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Emphasis Shifts in U.S. Agri-Environmental Policy

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Recognizing the negative impact that some farming practices (excess fertilization and manure, for example) can have on our Nation's natural resources, policymakers have been devoting more attention and funding to agri-environmental policies and programs. Until 2002, the bulk of conservation funds went toward land retirement: paying farmers to remove environmentally sensitive land from crop production for a time period specified under contract. In recent decades, this program has retired from

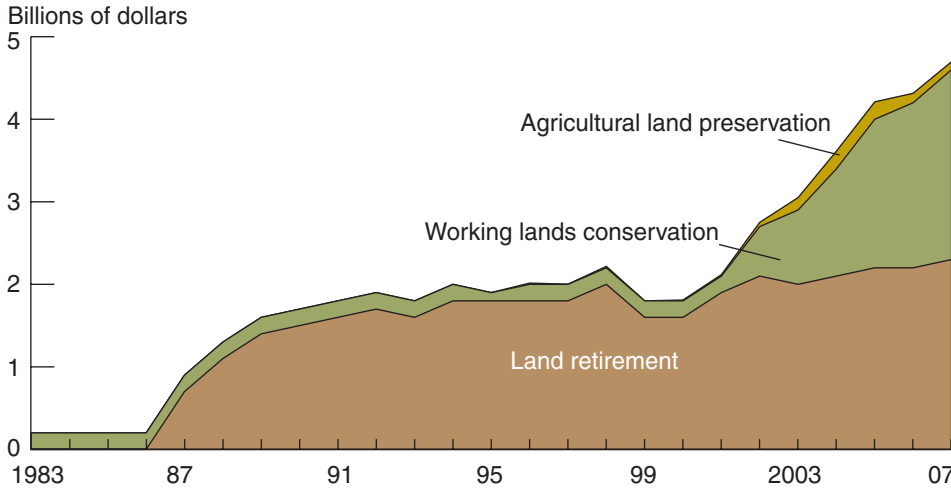
crop production up to 35 million acres—about 10 percent of total U.S. cropland.

With the passage of the 2002 Farm Security and Rural Investment Act (2002 Farm Act), policymakers have substantially increased conservation funding and made changes in program emphasis. The goals are to expand the amount of U.S. land and the number of farmers covered by conservation programs. The new Farm Act authorizes increases in conservation funding to levels that by 2007 will be double those of the last decade,

with about two-thirds of the new funds going to programs emphasizing conservation on working lands—lands used for crop production and grazing. With the slated increases, conservation programs for working lands will move from less than 15 percent of Federal expenditures on agricultural conservation over the past 15 years up to about half of the much larger total conservation spending by 2007.

A second point of greater emphasis in the new Act is wetland restoration.

The 2002 Farm Act has authorized substantially increased conservation funding, particularly for working lands programs



Sources: Office of Budget and Policy Analysis, USDA, and the Congressional Budget Office.

While the Act modestly increases funding for land retirement, a large portion of the increase is directed to the restoration of wetlands.

A third—more subtle but nonetheless notable—change in emphasis in the new Farm Act relates to the way funds are awarded through these programs. In this case, the Act decreases (rather than increases) the use of decisionmaking tools to target program participants and increase environmental benefits per dollar of program cost.

Certainly, these policy and program changes will expand the amount of land covered by conservation programs and the number of participating producers. What isn't so certain, however, is whether these changes will add up to more cost-effective conservation overall.

Expanding Conservation on Working Lands

Working lands represent a largely untapped source of potentially cost-effective agri-environmental gains. Land retirement programs have succeeded in improving environmental quality by removing the most fragile land from production, but

these benefits come at a high cost to taxpayers. Moreover, now that the most fragile land has already been retired through programs like the Conservation Reserve Program (CRP), the remaining land eligible for retirement may have higher production potential than the retired land and, therefore, may be more costly to retire. Keeping the land in production and funding conservation practices on that land may be a more cost-effective option. For example, it may be less expensive to improve water quality affected by nutrient runoff through widespread changes in management practices on working lands than through paying farmers to take land out of production to achieve the same benefits.

