

# Environmental Quality Incentives Program (EQIP)

## Program Summary and Potential for Wildlife Benefits

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### Program Description

The Environmental Quality Incentives Program (EQIP) was established in the 1996 Farm Bill to provide a voluntary conservation program for farmers and ranchers who face serious threats to soil, water, and related natural resources, including grazing lands, wetlands, and wildlife habitat. Four of USDA's former conservation programs were combined in EQIP: the Agricultural Conservation Program, Water Quality Incentives Program, Great Plains Conservation Program, and the Colorado River Basin Salinity Control Program. EQIP offers financial, educational, and technical help for installing structural conservation practices, establishing vegetation, and implementing management practices through voluntary five- to ten-year contracts for most agricultural land uses.

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Illinois grassed waterway (P. Buck)

## Priority Areas and Locally Led Conservation

EQIP works primarily in priority areas where significant natural resource problems exist. In general, priority areas are defined as watersheds, regions, or areas of special environmental sensitivity or having significant soil, water, or related natural resource concerns. These concerns could include soil erosion, water quality and quantity, wildlife habitat, wetlands, and forest and grazing lands. These priority areas are identified through a locally led conservation process. Conservation districts convene a local work group comprised of the district board members and key staff; Natural Resources Conservation Service (NRCS) staff; Farm Service Agency (FSA) county committees and key staffs; Cooperative State Research, Education, and Extension Service; other federal, state, and local agencies; nongovernmental organizations; and individuals interested in natural resource conservation, including tribal representatives.

*Priority area proposals are submitted to the NRCS State Conservationist, who prioritizes these proposals within the state based on the recommendations from the State Technical Committee.*

The local work group identifies program priorities by completing a natural resource needs assessment and develops proposals for priority areas based on that assessment. Priority area proposals are submitted to the NRCS State Conservationist, who prioritizes these proposals within the state based on the recommendations from the State Technical Committee.

EQIP also can address additional significant statewide concerns that may occur outside designated priority areas. USDA guidelines require that no less than 65 percent of allocated EQIP funds be directed toward addressing natural resource problems in priority areas and 35 percent of the funds are used to address statewide natural resource concerns. In FY 1999 and FY 2000, state-directed funding targeted to priority areas was approximately 85 percent.

## Conservation Plans

All EQIP activities must be carried out according to a conservation plan. Conservation plans are site-specific for each farm or ranch and can be developed by producers with help from NRCS or other service providers. Producers' conservation plans should address the primary natural resource concerns identified by the local working group. All plans are subject to NRCS technical standards adapted for local conditions and are approved by the conservation district. Producers are encouraged to develop comprehensive or total resource management plans.

## Contracts

EQIP is delivered to producers through five- to ten-year contracts that provide incentive payments and cost-sharing for conservation practices called for in site-specific plans. Contract applications are accepted throughout the year. NRCS conducts an evaluation of the environmental benefits associated with projects proposed in each producer application. Offers are then ranked according to criteria developed with the advice of the local work group.

Applications are ranked according to environmental benefits achieved, weighted against the costs of applying the practices. Higher rankings are given to plans developed to treat priority resource concerns to a sustainable level. The FSA County Committee approves the highest priority applications for funding. In this manner, EQIP seeks to maximize environmental benefits per conservation dollar spent.

### **Contract Payments**

Program participants receive cost-sharing of up to 75 percent of the costs of certain conservation practices, such as grassed waterways, filter strips, manure management facilities, capping abandoned wells, and other practices important to improving and maintaining the health of natural resources in the area. Incentive payments may be made to encourage a producer to perform land management practices such as nutrient management, manure management, integrated pest management, irrigation water management, and wildlife habitat management. These payments may be provided for up to three years to encourage producers to carry out management practices they may not otherwise use without the program incentive. EQIP payments are limited to \$10,000 per person per year and \$50,000 for the length of the contract.

### **Eligibility**

Eligibility is limited to persons who are engaged in livestock or other agricultural production. Eligible land includes cropland, rangeland, pasture, forestland, and other farm or ranch lands. The 1996 Farm Bill prohibits owners of large confined livestock operations from being eligible for cost-share assistance for animal waste storage or treatment facilities. However, technical, educational, and financial assistance may be provided for other conservation practices on these “large” operations. In general, USDA has defined a large confined livestock operation as an operation with more than 1,000 animal units. But, because of differences in operations and environmental circumstances across the country, the national definition of a large confined livestock operation may be amended in each state by the NRCS State Conservationist, after consultation with the State Technical Committee, and approval by the NRCS Chief.

### **EQIP Funding and Program Demand**

EQIP is funded through the Commodity Credit Corporation (CCC), which also funds several other USDA conservation programs. The 1996 Farm Bill authorized up to \$200 million of CCC funds per year be used to fund EQIP through 2002, with 50 percent of those funds dedicated for practices addressing concerns related to livestock production. During the first two years that EQIP was operational (FY 1997 and 1998), the full \$200 million was appropriated for the program. However, in each of FY 1999 and FY 2000, only \$174 million was appropriated for EQIP.

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Through FY 1999, more than 2,100 priority areas had been submitted to state conservationists. However, funding is available for only about 360 of these priority areas annually. To date, funding has been provided to 1,470 priority areas to address at least some of the natural resource concerns identified. Additionally, over 56,000 individual EQIP applications were submitted to NRCS by producers in FY 1999. Though approximately 19,000 of these applications were approved for funding, over \$233 million in proposed projects remained unfunded in FY 1999 alone.

