

An hourglass-shaped graphic with a globe inside. The top bulb is dark blue, and the bottom bulb is light blue. The globe is centered in the narrow neck of the hourglass. The top bulb has a dark blue cap. The bottom bulb has a light blue cap.

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*Green Payments in U.S. and European Union Agricultural
Policy*

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November 22, 2005

Abstract. Congressional interest in green payments today is driven by pressure from international trade negotiations and the anticipated development of the next farm bill, which will likely contain the U.S. policy responses to the results of these negotiations. These negotiations create considerable uncertainty over future farm program options, and green payments, in some fashion, are widely viewed as an option that could be designed so as to satisfy both international obligations and domestic agriculture constituencies. Differences between the United States and the EU in how green payments have been defined and translated into policy and programs may make consideration of EU agri-environmental policy as a model or source of ideas problematic. This report compares current U.S. and EU efforts in the area of green payments.

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Green Payments in U.S. and European Union Agricultural Policy

Updated November 22, 2005

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Green Payments in U.S. and European Union Agricultural Policy

Summary

Green payments are generally defined as payments made to agricultural producers as compensation for environmental benefits that accrue at levels beyond what producers might otherwise achieve under existing market and regulatory conditions. They may support both environmental and farm income objectives.

Modern U.S. agri-environmental programs began in 1985 by paying farmers to retire land and limiting conversion of wetlands and highly erodible land to cultivation, thereby reducing negative environmental effects associated with production agriculture. These initial programs focused on a single agricultural benefit, limiting erosion. Since then, these programs have proliferated in number and overall funding, and now pay farmers to provide additional conservation benefits either while maintaining agricultural production on working lands, or by retiring land from production. These environmental benefits include stemming wetland loss and wildlife habitat deterioration, protecting farmland from conversion to other uses, and improving water and air quality. The Conservation Security Program (CSP), enacted in the 2002 farm bill (P.L. 107-171) is the most recent step in the evolution of U.S. agri-environmental policy. CSP pays producers to capture environmental benefits across their entire agricultural operation, while producing commodities. It has been characterized by some as the most comprehensive U.S. “green payments” program.

General environmental policy in the European Union (EU) deals with negative externalities from water pollution, nitrates, and pesticides, among other issues, and also affects agricultural production. EU farm policy since 1985, however, has included payments to farmers to compensate for costs incurred or income forgone from undertaking agri-environmental measures that meet farm policy and rural development objectives. Such measures include, *inter alia*, reducing use of fertilizer and chemical inputs, adopting organic production methods, maintaining countryside and landscape, or managing land for leisure activities or public access. Successive reforms of the EU’s Common Agricultural Policy (CAP) have placed greater emphasis on such green payments — and increased funding for them — as agri-environmental measures have been integrated into a broad rural development policy.

Congressional interest in green payments today is driven by pressure from international trade negotiations and the anticipated development of the next farm bill, which will likely contain the U.S. policy responses to the results of these negotiations. These negotiations create considerable uncertainty over future farm program options, and green payments, in some fashion, are widely viewed as an option that could be designed so as to satisfy both international obligations and domestic agriculture constituencies. Differences between the United States and the EU in how green payments have been defined and translated into policy and programs may make consideration of EU agri-environmental policy as a model or source of ideas problematic. This report, which compares current U.S. and EU efforts in the area of green payments, will be updated.

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Green Payments in U.S. and European Union Agricultural Policy

What Are Green Payments?

Green payments generally are defined as payments to agricultural producers for providing environmental services *on working farms*. They are designed to encourage producers to provide more environmental services than they might otherwise provide in the absence of the payments,¹ and they are not connected to a producer's level of production.

In the United States, the term "green payments" refers to agricultural programs with primarily environmental goals. Although all U.S. "green payments" programs focus on the environment, the types of payments range from cost-sharing for specific conservation practices to incentives for whole-farm management of environmental resources and rewards for "good actors" for past environmental stewardship. This discussion will review U.S. green payments within the context of modern U.S. agri-environmental policy, which is evolving from programs focusing primarily on land retirement to programs encouraging sound environmental management on working farms.

The European Union (EU) views green payments more broadly than does the United States, using them to achieve socioeconomic and rural development goals as well as environmental goals. The EU makes agri-environmental (green) payments to farmers within the framework of its rural development policy, which encompasses not only environmental activities but also investments to modernize farms, programs to help young farmers get established or promote early retirement, assistance with processing and marketing farm products, and programs to promote the non-farm rural economy such as agri-tourism or preservation of cultural heritage. This discussion of EU green payments will focus primarily on agri-environmental measures that compensate farmers who take measures to enhance the environmental benefits from farming, but not other aspects of the EU's rural development policy.

The following review of green payments and agri-environmental policy in the United States and the European Union shows that they have become an important aspect of agricultural policy (although green payments are only one tool of agri-environmental programs).² Forces at work in the global economy could tend to

¹ Sandra S. Batie and Richard E. Horan, "Green Payments Policy," at [http://www.aec.msu.edu/agecon/smith_endowment/documents/outlaw4.pdf], visited May 27, 2004.

² Other methods used in agri-environmental programs to encourage producers to adopt sound environmental practices include regulating pesticide use, targeting program funds to areas of particular environmental need, and setting standards for environmental performance as
(continued...)

increase the role of green payments as a component of agricultural support. For example, in multilateral agricultural trade negotiations, pressures are mounting to curtail trade- and production-distorting support for domestic agriculture.³ Green payments are thought by many to be less trade- and production-distorting than other forms of domestic support for agriculture.⁴ In the future, U.S. producers and policymakers may focus more attention on the role of green payment programs in agricultural policy as a vehicle for supporting agriculture and rural areas that would be less susceptible to cuts resulting from multilateral trade negotiations.

U.S. Agri-Environmental Policy

The United States has implemented agri-environmental policies since the 1930s, when the Dust Bowl spurred Congress to enact laws providing financial, technical, and educational assistance to farmers to encourage the adoption of soil conservation practices. All assistance is provided to voluntary participants, as is designed to benefit individual farms. Today, the United States employs two main types of agri-environmental policy tools: mandatory cross-compliance mechanisms for those producers who receive federal farm program benefits and voluntary incentives. Voluntary incentives have been dominant in U.S. agri-environmental policy, and are viewed by most agriculture interests as being central to efforts to improve the environmental performance of producers. The few regulatory federal laws affecting agriculture include the use of restrictions and bans on certain pesticides, but these have been fairly limited in number and are not a topic of this report.⁵

² (...continued)

a requirement for certain agricultural payments. Economic Research Service, *Agri-Environmental Policy at the Crossroads*, ERS Rept. No. 794, 2001, p. 7.

