

**America's Working Lands:
Farm Bill Programs and Landscape-scale Conservation**

Lynn Scarlett

© 2011 Lincoln Institute of Land Policy

**Lincoln Institute of Land Policy
Working Paper**

The findings and conclusions of this Working Paper reflect the views of the author(s) and have not been subject to a detailed review by the staff of the Lincoln Institute of Land Policy.

Contact the Lincoln Institute with questions or requests for permission to reprint this paper. help@lincolninst.edu

Lincoln Institute Product Code: WP11LS1

Abstract

Affirming the substantial national conservation and ecosystem benefits associated with farmlands, ranchlands, and forests, every Farm Bill since 1985 has included a section dedicated to conservation programs. During each five-year reauthorization cycle, the Farm Bill conservation provisions undergo scrutiny regarding funding, structure, goals, program effectiveness, and geographic emphasis.

This White Paper examines Farm Bill conservation programs through a large landscape conservation lens and addresses four questions: (1) how does current implementation of Farm Bill conservation programs support landscape-scale conservation? (2) what Farm Bill conservation tools are particularly useful in supporting landscape-scale conservation? (3) what challenges or barriers limit the potential of Farm Bill conservation programs to support landscape-scale conservation?; and (4) what Farm Bill conservation program administrative and legislative measures might enhance large-landscape conservation?

About the Author

Lynn Scarlett is a Visiting Scholar at Resources for the Future working on issues pertaining to climate change, ecosystem services, and landscape-scale conservation. She is an adjunct professor at Carnegie Mellon University. She was named the Zurich Financial Services visiting lecturer at the University of California, Bren School of Environmental Science and Management in October 2009. From 2005 to January 2009, she served as the Deputy Secretary and Chief Operating Officer of the U.S. Department of the Interior, a post she took on after 4 years as the Department's Assistant Secretary for Policy, Management and Budget. She served as Acting Secretary of the Department for two months in 2006. Ms. Scarlett initiated Interior's Cooperative Conservation Task Force in 2002. The Task Force, comprising all of Interior's bureaus, focused on building Interior Department capacity to engage in collaborative partnerships in landscape-scale and cross-boundary conservation. Scarlett also chaired the Department's Climate Change Task Force. She is a Fellow of the National Academy of Public Administration. Scarlett serves on the board of the American Hiking Society, the Continental Divide Trail Alliance, the nonprofit environmental mediation organizations RESOLVE and the Consensus Building Institute. She is a trustee emeritus of the Udall Foundation. She is the author or co-author of recent publications on climate change adaptation (J-NABS, 2010); urban greening (EDF 2010); "Large Landscape Conservation" (Lincoln Institute, June 2010); offshore oil issues (RFF, 2011); and ecosystem services (RFF, 2011). She received her B.A. and M.A. in political science from the University of California, Santa Barbara, where she also completed her Ph.D. coursework and exams in political science.

Visiting Scholar
Resources for the Future
1616 P Street NW
Washington, DC 20036
(202) 328-5189
scarlett@rff.org

Table of Contents

I.	Executive Summary	1
II.	Introduction	5
III.	Farm Bill Conservation Programs: Overview	9
	1. Brief History and Delivery Infrastructure	10
	2. Program Implementation, Purposes, and Priorities – Breadth and Flexibility	12
	3. Budget and Spending	18
IV.	Farm Bill Programs in Action: Landscape Initiatives	19
V.	Performance Challenges	21
	1. Funding Issues	21
	2. Roles and Responsibilities – Program Implementation	22
	3. Programmatic Details	23
	4. Performance Measures	23
	5. Multi-Agency Coordination	24
VI.	Looking to the Future: Supporting Landscape-scale Conservation	24
	Policy Opportunities and Recommendations	26
VII.	Conclusion	29
	Appendices	30

America's Working Lands: Farm Bill Programs and Landscape-scale Conservation

I. Executive Summary

Private lands are central to conservation in the United States. These lands feed the Nation and generate economic benefits, with net value added of agriculture pegged at \$147.4 billion in 2011. Comprising over 60 percent, or 1.4 billion acres, of all U.S. lands, they also provide substantial environmental benefits.

Affirming the substantial national conservation and ecosystem benefits associated with farmlands, ranchlands, and forests, every Farm Bill since 1985 has included a section dedicated to conservation programs. During each five-year reauthorization cycle, the Farm Bill conservation provisions undergo scrutiny regarding funding, structure, goals, program effectiveness, and geographic emphasis. Within this context, one question is receiving broadened attention: *how can Farm Bill conservation programs support and facilitate large, landscape-scale conservation?* The question is linked to program effectiveness but presents a distinctive lens through which to examine effectiveness, one highlighted in a 2010 Lincoln Institute Report, *Large Landscape Conservation: A Strategic Framework for Policy and Action*.

This White Paper examines Farm Bill conservation programs through a large landscape conservation lens and addresses four questions:

- How does current implementation of Farm Bill conservation programs support landscape-scale conservation?
- What Farm Bill conservation tools are particularly useful in supporting landscape-scale conservation?
- What challenges or barriers limit the potential of Farm Bill conservation programs to support landscape-scale conservation?
- What Farm Bill conservation program administrative and legislative measures might enhance large-landscape conservation?

Large landscape conservation broadly refers to conservation initiatives that have one or more of the following characteristics: they occur on lands that transcend jurisdictional and property ownership boundaries; involve multiple agencies; include multiple public and private-sector participants; and address multiple issues. Farm Bill conservation programs have some features potentially consistent with this policy framework. That potential resides in the:

- Existing infrastructure of local landowner engagement in program implementation;
- Relative program flexibility regarding priorities; and
- Magnitude and wide geographic distribution of funding.

Brief History and Delivery Infrastructure: The Food, Conservation, and Energy Act of 2008 (P.L. 110-246, “2008 Farm Bill”) expanded Farm Bill conservation programs, bringing total mandatory spending for programs under the Conservation Title (Title II) to a projected \$24.3 billion over five years (FY2008-FY2012). The 2008 Farm Bill authorizes two broad types of conservation programs. One category includes environmental protections through purchase of easements or long-term “rental payments” to farmers to maintain and restore wetlands,

grasslands, or other land conservation. A second category includes financial and technical assistance for certain practices and infrastructure that improve environmental performance on working lands. Farm Bill conservation programs, with the two major program types (working lands and environmental protection of lands), hold significant potential to support large, landscape-scale conservation actions that protect, enhance, and restore important ecosystems.

