture Committee Chairman Harkin, which will provide payments to producers who apply conservation practices on working lands starting in FY2003. Other new programs will retire grasslands, address surface and ground water conservation needs, address conservation issues in certain regions, require approved third parties to supplement federal efforts to provide conservation assistance, and (in the forestry title) replace existing programs with a new assistance program. It greatly expands many conservation programs. Funding will grow for; the Environmental Quality Incentives Program (from \$200 million annually to \$1.3 billion in FY2007), the Farmland Protection Program (from a total of \$35 million to \$125 million annually starting in FY2004), and the Wildlife Habitat Incentive Program (from a total of \$50 million to \$85 million annually starting in FY2005). Enrollment ceilings were raised for the Conservation Reserve Program (CRP) (from 36.4 million acres to 39.2 million acres) and the Wetlands Reserve Program (from 1,075,000 acres to 2,275,000 acres).

Two agencies in the Department of Agriculture are implementing most of these programs, which are based on providing incentives to attract voluntary participants. The Natural Resources Conservation Service (NRCS) provides technical assistance and administers many of the smaller cost-sharing programs, and the Farm Service Agency (FSA) administers the most expensive program (the CRP) and emergency programs.

As both agencies implemented the last farm bill, enacted in 1996, controversy occurred when the Administration's interpretation of the law's intent differed from that of interested Members of Congress. Both agriculture committees held oversight hearings. A similar congressional response can be anticipated if similar controversies occur over implementation of this farm bill. In addition, appropriators may have some influence on implementation through their actions on FY2003 agriculture appropriations.

MOST RECENT DEVELOPMENTS

President Bush signed the farm bill into law on May 13, 2002 (P.L. 107-171, H.R. 2646). The bill, titled the Farm Security and Rural Investment Act of 2002, authorizes most conservation programs through FY2007 in Title II, and authorizes \$9.2 billion over in new budget authority through FY2007 for mandatory spending on these programs. This law adds some new programs to the conservation effort and greatly expanded funding for most existing programs.

Agencies at the Department of Agriculture, primarily the Natural Resources Conservation Service and the Farm Services Agency, are implementing provisions that take effect in FY2002 (some are not authorized until FY2003). Some implementation issues may become contentious if agencies at USDA proceed in ways that are at odds with congressional or interest group expectations.

Congress is considering FY2003 appropriations legislation. Both appropriations committees have reported their bills, and floor action can be expected in September.

BACKGROUND AND ANALYSIS

Evolution of Federal Resource Conservation Issues

Conservation of soil and water resources has been a public policy issue for more than 60 years, an issue repeatedly recast as new problems have emerged or old problems have resurfaced. Two themes involving farmland productivity dominated the debate until 1985. One was to reduce the high levels of soil erosion, and the other was to provide water to agriculture in quantities and quality that enhance farm production.

Congress responded repeatedly to these themes by creating new programs or revising existing ones. These programs that were designed to benefit the farmer and agriculture by resolving resource problems on the farm. These programs combined voluntary participation with technical, educational, and financial assistance incentives. By the early 1980s, however, concern was growing, especially among environmentalists, that these programs were inadequate in dealing with environmental problems caused by agricultural activities (especially off the farm), even those caused by widely accepted practices. Publicized instances of significant problems, especially soil erosion rates said to rival the dust bowl era, increased awareness and intensified the policy debate.

Congress responded, in a watershed event, by enacting four major new conservation programs in the conservation title of the 1985 Food Security Act. One of these programs, the Conservation Reserve (CRP), greatly increased the federal financial commitment to conservation and targeted federal funds at some of the most severe problems. The other three, sodbuster, conservation compliance, and swampbuster, created a new approach to conservation, which halted access to many federal farm program benefits to producers who did not meet conservation program requirements for highly erodible lands and wetlands.

Conservation provisions enacted in the next farm bill, in 1990, reflected a rapid evolution of the conservation agenda. This evolution reflects the growing influence of environmentalists and other non-agricultural interests in the formulation of agricultural policy, and a recognition that agriculture was not treated like other business sectors in many environmental laws. Congress expanded this agenda to address groundwater pollution, water quality, and sustainable agriculture, and allowed for the use of easements, as well as amending existing programs. Amendments to the CRP reflect these changes; its earlier focus on highly erodible land was expanded to include other environmental concerns.

Prior to the Republican congressional takeover in 1994, conservation policy discussions centered on: (1) how to build from conservation initiatives enacted in previous farm bills; (2) how to secure more dependable funding for programs at a time when reducing the federal deficit was a major priority; and (3) how to incorporate new concepts for resource management at scales larger than individual farms, called landscapes, watersheds or ecosystems. The takeover shifted the focus to identifying ways to make the conservation compliance and swampbuster programs less intrusive on farmer activities. Moreover, environmental interests initially played a diminished role in developing conservation policy. After President Clinton vetoed the initial farm bill that Congress had attached to the omnibus reconciliation legislation in December 1995, Congress quickly passed a free-standing farm bill early in 1996. The Senate Agriculture Committee staff drafted the conservation title, which greatly expanded on the vetoed legislation. The enacted bill restored much of the environmental focus that had been left out of earlier versions, with considerable attention to wildlife. (For an overview of conservation provisions in the 1996 farm bill, see CRS Report 96-330, *Conservation Provisions in the Farm Bill: A Summary.*)