³ CRS Report RL33144, *WTO Doha Round: Agricultural Negotiating Proposals*, by Charles Hanrahan and Randy Schnepf, discusses the status of proposals in multilateral trade negotiations to reduce trade-distorting domestic support to agriculture.

⁴ The World Trade Organization's Uruguay Round Agreement on Agriculture (1994) exempts from reduction commitments payments under environmental programs that meet the following conditions: (a) eligibility for such payments shall be determined as part of a clearly defined government environmental or conservation program and be dependent on the fulfillment of specific conditions under the government program, including conditions related to production methods or inputs; and (b) the amount of payment shall be limited to the extra costs or loss of income involved in complying with the government program.

⁵ Roger Claassen et al., *Agri-Environmental Policy at the Crossroads: Guideposts on a Changing Landscape*, Agricultural Economic Report Number 794, Economic Research Service, January 2001, Appendix 1. Major federal programs include mandates for states to deal with agricultural nonpoint pollution, under the Coastal Zone Act Reauthorization Amendments of 1990; prohibitions against taking a member of a threatened or endangered species, under the Endangered Species Act of 1973; regulation of pesticides under the Federal Insecticide, Fungicide, and Rodenticide Act of 1947; and regulation of concentrated animal feeding operations under the Federal Water Pollution Control Act Amendments (also known as the Clean Water Act) .

Cross-Compliance Mechanisms

In general, U.S. agri-environmental programs include few compulsory environmental requirements when compared to EU programs. U.S. cross-compliance programs aim to discourage farmers from converting wetlands into farmland and from farming highly erodible land (unless the land is protected by implementing an approved conservation plan from excessive soil erosion). A producer must comply with these programs to receive federal commodity price and income support, to participate in federal voluntary conservation programs, and to be eligible for federal agriculture loans or loan-related guarantees and other agriculture-related federal benefits.⁶ Farmers who do not comply may still farm, but are ineligible for these substantial government benefits. It is estimated that about 50% of the country's 2 million farmers currently receive federal farm program benefits; those who do not receive these benefits are not affected by cross compliance, as currently designed.

U.S. cross-compliance mechanisms, first enacted in the Food Security Act of 1985 (P.L. 99-198), include Highly Erodible Land Conservation (also known as "Conservation Compliance" and "Sodbuster") and Wetland Conservation (called "Swampbuster").⁷ Land is defined by the Natural Resources Conservation Service as "highly erodible" when it may erode at (or at more than) eight times the "soil loss tolerance level" (this is the rate at which soil can erode without losing its productivity over time). Much of this highly erodible land is located in the Great Plains states.

Conservation Compliance. Under this program, farmers producing agricultural commodities on highly erodible land that was cropped from 1981 to 1985 must implement an approved conservation plan. The plan must provide for a 75% reduction in erosion as compared to the land's previous erosion rates. Almost all affected producers are currently considered to be in compliance.

Sodbuster. Under this program, producers who plow erosion-prone grasslands (that were not cropped from 1981 to 1985) must implement a conservation plan that holds erosion to no more than the soil loss tolerance level.

Swampbuster. Under this program, producers converting a wetland area to cropland may lose eligibility for several federal farm program benefits, although there are many exceptions in statute (such as wetland conversions that have little effect on wetland functions).⁸

⁶ Economic Research Service, *Agricultural Resources and Environmental Indicators*, Chapter 6.3, p. 1, at [http://www.ers.usda.gov/publications/arei/ah722/arei6_3/AREI6_3compliance.pdf], visited September 8, 2004.

⁷ Food Security Act of 1985, PL 99-198, 99 Stat. 1504, as amended, Subtitles B and C.

⁸ Program descriptions modified from CRS Report 97-905, *Agriculture: A Glossary of Terms, Programs, and Laws, 2005 Edition*, by Jasper Womach.

Voluntary Agri-Environmental Programs

The majority of U.S. agri-environmental programs are voluntary in nature and are funded by mandatory spending through the Commodity Credit Corporation (CCC). They are known as either “farm bill” programs or “Title II programs” because they are authorized by the farm bill, a multi-year act authorizing federal commodity, farm support, and agricultural conservation programs, as well as other farm sector-related provisions, and these provisions were in Title II of the most recent farm bill.⁹ U.S. voluntary agri-environmental programs have evolved from emphasizing land retirement to encouraging the adoption of best management practices on working farmland. The following paragraphs describe selected and larger U.S. voluntary agri-environmental programs in the order they were enacted. **Table 1**, below after these short descriptions, conveys some sense of the scale of each program. For additional basic information on these and the numerous other smaller conservation programs, see CRS Report RL32940, *Agriculture Conservation Programs: A Scorecard*, by Jeffrey Zinn and Tadlock Cowan, and for additional information on the history of funding for these programs, see CRS Report RS22243, *Mandatory Funding for Agriculture Conservation Programs*, by Jeffrey Zinn.

Land Retirement Programs. These programs involve retiring land from crop production under the terms and conditions of the program contract in exchange for annual payments. They are precursors to “green payments” programs in that they are the first modern voluntary agricultural programs to base eligibility, in part or in whole, on an ability to provide environmental benefits.

Conservation Reserve Program (CRP) (1985). CRP, administered by the Farm Service Agency, is the largest private land retirement program, with an enrollment ceiling of 39.2 million acres, and the largest “farm bill” agri-environmental program in terms of annual spending (CBO estimates the program to cost more than \$2.0 billion annually starting in FY2005).¹⁰ Farmers may submit bids to “enroll” land in CRP for 10-15 years. The CRP’s original aim was not only to reduce soil erosion but also to protect soil productivity, control surplus production, and stabilize land prices (which were declining in the mid 1980s). CRP now has a broader environmental focus. Since 1990, FSA has evaluated bids to enroll land in CRP based on an Environmental Benefits Index (EBI) score, which reflects the impact enrollment would have on various environmental measures (ground water and

⁹ The relevant farm bills were enacted in 1985 (P.L. 99-198), 1990 (P.L. 101-624), 1996 (P.L. 104-127), and 2002 (P.L. 107-171). The 1985 law serves as the basis for modern agri-environmental policy; the other three laws amend the 1985 law.

¹⁰ CRP has its roots in the 1950s-era Soil Bank program, which had twin goals of controlling agricultural production and reducing soil erosion by idling up to 30 million acres of land producing surplus commodities.

