



Agricultural Issues Center  
University of California

July 2007

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## **Agricultural Conservation and the 2007 Farm Bill: A California Perspective**

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Supported in part by the Agricultural Marketing Resource Center



## Agricultural Conservation and the 2007 Farm Bill: A California Perspective\*

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A wide variety of agricultural conservation and environmental programs are found in Title II of the Farm Bill. Under these programs the government pays farmers to idle environmentally sensitive lands and to use environmentally friendly practices. They also provide funds to encourage farmers to undertake environmental improvements and support easements to discourage conversion of farmland to non-farm uses. This set of programs differs from environmental regulation affecting non-farm firms. Unlike programs regulating environmental impacts by industry as administered by the Environmental Protection Agency, the programs in the Farm Bill tend to reward farms for positive environmental contributions rather than penalize them for violating environmental mandates.

This Farm Bill brief describes the main environmental programs in the Farm Bill and considers their implications from a California perspective. Revising conservation programs can have significant impacts on both agricultural production and environmental quality. In addition, just as commodity programs have different effects in different regions of the country, effects of conservation programs are not uniform across the nation.

The effects of conservation programs on both production patterns and environmental quality depend on the combination of their level of funding and the details of their rules. Funding is at the heart of most agricultural policy debates. For most conservation programs, the Farm Bill only authorizes

the programs and sets their basic framework. The annual appropriation process determines the amount of funding and the regulatory process designs regulations that administer the programs.

### Agricultural conservation programs

Federal outlays to support conservation and environmental programs have risen steadily and by FY 2007 represents close to \$5 billion annually. Programs include those devoted to cropland retirement, working lands programs, farmland preservation and technical assistance. Budgets devoted to each of these program areas expanded with the 2002 Farm Bill. However, the land retirement programs, while remaining the largest program area, expanded less than the other programs in percentage terms.

The bulk of the overall budget is devoted to programs that pay for land retirement—led by the Conservation Reserve Program (CRP)—and those that support selected practices on working lands, such as the Environmental Quality Incentives Program (EQIP). These two types of programs may achieve similar environmental goals and certain impacts, but they differ significantly in their impact on commodity production and prices. In the case of land retirement, agricultural commodity production is eliminated (and the price of the commodity may rise) to achieve targeted environmental outcomes.

Alternatively, supporting environmentally approved practices on working lands may increase, decrease

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\*This AIC Farm Bill brief is one of a series that provides information on the 2007 Farm Bill of particular relevance for California. For more information and references to additional analysis please check [www.aic.ucdavis.edu](http://www.aic.ucdavis.edu).

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or leave yields unchanged. Funding of land retirement programs decreases agricultural output, whereas spending on working land programs may increase commodity production.

### *Land Retirement Programs*

The CRP is by far the largest of the conservation and environment programs with outlays of nearly \$2 billion per year since its inception in 1985. Furthermore, the CRP is an entitlement program that guarantees whatever funds are necessary to meet program enrollment requirements. Unlike other conservation programs that are the responsibility of the USDA Undersecretary for Natural Resources and the Environment, the CRP is administered by the Farm Service Agency of USDA, the unit that operates commodity programs. This organizational arrangement reinforces the point that the CRP was originally conceived as an effort to limit crop output and thereby raise prices, especially for grains.

The CRP makes annual rental payments to land owners to idle about 35 million acres of cropland, on (mostly) 10 year contracts that specify the land must be held in conserving uses. Owners of cropland bid a minimum rental rate they are willing to accept, and program administrators attempt to achieve the highest environmental benefit from the limited program budget subject to other program constraints. One important limit is that no more than 25 percent of the cropland in any county is allowed to enroll in the CRP, ensuring that agricultural production is maintained in local economies.