The role of conservation has continued to evolve since 1996, challenging existing programs and agencies. A result of this evolution was that the conservation debate for the 2002 farm bill was framed in terms of: (1) increasing funding; (2) addressing new issues; (3) providing more conservation on land that is in production; and (4) using funding for conservation programs to meet world trade obligations. Increased funding was a dominant theme; at committee hearings, witnesses suggested that total annual conservation funding, discretionary and mandatory, should grow from more then \$3 billion to between \$6 billion and more than \$10 billion. Enacting new conservation programs to address emerging problems has generally been at the center of recent farm bills, but this debate focused on increasing funding and amending existing programs, so new topics like carbon sequestration received limited attention. Nonetheless, the bill also includes new programs, of which the largest is likely to be the Conservation Security Program. Other new programs will retire grasslands, promote water conservation and quality, and increase conservation activity for certain regions or resources. Finally, conservation programs are widely viewed as meeting world trade obligations, or to be in the "green box", but only if eligibility for payments is based on fulfilling conservation requirements, and is limited to the costs of complying with these requirements. USDA will make these determinations in the future.

Specific conservation provisions enacted in Title II of the farm bill are discussed below for old programs; new programs are presented at the end of this section. Implementation activities are discussed together after the new programs. (Other provisions that could be considered to be a part of conservation or could affect the conservation effort can be found in many titles, especially those addressing research, forestry, and energy.) For detailed information about the enacted provisions, including how they compare with the House and

Senate-passed bills and prior law, see CRS Report RL31486, Conservation Title of the 2002 Farm Bill: A Comparison of New Law with Bills Passed by the House and Senate, and Prior Law.

The Administration had limited formal involvement in the development of specific provisions in this farm bill. It released a set of principles for the farm bill on September 19, 2001. It drew on these principles when it issued an Administration policy letter on October 3, 2001 that was critical of aspects of H.R. 2646 and a letter on December 4, 2001, that was critical of aspects of S. 1731, the farm bill reported by the Senate Agriculture Committee. Principles it sought for conservation included:

- ! Sustain past environmental gains;
- ! Accommodate new and emerging environmental concerns;
- ! Design and adopt a portfolio approach to conservation policies;
- ! Reaffirm market-oriented policies;
- ! Ensure compatibility of conservation and trade policies;
- ! Coordinate conservation and farm policies; and
- ! Recognize the importance of collaboration with conservation partners.

Current Major Conservation Activities

USDA's conservation effort, while diverse, have centered in recent years on implementing the Conservation Reserve Program (CRP), the Environmental Quality Incentives Program, compliance programs, and wetland protection programs. USDA will adjust this effort as the new farm bill is implemented, reflecting a different mix of programs and conservation activity. By FY2007, the overall size of the conservation effort will be much larger and program emphasis may move further away from land retirement and from programs that support traditional row crop production, as more of the effort centers on other aspects of natural resource protection and enhancement. Most conservation programs will continue to be administered by the Natural Resources Conservation Service (NRCS), which provides technical assistance to producers and administers most of the programs, and by the Farm Service Agency (FSA) which provides cost-sharing assistance and administers the CRP.

Conservation Reserve Program (CRP)

Under the CRP, enacted in 1985, producers can bid to enroll highly erodible or environmentally sensitive lands into the reserve during signup periods, retiring it from production for 10 years (or longer under limited circumstances). Successful bidders receive annual rental payments, and cost-sharing and technical assistance. Enrollment was limited to 36.4 million acres, and to 25% of the crop land in a county. The FY2003 budget submission notes that about 35.1 million acres were enrolled on November 1, 2001. About 135 counties, concentrated in the high plains, have reached the county enrollment limit. Funding is mandatory spending.

During the twelve signups held between 1986 and 1992, 36.4 million acres were enrolled. (Congress did not appropriate funds to enroll additional lands from FY1992 through FY1996.) USDA estimates that the average erosion rate on enrolled acres was

reduced from 21 to less than 2 tons per acre per year. Retiring these lands also expanded wildlife habitat, enhanced water quality, and restored soil quality. The annual value of these benefits has been estimated from less than \$1 billion to more than \$1.5 billion; some estimates exceed annual program costs, especially in areas of heavy participation. However, the General Accounting Office and others have criticized the potentially ephemeral nature of these benefits, which may not be retained after contracts expire. Currently, annual CRP expenditures are about \$1.5 billion, close to half of all USDA conservation expenditures.

The Department held one open enrollment period each year between FY1997 and FY2000. The FY1997 signup (the 15th) was large because contracts on approximately 21.4 million acres were set to expire. Bids were offered to enroll more than 23 million acres and accepted on 16.6 million acres (including 11.7 million acres that had been enrolled). Subsequent signups have been smaller. The FY1998 signup (the 16th) enrolled 5.9 million acres; the FY1998 signup (the 18th) enrolled almost 5 million acres; and the most recent signup (the 20th) enrolled 2.3 million acres. USDA has not offered another opportunity to enroll land (farmers with expiring contracts would have the option of extending them for one year). USDA took this action because relatively few contracts are ending.

USDA set aside 4.2 million acres within the 36.4 million acre cap to enroll land in two ways outside the open enrollment periods. One of those ways allows continuous signup for individuals who wish to enroll portions of fields with particularly high environmental values. FSA reported that through February 2002 almost 1.95 million acres have been enrolled, with almost 32% of these acres in Iowa and Illinois. The conservation practice that has received the most attention is buffer strips along water bodies. NRCS started an initiative in 1997 to enroll 2 million miles of buffer strips by 2002; it estimates that over 750,000 miles have been enrolled. In April 2000, the Department announced three new incentives to attract more participation: paying signing bonuses; increasing cost-share payments for cover crops and making maintenance payments on buffers; and increasing payments on pasture. It estimated these payments could total up to \$350 million over 3 years.