### **Fish and Wildlife Benefits**

No specific assessments of the fish and wildlife benefits derived from EQIP are currently available. However, some generalizations can be made from what is known about the biological aspects of the types of conservation practices being installed through EQIP. As of January 1, 2000, over 623,500 EQIP conservation practices (all states) were planned, with over 97,500 of these practices (16 percent) implemented. Although most EQIP practices installed directly or indirectly affect fish and wildlife resources, some practices are more likely to result in tangible habitat benefits (Table 1). By installing buffers and other wildlife-friendly practices, wildlife habitats on agricultural landscapes can be significantly improved (Koford and Best 1995). EQIP provides one mechanism for making these wildlife habitat improvements.

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### **Conservation Buffer Practices**

Over 10,000 individual conservation buffer practices have been planned for installation nationwide through EQIP. Although many of these practices have not yet been installed, they represent a significant potential to benefit fish and wildlife resources. Conservation buffer practices provide strip habitats in agricultural landscapes that are used by nesting birds (Best et al. 1995), mammals (Morgan and Gates 1983), and other wildlife (Friesen 1994). Filter strips and riparian buffers also provide water quality benefits, frequently protecting the integrity and restoring the quality of in-stream aquatic habitats (Whitworth and Martin 1990, Welsch 1991, Reay 1997).

### **Fencing**

Landowners are receiving a significant amount of EQIP assistance to install livestock fencing. This practice facilitates excluding livestock from streams and other environmentally sensitive areas, improving fish and wildlife habitat quality at these sites. Fencing also enables producers to improve and implement grazing practices, enhancing range conditions and improving upland wildlife habitat quality. Managed grazing can be a very useful tool to improve wildlife habitat in grassland communities (Kie and Loft 1990, Howe 1999). Current planned projects will eventually result in over 23,000 fencing projects implemented.

## Ponds

In many situations, installation of ponds has significant potential to improve habitat for waterfowl (Ruwaldt et al. 1979, Svingen and Anderson 1998), reptiles and amphibians (Fowler et al. 1985, Hecnar and M'Closkey 1998) and other wildlife. Over 3,200 pond practices have been installed through EQIP. Though no quantitative assessment has been done, these practices are likely providing locally significant wildlife benefits.

## Upland Wildlife Habitat Management

Upland wildlife habitat management practices include a wide variety of practices intended to improve upland habitat quality and quantity. Management actions include planting vegetation that provides wildlife food and cover and manipulating the quality and distribution of wildlife cover types used for nesting, brood rearing, escape cover, winter cover, and other wildlife life history requirements. Management actions taken are based on an appraisal of the habitat quality for target wildlife species or groups. Over 27,500 upland wildlife habitat management practices are currently planned for funding through EQIP. Since only about five percent of these practices have been installed, it is difficult to assess the actual wildlife benefits that have been realized so far.

## Wetland Restoration and Management

Over 5,200 wetland wildlife management and wetland restoration practices are currently planned. These practices have the potential to improve wetland wildlife habitat quantity and quality. Active wetland management for wildlife and restoration of degraded wetlands are well known for providing benefits to fish and wildlife (Weller 1990, Sewell and Higgins 1991). While many of these EQIP wetland practices have yet to be installed, the potential for local wildlife habitat improvement through these practices is significant.

## Conclusion

The majority of EQIP practices planned and approved for funding have yet to be installed. In addition, only about 13 percent of these practices are generally considered wildlife-oriented practices. However, a large percentage of the remaining practices, such as nutrient management and erosion control, benefit wildlife through water quality improvements. Therefore, it is beyond the scope of this effort to quantify the fish and wildlife benefits derived from EQIP to date. Additional monitoring and research are needed to adequately assess the value of installed EQIP practices to fish and wildlife.

Most EQIP practices have the potential to provide some benefits to fish and wildlife resources if they are planned with these resources in mind. The stated program purposes are to provide technical and financial assistance to farmers and ranchers who face the most serious threats to soil, water,

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Iowa conservation system (Tim McCabe)

and related natural resources, including grazing land, wetlands, and wildlife habitat. Practices with the primary purpose of addressing threats to soil and water and grazing lands can be planned to also address habitat needs of important fish and wildlife resources identified by local work groups. In this manner, EQIP can be used as a powerful fish and wildlife habitat enhancement tool while addressing a broad range of natural resource concerns in agricultural landscapes.

*“I’ve been involved with EQIP and have used the program to address a number of natural resource issues—from controlling erosion to keeping the water in my ditches clean. I feel that all the conservation practices I’ve installed through EQIP have definitely provided secondary benefits for the many species of wildlife that call our land home.”*

—Steve Williams, Producer  
Brocton, Illinois

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**Table 1. EQIP conservation practices planned and installed through December 1999 that are likely to provide fish and wildlife benefits.**

Conservation Practice	Number of Practices	
	Planned	Installed
Buffer practices		
Contour buffer strips	49	4
Field border	1,414	236
Field windbreak	74	3
Filter strip	2,598	
Filter strip—trees and shrubs	226	27
Hedgerow planting	140	28
Riparian herbaceous cover	18	—
Riparian forest buffer	1,474	77
Windbreak/shelterbelt establishment	3,504	939
Windbreak/shelterbelt renovation	509	161
<b>Total buffer practices</b>	10,003	1,826
Fence	23,179	6,302
Fish stream improvement	108	25
Pond	7,347	3,289
Tree/shrub establishment	2,994	987
Upland wildlife habitat management	27,519	1,194
Wetland restoration	343	70
Wetland wildlife habitat management	4,940	176
Wildlife watering facility	204	42
<b>Total wildlife-oriented practices</b>	76,637	13,911



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