This and subsequent program cost estimates are from the Congressional Budget Office January 2005 baseline. By way of comparison, CRP is almost twice as expensive as the next most costly FY2005 conservation program, EQIP (\$1.017 billion).

surface water quality, wind erosion, wildlife habitat, etc).¹¹ CRP also includes a number of subprograms, the most visible of which is the Conservation Reserve Enhancement Program or CREP. CREPs are developed by states who contribute additional funds so that higher payments can be offered to retire additional land in environmentally sensitive watersheds.¹²

Wetlands Reserve Program (WRP) (1990). WRP, administered by the Natural Resources Conservation Service (NRCS), provides long-term protection to agricultural wetlands by requiring participants to implement approved wetland restoration and protection plans. Most lands enrolled in WRP are flood-prone agricultural lands. Because the goal is long-term wetland restoration, most land is enrolled under a permanent easement or a 30-year easement. (Land may also be enrolled for ten years without any easement.) The 2002 farm bill set an enrollment limit of 2.275 million acres, with a goal of enrolling 250,000 acres in any given year.

Working Lands Programs. New programs for working farms were created, in part, because land retirement programs did not address many of the environmental problems stemming from ongoing agricultural production. These programs provide payments to farmers for increased environmental services on working lands (“green payments”). Below is a description of four of the largest working lands programs, all administered by NRCS. The newest of these, the Conservation Security Program, targets environmental problems on farms, while the others aim to create habitat or preserve especially valuable farmland. These programs have been very popular with farmers. While they each received substantial funding increases in the 2002 farm bill, requests to participate have continued to far outpace available funding, resulting in a large backlog.

Environmental Quality Incentives Program (EQIP) (1996). EQIP has been described as the first major U.S. “green payments” program specifically designed to pay farmers for environmental benefits while allowing continued agricultural production.¹³ It is also the second-largest agri-environmental program in terms of funding (\$1.017 billion in FY2006). EQIP provides cost-sharing and technical assistance for implementing specific conservation measures (such as installing buffer strips near streams) to remedy environmental problems on farms and may also provide incentive payments, all to encourage producers to adopt certain practices, so producers can keep lands in production rather than retiring them. NRCS distributes funds at the national level based on national environmental priorities, including reduction of nonpoint source pollution, reduction of air pollution and control of soil erosion. Each state determines how to allocate the funds it receives, based on its own environmental priorities. EQIP is the only large conservation

¹¹ Farm Service Agency, *Conservation Reserve Program: Final Environmental Impact Statement*, Chapter 3 (2003).

¹² For more information on the CRP, see CRS Report RS21613, *Conservation Reserve Program: Status and Current Issues*, by Barbara Johnson.

¹³ Karen Klonsky and Florence Jacquet, “How Well do Green Payments Fit into the Green Box?” Paper presented at the International Conference *Agricultural Policy Reform and the WTO: Where Are We Heading?*, Capri, Italy, June 23-26, 2003, accessed at [<http://www.ecostat.unical.it/2003agradeconf/>], June 16, 2004.

program targeted to livestock production, as 60% of the funds each year must be spent on practices that address associated problems, such as waste management.¹⁴

Wildlife Habitat Incentives Program (WHIP) (1996). WHIP provides cost-sharing to landowners to develop or restore wildlife habitat on their agricultural operations. In exchange, landowners voluntarily limit incompatible activities on the land. WHIP targets at-risk species, declining habitats, and conservation practices that are ineligible for other agricultural conservation program funds (e.g., fish passages). Agreements range from 5 years to 15 years or more in duration. Funding is distributed to states; each state ranks applications from landowners and sets local wildlife habitat priorities. State ranking criteria include items such as proximity to protected wildlife habitat, projected longevity of habitat created, and cost per acre.

Farm and Ranch Lands Protection Program (FRPP) (1996). FRPP helps farmers keep their land in production by providing matching funds to state, tribal, local, or non-governmental organizations that have existing farmland protection programs to purchase permanent conservation easements from willing sellers. The easements usually restrict non-farm development and subdivisions on the land, although the landowner retains the right to farm the land. The landowner must also implement a conservation plan to reduce soil erosion on any highly erodible land. NRCS state officials decide which applications to fund, and each state has an FRPP plan detailing the degree of development pressure, acreage of land to be protected, acreage of land lost, and other program indicators.

Grasslands Reserve Program (GRP) (2002). The GRP targets grasslands containing forbs¹⁵ or shrubs, especially areas that historically have been grasslands and have potential to provide habitat for animal or plant populations of significant ecological value. GRP also targets grasslands threatened with conversion to other uses. GRP offers landowners a choice of easements (lasting 30 years or permanently) or rental agreements (lasting 10 to 30 years). In exchange, landowners protect and, if necessary, restore grasslands in accordance with an NRCS restoration agreement. GRP has a total funding limit of \$254 million and a total enrollment limit of 2 million acres between FY2003 and FY2007.

Conservation Security Program (CSP) (2002). CSP rewards producers who proactively conserve environmental resources across their entire agricultural operation, and encourages them to integrate whole-farm planning. This is in contrast to EQIP, which helps producers address existing environmental problems. This contrast has caused some analysts to characterize CSP as the most comprehensive U.S. “green payments” program. The eligibility criteria for CSP reward a producer’s historic record of conservation and provide incentives to do more conservation in the future. It uses a three-tiered system that rewards increased levels of conservation on enrolled lands with increased payments. For the lowest level — protecting one natural resource on part of their operation — producers may earn up to \$20,000

¹⁴ For more information on the EQIP, see CRS Report RS22040, *Environmental Quality Incentives Program (EQIP): Status and Issues*, by Carol Canada and Jeffrey Zinn.

¹⁵ Forbs are also known as weeds or wildflowers. They provide important forage and seeds for wildlife, as well as cover and protection from predators.

annually, while for the highest level — protecting all natural resources on all of their operation — producers may earn up to \$45,000 annually.

Although CSP was designed to be a true entitlement and widely available for many types of agricultural operations, the Bush Administration is implementing the program with additional eligibility criteria designed to reward only the highest levels of conservation, and only in designated watersheds (which change from year to year). Congress has contributed to the limitations by repeatedly reprogramming funds that had been destined for CSP to other purposes such as disaster relief, according to the Congressional Budget Office. The first signup was held in FY2004, and CSP supporters see a large potential for this program if adequate funding is made available.¹⁶

Outlook for U.S. Financing of Agri-Environmental Measures

The U.S. voluntary agri-environmental programs noted above — the so-called “farm bill” programs — received dramatic increases in funding authority in the 2002 farm bill. At the time of enactment, the Congressional Budget Office (CBO) estimated the 2002 farm bill would increase overall spending for conservation and environmental programs by 80%.¹⁷ These increases have not been fully realized, however, because some of the increases authorized in the 2002 farm bill were subsequently cut in annual appropriations.¹⁸ Additional reductions can be anticipated as Congress and the Administration respond to budget pressures, including the costs of the war in Iraq and Hurricane Katrina at home, and projected deficits. For more information on the authorized amounts for these programs annually since FY2003, and reductions proposed by the administration or enacted by Congress, see CRS Report RS22243, *Mandatory Funding for Agriculture Conservation Programs*, by Jeffrey Zinn.