The second way is a state-initiated enhancement program, under which higher rents are paid to attract eligible land. Maryland, the first state to be approved for this program in October 1997, is trying to enroll 100,000 acres of stream buffers, restored wetlands, and highly erodible lands along streams in a portion of the Chesapeake Bay Watershed. (Before this program, less than 20,000 acres had been enrolled, and more than 37,000 acres have been enrolled under this option. The Maryland program will cost \$195 million, of which \$170 million is federal money. A total of 21 states have approved enhancement programs, and five additional states have submitted proposals. FSA data show that almost 310,000 acres had been enrolled under this option through February 2002, and more than 30% of those acres are in Illinois.

A third way to enroll land outside the general enrollment periods was created when Congress authorized a new pilot program to enroll up to 500,000 acres of farmable wetlands in six upper Midwestern states in Title XI of the FY2001 Agriculture Appropriations legislation. USDA offers signup bonuses as an incentive to participate. Signup for this option started in June, 2001, and results are limited.

NRCS provides technical assistance in support of CRP, but the 1996 farm bill placed a cap on the portion of program funding from the CCC that can be used to reimburse

agencies for services provided to deliver CCC programs. These funds have been insufficient to pay all related technical assistance costs in recent years, and in FY1999, NRCS briefly suspended CRP-related activities. The FY1999 Supplemental Appropriations (P.L. 106-31) and FY2001 Agriculture Appropriations (P.L. 106-387) provided additional funds.

A new CRP concern was raised in March 2000 when the Sixth U.S. Circuit Court of Appeals reversed a 1996 federal tax court ruling and required that farmers must pay a 15.3% self-employment tax on CRP payments. Program supporters fear the ruling could have a chilling effect on participation. Legislation to overturn the ruling has been reintroduced, but as tax legislation, it would not be considered by the agriculture committees and was not considered in the farm bill. (For more information on this issue, see CRS Report RS20564, Conservation Reserve Payments and Self-Employment Taxes, and for CRP generally, see CRS Report 97-673, Conservation Reserve Program: Status and Current Issues.)

Section 2101 of the 2002 farm bill reauthorizes the CRP through FY2007 and raises the enrollment cap from 36.4 million acres to 39.2 million acres. Also, only land that was cropped 4 of 6 years preceding enactment will be eligible, thus making it more difficult to cultivate land primarily to gain access to the program. It makes the 6-state pilot program to retire small, isolated farmable wetlands a national program, with an enrollment ceiling of 1 million acres within the total enrollment cap. Some economic uses of enrolled lands will be permitted, including managed haying and grazing, and construction of wind turbines, with a reduction in annual rental payments.

Under prior law, all economic uses of CRP law were prohibited, and under the 2002 law, only a few specified uses will be permitted. An exception is made for natural disasters, where emergency haying and grazing can be allowed in designated counties in return for reduced payments. Drought is widespread in 2002, and USDA has responded by permitting emergency haying and grazing in parts or all of 18 states through November 30, 2002, subject to certain limitations to protect the values derived from lands enrolled in the CRP.

Conservation Compliance and Sodbuster

Under sodbuster provisions, established in the 1985 farm bill, producers who cultivate highly erodible land (HEL) not cultivated between 1981 and 1985 are ineligible for most major farm program benefits, including price supports and related payments. These benefits are lost for all the land the farmer operates, not just for the HEL. A smaller penalty can be imposed on producers once every 5 years if circumstances warrant. Producers who cultivate highly erodible land using an approved conservation plan are not subject to these provisions. The 1996 farm bill revised these provisions in ways that increased producer flexibility.

Under conservation compliance, also established in the 1985 farm bill, producers who cultivate HEL lose the same program benefits as sodbusters unless they obtained an approved conservation plan by 1990 and had fully implemented it by the end of 1994. As under sodbuster, benefits are lost for all the land the non-complying farmer operates, and graduated penalties are available once every 5 years. Any person who had HEL enrolled in the CRP has 2 years after his contract expires to be fully in compliance (or longer if the Secretary determines that 2 years is not feasible).

According to 1997 data compiled by NRCS, producers were actively applying plans on more than 97% of the tracts of land that were reviewed. NRCS estimates that soil erosion on these acres is being reduced from an average of 17 tons per year to 6 tons per year. More generally, a 1997 national survey of erosion rates taken by NRCS, showed that cropland erosion totaled about 1.9 billion tons per year. This decline in the annual rate of almost 1.4 billion tons from the 1982 survey is attributed mostly to the compliance and CRP programs.

Critics, primarily from the environmental community, have contended that USDA staff has not vigorously enforced conservation requirements. The Inspector General and the U.S. General Accounting Office also have been critical of the implementation effort. Others, primarily from the agriculture community, have countered that the Department has been too vigorous, and, especially in the early years, and was inconsistent in its enforcement from state to state. Many of the agriculture community concerns were addressed in the 1996 farm act. (For more background on the compliance programs, see CRS Report 96-648, Conservation Compliance for Agriculture: Status and Policy Issues.)

Section 2002 of the 2002 farm bill prohibits the delegation of authority by USDA to other parties to make highly erodible land determinations.