Funding for the Environmental Quality Incentives Program (EQIP), the major working lands program, jumps five-fold with the 2002 Farm Act, to the tune of nearly \$5.8 billion for 2002-07. Through this program, crop and livestock producers can get information and technical and financial assistance in designing and implementing conservation practices (such as conservation tillage or nutrient management) on their land. The program now provides more incentives for live-



Gary Kramer, USDA/NRCS

A farmer adjusts the water level in a restored wetland.

stock producers to participate. About 60 percent of the program's funding is earmarked for livestock producers, up from 50 percent in the 1996 Farm Act. Limits on the size of participating livestock operations and on maximum payment levels per operation have been loosened.

Also, a new working lands program, the Conservation Security Program (CSP), has been authorized in the 2002 Farm Act. When fully implemented, the CSP will pay producers to adopt or maintain appropriate land-based practices that address one or more resources of concern, such as soil quality, water quality, or wildlife habitat.

While the CSP, like EQIP, funds conservation on working lands, it differs in important ways. Through the CSP, producers can receive annual payments based on conservation practices they had installed on their land before enrollment in the CSP. These payments serve as a reward for achieving a high level of conservation and as an incentive to maintain and improve that level of conservation performance.

Also, through CSP's three-tiered system of participation, producers receive larger annual payments for higher levels of participation, encouraging them to develop comprehensive, whole-farm conservation plans (see box, "Major USDA Conservation Programs").

With these expanded and new working lands programs come new rules for the CRP, USDA's major land retirement program. These new rules will permit managed haying and grazing (with appropriate reductions in payments to landowners) on land that has been retired, in essence converting retired land into working land.

The increased funding for conservation on working lands is intended to provide greater flexibility to address the diversity of U.S. agricultural land and agricultural producers. Most producers who are dealing with different agri-environmental problems and resource settings and whose

operations vary in size and management structure will have options for receiving Federal funds for conservation.

Smaller operations—those with sales of less than \$250,000 per year—produce roughly one-third of U.S. agricultural output but include nearly three-quarters of all producer-owned land. These farms often depend heavily on land retirement payments and nonfarm sources of household income, rather than on income from crop or livestock production.

Larger farms, on the other hand, produce two-thirds of U.S. agricultural output while accounting for only one-fourth of the land. These farms are generally more commercially oriented and depend far less on nonfarm sources of income. The increased funding for conservation on working lands, along with the greater focus on livestock operations and the higher maximum payment levels, is

expected to raise conservation participation by larger farms.

While the expansion of conservation on working lands has significant advantages, implementing it may pose additional challenges. Payments for a broader range of conservation practices, available to a wider range of producers, will complicate both conservation planning and the monitoring of practice implementation and maintenance. This is particularly true for some conservation management practices, such as crop nutrient management, which are less visible and thus more difficult to monitor than changes in tillage or contour cropping. Multiple conservation programs for working lands could also increase the challenge in making programs work together seamlessly for producers while keeping the cost of program administration low. And producers participating in new and newly expanded con-

Conservation spending under the 2002 Farm Act will increase, particularly for the Environmental Quality Incentives Program