Working lands programs offer financial and technical assistance to agricultural producers for natural resource protection and enhanced conservation management practices on their productive lands. Working lands programs include the Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Agricultural Management Assistance Program (AMAP), and the Wildlife Habitat Incentives Program (WHIP). The Natural Resource Conservation Service (NRCS) within the U.S. Department of Agriculture (USDA) currently supports several landscape-scale initiatives through its implementation of multiple Farm Bill conservation programs.

Consistent with USDA's landscape-scale focus, in its 2012 budget proposal, the department included funding to support coordination of regional planning activities. This proposed funding continues the 2011 efforts by the NRCS to invest in several priority landscape-scale initiatives. Initiative funding under FY 2011 allocations totaled \$202,104,071, of which \$16,390,716 was for technical assistance and \$188,713,355 was project funding.

Environmental protection of lands/easement programs remove land from crop production and also offer rental payments and cost-sharing to create longer-term conservation opportunities, including conversion of land back into forests, grasslands, or wetlands. The largest program is the Conservation Reserve Program (and Continuous Conservation Reserve Program), through which the Farm Service Agency (FSA) enters into 10- to 15-year contracts with producers, providing annual rental payments as well as financial assistance for some conservation practices.

Budgets and Spending: Since the introduction of the Conservation Title in the Farm Bill in 1985, conservation program spending has steadily increased. However, the current fiscal climate and tightened "pay go" rules requiring offsets for new spending make further increases doubtful as the Congress moves to reauthorize the Farm Bill.

The 2008 Farm Bill made strides in giving USDA the direction and tools with which to more strategically allocate funding and assess performance. Building upon long-standing program flexibilities and these new directions and tools, NRCS has undertaken several significant landscape-scale initiatives using Farm Bill conservation programs. Using a "Conservation beyond Boundaries" framework, the NRCS is targeting a number of priority natural resource concerns with landscape-scale initiatives. The initiatives build upon existing local partnerships, receive dedicated funding to enhance implementation, use science to inform management practices, and assess performance and outcomes.

The NRCS initiatives exemplify landscape-scale conservation and point the way to future opportunities. Current resources directed to these initiatives remain, however, a small percentage of overall conservation program spending. But other funding challenges unrelated to resource allocation also limit agency capacity to administer the conservation programs in ways that target

spending and track performance. Funding for program management has declined despite expansions in the scale and number of conservation programs. Low staffing levels may limit the ability of NRCS to reach out to potential farming partners. However, delegation of authority to nonprofit land trusts and other organizations to acquire and manage easements under the Farm and Ranchland Protection Program offers a potential way to leverage implementation capacity. Under this model, funding is provided through grants to an applicant (and matched with a 50 percent share of non-NRCS resources).

Participatory Structure: A signature characteristic of large landscape conservation is collaboration and network governance in which multiple public, private, and nonprofit participants jointly identify priorities, take actions, and assess results. Farm Bill conservation programs have long used local councils, conservation districts, and state technical committees to assist in identifying priorities and actions. The extensive structure of local participation in Farm Bill conservation programs provides a significant basis from which to strengthen collaborative and coordinated conservation efforts.

Program Performance: Despite a growing focus on benefits assessment, Farm Bill conservation programs face some continued criticism for allocating funds to projects and areas that are not high-priority ecosystems and for evaluating results based on outputs such as number of acres served rather than conservation results. Though metrics for evaluating performance are improving, key questions remain regarding how to better harness these programs to further increase their benefits:

- How robust is the selection of priority conservation areas?
- Should a broader set of criteria be used?
- Are funds always allocated based on the priority designations, or do other factors, such as equal geographic distribution, affect fund allocation?

The growing interest in large, landscape-scale conservation and the NRCS focus on some targeted ecosystem initiatives highlight the need for quantifiable outcome measures. In addition, the increasing availability of such measures also may demonstrate the cost-effectiveness of allocating Farm Bill conservation funding on a regional basis to high-priority areas.

Multi-Agency Coordination: As reauthorization of the Farm Bill looms—and as ongoing implementation improvements continue—a central challenge is how conservation effectiveness might be enhanced by strengthening capacity for large, landscape-scale conservation through Farm Bill conservation programs and their intersection with other agency programs and actions. While current laws and regulations provide sufficient flexibility to support “conservation beyond borders”, the 2012 Farm Bill reauthorization provides an opportunity to strengthen Farm Bill tools that support collaboration, multi-participant initiatives, and investment in landscape-scale initiatives that address priority issues.

Policy Opportunities and Recommendations

- **Environmental Markets:** Section 2709 of the 2008 Farm Bill directs the U.S. Department of Agriculture, through the Office of Environmental Markets, to develop technical guidelines for quantifying, reporting, registering, and verifying the

environmental benefits of land management activities to facilitate development of environmental markets. The 2012 Farm Bill should retain and strengthen these provisions, and Farm Bill architects should consider providing some dedicated funding to assist USDA in undertaking pilot studies explicitly designed to be policy experiments associated with ecosystem services payments.

- **Performance Measures:** The 2012 Farm Bill should direct USDA to continue development of CEAP outcome-based measures and use of these measures to assess program performance and inform allocation decisions. Specifically, all Farm Bill programs should include selection criteria linked to outcome-based measures where feasible and relevant. Consistent with the increased formation of large landscape-scale, multi-participant conservation partnerships that benefit from Farm Bill conservation programs, CEAP should include comparative evaluation of the effectiveness on conservation measures at different project scales.
- **Funding Allocation:** The 2008 Farm Bill includes several provisions that promote and facilitate conservation partnerships and funding allocation to state, regional, and other high-priority areas, including the Cooperative Conservation Partnership Initiative. That Initiative should be continued in the 2012 Farm Bill, but with revisions that allow CCPI funds to be used for integrated, ecosystem-focused purposes.
- **Eligibility:** Three eligibility and allocation considerations could support large landscape, collaborative conservation.
 - Funding eligibility for partnership organizations that engage directly in conservation projects should be considered
 - Eligibility provisions that reward projects identified by states, tribes, and others as high-priority regions could help steer funds to areas of high potential for cost-effective investments
 - Project rankings that reward multi-partner projects would help support coordinated, landscape-scale conservation investments.
 - *Adjusted Gross Income:* Eliminating or reducing eligibility restrictions pertaining to adjusted gross income may merit reconsideration in a reauthorized farm bill to take maximum advantage of participation in large landscape, priority-focused conservation efforts.
- **Rural community and partnership capacity:** The Resource Conservation and Development Program provides NRCS staff coordinators that assist state and local units of government and nonprofits to develop and implement conservation and natural resource improvement measures. With many landscape-scale partnerships and rural community conservation organizations lacking technical and financial capacity, this sort of funding can help catalyze farmer participation in collaborative conservation efforts and leverage local knowledge and resources.
- **Federal Capacity:** Funding allocation and assessment of project outcomes requires adequate federal staffing. The Farm Bill reauthorization presents an opportunity to assess