Wetlands and Agriculture

Swampbuster and the Wetlands Reserve Program (WRP) have been the main agricultural wetland protection programs, and an expanded farmable wetlands programs was added to this effort as a part of the CRP under the 2002 farm bill provisions, discussed above. Under swampbuster, farmers who convert wetlands to produce crops lose the same federal farm program benefits as would be lost under conservation compliance or sodbuster until the wetland is restored. Swampbuster includes four major exemptions, and also allows a partial penalty once every 10 years. Provisions enacted in the 1996 farm bill generally gave producers and USDA greater flexibility under swampbuster.

Swampbuster has been controversial since it was first enacted. Some from the farm community view wetland protection efforts on agricultural lands as too extensive or overzealous. They observe that it sometimes protects sites that appear to provide few of the values attributed to wetlands. A portion of this group also view these efforts as an unacceptable intrusion of government into the rights of private property owners, or "takings." Environmental and other groups counter that the swampbuster program has been enforced weakly and inconsistently, with few violators losing farm program benefits. Controversies also arise over inconsistencies, such as when adjoining states use different interpretations of rules based on their physical settings that lead to different determinations. Such a controversy arose in 1999 between South Dakota and Minnesota.

Some concerns raised by the agricultural community were thought to have been addressed when a Memorandum of Agreement (MOA) making NRCS responsible for all federal wetland determinations on agricultural lands under swampbuster and the Clean Water Act's §404 Program was signed by NRCS, the U.S. Army Corps of Engineers, the U.S. Fish and Wildlife Service, and the U.S. Environmental Protection Agency (EPA) on January 6, 1994. But aspects of implementation have proven controversial. The signatory agencies attempted to revise the MOA to reflect changes in the 1996 farm bill; this revision process was difficult, and has never been completed.

A new issue for agriculture was raised when the Supreme Court determined, in *Solid Waste Agency of Northern Cook County (SWANCC) v. U.S. Army Corps of Engineers* (January, 2001) that the §404 wetland permit program should not apply to "isolated waters." One result is that an estimated 8 million acres of agricultural wetlands that had been subject to both the §404 program and swampbuster will now be subject only to swampbuster. Some of these wetlands (up to 1 million acres) may now be protected under the farmable wetland component of the CRP. For more information on this decision, see CRS Report RL30849, *The Supreme Court Addresses Corps of Engineers Jurisdiction Over "Isolated Waters": The SWANCC Decision.*)

The second wetlands program, the WRP, was established in the 1990 farm bill. It uses easements to protect farmed wetlands. The Department had chosen to use only permanent easements prior to 1996, when Congress authorized temporary easements and long-term agreement options, and instructed that the three options be used equally. Enrollment has reached the cap of 1,075,000 acres. The Secretary is permitted to delegate the administration of easements to other federal or state agencies that have the necessary expertise. Since funding was made mandatory in the 1996 farm bill, appropriators have limited enrollment most years by placing limits on available staff. In addition to the annual appropriations, emergency funding was provided to enroll lands flooded in 1993 in the upper Midwest. November 2001 data show that almost 1,075,000 acres have been enrolled, and almost 35% of that total is in 3 states: Louisiana, Mississippi, and Arkansas. Permanent easements account for almost 90% of the total. (For more information about wetlands, see CRS Issue Brief IB97014, Wetland Issues, updated regularly.)

Section 2002 of the 2002 farm bill prohibits USDA from delegating the authority to make wetland determinations to other parties. Section 2101creates a national program to retire small isolated agricultural wetlands, as mentioned above in the CRP discussion. Section 2201 amends the WRP to reauthorize the program through FY2007 and increases the enrollment ceiling to 2,275,000 acres, while limiting enrollment to 250,000 acres per year. It eliminates the requirement to enroll land equally using permanent easements, temporary easements, and long-term agreements.

Cost-Sharing Assistance

Over the past several decades, Congress has enacted cost-sharing programs that provide financial incentives to induce farmers to participate in conservation efforts. These programs pay a portion of the cost of installing or constructing approved conservation practices. Before 1996, the largest of these programs, by far, had been the Agricultural Conservation Program (ACP), administered by the FSA and funded at between \$175 and \$200 million annually during the two decades preceding the early 1990s. In FY1995 and FY1996, Congress reduced funding for ACP and other cost-sharing programs to reduce the federal budget deficit. In 1994, Congress moved administration of almost all the cost-sharing programs, except the ACP, from FSA to NRCS.

The 1996 farm act replaced the ACP and three smaller cost-sharing programs with EQIP. EQIP is a mandatory spending program which supports structural, vegetative, and land management practices. Annual funding was authorized at \$200 million, and half the funding was to address the needs of livestock producers. A plan is required to participate. Each contract was limited to \$10,000 annually and to \$50,000 in total. Contracts were 5 to

10 years in length. Large livestock operations, defined in regulations by USDA, were ineligible for contracts to construct animal waste management facilities. The law required USDA to designate priority areas for more concentrated attention; USDA allocated at least 65% of the funding to these areas, which were designated within each state.

Interest has far exceeded available funds. For FY2000, for example, NRCS received about 54,000 applications requesting \$402 million, but was only able to sign 16,000 contracts, with a total cost of almost \$177 million. These contracts are providing \$140 million in financial assistance, \$33 million in technical assistance and almost \$4 million in educational assistance. The Clinton Administration repeatedly sought higher funding levels (but did not submit the needed authorizing legislation). Congress rejected these proposals and usually limited funding to less than \$200 million, except for FY2001, when it provided full funding in omnibus appropriations legislation (P.L. 106-554). (For further information on the early implementation of EQIP, see CRS Report 97-616, *Environmental Quality Incentives Program (EQIP): Status and Issues*, last updated March 2, 1998.)