The index of environmental benefits from the CRP, used to evaluate land under the CRP, has been improved and refined over the 22-year history of the program and environmental index scores of cropland bidding to be enrolled in the program now reflect such indicators as likely effects on water quality and habitat preservation as well as soil erosion. Although it remains difficult to quantify the environmental benefits from the CRP and balance those against program outlays, analysts point to a number of environmental benefits ascribed to the program. Particularly important are elements of the index crediting reduced soil erosion and increased wildlife

habitat. Similar to the CRP, the Wetlands Reserve Program enrolls about 2 million acres of cropland in long-term land retirement using a bid system combined with an index of environmental benefits.

In California, land retirement programs are of minor importance. California landowners enrolled only about 138 thousand acres in the Conservation Reserve Program. California represents only 0.4 percent of the national CRP acreage and the CRP represents only 1.25 percent of cropland within California, compared to about 8 percent of the cropland nationally. The CRP originally focused on soil erosion, which is less of an issue for most of California cropland. In addition, land values in California are relatively high, so cost per acre of land retirement is also high, especially for irrigated cropland, which makes up the largest share of cropland in California. Despite the high cost of land retirement per acre, California makes up only 0.25 percent of national CRP outlays, indicating that only very low-value land in California has been enrolled in the program.

### *Working-Land Programs*

Working-Land Programs encourage environmental improvements while land remains in productive agricultural use. Not only do these programs require land to remain in production, they may stimulate additional farm production by helping cover the costs of complying with environmental regulations that farmers must meet, even if the subsidy was not in place. The programs also help fund some production-enhancing investments that farmers may have made and paid for anyway and provide payments to farmers based on practices that they were already using before the subsidy was available. In all these ways, the Working Land Programs have the potential to increase output and thereby drive down farm prices for the more heavily supported commodities. This may raise concerns among producers, especially those who have not qualified for the benefits. It may also raise questions, but perhaps not actual challenges, in the context of World Trade Organization commitments, unless funding for these programs were raised substantially.

The largest Working-Land Program is the Environmental Quality Incentives Program (EQIP),

for which outlays have grown to more than \$1 billion per year. The EQIP provides technical assistance and cost-share funds for farms that undertake approved projects providing environmental benefits. Unlike cropland retirement programs, more than 50 percent of EQIP funds are directed towards livestock enterprises, with an emphasis on meeting water quality requirements under the Federal Clean Water Act. The EQIP program has been oversubscribed, given its budget, and projects are funded only if they score well in terms of their expected environmental benefits per dollar of outlay. Assessing the environmental benefits across a wide range of projects related to many disparate environmental goals in different parts of the country is extremely difficult. The task of maximizing benefits with the limited budget was made more difficult by a restriction in the 2002 Farm Bill that eliminated the option for farmers to increase the likelihood of their project being funded by indicating a willingness to accept lower cost share percentages. Table 1 shows that about 6.5 percent of EQIP funds were directed to California projects, well below the more than 12 percent share of national farm output, but more than California's tiny share of CRP funding.

The Conservation Security Program (CSP) provides payments to qualifying producers who use approved farming practices. The CSP was new with the 2002 Farm Bill but was slow to implement and fund. It has been funded only for selected watersheds throughout the United States and even in the selected regions (due to budget constraints), only a limited number of applicants have been allowed to enroll. The CSP makes payments to farms that use practices that are deemed environmentally friendly, but does not require new practices and thus may not provide a direct incentive for environmental improvement on the farms receiving payments. The hope is that other farms will change their practices so that they may become eligible for CSP payments in the future. California has received only about \$4 million annually or about 4 percent of the national CSP total. So far, funding limits have meant this program has had small impacts on the environment and farm revenues.

### *Farmland protection*

Most farmland protection effects are undertaken by state and local entities and private organization that appreciate the positive economic, aesthetic and environmental benefits provided by working farms in local areas. Federal funding for such programs has been relatively small (an average of only \$3.2 million in recent years) and in California the imprint of the federal farmland protection funding has been minor compared to efforts of local easement programs, zoning efforts and real estate tax benefits (for example, under the Williamson Act). California has many thousands of acres of farmland near the urban fringe vulnerable to conversion. Furthermore, the difference between the offer price for conversion and the value of land in farming is often \$100,000 per acre or more. Even if federal funding was raised several fold, say to \$20 million for California alone, it would only cover the differential for easement to maintain 200 acres in farming. The federal program can only be a small part of an overall strategy for slowing farmland conversion.