Land retirement programs

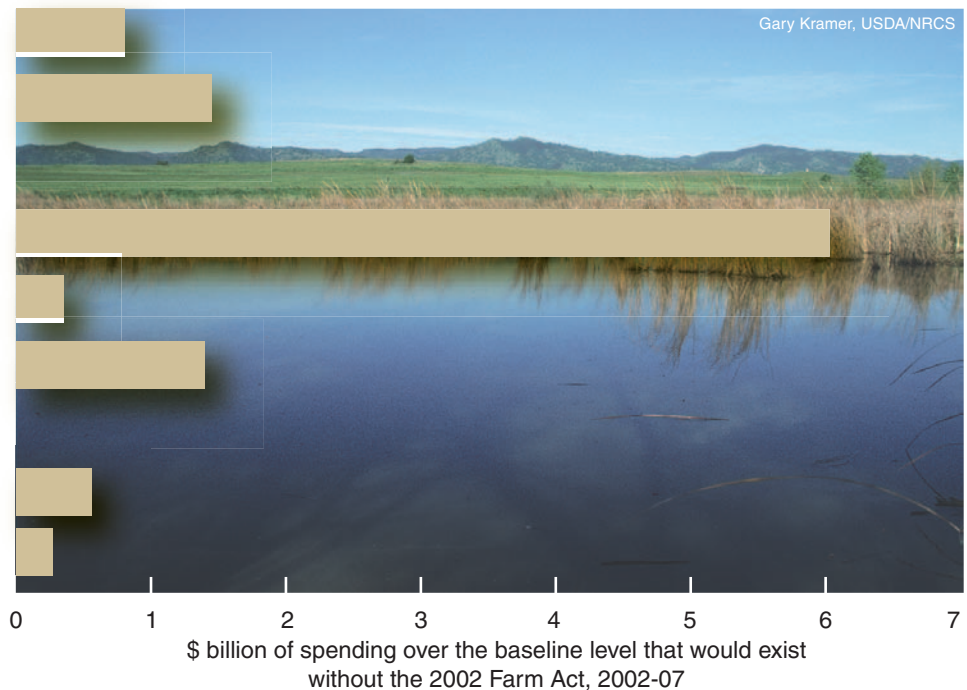
- Conservation Reserve Program
- Wetlands Reserve Program

Working lands conservation programs

- Environmental Quality Incentives Program
- Wildlife Habitat Incentives Program
- (New) Conservation Security Program

Agricultural land preservation programs

- Farmland Protection Program
- (New) Grassland Reserve Program



Sources: Office of Budget and Policy Analysis, USDA, and Congressional Budget Office.

ervation programs will need conservation planning services and technical assistance. To help handle the increased workload, the new legislation includes funding for certification of third-party technical service providers to supplement USDA's Natural Resources Conservation Service field staff.

Wetlands Restoration Coming of Age

While the expansion of working lands programs is the big story in the conservation portion of the 2002 Farm Act, the greater emphasis on wetlands restoration in the modest expansion of land retirement programs is also significant. The legislation augments authority for land

retirement in the CRP and the Wetlands Reserve Program (WRP) by 4 million acres, up about 11 percent. While wetlands restoration accounts for about 3 percent of current land retirement, 40 percent or more of the authorized increase may be devoted to wetlands restoration. In addition to the 1.2 million acres added to WRP, the CRP routinely enrolls farmed wetlands that are restored to wetlands condition. Up to 500,000 acres of the 2.8-million-acre rise in the CRP could be specially earmarked for restoration of currently farmed wetlands. The shift toward wetlands restoration is significant because of the relatively high environmental benefits per acre provided by wetlands.

De-emphasizing Targeting Tools

In addition to increasing the amount and scope of conservation funding significantly, policymakers have also changed how conservation program managers decide which producers receive funds through the various programs. To maximize the environmental benefits from limited conservation funds, program managers typically use two tools—environmental indices and competitive bidding—to target and apply funds to the most cost-effective conservation projects, or installations. Environmental indices are point systems used to rank conservation practices according to expected environmental benefits. Using these rankings and the proposed costs of practices, program man-

Major USDA Conservation Programs

Land Retirement Programs

The **Conservation Reserve Program (CRP)** offers annual payments and cost sharing to establish long-term, resource-conserving cover, usually grass or trees, on environmentally sensitive land. The 2002 Farm Act increased the acreage cap from 36.4 million acres to 39.2 million acres. Funding is through the Commodity Credit Corporation (CCC). The Congressional Budget Office (CBO) estimates increased spending of \$800 million for 2002-07.

The **Wetlands Reserve Program (WRP)** provides cost sharing and/or long-term or permanent easements for restoration of wetlands on agricultural land. The 2002 Farm Act increased the acreage cap from 1.075 million acres to 2.275 million acres. The legislation requires the Secretary of Agriculture (to the greatest extent practicable) to enroll 250,000 acres per year. Funding is through the CCC. CBO estimates increased spending of \$1.5 billion for 2002-07.

