

# Wind Erosion and Air Quality Issues Addressed in the 2002 Farm Bill

The USDA's Natural Resources Conservation Service (NRCS) cites the Farm Security and Rural Investment Act (2002 Farm Bill) as "landmark legislation for conservation funding and for focusing on environmental issues," and as one that "represents the single most significant commitment of resources toward conservation on private lands in the Nation's history" (ERS, 2002; NRCS, 2002b). It increases funding for almost every existing agri-environmental program by 80% to a projected 10-year total of \$38.6 billion. Whereas past conservation funding was skewed with over 85% directed toward land retirement, more than 60% of the \$17.1 billion increase authorized in the 2002 Farm Bill will be for support of improved conserva-

tion and environmental management on working lands.

The legislation responds to a range of high priority environmental and production issues facing farmers and ranchers involving soil erosion, wetlands, wildlife habitat and farmland protection by providing benefits in the form of cost-share, land rental, incentive payments and technical assistance. The 2002 Farm Bill recognizes the unique challenges facing farmers and ranchers who are just beginning their agricultural operations, and those with limited financial resources. Moreover, there is increased emphasis on equity in accessing USDA programs and provisions for voluntary participation and improved services.

To help meet the challenges of farming on the Columbia Plateau and Basin, producers are encouraged to give specific attention to three conservation programs in the 2002 Farm Bill that offer financial and technical assistance for controlling wind erosion on farmlands and improving regional air quality. These are the Conservation Reserve Program (CRP), Environmental Quality Incentives Program (EQIP), and the Conservation Security Program (CSP). All are voluntary programs meaning that the growers themselves must pursue involvement and participation because the programs will not come to them in any other way. EQIP and CSP are administered through the local offices of the NRCS and the CRP by the USDA's Farm Service Agency. Details of these programs follow and are summarized in Table 8.1.

**Table 8.1. Conservation provisions overview of Conservation Reserve Program (CRP), Environmental Quality Incentives Program (EQIP), and Conservation Security Program (CSP) in the 2002 Farm Bill<sup>1</sup>.**

Program	Summary highlights
<b>CRP</b>	<ul style="list-style-type: none"> <li>• Reauthorizes program through 2007.</li> <li>• Raises enrollment cap to 39.2 million acres.</li> <li>• Allows land owners to continue with existing ground cover where practical and consistent with wildlife benefits of CRP.</li> <li>• Provides for managed haying, grazing and construction of wind turbines on CRP lands.</li> </ul>
<b>EQIP</b>	<ul style="list-style-type: none"> <li>• Reauthorizes program through 2007 with greater funding.</li> <li>• Eliminates geographic priority areas.</li> <li>• Prohibits process of bidding-down.</li> <li>• Allows cost share for beginning and limited resource farmers.</li> <li>• Includes opportunities for innovation grants.</li> <li>• Specifies contract length from one year after installation of the last practice to 10 years.</li> </ul>
<b>CSP</b>	<ul style="list-style-type: none"> <li>• Establishes program for 2003-07 to assist with implementing conservation practices and to reward stewardship on working lands.</li> <li>• Defines eligible lands to include private agricultural, certain tribal, and forested that is part of the agricultural operation.</li> <li>• Establishes three tiers of participation with corresponding levels of participation.</li> </ul>

<sup>1</sup>Source: NRCS (2002c).

### CONSERVATION RESERVE PROGRAM (CRP)

The 2002 Farm Bill reauthorizes the CRP through 2007 and raises the enrollment nationwide from 36.4 million acres to a cap of 39.2 million acres. It allows landowners to continue with existing ground cover where practicable and consistent with wildlife benefits of CRP on environmentally sensitive land. Provisions allow producers to enroll entire fields through the continuous CRP as buffers in cases where more than 50% of the field is eligible for enrollment and the remainder of the field is not feasible to farm. The modification restricts payments on the remaining acreage to general sign-up rates. The new rules also provide for managed haying (including for biomass), grazing, and construction of wind turbines on CRP lands (NRCS, 2002a, b).