### **Consequences of Expanding and Revising Conservation Programs**

As the 2007 Farm Bill discussions have proceeded, all indications are that conservation funding will expand and that some program adjustments are likely. For California, the most significant impacts will be for expansion of working lands programs simply because subsidized land idling is unlikely to play a major role.

The effect of increased funding on environmental outcomes (such as nitrogen and phosphorus concentration in surface water bodies, or wildlife population size and diversity) is extremely difficult to measure. As a result, the environmental efficiency of the programs is also difficult to document. Given the complexity of scientific and technical relationships, environmental programs are expensive to administer and, when operated through a grants process, are difficult and expensive for farmers who wish to enroll. One of the major issues has been that even qualified farmers who devote considerable time and resources to applying for program benefits have often failed to receive benefits simply because of limited program funds.

Many proposals for improving the operation of conservation programs call for a simplified and streamlined version of the existing programs. The consolidation of programs may reduce complexity for growers and reduce program overlap. For example, the American Farmland Trust proposes “a simple, unified application for any conservation program.” In practice, however, the processes that determine the impact of efforts on the environment remain complex, costly to monitor and highly variable across climates, soils, crops, and practices. This is particularly true in California given the great diversity of agriculture here.

## Concluding Remarks

Expansion of conservation programs in the 2007 Farm Bill has been widely accepted. Such expansion would continue the separate treatment of agriculture relative to other industries that have faced regulation and penalty for negative environmental effects rather than rewards for positive environmental practices. In California, agriculture has faced a stronger regulatory approach in state and local environmental relationships than agriculture in other states. In that sense, federal support may ease the financial burden of state and local regulations and may be particularly welcome.

**Table I. Federal Conservation Program Outlays, U.S. and California, not including technical assistance (2003-2006\* averages)**

Program	U.S.	California	Share of California
	<i>\$millions</i>		<i>Percent</i>
Conservation Reserve Program (CRP) <sup>a</sup>	1,795.3	4.6	0.3
Environmental Quality Incentives Program (EQIP) <sup>b</sup>	885.0	57.7	6.5
Conservation Security Program (CSP) <sup>c</sup>	97.7	3.7	3.7
Wildlife Habitat Incentives Program (WHIP) <sup>b</sup>	29.1	1.2	4.0
Wetland Reserve Program (WRP) <sup>b</sup>	249.3	14.8	5.9
Farm and Ranch Land Protection Program (FRPP) <sup>b</sup>	84.5	3.2	3.8
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Value of Agricultural Production (\$millions) <sup>c</sup>	275,446	33,789	12.3
Agricultural Land (millions of acres) <sup>d</sup>	1,028	32	3.1
- Cropland	442	11	2.4
- Grassland	587	21	3.7
Population (millions) <sup>e</sup>	299	36	12.2

Notes: \*Year 2006 data are estimates.

<sup>a</sup> Average annual outlays for 2003-2006 (not including technical assistance outlays). *Source:* Authors' calculations from Farm Service Agency USDA data, [www.fsa.usda.gov](http://www.fsa.usda.gov).

<sup>b</sup> Average annual allocations for 2003-2006. *Source:* Author's calculations from Natural Resource Conservation Service, USDA data, [www.nrcs.usda.gov](http://www.nrcs.usda.gov).

<sup>c</sup> Estimate for fiscal year 2006. *Source:* Fact Sheets, Economic Research Service USDA, [www.ers.usda.gov](http://www.ers.usda.gov).

<sup>d</sup> Estimate for 2002. *Source:* ERS, USDA

<sup>e</sup> Average annual eligible applications for 2005-2006. *Source:* Author's calculations from Natural Resource Conservation Service, USDA data, [www.nrcs.usda.gov](http://www.nrcs.usda.gov).

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