Working Lands Conservation Programs

The **Environmental Quality Incentives Program (EQIP)** provides technical assis-

tance and cost-sharing or incentive payments to assist livestock and crop producers with conservation and environmental improvements on working lands. Under the 2002 Farm Act, EQIP is authorized to receive \$5.8 billion from CCC funds to cover fiscal years (FY) 2002-07 and an estimated \$1.1 billion total for 10 years. Annual funding is phased up to \$1.3 billion by FY 2007, compared with annual funding of roughly \$200 million per year under the 1996 Farm Act. Additional CCC funding of \$310 million is authorized over FY 2002-07 for ground and surface water conservation.

EQIP's focus on livestock will increase, with 60 percent of funding earmarked for livestock producers, up from 50 percent in the 1996 Farm Act. Moreover, much of this funding could be used to cost-share nutrient management on large, concentrated animal feeding operations (CAFOs) that will be required to comply with new Clean Water Act regulation of manure handling and disposal. Previous limits on the size of participating livestock operations, which excluded operations with more than 1,000 animal units, were eliminated in the 2002 Farm Act. Payment limits previously set at \$50,000 total per operation were raised to \$450,000

per operation over the 6-year life of the 2002 Farm Act.

The **Wildlife Habitat Incentives Program (WHIP)** provides cost sharing to landowners and producers to develop and improve wildlife habitat. The 2002 Farm Act mandates funding of \$360 million total from CCC over FY 2002-07, ranging from \$15 million in FY 2002 to \$85 million in FY 2005-07. WHIP received just over \$62 million during the 1996 Farm Act, 1996-2001.

The (New) **Conservation Security Program (CSP)** will pay producers for adopting and maintaining appropriate land-based practices on working lands that address one or more resources of concern, such as soil, water, or wildlife habitat. The program is designed to encourage broad participation, help ensure a high level of conservation throughout the farm, and reward producers for exemplary conservation efforts. Toward that end, most cropland and grazing land are eligible. Although CSP was initially approved as an entitlement program with no fixed budget, appropriation legislation for FY 2003 limited the program to \$3.77 billion for 2003-13. The USDA Office of Budget and Policy Analysis estimates that \$1.39 billion of that

agers can identify farms and fields where land retirement or conservation practices on working lands would yield relatively high environmental benefits (see box, "Program Targeting Tools").

Competitive bidding is a process in which producers submit bids on installation of conservation practices and the proposed level of cost sharing in percentage terms (that is, the percentage of total installation or implementation cost paid by the Government). Through comparing the submitted bids, program managers can identify farms and fields where the costs of retiring land or installing conservation practices are relatively low.

While policymakers have not yet announced program details for the new

CSP, they have specified that these targeting tools will not be used in deciding which producers get contracts for conservation practices. CSP eligibility will, instead, be based on installing, adopting, or maintaining practices that address national and local priority resource concerns. Targeting tools are still used in the CRP (land retirement program), but competitive bidding is no longer used in the EQIP.

The use of targeting tools in the CRP (land retirement program) has resulted in increased public benefits from three environmental objectives of the program, according to ERS research. By using these tools to identify land appropriate for water-based recreation, public benefits

from pheasant hunting and wildlife viewing have increased by at least \$370 million per year, while program acreage and costs have remained virtually unchanged.

The elimination of competitive bidding in EQIP will likely result in lower environmental benefit per dollar of program spending. EQIP data show that producers have often been willing to accept cost-share rates (what the government pays) well below the pre-2002 Farm Act maximums of 75 percent of cost for structural practices, such as terrace installation, and 100 percent for management practices, such as integrated pest management. Since 1996, the overall national average cost-share rate was 35 percent for

total will be spent over the 6-year life of the 2002 Farm Act.

Producers can choose among three levels or "tiers" of participation. Higher tiers offer larger annual payments during the contract period but require greater conservation effort. Conservation effort is measured by the number of resource concerns addressed and the extent to which the whole farm is included.

- Tier I: Producers must address (to the "nondegradation" standard) at least one resource concern on at least part of the farm. Contracts are for 5 years. Tier I contract renewal requires broadening scope of practices or portion of the farm covered.
- Tier II: Producers must address (to the "nondegradation" standard) at least one resource concern on the entire farm. Contracts are for 5-10 years and can be renewed.
- Tier III: Producers must fully address (to the "nondegradation" standard) all resource concerns on the entire farm. Contracts are for 5-10 years and can be renewed.