## ENVIRONMENTAL QUALITY INCENTIVES PROGRAM (EQIP)

EQIP is a conservation practice-driven program. It was reauthorized in the 2002 Farm Bill through 2007 with increased funding to provide a voluntary conservation program for farmers and ranchers that promotes agricultural production and environmental protection as compatible national goals (NRCS, 2002b, c, d, e). The program offers technical assistance, cost-sharing, and incentive payments to assist eligible participants with installing conservation and environmental improvements on their farms. In particular, improving air quality is a new purpose of the reauthorized Act.

The EQIP Final Rule of 30 May 2003 establishes four National Priorities and Measures (NRCS, 2002f). Two of these are:

1. Reduction of emissions, such as PM, NO<sub>x</sub>,....that contribute to air quality impairment violations of National Ambient Air Quality Standards (NAAQS); and
2. Reduction in soil erosion and sedimentation from unacceptably high rates on agricultural land.

Both of these priorities fall within the primary objectives of the CP<sub>3</sub> on Columbia Plateau farmlands.

EQIP is implemented through a plan of operations developed in conjunction with the grower that identifies the appropriate conservation practice to address the resource issue or concern. According to the Summary of Proposed Rule, the national priorities and measures will be used at the national level as guidance in the allocation of funds decisions. These will give primary attention to the significance of the environmental and natural resource concerns and the opportunity for environmental enhancement along with consideration of the conservation needs of growers in complying with the conservation provisions of highly erodible lands. At the state and local levels, factors that weigh in the decision of allocation of financial resources are the nature and extent of natural resource concerns, the availability of existing programs to assist with activities related to the priority natural resource concerns, and the degree of difficulty that growers face in complying with environmental laws (in this case the Clean Air Act Amend-

ments of 1990) (NRCS, 2002b).

All work and practices are subject to NRCS standards and specifications adapted to local conditions. In this regard, producers have the option to receive technical assistance from NRCS or certified technical service providers (the latter a new feature in the 2002 Farm Bill).

EQIP may cost-share up to a maximum of 75% of the costs of certain conservation practices; however limited-resource, and beginning producers may be eligible for up to 90% cost-share. Incentive payments may be provided for up to three years to reduce the financial risks to a grower in switching to a form of conservation management that they otherwise would not use. The minimum length of an EQIP contract has been reduced to one year *after* the implementation of all practices. The maximum length remains the same at 10 years.

A new feature of EQIP starting in 2003 and applicable through 2006 is the Conservation Innovation Grants. These are competitive grant awards to stimulate innovative approaches to environmental enhancement and protection in conjunction with agricultural production, and accelerate technology transfer (NRCS, 2002d, e). EQIP funds are available to state and local governmental agencies (excluding Federal) and non-governmental organizations and award amounts may not exceed 50% of the total cost of a project.

## CONSERVATION SECURITY PROGRAM (CSP)

The CSP in the 2002 Farm Bill is a new program, and like EQIP, has specific language that addresses air quality improvement goals (ERS, 2002; NRCS, 2002b, c; The Minnesota Project, 2002). At this writing, the proposed rules and regulations are soon to be published in the Federal Register after which they will be open for at least 30 days to the public for review and comment. After public review, the USDA will publish the final review and regulations that will govern how the program is put into practice. The program will be available to producers in the 2004 crop year.

The CSP aims to "assist producers of agricultural operations in promoting...conservation and improvement of the quality of soil, water, air, energy,

plant and animal life, and any other conservation purposes, as determined by the Secretary" (Agriculture). It is a resource-driven program that offers financial rewards for ongoing stewardship on working lands and strives to assist producers to increase their level of conservation treatment by maintaining existing conservation practices and installing additional control measures.

Any producer who develops and obtains approval by the NRCS of a conservation security plan may participate. All private agricultural land is eligible for a conservation security plan except land already in a government program (e.g., CRP) where a modification of the plan would be required. It also excludes land that is sodbusted, i.e., converted to crops after enactment of the Farm Bill that had not been planted or considered planted in four of the last six years. Resource concerns for which conservation practices may be implemented under a Conservation Security Contract include the following six out of a total of 18 listed that are of high priority, and that are within the realm of wind erosion and air quality control.