Section 2301 of the 2002 farm bill reauthorizes EQIP through FY2007. It gradually increases annual funding from \$200 million currently to \$1.3 billion in FY2007. It eliminates the use of priority areas. Funds will be spent in the first year of a contract, rather than having to wait until the year after the date of enrollment. The large livestock operation funding prohibition for animal waste management facilities is eliminated. The total of all EQIP payments a producer or entity can receive, combined, is \$450,000 through FY2007. Contracts can be as short as 1 year. Producers with comprehensive nutrient management plans are eligible for incentive payments, and producers receiving funding for animal waste manure systems must have these plans. Cost share assistance will be higher for beginning and limited resource producers than for other producers. The Department can use a portion of EQIP funds in FY2003 through FY2006 for innovative grants, such as fostering markets for nutrient trading, and additional funds, starting at \$25 million in FY2002 and growing to \$60 million in FY2004, are provided for a new ground and surface water conservation program within EQIP. Of these funds, \$50 million are earmarked for the Klamath River basin and are to be provided as soon as possible.

Selected Other Conservation Activities

Conservation includes many additional activities and programs. The list below does not include the numerous programs that have been authorized but are not being implemented. Also, it includes only conservation activities in USDA that are administered by NRCS and FSA. Several other agencies also make significant contributions to the conservation effort; for example, the Agricultural Research Service conducts research on numerous conservation topics; the Economic Research Service provides analysis of many conservation topics and played a major role in developing the Environmental Benefits Index, used to compare CRP bids; and the Forest Service conducts research on forest and tree topics and administers programs to enhance timber stands on private lands.

Conservation Technical Assistance (CTA). NRCS provides technical assistance on a voluntary basis to conserve and improve natural resources. Technical assistance is a component of most conservation programs, and the cost of providing it has amounted to just under \$1 billion annually in recent years, according to the NRCS. Almost two thirds of this funding is found in Conservation Operations. NRCS characterizes technical assistance as

the "intellectual capital" of the agency, allowing it to combine its scientific and technical expertise with knowledge of local conditions.

One subsection of section 2701 of the 2002 farm bill provides that funding for technical assistance in support of each mandatory program come from the funding provided by the CCC for that program. Another subsection authorizes the Secretary to establish a program to certify third parties to provide technical assistance.

Watershed Programs. NRCS has worked with local sponsors under several authorities to construct more than 10,500 structures. Benefits from these structures may include flood prevention, watershed protection, erosion and sediment control, water supply, water quality, recreation, habitat enhancement, or wetland creation or restoration.

A rehabilitation program for aging small watershed structures, authorizing appropriations of up to \$90 million over 5 years was enacted late in the Small Watershed Rehabilitation Amendments of 2000 (§313 of P.L. 106-472). The law permits federal funds to pay for 65% of rehabilitation projects, with the remainder coming from local sponsors, and requires that projects meet National Environmental Policy Act requirements. NRCS released a status report in June, 2000.

Section 2505 of the 2002 farm bill authorizes mandatory funding for the rehabilitation program, rising from \$45 million in FY2003 to \$65 million in FY2007, and authorizes additional appropriations, rising from \$45 million in FY2003 \$85 million in FY2007.

Resource Conservation and Development (RC&D). RC&D provides a framework for local interests to work together to improve the economy, environment, and living standard in multi-county areas through RC&D Councils. USDA provides technical and financial assistance to councils and helps them secure funding and services from other sources. NRCS states that 348 areas encompassing more than 75% of the country have been designated, and additional requests are pending.

Section 2504 of the 2002 farm bill permanently reauthorizes the program, and makes numerous technical amendments.

Farmland Protection Program(FPP). The 1996 farm bill authorized USDA to assist state and local governments to acquire easements to limit conversion of agricultural lands to nonagricultural uses. The program was allocated \$35 million from the CCC to protect between 170,000 and 340,000 acres of farmland. Eligible lands must be subject to a pending offer. From FY1996 through FY1998, \$33.5 million was obligated in 19 states to place easements on 127,000 acres on 460 farms with an estimated easement value of \$230 million. Congress provided an additional \$17.5 million in FY2001. The 2001 legislation also made certain private nonprofit organizations eligible to compete with state and local governments for these funds. These funds were used to protect about 28,000 acres in 28 states. Demand to participate greatly exceeds available funds.

Section 2503 of the 2002 farm bill increases annual mandatory funding from \$50 million in FY2002 to a high of \$125 million in FY2004 and FY2005. The definition of eligible land is expanded to include rangeland, pastureland, grassland, certain forest land, and land containing historic or archeological resources. The program will be subject to

conservation compliance. Certain private nonprofit organizations can participate. It also authorizes appropriations for grants to carry out new farm viability programs.

Forest Incentive Program (FIP). FIP, a line item in the NRCS budget, provides technical and financial assistance to help landowners install practices such as tree planting and timber stand improvement on non-industrial private forest lands. While forestry and farm conservation issues can be closely related, all other programs for forests on private lands are administered by the Forest Service. (For more information on FIP and related programs, see CRS Report RL31065, *Forestry Assistance Programs*.)

Section 8002 of the 2002 farm bill eliminates FIP and the Forest Service's Stewardship Incentive Program, replacing them with a new Forest Land Enhancement Program, to be funded with a total of \$100 million in mandatory funding between the date of enactment and the end of FY2007. The new program will be administered by the Forest Service.