¹⁶ For more information on the CSP, see CRS Report RS21740, *Implementing the Conservation Security Program*, by Barbara A. Johnson.

¹⁷ Based on CBO’s April 2002 baseline. Source: Economic Research Service, [<http://www.ers.usda.gov/features/farbill/analysis/conservationoverview.htm>], accessed September 16, 2004.

¹⁸ Although changes in mandatory programs usually require changes in authorizing legislation, appropriators (who deal with discretionary funds) frequently limit mandatory funding in annual appropriations bills. This provides savings that appropriators can use to increase funding for discretionary programs. “Savings” are relative to a mandatory program’s budget score, as calculated by the Congressional Budget Office (CBO).

Table 1. Measures of Selected U.S. Agri-Environment Programs

Program	Funding	Measures of Activity
Conservation Reserve	FY2005:\$1.937 billion FY2006 (auth.):39.2 mil. acres (no dollar amount) FY2006 (est): \$2.020 billion	35.8 million acres were enrolled as of Oct. 2005. A total of 2.0 million acres were signed up during FY2004 and 468,000 acres were signed up during FY2005. In last general signup, 1.7 million acres were offered and 1.2 million acres were accepted. Includes several small, more targeted components.
Wetlands Reserve	FY2005:154,000 acres FY2006 (auth.): 250,000 acres (no dollar amount) FY2006 (est): 150,000 acres	1.63 million acres were enrolled by Jan. 2005, with permanent easements on 80% of that total. In FY2004, 3 acres were offered for every acre accepted. Includes several small, more targeted components.
Environmental Quality Incentives	FY2005: \$1.017 billion FY2006 (auth): \$1.20 billion FY2006 (est): \$1.017 billion	Participants install structural, vegetative, and land management practices. About 77% of the funds go to producers and 23% pays for technical assistance. In FY2004, only 42% of the 113,485 applications were funded because demand greatly exceeded available funding.
Wildlife Habitat Incentives	FY2005: \$47 million FY2006 (auth): \$85 million FY2006 (est): \$43 million	Through FY2004, more than 2.8 million acres had been enrolled. In FY2004, 3,012 contracts were signed affecting 432,000 acres.
Farmland Protection	FY2005: \$112 million FY2006 (auth): \$100 million FY2006 (est): \$74 million	Through FY2004, almost \$265 million had been obligated to acquire 870 easements on almost 178,000 acres in 37 states; 959 additional easements are pending on more than 209,000 acres in every state.
Grasslands Reserve	FY2005: \$128 million FY2006 (auth): \$0 FY2006 (est): \$0	All authorized funding (\$254 million) was spent by the end of FY2005, so there is no additional funding in FY2006. In FY2004, 283,000 acres were enrolled under 1,055 contracts.
Conservation Security	FY2005: \$202 million FY2006 (auth): \$331 million FY2006 (est): \$259 million	In FY2004, 2,200 producers in 18 watersheds were enrolled; in FY2005, 12,500 producers in 220 watersheds were enrolled; in FY2006, 110 watershed will be eligible.

EU Agri-Environmental Policy

In the EU, the relationship between agriculture, the environment, and development of rural areas has found expression in the concept of multifunctionality. Farmers are viewed as producing not only food and agricultural products, but also positive environmental and other benefits (externalities). Agri-environmental policy focuses mainly, but not exclusively, on promoting positive externalities associated with agricultural production. These include, among others, landscape, rural amenities, and cultural heritage. The premise underlying agri-environmental policy is that these externalities are public goods that are undervalued by the market and therefore require social or public funding to induce farmers to produce them. More broadly, the EU maintains that support of commodity production and farm incomes that also engenders these positive externalities is also justified. Critics of the concept argue that multifunctionality is intended to justify substantial income support for farmers and that support for the public goods produced by agriculture should be specifically targeted. In addition to meeting desirable social goals, EU agricultural policymakers view shifting funds from commodity support to rural development, including agri-environmental programs, as being more compatible with multilateral efforts in the World Trade Organization (WTO) to curb domestic support, while maintaining support that is not, or is at most minimally, trade-distorting.¹⁹

Since 1985, agri-environmental (green) payments as defined above have been available to EU farmers. Successive reforms of the EU's Common Agricultural Policy (CAP) in 1992, 2000, and 2003 have placed increasing emphasis on green payments to meet farm policy and social objectives. In the process, agri-environmental measures have become more integrally a part of the CAP.

General EU Environmental Policy and Agriculture

Beginning in the 1970s, the EU issued a number of directives outlining measures to deal with water pollution, nitrates, pesticides, and habitats and wild birds. Although these initiatives were important to agriculture, they were taken as part of the EU's general environmental policy, outside the framework of the CAP.

These environmental regulations, as of January 1, 2005, became the basis of so-called "statutory environmental management requirements" with which EU farmers must comply in order to be eligible for direct income support under the recently reformed CAP (discussed below). These general environmental regulations cover the following.

Water Protection. A series of directives enumerate undesirable or dangerous substances and establish standards for protecting water sources and/or safeguard water quality.²⁰

¹⁹ See Batie and Horan, cited above.

²⁰ The principal water protection directive is Council Directive 80/68/EEC, December 17, 1980, on the protection of groundwater against pollution caused by certain dangerous (continued...)

Nitrates. The nitrate directive aims to reduce water pollution caused by nitrates from agricultural sources by requiring member states to implement action programs in areas identified as being vulnerable to pollution. Among other requirements, the directive limits the application of manure to 170 kg of nitrogen per hectare.²¹

Pesticides. A number of directives, issued from 1976 to the early 1990s, aim to reduce the public health risks associated with the use of plant protection products. These directives establish and regulate maximum residue limits (MRLs) of pesticides for various products, including fruits and vegetables, cereals, and livestock products.²² Other directives deal with harmonization of various national regulations concerning conditions, arrangements, and procedures related to the classification, packaging and labeling of pesticides, and with registration and control of sales of pesticides.

Habitats and Wild Birds (The Natura Network). These directives aim to protect natural habitats of wild fauna and flora and to protect wild birds in their habitats.²³ Member states have to take the necessary measures to achieve these aims and to notify protected areas to the European Commission. Most of the designated areas are in agricultural or wooded areas created and maintained by farming or other human activity.