federal capacity and needs for effective program implementation, perhaps through use of tools such as activity-based cost analysis.

- **Program Implementation Efficiency:** Landscape-scale conservation would benefit from efforts in the 2012 Farm Bill to streamline and consolidate programs and simplify their administration. In addition, several specific implementation issues are particularly germane to landscape-scale conservation partnerships.
 - The current provision of easement authority to certified land trusts under the Farm and Ranchland Protection Program in the 2008 Farm Bill offers a way to leverage federal funds by shifting management responsibilities to professional land trusts. Extending this authority to the Wetland Reserve Program and maintaining this provision for other Farm Bill easement programs could expand and enhance opportunities for Farm Bill investments to better link to local and regional collaborative conservation initiatives.
 - The 2008 Farm Bill eliminated the competitive bidding options for the EQIP program. Re-introducing a competitive bidding program, carefully structured to maintain program access by new and small farmers and ranchers, may help steer funds toward cost-effective projects and, where larger-scale collaborative efforts generate economies of scale and greater cost-effectiveness, could reward such efforts while still sustaining participation by smaller-scale landowners.

II. Introduction

In *A Sand County Almanac*, penned over a half-century ago, Aldo Leopold envisioned private lands as central to conservation in the United States.¹ These lands feed the Nation; they sustain communities; they generate economic benefits, with net value added of agriculture pegged at \$147.4 billion in 2011.² They also often provide high-quality, unfragmented landscapes and proximity to water.

According to the U.S. Department of Agriculture, farm and farm-related employment includes about 24 million jobs. The American Forest and Paper Association estimates that forest management and forest-dependent industries account for approximately 5 percent of the total U.S. manufacturing GDP, produce about \$175 billion in products annually, and employ nearly 900,000 people.³ According to the National Oceanic and Atmospheric Administration, commercial fishing supports one million full- and part-time jobs and generates \$116 billion in revenue.⁴ A study by US Fish and Wildlife Service found that hunting, angling and wildlife-

¹ Aldo Leopold, *A Sand County Almanac*

² U.S. Department of Agriculture, Economic Research Service, "Farm Income and Costs: 2011 Farm Sector Income Forecast," accessed at <http://www.ers.usda.gov/Briefing/FarmIncome/nationalestimates.htm>

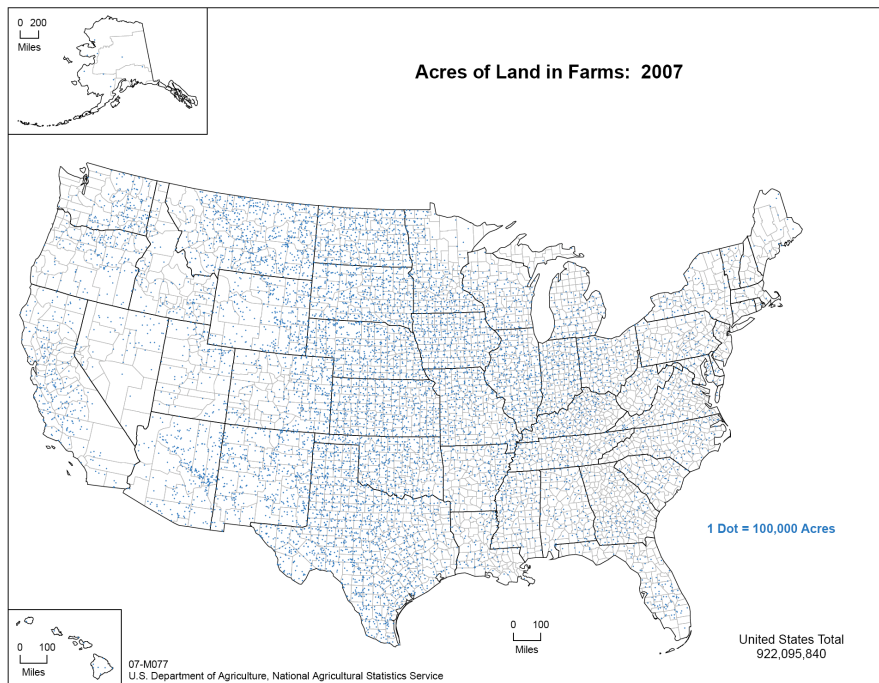
³ Timothy Hess, "Statement of Timothy Hess, Vice President, Engineered & Converting Products, Glatfelter, on behalf of the American Forest & Paper Association," House Subcommittee on Energy and Power, Hearing on the American Energy Initiative, April 7, 2011, available at: <http://republicans.energcommerce.house.gov/Media/file/Hearings/Energy/040711/Hess.pdf>

⁴ National Marine Fisheries Service, *Fisheries Economics of the United States, 2009*, U.S. Department of Commerce, NOAA Tech. Memo NMFS-F/SPO-118, 2010, p. 5, available at: <https://www.st.nmfs.noaa.gov/st5/publication/index.html>

dependent recreation contribute \$122 billion annually to our national economy.⁵ Much of this economic activity is located in rural areas where there are fewer other economic options. Natural resources-based products represent a significant proportion of the export sector essential to economic health.

The health of these lands, as Leopold foretold, figures prominently in the Nation's commitment to sustaining healthy soils, clean and plentiful water, biodiversity, and other environmental values. Yet the role of these lands is expanding, evolving, and shifting. As conservation needs evolve, the attributes of effective conservation are also evolving. The spread of invasive species, the effects of a changing climate, the threats of catastrophic wildland fire, and the ever-present challenges of sustaining clean, fresh water supplies amid expanded demand for water all present challenges that transcend public and private land ownership boundaries. Addressing these issues requires coordinated, landscape-scale efforts that bring together private land stewards and public agencies.