Wildlife Habitat Incentives Program (WHIP). WHIP was authorized in 1996 to use a total of \$50 million from mandatory funds allocated to the CRP to provide cost sharing and technical assistance for conservation practices that primarily benefit wildlife. The FY1998 appropriations obligated \$30 million, and the remaining \$20 million was obligated in FY1999. More recently, Congress provided additional conservation funding for FY2001, and the Department allocated \$12.5 million to WHIP.

Section 2502 of the 2002 farm bill provides \$15 million in FY2002, growing to \$85 million in FY2005 and thereafter. It provides that up to 15% of the funding each year can be used for higher cost sharing payments to producers whom protect and restore essential plant and animal habitat under agreements of 15 years or longer. It makes WHIP subject to conservation compliance requirements.

Emergency Programs. The Emergency Watershed Program (EWP) is administered by the NRCS and the Emergency Conservation Program (ECP) is administered by the FSA. The EWP provides technical and cost sharing assistance for projects that restore land after flooding and protect it from future damage. The ECP provides cost-sharing and technical assistance to rehabilitate farmland damaged by natural disasters, and to carry out emergency water conservation measures during severe drought.

The 2002 farm bill does not amend emergency conservation programs.

Water Quality Programs and Initiatives. Groundwater and nonpoint pollution have emerged as major issues for conservation policy as more instances of contamination in which agricultural sources play major roles have been identified. Specific instances that drive public interest and concern range from a very large hog farm waste spill in North Carolina to the outbreak *Pfiesteria* and fish kills in portions of the Chesapeake Bay and a large "dead zone" in the central Gulf of Mexico. Questions are being raised about the extent of the problems, the severity of the potential threat to human health, the adequacy of government programs, and the contribution of agriculture. In some cases, contamination may have resulted even though producers followed accepted agricultural practices, and did not commit illegal acts. Current conservation programs that are used to address water quality concerns center on the EQIP program, plus both the Enhancement Program (CREP) and the continuous enrollment option under CRP.

NRCS released proposed revisions to its nutrient management policy, which are designed to help the farm community more effectively address these topics, on June 30, 1998. USDA and EPA released a "unified national strategy for animal feeding operations." on March 9, 1999. Elements in the strategy are controversial because it would greatly expand the number of animal operations at which nutrient management plans would be required. In early August 1999, EPA released a long-awaited draft plan for issuing Clean Water Act permits, which is required under court order. Large operators will be required to develop comprehensive nutrient management plans while smaller operators will be encouraged to develop them. The comment period on the proposed rule was extended. Because of the court order, EPA must release the final rule by December 15, 2002.

Limiting total maximum daily loadings (TMDLs) is another approach to cleaning polluted waterways authorized under the Clean Water Act. Congress included a rider in H.R. 4425, the FY2001 Military Construction and FY2000 Urgent Supplemental Appropriations bill, prohibiting EPA from using FY2000 or FY2001 funds to implement the TMDL proposal the Clinton Administration had announced in August, 1999. It responded to the rider by issuing a revised rule delaying the effective date of the program until October 31, 2001. (For more information, see CRS Report RL30437, *Water Quality Initiatives and Agriculture*.)

The 2002 farm bill could addresses these topics through existing programs, such as EQIP, discussed above, and also through the new programs listed below, including:

- ! The Conservation Security Program, in Section 2001, which is expected to be used to address water quality problems, especially nutrient management;
- ! the Ground and Surface Water Conservation Program enacted in Section 2301 as part of EQIP (discussed above);
- ! the Small Watershed Rehabilitation Program amendments enacted in Section 2505 (discussed above);
- ! the Agricultural Management Assistance Program reauthorized in Section 2501 that provides \$10 million annually (\$20 million annually between FY2003 and FY2007) to 15 specified states that have been underserved by risk management programs for conservation;
- ! a new program for the Great Lakes Basin states enacted in Section 2502;
- ! a new Grassroots Source Water Protection Program, also enacted in Section 2502; and
- ! a new demonstration program for the Delmarva Peninsula enacted in Sections 2601-2604.

Private Grazing Lands Program. A voluntary coordinated technical and educational assistance program was enacted in the 1996 farm bill to maintain and improve resource conditions on private grazing lands. Appropriations were authorized at \$20 million in FY1996, \$40 million in FY1997, and \$60 million annually thereafter. Appropriators have not established a separate line item, but continue to earmark a portion of NRCS's Conservation Operations funds for this effort annually, providing \$21.5 million for FY2002.

Section 2502 of the 2002 farm bill reauthorizes the program through FY2007 with appropriations of \$60 million annually, and makes it subject to conservation compliance. Section 2401 of the 2002 farm bill authorizes a new Grasslands Reserve Program to retire 2 million acres under arrangements ranging from 10-year agreements to permanent

easements, permits the delegation of easements to ceratin private organizations and state agencies, and provides up to \$254 million in mandatory funding.

Air Quality Activities. The 1996 farm bill created an interagency air quality task force in USDA. The task force represented USDA on scientific topics such as EPA's proposals to revise National Ambient Air Quality Standards for ground-level ozone and two sizes of particulates in 1997. Cooperation grew after USDA and EPA signed a Memorandum of Agreement in January 1998. More recently, federal agencies have been discussing how agricultural practices and programs affect global warming, especially by sequestering carbon. (For more information, see CRS Report 97-670, *Agriculture and EPA*;'s *Proposed Air Quality Standards for Ozone and Particulates*.)

The 2002 farm bill does not amend air quality provisions in the conservation title.