Agri-Environmental Programs in the CAP

Environmental objectives initially were omitted from the CAP, which was conceived primarily as a policy to support the operation of agricultural commodity markets for the benefit of farmers and consumers. However, the CAP did include an objective with respect to “structural” aspects of agriculture (e.g., farm size, farm population characteristics, farm organizations, investment in production or marketing facilities, or regional disparities), which served subsequently as a legal (and financial) framework for agri-environmental measures.

Until 1992 (see below), agri-environmental measures were financed from a separate structural fund, the Guidance Section of the European Agricultural Guarantee and Guidance Fund (EAGGF), while commodity support was financed from the Guarantee Section. Guidance funds averaged about 10% of the total funding of the CAP (around EUR 4 billion); agri-environmental programs were only a small portion of total Guidance spending. As structural measures, pre-1992 agri-

²⁰ (...continued)

substances (OJ L 20, 26.1.1980, p. 43). In this and subsequent footnotes referring to EU regulations, OJ refers to the Official Journal of the EU.

²¹ Council Directive 91/676/EEC of December 12, 1991, concerning the protection of waters against pollution caused by nitrates from agricultural sources (OJ L 375, 31.12.1991, p. 1).

²² Pesticide use on fruits and vegetables is covered by Council Directive 76/895/EE (L 340, 9.12.1976, p. 179); cereals by Council Directive 86/362/EEC (OJ L 221, 7.8.1986, p. 36); and animal products by Council Directive 86/363/EEC (OJ L 221, 7.8.86, p. 43)

²³ Council Directive 92/43/EEC (OJ L 206, 22.7.92, p. 7) and Council Directive 79/409/EEC (OJ LO 103, 2.5.1979, p. 1)

environmental programs that meet the general definition of green payments used in this memo were co-financed on a 50-50 basis by the EU and member states, although the percentage of EU financing could be larger for projects in poorer regions. These programs, which are now incorporated into the EU's rural development policy, provide compensation to farmers for undertaking specific agri-environmental measures. Among the programs are the following.

The Less Favored Area Program (LFA).²⁴ The LFA targets farmers in mountainous areas, areas threatened with abandonment, and other areas where agriculture is deemed necessary for the conservation or improvement of the environment, management of landscape, promotion of tourism, or protection of coastlines. Farmers in these areas can receive payments aimed at compensating the costs and income losses resulting from implementation of environmental or conservation measures. Member states identify the zones and implement the programs in their national territories. LFA payments were fixed at EUR 200 per hectare.

The "Efficiency" Regulations.²⁵ As indicated by their designation, these regulations were aimed at improving the efficient development of the agricultural sector. The regulations encouraged, for example, the creation of agricultural associations and the formation of groups of farmers to promote common use of equipment in farming operations. It also introduced the possibility for member states to make payments to farmers for environmentally friendly farming practices. Such payments were subject to rules intended to prevent them from becoming national subsidies of a competition-distorting nature. However, financing was by member states only. Without EU funds, the regulations were not attractive to many member states. As a result, only four countries (Denmark, Germany, the Netherlands, and the United Kingdom) implemented agri-environmental programs under the efficiency regulations.

Organic Farming.²⁶ These regulations encourage farmers to engage in this type of production, which is deemed beneficial and environmentally friendly because of its emphasis on less intensive land use, exclusion of chemical inputs, and use of conserving practices. The EU legislation establishes principles and rules to be followed on production, processing, labeling, and imports of organically produced products. They provide for inspection and control of the process at all stages in order to verify that organic methods have been used. Incentive payments are available to farmers who participate voluntarily in organic farming, and participants may receive annual payments for up to five years and up to a maximum of EUR 3,000 per holding per year.

²⁴ Council Directive 75/268/EEC of 28.4.1975, OJ L 1289, 19.5.1975, p. 1

²⁵ Council Regulation 797/85 of 12.3.1985 (OJ L 93, 30.3.1985, p. 1) and Council Regulation 2328/91 of 15.7.1991 (OJ L 218, 6.8.1991, p. 1)

²⁶ Council Regulation 2092/91 (OJ L 198, 22.7.91, p. 1) and Commission Regulation (EC) 1935/95, 22.6.1995 (OJ L 186, 5. 8.95, p. 1).

Agri-Environmental Measures in the 1992 CAP Reform

The EU undertook a major reform of the CAP in 1992. The major aims of the reform were to reduce market surpluses, make agricultural products more competitive in world markets, secure farmers' incomes, and conform the CAP to anticipated WTO rules and disciplines with respect to domestic support. The essential element of the reform was to reduce price supports to farmers, while making direct payments to farmers to compensate them for loss of income due to price reductions. At the same time, the reform gave additional emphasis to agri-environmental measures.

Agri-environmental measures were dealt with in two ways in the 1992 CAP reform. First, some agri-environmental measures were included in commodity support programs; second, specific agri-environmental measures were introduced as measures "accompanying" the market reforms. Examples of the former include compulsory set-asides for large farmers, primarily to manage supplies but also to foster the rotational release and recovery of arable land; limits on stocking density (per holding or per hectare) in order to qualify for payments; extensification premiums for further reducing stocking density per hectare; and payments to fruit and vegetable producers made contingent on the adoption of environmentally sound production practices.

The three accompanying measures in the 1992 CAP reform were:

- agricultural production methods compatible with the requirements of the protection of the environment and the maintenance of the countryside;²⁷
- early retirement from farming;²⁸ and
- afforestation of agricultural land.²⁹

For the agri-environmental accompanying measures, assistance, in the form of payments, would be made to farmers or herders who voluntarily participated in measures to:

- reduce the use of fertilizers and chemical inputs;
- introduce or continue with organic farming methods
- change production methods toward or maintain extensification of production;
- reduce the number of animals per forage unit;
- maintain the countryside and landscape and generally promote bio-diversity;
- ensure the upkeep of abandoned farmland or woodlands;

²⁷ Council Regulation (EEC)2078/92 of 30.6.1992 (OJ L 215 30.7.92, p. 85), as amended by Commission Regulation (EC)2772/95 (OJ L 288, 1.12.1995, p. 35).

²⁸ Council Regulation (EEC) 2079/92) of 30.6.1992 (OJ L 215, 30.7.1992, p. 91).

²⁹ Council Regulation (EEC) 2080/92 of 30.6.1992 (OJ L 215, 30.7.1992, p. 96). Afforestation refers generally to establishing forest cover on agricultural land.

- set aside farmland for at least 20 years for nature reserves or parks or to protect hydrological systems; and
- manage land for leisure activities and public access.

Payments were made to farmers to cover the costs and/or loss of income from adopting the agri-environmental measures. In addition, assistance included measures to improve the training of farmers with regard to farming or forestry practices compatible with environmental protection.