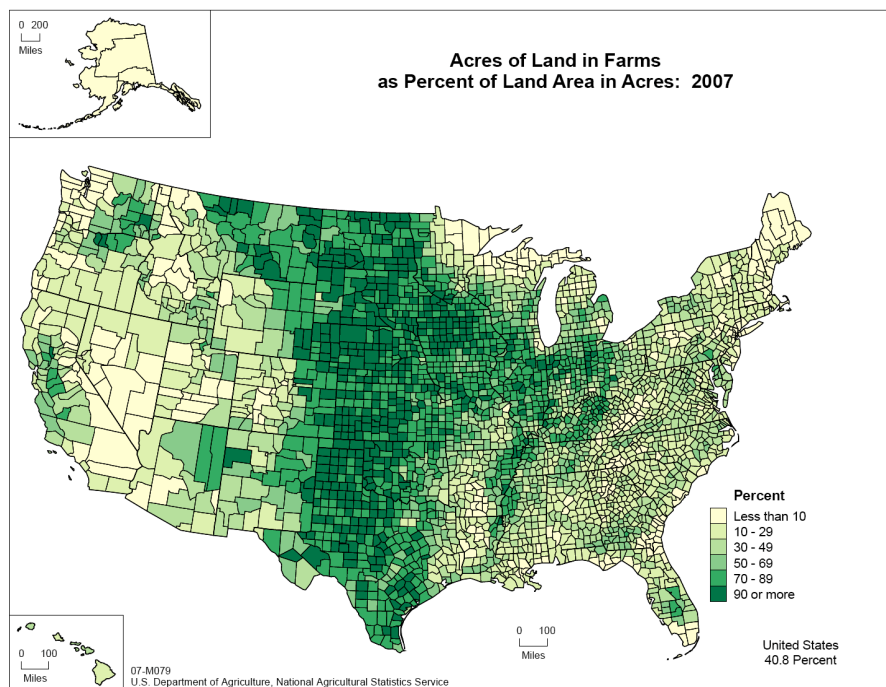
Figure 1. Acres of Farmland in the United States, 2007



Source: U.S. Department of Agriculture, National Agricultural Statistics Service

⁵ U.S. Department of the Interior, Fish and Wildlife Service, and U.S. Department of Commerce, U.S. Census Bureau, *2006 National Survey of Fishing, Hunting, and Wildlife-Associated Recreation*, U.S. Department of the Interior and U.S. Department of Commerce.

Figure 2. Acres of Farmland as a Percent of Land Area in the United States, 2007



Source: U.S. Department of Agriculture, National Agricultural Statistics Service

Private lands are an essential part of this conservation mosaic. These lands comprise over 60 percent, or 1.4 billion acres, of all U.S. lands.⁶ These aggregate figures obscure wide regional variations. For example, over 98 percent of Kansas lands are private and nonfederal lands while just 4 percent of Alaska is private land.⁷ Of the nonfederal lands, some 7 percent constitute urban and rural residential areas; much of the remainder is cropland, grassland pasture, and private forest land.⁸ Over 80 percent of species listed as endangered or threatened under the Endangered Species Act are found entirely or in part on private or other nonfederal lands.⁹

Affirming these substantial national conservation and ecosystem benefits associated with farmlands, ranchlands, and forests, every Farm Bill since 1985 has included a section dedicated to conservation programs. But these provisions have an even longer legacy, dating to the 1930s and soil conservation provisions first launched in the wake of the devastating Dust Bowl. These Farm Bill conservation programs represent investments in the natural or green “infrastructure” (wetlands, flowing waters, native grasslands, and forests) that provides clean water, crop pollination, sequestration of greenhouse gases, quality soils, and other benefits to the nation’s communities. Farm Bill conservation programs also assist farmers, ranchers, and forest owners

⁶ U.S. Department of Agriculture, Economic Research Service, *Major Uses of Land in the United States*, EIB-14, 2002, p. 35.

⁷ Summitpost.org, “Public and Private Land Percentages by U.S. States,” accessed on May 14, 2011 at <http://www.summitpost.org/public-and-private-land-percentages-by-us-states/186111>

⁸ Ibid.

⁹ Government Accountability Office, 1994, *Endangered Species Act: Information on species protection on nonfederal lands*, Report no. GAO/RCED-95-16, Washington, D.C.

in reducing their environmental footprint and protecting wildlife and their habitat while sustaining food and timber production. Food security, timber production, and their dependent jobs are thus inextricably linked to sustain our nation's natural infrastructure.

During each five-year reauthorization cycle, the Farm Bill conservation provisions undergo scrutiny regarding “program funding, policy objectives, individual program effectiveness, comparative geographic emphasis, and the structure of federal assistance....”¹⁰ Many of these areas of scrutiny persist as the current five-year period of the 2008 Farm Bill comes to a close.¹¹ Within this context, one question is receiving broadened attention: ***how can Farm Bill conservation programs support and facilitate large, landscape-scale conservation?*** The question is linked to program effectiveness but presents a distinctive lens through which to examine effectiveness, one highlighted in a 2010 Lincoln Institute Report, *Large Landscape Conservation: A Strategic Framework for Policy and Action*.¹²

In past cycles of Farm Bill reauthorization, questions of program effectiveness have focused on whether conservation spending targets high-priority areas and promotes actions that generate measurable environmental improvements. Both areas of focus remain important in evaluating conservation program effectiveness. But the cross-boundary nature of many current conservation problems amplifies the importance of conservation actions undertaken at a landscape-scale.¹³ This White Paper examines Farm Bill conservation programs through a large landscape conservation lens and addresses four questions:

- How does current implementation of Farm Bill conservation programs support landscape-scale conservation?
- What Farm Bill tools are particularly useful in supporting landscape-scale conservation?
- What challenges or barriers limit the potential of Farm Bill conservation programs to support landscape-scale conservation?
- What Farm Bill conservation program administrative and legislative measures might enhance large-landscape conservation?

¹⁰ Ibid., p. CRS-1.