Research and Technical Activities. Many agencies in USDA conduct research and provide technical support. NRCS, for example, provides basic data about resource conditions and characteristics through the soil and snow surveys and periodic surveys through the National Resources Inventory. It also does applied research through the plant material and technical centers.

Section 2005 of the 2002 farm bill requires the Secretary to submit a report, with implementing recommendations, about how to better coordinate and consolidate conservation programs to both agriculture committees by December 31, 2005.

Other Conservation Programs and Provisions in the 2002 Farm Bill. In addition to the farm bill programs described above, the conservation title contains several other programs. It:

- ! Authorizes the Conservation Security Program in Section 2001 to provide payments to producers starting in FY2003, based on which of three levels of conservation is planned for and practiced. Payments are available on all agricultural land that was cropped in 4 of 6 years before 2002. The lowest level allows contracts of 5 years and annual payments up to \$20,000; the middle level allows contracts of 5 to 10 years and annual payments up to \$35,000; the top level allows contracts of 5 to 10 years and annual payments up to \$45,000. The lowest level requires a plan that addresses at least one resource concern on the entire operation, and the top level requires a plan to address all resource concerns on the entire operation.
- ! Authorizes Partnerships and Cooperation in Section 2003, using up to 5% of conservation funding, for both stewardship agreements with other entities and special projects designated by state conservationists to enhance technical and financial assistance to address resource conservation issues.
- ! Amends administrative requirements in Section 2004, to provide the option of providing incentives to beginning and limited resource farmers and ranchers and Indian tribes, and to protect the privacy of personal information related to natural resource conservation programs and information about National Resources Inventory data points.

! Reauthorizes the Agricultural Management Assistance Program through FY2007 in Section 2501, and provides \$10 million in mandatory funding annually.

- ! Authorizes a Grassroots Source Water Protection Program in Section 2501 and annual appropriations of \$5 million through FY2007.
- ! Authorizes a Great Lakes Program for Erosion and Sediment Control in Section 2501 and annual appropriations of \$5 million through FY2007.
- ! Desert Terminal Lakes provisions in Section 2507 require the Secretary to transfer \$200 million in mandatory funds to the Bureau of Reclamation to pay for providing water to at-risk natural desert terminal lakes; other provisions prohibit using these funds to purchase or lease water rights.
- ! Authorizes appropriations of such funds as are necessary through FY2007 to conduct a Conservation Corridor Demonstration Program on the Delmarva Peninsula in Sections 2601-2604 to provide matching funds to demonstrate local conservation and economic development with state and local partners.

Implementing the 2002 Farm Bill Conservation Provisions

Official actions, including announcements in the *Federal Register* (FR), taken to implement selected conservation programs authorized or significantly amended by the 2002 farm bill are listed below.

- ! Conservation Reserve Program: No action.
- ! Wetland Reserve Program: No action.
- ! **Environmental Quality Incentive Program:** 7/24/02 FR notice providing additional \$275 million for FY2002. /8/01/02 Secretary announces \$227 million released.
- ! Conservation Technical Assistance: No action.
- ! Small Watershed Rehabilitation Program: No action.
- ! **Resource Conservation and Development Program**: No action.
- ! **Farmland Protection Program**: 5/30/02 FR notice requesting proposals for FY2002, due 8/15/02.
- ! Wildlife Habitat Incentive Program: 7/24/02 FR final rule providing additional cost share assistance to participants with agreements exceeding 15 years.
- ! Agricultural Management Assistance Program: No action.
- ! Private Grazing Lands Program: No action.
- ! Grasslands Reserve Program: No action.
- ! Conservation Security Program: No action.
- ! Partnerships and Cooperation: No action.

Appropriations

FY2002. For discretionary conservation programs, FY2002 appropriations legislation, signed into law on November 28, 2001, provided \$962.1 million to NRCS activities. For Conservation Operations (the core technical assistance effort), it provided \$779.0. The law

allowed the Secretary to transfer to the CRP up to \$13 million from the EQIP to fund technical assistance support for the CRP. Both Chambers included numerous earmarks in their reports, especially in the Conservation Operations and Watershed Operations portions, amounting to a large portion of the funding. The conference committee was silent on most earmarks and stated that any earmarks in either report it did not address were considered to be adopted.

For the mandatory programs that are funded through the CCC and are not subject to annual appropriations, the Administration proposal did not assume the recurrence of several single year increases at unauthorized levels provided in FY2001 under various emergency supplemental measures. Supporters of these FY2001 increases characterize the FY2002 proposals as reductions, while others stated that future funding levels would be addressed in the 2002 farm bill. (For a more detailed discussion of FY2002 appropriations for conservation, see the final version of CRS Report RL31001, *Appropriations for FY2002: U.S. Department of Agriculture and Related Agencies.*)

FY2003. The Administration requests \$841 million for Conservation Operations (CO), up \$62 million from FY2002. The Administration requests no funding for Watershed and Flood Prevention Operations, Watershed Surveys, or the Watershed Rehabilitation Programs, but instead requests \$111.4 million for Emergency Watershed Protection, so USDA can focus its resources on providing assistance rapidly after a natural disaster, and limits watershed spending to disasters. The Emergency Conservation Program is usually funded through emergency supplemental legislation, but the budget requests \$48.7 million, the average amount spent over each of the past 10 years, so these funds will be available when needed. The Administration requests an increase for the Resource Conservation and Development Program (RC&D) of \$1.0 million, to \$49.1 million.