The two other accompanying measures, though not principally agri-environmental, also had environmental aspects. The principal aim of the early retirement scheme was to encourage replacement of elderly farmers by younger ones or to reallocate the land to non-agricultural uses. In both cases, member states were to operate the programs “in harmony with the requirements of environmental protection or assure that the land is used in a manner compatible with protection or improvement of the quality of the environment and of the countryside” (Reg. EEC 2079/92). Similarly, the EU afforestation program aimed to encourage farmers to withdraw their land from crop or livestock production for up to 20 years (a permanent set-aside) and dedicate it to afforestation. Implementation of the program was supposed to contribute to forms of countryside management more compatible with environmental balance and to combat the effects of greenhouse gasses by absorbing carbon dioxide through an eventual improvement in forest resources (EEC 2080/92).

Each member state could decide on its participation in the accompanying environmental measures. Programs were funded from the Guarantee Section of the EAGGF, not the Guidance Section, on a matching basis — 50% of the costs of the programs were funded by the EU, 50% by member states. (EU co-financing for such projects in poorer regions was 75%.) Farmers who voluntarily agreed to implement agri-environmental measures for a minimum period of five years received annual payments calculated on the basis of additional costs and income forgone and the financial incentive needed to spur adoption. Payments were limited to EUR 450-900 per hectare.³⁰ Payments were also made to livestock producers on a per animal unit basis (EUR 210 for each sheep or cattle unit by which a herd is reduced; EUR 100 for each livestock unit of an endangered breed reared).

That these agri-environmental programs were funded from the Guarantee Section of the EAGGF rather than the Guidance Section was an important change. This is the first time that Guarantee funds were allocated to anything other than commodity support. But whereas commodity support was totally financed by the Guarantee Section, the Guidance Section approach of co-financing structural programs on a matching basis was used to allocate the Guarantee funds to the agri-environmental (and other rural development) programs.

³⁰ One hectare is equivalent to 2.47 acres. 1 EUR is about \$1.21 as of the date of this report. Consequently, 450-900 EUR per hectare is about \$220-\$440 per acre.

Agri-Environmental Programs in Agenda 2000³¹

The process of agricultural policy reform and of integrating agri-environmental measures into agricultural policy was continued with the Agenda 2000 reforms. The primary rationale for further reforming the CAP was to adapt it to the enlargement of the EU by another 10 member states within existing budgetary and other limits. A second rationale was to prepare the EU for new WTO agricultural trade negotiations that were to have been launched in Seattle in 1999, but were launched subsequently at Doha, Qatar, in 2001.

Agenda 2000 established adoption of agri-environmental measures as the only compulsory element of EU rural development policy. Member states have to include agri-environmental measures (such as those identified in the 1992 regulations) in their rural development programs to tap funding available from the Guarantee Section of the EAGGF.

Agenda 2000 also established rural development (including the agri-environmental accompanying measures and the other environmental programs) as the second pillar of the CAP, the first pillar being the commodity support programs and direct income support payments to farmers. All of the rural development measures are co-financed by the EAGGF Guarantee Section in all member states. This fund has an annual average ceiling of EUR 4.3 billion for rural development (which includes agri-environmental measures) for the budget period 2000 to 2006, about 10% of annual Guarantee funds under Agenda 2000. The EAGGF Guarantee Section, as a rule, co-finances 50% of the cost of the rural development/agri-environmental measures undertaken by member states. Poorer regions could qualify for a higher percentage of EU co-financing.

2003 CAP Reforms and Agri-Environmental Programs³²

A midterm review of Agenda 2000 undertaken by the EU resulted in further significant reforms of the CAP in 2003. The major reform was the establishment of a single farm payment decoupled from production (with some exceptions for certain crops) to replace the myriad commodity payments made to EU farmers. Receiving the single payment is contingent on farmers' compliance with environmental and other requirements (food safety, occupational safety, animal welfare) set at the EU and national levels (cross-compliance). Cross-compliance is now compulsory and all farmers receiving direct payments will be subject to it. Farmers will be sanctioned for non-observance of these standards through cuts in direct payments. These policy changes took effect on January 1, 2005. Member states still benefit from co-financing of agri-environmental and other rural development measures out of Guarantee funds. The 2003 reform makes additional funds available for rural development by reducing the Guarantee funds available for commodity price and income support and transferring them to rural development, a process referred to as modulation.

³¹ Council Regulation (EC) 1257/99 of May 17, 1999 (OJ L 160 26.6.1999, p. 80).

³² Council Regulation (EC) 1782/2003 L 270/1 21.10.2003, p. 1 ff.

Cross-Compliance with Agri-Environmental Measures. In order to qualify for the single farm payment, EU farmers must observe “statutory mandatory requirements” related to the environment as well as “good agricultural and environmental farming practices.” (Cross-compliance also entails meeting standards for food safety and animal welfare). No additional compensation is available to farmers for meeting these minimum standards. The statutory mandatory requirements include the regulation established in the water protection, nitrate, pesticide, and habitats and wild birds directives discussed above. Good farming practices are spelled out in the regulation implementing the 2003 reforms (see **Table 2**).

Table 2. Good Agricultural and Environmental Practices

Issue	Standards
Soil erosion: Protect soil through appropriate measures	<ul style="list-style-type: none"> — Minimum soil cover — Minimum land management reflecting site-specific conditions — Retain terraces
Soil organic matter: Maintain soil organic matter levels through appropriate practices	<ul style="list-style-type: none"> — Standards for crop rotations where applicable — Arable stubble management
Soil structure: Maintain soil structure through appropriate measures	<ul style="list-style-type: none"> — Appropriate machinery use
Minimum level of maintenance: Ensure a minimum level of maintenance and avoid the deterioration of habitats	<ul style="list-style-type: none"> — Minimum livestock stocking rates or/and appropriate regimes — Protection of permanent pasture — Retention of landscape features — Avoiding the encroachment of unwanted vegetation on agricultural land

Source: Annex IV of Council Directive (EC) No 1782/2003.

Farmers who do not comply with the statutory management requirements or good agricultural and environmental practices “as a result of action or omission directly attributable to the individual farmer” will be subject to reduction or cancellation of their single farm payment. If non-compliance results from negligence, the farmer’s payment is reduced by a minimum of 5% or, in the case of repeated non-compliance, 15%. If non-compliance is intentional, the percentage reduction will be not less than 20% and may go as high as the total payment for one or more calendar years. Member states get to keep 25% of any amounts derived from non-compliance.

Member states are responsible for carrying out spot checks to verify that farmers are complying with the requirements. The European Commission is responsible for ensuring that the member states are enforcing cross-compliance and providing them with technical assistance if needed.