¹¹ In a 2011 speech at a forum sponsored by The Horinko Group, Ann Mills, Deputy Undersecretary of the U.S. Department of Agriculture emphasized the importance of ecosystem outcomes (versus programmatic outputs) and the need for better science and ongoing measures to assess Farm Bill program performance. (The Horinko Group, “The Next Farm Bill: New Opportunities for Environmental and Agricultural Sustainability,” Water Salon Series, Part IV, Summary and Synthesis, March 15, 2011, Washington, D.C.). The Congressional Research Service 2008 Report to Congress on “Conservation Provisions and the 2008 Farm Bill” points to ongoing concerns about program complexity, program funding levels, geographic emphasis, program relationship to regional and multistate conservation efforts, producer payment limits, and other factors as persistent areas of concern regarding Farm Bill conservation programs. (Tadlock Cowan and Renee Johnson, CRS Report for Congress, July 2, 2008, Washington, D.C., Congressional Research Service, Order Code RL34557/)

¹² Matthew McKinney, Lynn Scarlett, and Daniel Kemmis, *Large Landscape Conservation: A Strategic Framework for Policy and Action*, Cambridge, Mass.: Lincoln Institute of Land Policy, 2010.

¹³ Landscape-scale conservation does not refer to specific acreage thresholds. Rather, “the common currency in landscape scale conservation is regional collaboration—the ability to work across boundaries with people and organizations that have diverse interests yet share a common place.” See Matthew McKinney, Lynn Scarlett, and Daniel Kemmis, *Large Landscape Conservation: A Strategic Framework for Policy and Action*, Cambridge, Mass., Lincoln Institute for Land Policy, 2010, pp. 2-3.

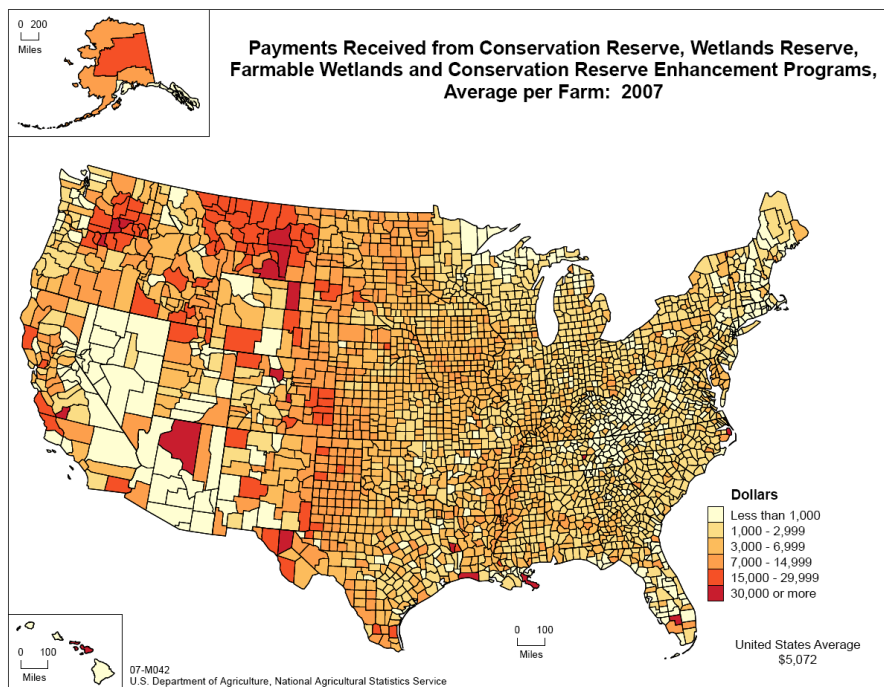
III. Farm Bill Conservation Programs: Overview

Farm Bill Conservation programs collectively represent the Nation’s largest conservation investments on private lands. Their scope and scale have brought scrutiny to their effectiveness, with particular focus on: 1) adequacy of performance measures; 2) criteria for allocating spending; and 3) durability of conservation actions. Despite these ongoing concerns, Farm Bill conservation programs, as currently structured, offer significant potential to support large landscape conservation.

Large landscape conservation broadly refers to conservation initiatives that have one or more of the following characteristics: they occur on lands that transcend jurisdictional and property ownership boundaries; involve multiple agencies; include multiple public and private-sector participants; and address multiple issues. The term “large landscape conservation” does not refer to a specific acreage threshold. Instead, it refers to efforts that “focus on land and water problems at an appropriate geographic scale, regardless of political and jurisdictional boundaries” and often involve regional collaboration.¹⁴ These characteristics suggest the importance of public policies that facilitate stakeholder and agency collaboration, a focus on outcome-based goals, and multi-agency coordination. Farm Bill conservation programs have some features potentially consistent with this policy framework. That potential resides in the:

- Existing infrastructure of local landowner engagement in program implementation;
- Relative program flexibility regarding priorities; and
- Magnitude and wide geographic distribution of funding.

Figure 3. Payments from Federal Conservation Programs, Average per Farm, 2007



Source: U.S. Department of Agriculture, National Agricultural Statistics Service

¹⁴ Ibid., pp. 2-3.

1. Brief History and Delivery Infrastructure

The Food, Conservation, and Energy Act of 2008 (P.L. 110-246, “2008 Farm Bill”) expanded Farm Bill conservation programs, bringing total mandatory spending for programs under the Conservation Title (Title II) to a projected \$24.3 billion over five years (FY2008-FY2012).¹⁵ The conservation provisions rank third (behind nutrition and commodity support programs) in total Farm Bill category spending, representing 9 percent of the total net outlays for Farm Bill programs¹⁶ (See Appendices I and II).