1. Water conservation management and quality, including irrigation.
2. Soil conservation, quality, and residue management.
3. Air quality management.
4. Cover cropping.
5. Resource-conserving crop rotation.<sup>1</sup>
6. Conversions of portions of cropland from soil depleting to soil conserving use.

All contract practices must be at a level that satisfies the appropriate non-degradation standards for the resource of concern. Other conservation practices may be approved if the Secretary determines them to be appropriate and comparable to those listed.

The CSP establishes three tier levels of conservation contracts in which a producer may receive payments for land management, vegetative and structural practices that address one or more resource concerns. The NRCS decides the minimum requirements for each tier level. The CSP provides annual payments to participating producers based on the following three items.

1. **Base payment:** This payment is the average national per acre rental rate for a specific land use during the 2001 crop year or another

<sup>1</sup>Resource conserving crop rotation means a crop rotation that 1) includes at least one resource conserving crop (as defined by the Secretary), 2) reduces soil erosion, 3) improves soil fertility and tilth, 4) interrupts pest cycles, and 5) in applicable areas reduces depletion of soil moisture (or reduces the need for irrigation).

appropriate rate for the 2001 crop year designated by the USDA that ensures regional equity.

2. **Cost share for practices:** The CSP covers 75% (90% in the case of a beginning producer) of the costs for 1) adoption of new management, vegetative, and land-based structural practices, 2) maintenance of approved existing land management and vegetative practices, and 3) maintenance of approved existing land-based structural practices that are not already covered by a Federal or State maintenance requirement.
3. **Enhanced payment:** This is a bonus payment a producer may receive if the conservation security plan achieves any of the following: 1) implements and maintains multiple conservation practices that exceed minimum requirements, e.g., one that involves a change in land use such as resource-conserving crop rotations; 2) addresses local conservation priorities in addition to the required resource-of concern for the operation; 3) participates in on-farm conservation research, demonstration, or a pilot project; 4) participates in a regional conservation plan involving 75% of producers in a targeted area; and 5) conducts assessment and evaluation activities relating to the practices covered in the conservation security plan.

The three tier levels of participation are:

**Tier I:** The plan may involve partial farm enrollment with a 5-yr contract renewable for 5 to 10 years, but only with expansion of the plan to cover additional practices on enrolled land, or to enroll new practices on new land. Renewals must meet non-degradation standards<sup>2</sup>. The plan must address one significant resource concern for the enrolled portion of the agricultural operation. The base payment is capped at 5% of the rental rate and the total may not exceed 25% of the tier maximum payment, or \$5,000. The maximum annual payment is \$20,000.

**Tier II:** The plan must cover the entire farm with a 5 to 10 year contract, renewable for up to 10 years. It must meet non-degradation standards for at least one significant resource concern and cover active management

of the conservation practices that are implemented and maintained. The base payment is 10% of the rental rate and may not exceed 30% of the tier limit, or \$10,500. The maximum annual payment is \$35,000.

**Tier III:** The plan must cover the entire farm with a 5 to 10 year contract, renewable for up to 10 years. The producer must apply a Resource Management System that meets appropriate non-degradation standards for all resource concerns on the entire agricultural operation, including active management of the practices implemented and maintained. The base payment is 15% of the rental rate and may not exceed 30% of the tier limit, or \$13,500. The maximum annual payment is \$45,000.

The CSP is not a competitive program and does not require bidding or any similar procedure for enrollment. The only requirement for enrollment is approval of the conservation security plan by the NRCS. The NRCS will provide technical assistance to producers for the development and implementation of conservation security contracts using an amount not to exceed 15% of the total amount expended for the fiscal year. Conservation security contract payments for practices on land that is enrolled in CRP may also be received provided that the producer exceeds the minimum requirements for the CRP program.

Producers participating in the on-farm research project of the CP<sub>3</sub> are potentially eligible for payment under a conservation security contract. During its life of five years the work has produced significant contributions and outcomes in enhancing conservation farming in the drylands primarily due to the active involvement and innovations of the growers and their close collaboration with University and Extension personnel. The CSP appears to hold promise as an additional incentive for strengthening this field conservation research approach to address resource concerns in a natural setting on agricultural working lands.

