## **Resources & Environment**

## **EQIP: Conserving While Farming**

Incentive payments to farmers for natural resource conservation have received growing attention in the debate surrounding the upcoming farm bill. The Environmental Quality Incentives Program (EQIP), which provides technical, financial, and educational assistance for a wide range of agri-environmental activities, has attracted particular interest. Conservation practices implemented under the program have improved soil, land, water, and nutrient management on working farmland.

Farmers' applications each year for participation in EQIP have exceeded available funding. However, some farmers signing multi-practice participation contracts have subsequently withdrawn from the program or have chosen not to implement some of the planned practices. This is among the issues that have implications for program design and funding.

Interest in EQIP by policymakers is linked to increasing recognition that many agri-environmental problems can be addressed only through improved performance on working farmland (rather than through land retirement). Another consideration is that financial support under EQIP is not constrained by World Trade Organization rules regarding production subsidies, since payments are not linked to production or price of a commodity.

Established in the 1996 Farm Act, EQIP provides a voluntary conservation program for farmers and ranchers facing threats to their natural resource base or whose production activities contribute to environmental degradation. EQIP is attractive to producers given the program's flexibility in addressing natural resource concerns while maintaining land in productive agricultural use. The program, administered by USDA's Natural Resources Conservation Service, provides technical, financial, and educational assistance to farmers adopting conservation practices, primarily in designated priority areas. The objective of the program is to maximize the environmental benefits per dollar of program expenditure. *Priority areas* are areas of special environmental sensitivity or significant natural resource concerns as identified through a State level conservation process. At least 65 percent of EQIP funds are to be used in these designated priority areas. Remaining funds may be allocated to agricultural producers not located in priority areas if their conservation plan addresses statewide environmental concerns. Overall, half of all EQIP funds is earmarked for practices or systems relating to livestock production.

All EQIP-funded activities must be carried out according to an approved conservation plan for each participating farm, specifying the conservation practices to be implemented and how these practices address primary natural resource concerns in the area. An "offer index" is calculated for each proposal that is a ratio of the environmental benefits and the total cost-share request. Conservation plans with the most favorable offer index are approved up to the point where the funds are exhausted for a priority area or for statewide concerns.

In the 1997-2000 period, farmers submitted nearly 250,000 applications for EQIP contracts. Of these applications, only about one-third were accepted and EQIP contracts signed by the end of the period. However, the contracts covered nearly 35 million acres of farmland, already close to the 37.5-million-acre anticipated coverage of the 7-year funded program. And this near-achievement of the anticipated acreage tied up about \$600 million in contracts, less than half the \$1.3 billion authorized for the initial 7 years. The remaining authorized funds will allow additional EQIP applications to be approved.

Water management and soil and land management have predominated among the practices contracted under EQIP, making up 56 percent of planned practices and accounting for a slightly higher percentage of the allocated funds. Livestock nutrient management, with 6 percent of the practices,

Environmental concern (example of practice)			EQIP practices			
	Allocated funds		Planned		Withdrawn	
	\$ million	Percent	Number	Percent of total	Number	Percent
Wildlife habitat (riparian buffers)	36.60	6.2	15,813	7.3	2,380	15
Crop nutrients (soil testing)	26.63	4.5	28,805	13.3	2,446	8
Livestock manure nutrients (waste facility)	109.09	18.4	13,955	6.4	1,458	1
Soil and land conservation (crop rotations)	150.21	25.4	68,696	31.6	7,602	11
Water quality and conservation (irrigation sprinkler)	192.47	32.6	53,718	24.7	6,577	12
Other (planned grazing system)	76.17	12.9	36,168	16.7	3,836	1
Total	591.17	100.0	217,155	100.0	24,299	11

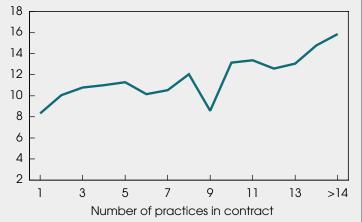
## Habitat-Related EQIP Practices Have the Highest Incidence of Withdrawal

Source: Derived from data provided by the Natural Resources Conservation Service, USDA

Economic Research Service, USDA

## Multiple-Practice EQIP Contracts Are More Prone to Withdrawal of Practices

Percent of practices withdrawn



Among the EQIP contracts signed in 1997-2000, farmers opted not to implement one or more practices on about 8 percent. Source: Calculated from program data provided by Natural Resources Conservation Service, USDA

Economic Research Service, USDA

required 18 percent of the allocated funds because of the higher cost structural measures undertaken. Just over 7 percent of the contracts included wildlife habitat improvement, with 6 percent of the funds allocated to this measure.

Most farmers entering into EQIP contracts have fully implemented the practices specified in their conservation plans, or are expected to do so. However, some farmers withdrew entirely from the signed contracts or chose not to implement certain practices. By so doing they forgo cost-share payments for practices not implemented and risk payment of penalties stipulated in the contract. However, USDA allows farmers to substitute among practices and not be penalized if no reduction occurs in the contract's offer index.

During the 1997-2000 period, farmers withdrew 3,697 or about 5 percent of the contracts in their entirety. On 6,800 other contracts, about 8 percent of the total signed, farmers opted not to implement one or more practices. On over half these latter contracts, farmers canceled only one practice. The few farmers withdrawing four or more practices accounted for about half of the practices not implemented. Among the contracted practices, the highest withdrawal rate, 15 percent, occurred for wildlife habitat improvement and the lowest, 8 percent, for crop nutrient management. Farmers with greater numbers of practices in their contracts withdrew relatively more practices than did farmers with fewer practices in their contracts. A possible explanation is that farmers with more practices in their contracts may feel less pressure to implement all of them than do farmers with few contacted practices. Also in larger contracts, some producers may be including practices with no perceived private benefit, in order to increase the probability of approval of their conservation plan. Certain types of practices that do not provide direct benefits to producers, such as wildlife and habitat related practices, are logically the ones most frequently withdrawn. Also part of the withdrawals may be a transitory effect linked to learning the innovative aspects of the program.

The withdrawals may be lowering the benefits expected from the program, but likely not enough to reverse the positive net benefits. Even so, the difference between the expected social benefits as approved in the conservation plans and those arising from the practices actually being implemented needs to be assessed and considered in the overall evaluation of EQIP. Increasing the enforcement of penalties for withdrawals may reduce applications and participation in areas of real conservation need and could reduce net social benefits more than what occurs from the withdrawals.

Reducing withdrawals is important when considering that the funds allocated to withdrawn contracts are often lost to the program if they can't be reallocated before the end of the fiscal year. An alternative program design that would maintain the flexibility of EQIP's approach to conservation might consider the introduction of incentives for smaller contracts and a mechanism for the reutilization of funds allocated to withdrawn contracts and practices. Furthermore, the differences in withdrawal rates among different types of conservation practices suggest that some of the program's goals may be achieved through other programs targeted to specific natural resource concerns. For example, habitat and wildlife conservation practices may be better addressed by the Wildlife and Habitat Incentives Program (WHIP) that is tailored exclusively to that end, rather than being included as part of a single EQIP contract. AO

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