An estimated 14 percent of rural residence farms and 24 percent of commercial farms received some conservation payments in 2004, with average payments of \$6,904 per recipient farm, comprising 16 percent of all government farm payments and 1 percent of gross cash income.¹⁷

Evaluations of Farm Bill conservation programs show some environmental benefits attributable to these payments. For example, soil erosion between 1982 and 2003 fell 43 percent, with these results attributed in large part to conservation payments.¹⁸ Likewise, the Wetlands Reserve Program (WRP) and Conservation Reserve Program (CRP) are considered to contribute significantly to wetland protections. “By the end of 2005, for example, the WRP had enrolled 1.8 million acres, with much of this land under long-term or permanent easements.”¹⁹ By the end of 2010, that tally had reached 2.3 million acres, with much of this under long-term or permanent easements.²⁰

The 2008 Farm Bill retained almost all the earlier Farm Bill conservation programs, though some were modified, and several new programs emerged. Key changes included an expansion of the major working lands program, the Environmental Quality Investment Program (EQIP) and the addition of the Conservation Stewardship Program (CSP), which replaces the Conservation Security Program.²¹

The 2008 Farm Bill authorizes two broad types of conservation programs. One category includes environmental protections of land through the purchase of easements or long-term “rental payments” to farmers to restore and maintain wetlands, grasslands, or other land conservation. A second category includes easements and rental agreements and financial and technical assistance for certain practices and infrastructure that improve environmental performance on working

¹⁵Tadlock Cowan and Renee Johnson, CRS Report for Congress, “Conservation Provisions of the 2008 Farm Bill,” July 2, 2008, Congressional Research Service, Order Code RL34557, Summary.

¹⁶Renee Johnson and Jim Monke, CRS Report for Congress, “What Is the ‘Farm Bill’?” December 10, 2010, Congressional Research Service, Order Code RS22131, p. 3.

¹⁷Ibid., p. 11.

¹⁸Ibid., p. 13.

¹⁹Jim Boyd and Lynn Scarlett, “Ecosystem Services: Quantification, Policy Applications, and Current Federal Capabilities,” Washington, D.C.: Resources for the Future.

²⁰Conversation with Leslie Deavers, Farm Bill Coordinator, USDA, July 29, 2011. See also: “USDA announces Unprecedented Enrollment in Voluntary Effort to Restore the Nation’s Wetlands,” USDA Press Release, November 12, 2010, available at http://www.nrcs.usda.gov/news/releases/2010/wrp_acres.html

²¹Bruce Knight, former NRCS Chief, notes that growing worldwide food needs put a premium on retaining and expanding areas for food production. This premium raises the issue of how to prioritize conservation investments between idling lands versus focusing on improving conservation practices on working lands. The 2008 Farm Bill shifting emphasis toward working lands conservation is a partial affirmation of the importance of sustaining agricultural production. Interview with Bruce Knight, April 20, 2011.

lands. In addition to these two categories, the 2008 Farm Bill provides some grants for energy-related and other innovations.

Table 1: Overview of Farm Bill Conservation Programs

Program	Purpose	Eligibility	Policy Tools
Ag. Mgmt. Assistance (AMA)	Water management, water quality, erosion control		incentive, cost-share
Conservation Reserve—General (CRP)	Retires land from crop production for environmental benefits	Owners/operators for at least 1 yr. & control during contract period	cost-share, rental
Conservation Reserve—Continuous (CCRP)	Installs conservation practices to provide large benefits (riparian buffers, bottomland hardwood forest restoration, etc.)	Owners/operators for at least 1 yr. & control during contract period	incentive, cost-share, rental
Conservation Reserve Enhancement (CREP)	Specific conservation needs defined by state and federal partnership (e.g., sediment runoff in Chesapeake Bay)	Owners/operators for at least 1 yr. & control during contract period	cost-share, easement, rental
Conservation Security (CSP)	Promotes conservation & improvement of soil, air, water, energy, and other conservation purposes	Privately owned & tribal land; agricultural producers	stewardship enhancement
Environmental Quality Incentives (EQIP)	Fosters adoption of specific management and structural measures to address specific resource quality issues	Agricultural producers	incentive, cost-share
Ground & Surface Water Conservation (GSWC)	Conserves ground and surface water on agricultural operations	Agricultural producers	incentive, cost-share
Conservation Innovation Grants (CIG)	Stimulates development & adoption of innovative conservation approaches while leveraging federal investment in environmental protection	Non-federal government s or NGOs, Tribes, or individuals	Grants
Farm and Ranchland Protection (FRPP)	Protects important farm & ranchland from conversion and retains agricultural uses	Landowners who apply cooperating entities	Easement
Grassland Reserve (GRP)	Conserves vulnerable grasslands from conversion to other uses & conserves grasslands by helping maintain viable ranching operations	Easements: privately owned & tribal grasslands Contracts: owners with long-term land control	Easement
Healthy Forest Reserve (HFRP)	Restores & enhances forest ecosystems for T & E species, improved biodiversity, and carbon sequestration		Easement
Wetland Reserve (WRP)	Restores & protects wetlands and associated uplands and the flora and fauna they support; mitigates flooding; contributes to water quality & supply	Owners: restored or restorable wetlands/uplands for at least 1 yr	cost-share, rental, easement

Program	Purpose	Eligibility	Policy Tools
Wildlife Habitat Incentives (WHIP)	Establishes/improves fish & wildlife habitat	Individuals, groups, NGOs, tribes, nonfederal government	cost-share
Conservation Technical Assistance	Conservation planning, design, and implementation, conservation compliance, technology development	All non-federal lands	

Two federal agencies within the U.S. Department of Agriculture (USDA)—the Farm Services Agency (FSA) and the Natural Resources Conservation Service (NRCS)—oversee implementation of Farm Bill conservation programs. These agencies rely on a large, dispersed network of state and county offices and service centers. In addition, the FSA works with County Committees, which comprise over 7,700 farmers and ranchers selected by other agricultural producers. These committees assist the FSA in setting priorities and allocating Conservation Reserve Program (CRP) and other payments. The NRCS provides technical support to the FSA for the CRP and administers most of the other Farm Bill conservation programs.²²

In managing Farm Bill conservation programs, the NRCS provides technical and financial assistance to farmers and ranchers for conserving and protecting natural resources. The agency includes three administrative regions that oversee numerous field offices that work with program participants.

Conservation Districts, established in the 1930s to address soil loss and erosion, operate using voluntary boards of directors that represent local landowners. The districts assist the NRCS in identifying priorities. The districts coalesce into State Associations of Conservation Districts that are, in turn, members of a National Association of Conservation Districts.²³ In addition to these districts, State Technical Committees and Local Working Groups provide recommendations to NRCS regarding the implementation and technical aspects of natural resource conservation activities and programs.

2. Program Implementation, Purposes, and Priorities—Breadth and Flexibility

Farm Bill conservation programs, with two major program types (working lands and environmental protection programs), hold significant potential to support large, landscape-scale conservation actions that protect, enhance, and restore important ecosystems.