## SUMMARY OBSERVATIONS

The Farm Security and Rural Investment Act (2002 Farm Bill) is heralded as landmark legislation for conservation funding and for increasing the

size and scope of agri-environmental programs. While it continues to support and expand programs that retire environmentally sensitive lands from crop production the new Act shifts considerably more emphasis towards conservation and stewardship on working lands to ensure that these remain both healthy and productive. In this regard, while funding for conservation and environmental management on land in production received less than 15% of Federal conservation expenditures over the past 15 years they account for more than 60% of the \$17.1 billion increase in conservation spending in the 2002 Farm Bill.

Three programs in the 2002 Farm Bill address environmental and production goals for growers on farmlands where wind erosion and air quality control are major concerns. These are the Conservation Reserve Program (CRP), Environmental Quality Incentives Program (EQIP), and the Conservation Security Program (CSP).

The CRP builds on past conservation gains and provides annual payments and cost-sharing to establish long-term perennial cover to protect environmentally sensitive farmlands. The national acreage cap for the program was increased from 36.4 to 39.2 million acres.

EQIP is a voluntary conservation program that provides technical and financial assistance to crop and livestock producers for installing and implementing structural and management conservation practices on eligible agricultural lands.

The CSP is designed to further expand the objectives and role of agri-environmental policy. It is a new voluntary conservation program that provides financial and technical assistance to growers for maintaining or adopting a range of structural and land management practices for addressing either or both local and national resource concerns. The program will be available to producers in the 2004 crop year. Growers on the Columbia Plateau where wind erosion and air quality control are primary concerns are urged to contact NRCS field offices for further details of these programs in meeting conservation needs specific for their farms.

<sup>2</sup>The term non-degradation standard means the level of measures required to adequately protect, and prevent degradation of one or more natural resources as determined by the Secretary in accordance with the quality criteria described in the Field Office Technical Guide of the Natural Resources Conservation Service.

## CHAPTER 8

### REFERENCES

1. ERS. 2002. ERS analysis conservation programs. Economic Research Service, US Dept. of Agriculture, Washington, DC. Web site <http://www.ers.usda.gov/Features/farmbill/analysis/conservationoverview.htm> (viewed April 2003).
2. NRCS. 2002a. Farm Bill 2002. Section 2101. Conservation Reserve Program. Natural Resources Conservation Service, US Dept. of Agriculture, Washington, DC. Web site <http://www.nrcs.usda.gov/about/legislative/pdf/SectionbySection5-7.pdf> (viewed April 2003).
3. NRCS. 2002b. Farm Bill 2002. Summary of NRCS conservation programs. Natural Resources Conservation Service, US Dept. of Agriculture, Washington, DC. Web site <http://www.usda.gov/farmbill> (viewed April, 2003).
4. NRCS. 2002c. Farm Bill 2002. Conservation provisions overview. Natural Resources Conservation Service, US Dept. of Agriculture, Washington, DC. Web site <http://www.usda.gov/farmbill> (viewed April 2003).
5. NRCS. 2002d. Farm Bill 2002. Environmental Quality Incentives Program. Natural Resources Conservation Service, US Dept. of Agriculture, Washington, DC. Web site <http://www.usda.gov/farmbill> (viewed April 2003).
6. NRCS. 2002e. Environmental Quality Incentives Program. Natural Resources Conservation Service, US Dept. of Agriculture, Washington DC. Web site <http://www.nrcs.usda.gov/programs/equip/> (viewed April 2003).
7. NRCS. 2002f. Environmental Quality Incentives Program, Summary of Proposed Rule, 29 January 2003. Natural Resources Conservation Service, US Dept. of Agriculture, Washington, DC. Web site <http://www.nrcs.usda.gov/programs/farmbill/2002/> (viewed April 2003).
8. The Minnesota Project. 2002. The Conservation Security Program in the 2002 Farm Bill. The Minnesota Project, St. Paul, MN Web site [http://www.mnproject.org/csp/id70\\_m.htm](http://www.mnproject.org/csp/id70_m.htm) (viewed April, 2003).