The House and Senate Appropriations Committees reject many of these proposals in H.R. 5263 and S. 2801, respectively, providing similar levels of funding for the three watershed programs as last year (except the House Committee recommends no funding for the rehabilitation program, while the Senate committee recommends \$30 million) and no funding for the Emergency Conservation Program. Both committees provide slightly higher funding than the Administration requested for CO, \$843 million by the House and \$851 million by the Senate. Both bills include about 50 earmarks for CO, and very few of them are in both bills. Both bills provide higher amounts for the RC&D than the Administration requested, \$55.1 million in the House bill and \$50.4 million in the Senate bill.

For the mandatory programs, the Administration assumes full funding for EQIP at \$200 million in FY2003, even though budget authority expires at the end of FY2002. None of the other mandatory conservation programs is addressed in the request, except that the budget assumes continuing outlays for land retirement programs. For the CRP, for example, it assumes outlays of \$1.856 billion in FY2003 to fund existing and new contracts.

The House Committee takes three actions to limit mandatory programs. It limits the Environmental Quality Incentives Program to \$695 million instead of the \$700 million authorized, limits the Wetlands Reserve Program to 245,833 acres instead of the 250,000 acres authorized, and limits expenditures under the new Conservation Security Program to Iowa (making it a pilot program and saving an estimated \$3 million). The Senate places one limit on mandatory funding, prohibiting these funds for the Small Watershed Rehabilitation

Program (which would receive \$30 million as a discretionary line item). (For more details on conservation funding, see CRS Report RL31301, *Appropriations for FY2003: U.S. Department of Agriculture and Related Agencies.*)

LEGISLATION

Almost 100 bills with conservation provisions were introduced; only the enacted farm bill is listed below.

P.L. 107-171, H.R. 2646

Provides for the continuation of farm programs through FY2011. Introduced July 26, 2001; referred to Committee on Agriculture. Reported August 2, 2001 (H.Rept. 107-191, pt. 1) and August 31, 2001 (H.Rept. 107-191, pt. II). Passed the House (amended) October 5, 2001. Passed the Senate (amended) February 13, 2002. House agrees to conference report May 2, 2002 (H.Rept. 107-424). Senate agrees to conference report May 8, 2002. Signed into law May 13, 2002.

CONGRESSIONAL HEARINGS, REPORTS, AND DOCUMENTS

- U.S. Congress. House. Committee on Agriculture. Subcommittee on Department Operations, Oversight, Nutrition, and Forestry. *The Impact of the Proposed Total Maximum Daily Load Regulations on Agriculture and Silviculture*. Hearings. 106th Congress, 2nd session. May 22, June 19, and June 20, 2000. 296 p. Serial No. 106-53.
- U.S. Congress. House. Committee on Agriculture. Subcommittee on General Farm Commodities, Resource Conservation, and Credit. *Review of USDA's Administration of the CRP*. Hearings, 106th Congress, 1st session. July 22, 1999. 96 p. Serial No. 106-30.
- U.S. Congress. House. Committee on Agriculture. Subcommittee on Water Resources and Environment. *H.R.* 728, *The Small Watershed Rehabilitation Amendments of 1999 and the Natural Resource Conservation Service's Small Watershed Program.* Hearings, 106th Congress, 1st session. Sept. 24, 1999. 63p. Serial No. 106-40.
- U.S. Congress. Senate. Committee on Agriculture, Subcommittee on Forestry, Conservation, and Rural Revitalization. *Farmland Protection Program*. Hearings, 106th Congress, 2nd session. September 18, 2000. 61p. S. Hrg. 106-947.
- U.S. Congress. Senate. Committee on Agriculture, Subcommittee on Research, Nutrition, and General Legislation. *Carbon Cycle Research and Agriculture's Role in Reducing Climate Change*. Hearings, 106th Congress, 2nd session. May 4, 2000. 116 p. S. Hrg. 106-905.

FOR ADDITIONAL READING

U.S. Department of Agriculture. Economic Research Service. *Agricultural Resources and Environmental Indicators*, 1996-1997. Washington, July 1997. 347 p. Agricultural Handbook No. 712. (Chapters are individually updated and available on the internet.)

- ----. Agri-Environmental Policy at the Crossroads: Guideposts on a Changing Landscape. Washington, January 2001. 66p. Agricultural Economic Report No. 794.
- U.S. Department of Agriculture. Natural Resources Conservation Service. *America's Private Land: A Geography of Hope*. Washington. 1996. 81 p.

CRS Reports

- CRS Report RL31301. *Appropriations for FY2003: Department of Agriculture and Related Agencies*, coordinated by Ralph M. Chite.
- CRS Report RL30331. *Conservation Spending in Agriculture: Trends and Implications*, by Jeffrey Zinn. 11 p.
- CRS Report 97-673. *Conservation Reserve Program: Status and Current Issues*, by Jeffrey Zinn. 6 p.
- CRS Report RL31486. Conservation Title of the 2002 Farm Bill: A Comparison of New Law with Bills Passed by the House and the Senate, and Prior Law, by Jeffrey Zinn. 33 p.
- CRS Report 97-616. *Environmental Quality Incentives Program (EQIP): Status and Issues*, by Jeffrey Zinn and Geoffrey Becker. 6 p.
- CRS Report RL31065. Forestry Assistance Programs, by Ross Gorte. 20p.
- CRS Report RL31131. Selected Conservation Proposals for the Next Farm Bill, by Jeffrey Zinn. 40 p.
- CRS Report RL30437. *Water Quality Initiatives and Agriculture*, by Claudia Copeland. 29 p.