Working lands programs offer financial and technical assistance to agricultural producers for natural resource protection and enhanced conservation management practices on their productive lands through programs that include the Environmental Quality Incentives Program (EQIP), Conservation Stewardship Program (CSP), Agricultural Management Assistance Program (AMAP), and the Wildlife Habitat Incentives Program (WHIP).

²² A key exception is the Community Forestry program, which is implemented by the U.S. Forest Service.

²³ Aimee Weldon, et al., “Conserving Habitat through the Federal Farm Bill: A Guide for Land Trusts and Landowners,” Defenders of Wildlife, Washington, D.C., 2010, p. 10.

Working lands programs also include easement and rental payment programs, including the Farm and Ranchlands Protection Program and the Grasslands Protection Program. The Farm and Ranchland Protection Program (FRPP), administered by the NRCS, focuses on promoting farmland protection on working lands through the purchase of conservation easements. Once a direct purchaser of easements, the NRCS now primarily facilitates and funds purchases through cooperative agreements with land trusts.²⁴ This provision of the FRPP has potential to strengthen linkages between Farm Bill conservation easement investments and other landscape-scale conservation initiatives of land trusts and their partners. However, the land trust community has pointed to several program limitations. For example, while Farm Bill programs cover total easement transaction costs when the easements are acquired by the federal government (as occurs in the Wetlands Reserve Program, Grasslands Reserve Program, and Forest Legacy, for example), the FRPP requires a 25 percent cash match, potentially limiting land trust participation, according to some land trust organizations.²⁵

The Farm Bill delineates particular purposes and administrative features for the various working lands programs. Largely administered by the NRCS, the agency's regulations detail additional implementation requirements. Both the statute and implementing regulations contain features consistent with using these programs to support large, landscape-scale conservation.

Specifically, though program ranking criteria for project selection vary by program, they include the following types of criteria that may be relevant to allocating funds in a focused way to groups of landowners operating at landscape scales within high-priority ecosystems.

- Promotion of at-risk species habitat conservation
- Focus on priority resource concerns for a particular watershed or area of a state
- Cost-effectiveness
- Overall effectiveness, including how comprehensively a project addresses the identified high-priority concerns
- Degree of expected environmental benefit
- Long-term value and sustainability
- Potential of a project to improve existing conservation systems or complete a conservation system
- Emphasis on state, regional, and national conservation initiatives, including identification of priority landscapes or habitats and relevance to established wildlife priority areas, long-term benefits, and other factors

USDA's Economic Research Service notes that the Environmental Quality Incentives Program highlights "consideration of how comprehensively and completely a proposed conservation project would address resource issues and whether the project would improve or complete a conservation system. The legislation encourages the grouping of 'similar' contract offers for ranking purposes."²⁶ More broadly, the NRCS currently supports several landscape-scale initiatives through its implementation of multiple Farm Bill conservation programs.

²⁴ Ibid., p. 22.

²⁵ Land Trust Alliance, "Proposed Modifications to the Conservation Title of the 2012 Farm Bill, Discussion Draft, May 18, 2011.

²⁶ USDA Economic Research Service, "Conservation Policy: Working-Land Conservation Programs," January 10, 2011, pp. 2-3. Available at www.ers.usda.gov/Briefing/ConservationPolicy/workingland.htm.

Consistent with USDA’s landscape-scale focus, in its 2012 budget proposal, the department included funding to support coordination of regional planning activities. The proposed budget also establishes a set-aside of approximately 5 percent of funding from existing programs, using existing authorities, for competitive allocation among regional pilot projects tailored to local conservation needs and opportunities.²⁷ This proposed funding continues the 2011 efforts by the NRCS to invest in several priority landscape-scale initiatives. Initiative funding under FY 2011 allocations totaled \$202,104,071, of which \$16,390,716 was for technical assistance and \$188,713,355 was project funding.

Table 2. FY 2011 NRCS Initiative Allocations (Final 10/25/2010 Updates 1/12/11): Funding Assistance*

Landscape Initiative	CSP-CCPI Acres	EQIP-Gen	EQIP-CCPI	WHIP-Gen	WHIP-CCPI	WRP	WREP	FRPP
Miss. River Basin Init.-Commitment	122,172		22,475,000	365,904	365,904		20,401,052	
MRBI-RFP	278,000		8,990,000		495,495		25,000,000	
Sage Grouse		21,000,000		3,960,000		5,000,000		23,000,000
Lesser Prairie Chicken		5,910,000		4,600,000				
Longleaf Pine				12,100,000				
Bay Delta						25,375,000		
Illinois River		3,725,000						
Northern Central Wetlands**								
N.E. Forestry				5,950,000				
TOTAL	400,172	30,635,000	31,465,000	26,975,904	861,399	30,375,000	45,401,052	23,000,000
Original Reserve		49,100,000	58,300,000	33,000,000	861,399	181,500,000		
Remaining in Reserve		18,465,000	26,835,000	6,024,096	0	136,098,948		

*In addition to direct funding assistance, initiatives received a total of \$16,390,716 in technical assistance.

**The Northern Central Wetlands initiative received Conservation Technical Assistance only in the amount of \$4,500,000.

In addition to the ranking criteria among the working lands programs that support or imply the relevance of landscape-scale conservation, several programs emphasize partnership projects.

The Cooperative Conservation Partnership Initiative (CCPI) is explicitly intended to set aside “funds within WHIP, EQIP, and CSP to fund special local and regional restoration and improvement initiatives involving groups of farmers or ranchers working with USDA,

²⁷USDA, FY2012 Budget Summary and Annual Performance Plan, January 2011.

conservation organizations, state and tribal agencies or other entities.”²⁸ The initiative is not a separate Farm Bill program. Rather, the 2008 Farm Bill directs that 6 percent of EQIP and WHIP funds and 6 percent of allowed acres for the Conservation Stewardship Program be reserved to support contracts for agricultural owners and operators who participate in approved project areas such as the Chesapeake Bay Watershed. Ninety percent of CCPI funds focus on state and local conservation priorities, and the remaining funding is allocated to multi-state CCPI projects selected through a national competitive process.