Assistance to Farmers in Meeting Standards. The 2003 reforms added two measures that assist farmers in meeting the new, more demanding standards.

Temporary and degressive support will be payable to farmers to help them adapt to the introduction of the new standards. Assistance will be on a flat-rate basis and degressive for a maximum period of five years and subject to a ceiling of EUR 10,000 per holding in any year. Support will also be available to help farmers with the costs of using farm advisory services to assess the performance of their farm business against the new cross-compliance standards being introduced. Farmers may receive up to a maximum of 80% of the cost of such services, subject to a ceiling of EUR 1,500 per service.

Support for Implementing Natura (2000). The 2003 CAP reforms also made some changes in the Natura 2000 program (see page 7). Per hectare funding for areas covered by the habitats and wild birds directives will be increased. Assistance can start at EUR 500 per hectare, declining to EUR 200 per hectare over five years. Higher payments initially are intended to reflect higher initial costs associated with adjustment of farming practices when land is designated under the Natura 2000 program. The total area eligible for Natura 2000 funding is no longer restricted to a maximum of 10% of the area of a member state.

Increased EU Co-Financing for Agri-Environment (and Animal Welfare). EU co-financing for these measures increases to a maximum of 85% in poorer regions and 60% in other areas. (Previous co-financing of rural development measures was 75% for poorer regions and 50% for all others.)

Increased Support for LFAs. Compensatory allowances for LFAs are increased to a maximum of EUR 250/hectare (on average at member state levels). Previously, per hectare payments in LFAs were set at EUR 200.

Additional Financing for Rural Development Policy (Modulation)

The 2003 CAP reforms also introduced a new system for financing rural development (including agri-environmental) policy called compulsory modulation. Under compulsory modulation funds from commodity support will be transferred to rural development support. Member states may then use the additional funds to finance new rural development measures or to increase financing of existing measures. Under the system, farms receiving over EUR 5000 a year in direct payments will have those payments reduced (i.e., modulated) by 3% in 2005, 4% in 2006, and 5% from 2007 onward. The additional funds become available in 2006. When the modulation rate reaches 5%, estimates are that it will result in additional EU rural development funds (inflation-adjusted) of EUR 1.2 billion per year (over the 4.3 billion previously allocated).

Currently EU agri-environmental programs account for 52% of rural development spending (from both EU and member states' financing). Within the rural development spending category, agri-environmental programs compete with rural restructuring (e.g., investment aids) and non-farm rural economy programs (e.g., agri-tourism or village renewal). Despite these competing programs within the rural development program, spending on agri-environmental measures appears likely to

continue as a substantial component of total rural development spending over the 2007-2013 EU budget period (**Table 3**).³³

Table 3. Proposed Budget Commitments for the CAP, Rural Development, and Total EU Spending
(EUR million — 2004 prices)

	2007	2008	2009	2010	2011	2012	2013
<i>Rural Development</i>	11,759	12,235	12,700	12,825	12,952	13,077	13,205
Total CAP	55,259	55,908	56,054	55,859	55,666	55,863	55,497
Total EU	133,560	138,700	143,140	146,670	150,200	154,315	158,450

Note: Rural development, which includes spending on agri-environmental measures, is a component of total CAP spending.

Funds generated by modulation will be distributed among all member states for use in their rural development programs financed by the EAGGF Guarantee Section. As of 2007, 20% of the modulation money generated in a member state will be allocated to that member state. The remaining amounts will be redistributed among member states, according to their

- agricultural area;
- agricultural employment;
- GDP per capita purchasing power.

Every member state, however, will get back at least 80% of the modulation funds generated from its farmers.

In September 2005, the EU's Council of Ministers adopted a new Rural Development Regulation (2007/2003). Under this new legislation, rural development funding (including agri-environmental funding) will be centralized in one single fund: The European Agriculture Fund for Rural Development (EAFRD). The regulation establishes that a minimum of 25% of rural development spending will focus on environmental stewardship in land management.³⁴

EU Spending on Agri-Environmental Measures

It is difficult to get an estimate of EU and member states' total spending on agri-environmental programs, particularly since funding of such activities is a shared

³³ "Proposed budget commitments for the CAP," in *AgraFacts*, June 30, 2004, published for Agra-Europe (AgE) Bonn, German Federal Republic, by AGRA, 84 Boulevard de Sebastopol, 75003 Paris, France.

³⁴ The rural development regulation is discussed at [http://www.fas.usda.gov/scripts/w/attacherep/attache_lout.asp]

responsibility between the EU and the member states. Nevertheless, an idea of how much is spent on this category of programs is included in the EU's notification to the WTO of domestic support for agriculture in 2000-2001 (marketing year), the most recent year available.³⁵ The EU reports spending by the EU and its member states of EUR 5.7 billion for "protection of the environment and preservation of the countryside, control of soil erosion, extensification, aid for environmentally sensitive areas; support and protection of organic production by creating conditions for fair competition; aid for forestry measures in agriculture; (and) conservation of genetic resources in agriculture." In contrast, the United States, in its WTO notification, reports spending of \$2.7 billion for various environmental programs in its 2000-2001 notification.³⁶

Some Concluding Observations

This review of U.S. and EU current agri-environmental policies reveals both similarities and differences (see **Table 4** following this section). Many of the major environmental topics dealt with by U.S. and EU policy and programs are much the same — soil and water quality, wildlife habitat, farmland preservation and protection, and wetlands protection and restoration, but how they are addressed is different in many significant ways. One major difference is the extent to which cross-compliance measures are used in relation to receipt of commodity support payments. Although U.S. agri-environmental policy has emphasized voluntary participation, farmers or ranchers with erodible lands or wetlands must comply with cross-compliance measures as a condition for receiving commodity payments. In the EU, on the other hand, all farms (as of January 1, 2005) are required to meet certain statutory environmental management requirements and observe "good agricultural and environmental practices" in order to receive support payments (provided as a single farm payment).³⁷

In the United States, the federal government is primarily responsible for program administration and funding. It provides technical assistance and financial or cost-sharing assistance developing and implementing conservation plans. In contrast, EU member states are primarily responsible for administering agri-environmental programs which are co-financed generously by the European Commission. Farmers receive technical assistance to enable them to meet the compulsory agri-environmental standards and financial aid as they implement activities to meet the standards.

In the United States, integrating agri-environmental programs with rural development policy and shifting funds from commodity to agri-environmental efforts

³⁵ The EU notification of domestic support for agriculture for MY2000-MY2001 is available at [<http://docsonline.wto.org/DDFDdocuments/t/G/AG/N/EEC/49.doc>].