Payments include three components: base payment, cost-share payment, and enhancement payment. The base payment is a percentage of the national average land rental for the specific land use, or another appropriate rate that ensures regional equity: 5 percent for tier I, 10 percent for tier II, and 15 percent for tier III. The cost-share payment can be up to 75 percent of the cost of adoption or maintenance of conservation practices. Finally, enhancement payments can be provided for taking additional actions, such as implementing or maintaining practices that exceed minimum requirements. Total tier I payments are limited to \$20,000 annually per farm, while base payments cannot exceed 25 percent of that amount. The payment limit for tier II is \$35,000 annually per farm, with a base payment limit set at 30 percent of that amount. Tier III payments are limited to \$45,000 annually per farm and 30 percent of that amount for the base payment.

Agricultural Land Preservation Programs

The **Farmland Protection Program (FPP)** provides funds to State, tribal, or local governments and private organizations to help purchase development rights and keep

productive farmland in agricultural use. The 2002 Farm Act mandates funding from CCC of \$597 million over FY 2002-07, ranging from \$50 million in FY 2002 to \$125 million in FY 2004-05. In contrast, FPP received just over \$50 million total during the last Farm Act, 1996-2001.

The (New) **Grassland Reserve Program (GRP)** is designed to preserve and improve native-grass grazing lands through long-term (10-30 years) contracts and easements. While normal haying and grazing activities will be allowed under GRP, producers and landowners cannot crop the land and will be required to restore and maintain native grass, forb, and shrub species. For contracts, annual rental payments equal 75 percent of grazing value. Permanent easements are to be purchased at fair market value, less grazing value, while 30-year easements are to be purchased at 30 percent of fair market value, less grazing value. Cost-sharing is provided for up to 75-90 percent of the restoration and maintenance costs, depending on the type of grassland. GRP will protect up to 2 million acres of grassland. Funding of up to \$254 million over the 6-year life of the Farm Act is available from the CCC.

Program Targeting Tools

Competitive bidding—A process in which producers submit bids on installation of conservation practices and the percentage level of USDA cost sharing they are willing to accept. Cost-share payments to producers cover a specified portion of the cost of installing, implementing, or maintaining a conservation (structural or land management) practice. Bids are selected for program participation based on potential for environmental gain and the level of payment requested by the producer.

Environmental indices—A point system is used to rank the proposed application of conservation practices according to expected environmental benefits. Points may be awarded for the use of particularly effective practices, the environmental sensitivity of the land where practices are to be applied, or proximity to particular resources such as lakes or streams.

structural practices and 43 percent for management practices.

Now, producers implementing practices under EQIP receive the maximum cost-share rate of 50 percent unless they are located in States that have received USDA approval to accept a higher rate for specific practices. Local program managers, however, can still consider potential environmental benefits in deciding which producers' contracts to accept.

Lowering the maximum cost-share rates may mean that some producers who might have participated in EQIP will no longer be interested, even if they could provide environmental benefits that would justify a higher cost-share rate. That is, some producers who may be able to



Jeff Vanuga, USDA/NRCS

A USDA conservationist discusses cultivation practices with a farmer.

make a cost-effective contribution to environmental protection would be effectively excluded from the program. On the other hand, producers who would be willing to adopt conservation practices at a lower cost-share rate could receive payments that exceed the level necessary to induce their participation, leading to higher than necessary contract costs. In other words, the environmental benefits gained may be obtained at a higher than necessary cost.

Opposing Directions?

The net effect of the seemingly opposing directions of the increased emphasis on working lands over land retirement and reduced emphasis on targeting is difficult to discern. While the emphasis on working lands and wetlands pushes toward increasing the overall cost effectiveness of agri-environmental policy in producing environmental benefits, moving away from environmental targeting and competitive bidding may pull in the opposite direction by limiting the environmental gains per program dollar. Without competitive bidding in working lands programs, cost-share payments will likely be higher than what a large share of producers would have bid to participate. And without environmental benefit

indices to steer programs to higher benefit-producing situations, overall benefits may be less than would otherwise be achieved. **W**

This article is drawn from...

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