³⁶ The U.S. notification of domestic support for agriculture for MY2000-MY2001 is available at [<http://docsonline.wto.org/DDFDdocuments/t/G/AG/N/USA/51.doc>].

³⁷ A discussion and evaluation of the EU's recent policy reforms is *Analysis of the 2003 CAP Reform* prepared by the Organization for Economic Cooperation and Development (OECD), Paris, France, 2004.

are at issue. To date, United States policy makers have not chosen to make this linkage or to transfer funds. EU policymakers seem to have made a decision to integrate agri-environmental programs into a broad rural development policy. The EU, as part of its most recent reform of the CAP, has also made a policy decision to shift increasing amounts of funds from commodity to agri-environmental support. Part of the difference between the United States and the EU with respect to funding derives from different approaches to budgeting for agricultural programs in the EU and the United States. While the EU operates on a seven-year fixed budget for agriculture (with inflation factors built in), the United States operates with budgets decided in annual appropriations legislation, although programs are authorized for multi-year periods.

Further developments in agri-environmental policy in both the United States and the EU will likely depend at least in part on outcomes from ongoing multilateral agricultural trade negotiations. If these negotiations result in further restrictions on trade-distorting domestic commodity support, farmers, ranchers, and policymakers may view increased funding for green payments as an attractive alternative for providing support to agriculture. If further restrictions are required, it seems more likely that the United States and the EU will look at the other's policies and experiences more closely. If such an examination demonstrates that historic and current differences are extensive and difficult to overcome, it may be that a broad and imprecise definition of green payments will serve the interests of diverse parties who participate in farm policy debates.

For U.S. policy, the status of these negotiations in early 2007, when crafting the next farm bill is likely to start in earnest, will be particularly important because designers of this legislation and interest groups will likely give the status and direction of these negotiations strong consideration as they contemplate farm bill options. If the outcome of the negotiations is uncertain while the farm bill is being debated, this uncertainty will compound the intensity of the debate, and possibly result in the inclusion of language in legislation giving the Department greater flexibility in implementation.

Congressional discussion of green payments may become contentious for other reasons as well. One source of that contention may be the translation of the concept into policies and programs. Most interests involved in farm policy who have expressed an opinion support the general concept of green payments. But as the discussions become more specific, participants may find that they have different views about program design, funding allocations, administrative responsibilities and similar questions, making it difficult to hold together coalitions of supporters. Among the most difficult of these questions may be deciding whether such a program should include a significant income support component and contribute to the "bottom line" of each participant, or should it be limited to covering costs to install and maintain conservation practices. A related question may be deciding what is to be accomplished through a green payment approach. Some may view it as meeting international obligations, and seek a minimal program with limited impact to current domestic efforts, while others may view it is a major new and positive direction in farm policy, and seek to make it large and far-reaching. One aspect of discussing these options may be over whether payments should be based on cost-sharing for individual practices, which has a long history in agri-environmental policies, or on

the level of improved environmental performance that results from installing practices.

Consideration of green payments may also include a debate over questions of scale. To this point, all conservation programs are implemented at the scale of an individual farm. Green payments could include additional incentives for coordinated and collective action that have much larger cumulative benefits than actions on individual farms are likely to result in. Such programs could be designed around the magnitude of the benefits that the group provides, and grow or shrink for all members of the group as the participation, and therefore the benefits, change.

Differences between the United States and the EU in how green payments have been defined and translated into policy and programs may make consideration of EU agri-environmental policy as a model or source of ideas problematic. Some aspects of EU policy, e.g., compulsory cross-compliance with agri-environmental measures as a condition for receiving price and income support, differ substantially from historical U.S. practice, in which cross-compliance has been far more sparingly applied. Spending on agri-environmental programs in the United States has been relatively less than in the EU, both as a portion of total federal spending for agriculture and as an amount spent. Identifying sources of increased funding for agri-environmental programs, even in the context of possible new WTO restrictions on other forms of farm support, might still be difficult given projected budget deficits. Even with new multilateral restrictions on farm subsidies, agri-environmental programs might compete unfavorably with the more conventional forms of farm support or with other WTO-compatible programs. Apart from funding considerations, a consensus for linking agri-environment and rural development with more traditional farm program measures has not emerged in the United States as it apparently has in the EU. So the extent to which EU agri-environmental policy could serve as a model or source of ideas for U.S. agri-environmental policy remains to be seen.

Table 4. Comparison of Current U.S. and EU Agri-Environmental Policies

Key Policy Aspects	U.S.	EU
Overall purpose of policy	Encourage voluntary adoption of agricultural practices that benefit the environment.	Integrate range of environmental and socio-economic goals into agricultural policy.
Program administration and funding	Federal government primarily responsible for administration and funding.	Member States primarily responsible for program administration; co-financing with EU on formula basis.

Key Policy Aspects	U.S.	EU
Relationship to Commodity Payments	Cross-compliance required <i>for farms with certain types of land</i> to receive commodity payments (see “cross-compliance,” below).	In principle, cross-compliance with all agri-environmental programs required <i>for all farms</i> to receive commodity payments.
Major issues addressed by agri-environmental policy	<ul style="list-style-type: none"> - Soil quality - Water quality - Wildlife Habitat - Farmland Preservation - Grassland and Wetland Protection and Restoration - Water Conservation - Air Quality. <p>(The US addresses pesticides through regulation.)</p>	<ul style="list-style-type: none"> - Soil quality - Water quality - Wildlife habitat - Farmland Preservation - Wetland Protection and Restoration - Nitrates - Pesticides - Wild birds - Stocking density - Permanent pastures - Rural landscape <p>(Also food safety, animal welfare, promotion of rural development).</p>
Cross-Compliance Measures: Programs or specific actions required to receive direct commodity support payments	Compulsory cross-compliance with resource conservation measures: <ul style="list-style-type: none"> - Conservation compliance (erodible lands in production) - Sodbuster (erodible grasslands being brought into production) - Swampbuster (converting wetlands to production). 	Compulsory cross-compliance with: <ul style="list-style-type: none"> - Statutory (environmental) management requirements - “Good Agricultural and Environmental Practices;” - Other standards (food safety, animal welfare).
Assistance to producers to meet compulsory measures	Technical assistance for developing conservation plans; financial or cost-sharing assistance to implement plans.	Temporary and degressive (reduced over time) compensatory financial aid to meet standards; technical assistance (farm advisory services).
Voluntary Programs	Many opportunities, including CRP, WRP, EQIP, WHIP, GRP, FPP, CSP and other smaller programs.	Member State programs co-financed with EU, e.g., reduction of fertilizer use, organic farming, extensification, upkeep of abandoned farmland, or permanent set-aside.

Source: Congressional Research Service, based on literature review including U.S. and EU publications.