Despite its focus, the CCPI program does not appear to have fulfilled its potential to coordinate more landscape-scale, cross-boundary and cross-jurisdictional investments.²⁹ The initiative does not have dedicated funding, but other factors may also have limited the full realization of its potential to facilitate collaborative conservation. In particular, the initiative draws its funding from an amalgamation of other programs. Use of those funds, blended together for CCPI use, must still conform to the specific rules of the funding sources (EQIP, WHIP, etc.). For example, one obstacle to using the CCPI program for community-based conservation efforts using EQIP funds is that EQIP contracts must be with an individual producer rather than with an organization or group. Some observers have suggested CCPI might be more effective if it could operate under its own program rules, aligning funds from various sources to those rules.³⁰

The Agricultural Water Enhancement Program (AWEP), funded in the 2008 Farm Bill at \$60 million within EQIP funds, focuses on large-scale projects that benefit water quality and water quantity. While individual farmers may apply for funding, nonprofit organizations and governments—state, county, tribal, and local—may also apply for funding of partnership projects. Producers may participate individually in AWEP, or collectively through a partnership project. For example, within the Central Coast of California, the Agriculture Water Quality Alliance was funded under AWEP to help 71 growers install 384 conservation practices and treat over 12,000 acres to reduce runoff and leaching of nutrients. The project area covers four watersheds and is intended to conserve water supply and improve water quality.³¹

Beyond general funding, eligibility, and other program design constraints, one limitation of effective use of these programs in nurturing collaborative (larger-scale) projects is their prohibition on use of any portion of funding for partnership capacity building, an issue flagged by the Rural Voices for Conservation Coalition, an alliance of organizations that supports collaborative, place-based conservation in rural communities. A recent study of 92 community-based organizations in the West found that 25 percent had no paid staff, and 78 percent had annual budgets under \$500,000.³² Institutional capacity for these organizations can be a limiting factor in their participation in Farm Bill conservation program partnerships.

²⁸ Ibid., p. 12.

²⁹ Interview with Bob Bendick, The Nature Conservancy, March 30, 2011.

³⁰ Interview with Arlen Lancaster, former NRCS Chief, April xx, 2011.

³¹ See Agriculture Water Quality Alliance website, Central Coast Irrigation and Nutrient Management Initiative at www.awqa.org/farmers/AWEP.html For a general description of the AWEP grants, see <http://www07.grants.gov/search/search.do?oppId=44789&mode=VIEW>

³² Cassandra Moseley, et al., “Community-based Natural Resource Management in the Western US: A Pilot Study of Capacity,” Ecosystem Workforce Program Working Paper Number 21, Spring 2011,.

Environmental protection programs remove land from crop production, often through easements, and also offer rental payments and cost-sharing to create longer-term conservation opportunities, including conversion of land back into forests, grasslands, or wetlands. The largest program is the Conservation Reserve Program (and Continuous Conservation Reserve Program), through which the Farm Service Agency enters into 10 to 15-year contracts with producers, providing annual rental payments as well as financial assistance for some conservation practices. A sub-program, the Conservation Reserve Enhancement Program, specifically supports state and federal partnerships that protect environmentally sensitive lands, restore wildlife habitat, and protect ground water and surface water. One program option, the State Acres for Wildlife Enhancement (SAFE), focuses on geographically defined areas that protect specific wildlife species.

Other land retirement programs, managed by the NRCS, include: the Wetlands Reserve Program (easements and payments for wetland and wildlife protection activities) and a Wetlands Reserve Enhancement Program and the Healthy Forests Reserve Program. Like the Working Lands programs, ranking criteria for project selection include conservation value, cost-effectiveness, leveraging, and other criteria potentially relevant to large landscape-scale conservation.

Several *other Farm Bill conservation programs* have a potential nexus to landscape-scale conservation, including the 2008 Farm Bill emphasis on Environmental Services Markets, with a goal of facilitating participation of farmers and landowners in emerging environmental services markets for habitat protection, carbon storage, water storage, and other activities.

The ecosystem services provisions of the Farm Bill provide a potentially important support tool for landscape-scale conservation for several reasons. First, better understanding and quantifying these benefits may open the door to additional conservation revenue streams—for example, from municipalities seeking to protect source water. Second, because some ecosystem services benefits are more evident and measurable at larger scales, attempts to develop ecosystem services markets may motivate multi-landowner collaboration to aggregate benefits at an ecosystem (or landscape) scale.

Two examples highlight these possibilities. Florida initiated in 2005 its Florida Ranchlands Environmental Services Project (FRESP) to field-test payment for ecosystem services in the northern Everglades ecosystem in a partnership that included Florida's Department of Agriculture and Department of Environmental Protection, the South Florida Water Management District, the USDA Natural Resources Conservation Service, scientists at the University of Florida, the World Wildlife Fund, and eight participating ranchers. From 2006 to 2009, water management alternatives were implemented on eight ranches, accompanied by the field-testing of measures and practices to certify on-ranch provisioning of water and phosphorous retention and wetland enhancement. In Phase II, beginning in 2010, payments for performance on the volunteer ranches commenced. During the pilot, capital costs to ranchers were reimbursed and participation fees were paid based on land rental calculations rather than on direct ecosystem services calculations.³³

³³ Boyd and Scarlett.

In the Tualatin Basin, Oregon, the water management agency, Clean Water Services, received in 2004 “the first-ever fully integrated municipal National Pollutant Discharge Elimination System permit” using trading provisions to pay farmers \$6 million to plant over 35 miles of shade trees in riparian areas. These payments were combined with NRCS program payments to attract landowner participation. The payments to farmers enabled CRS to avoid \$60 million in costs to construct refrigeration systems at two wastewater treatment plants. Through this permit, CSW was able to “balance heat released from the treatment facilities with cool water released from Hagg Lake and new shade from planting trees in rural riparian areas,” according to analysts at the Institute for Natural Resources at Oregon State University.³⁴

To avoid risks that some trees would die off, CSW worked with farmers to plant twice as many trees as was necessary to achieve desired water temperatures. Farmers participate on a voluntary basis. Initially, farmers were wary of participating in a program that might bring increased scrutiny of their actions or interference with their operations. However, after a slow initial start as farmers eyed with caution any involvement in the permit, CSW has had to turn farmers away, as the tree-planting goal has been met. CSW concludes of its pioneering effort that water quality trading allows them “to work with our agricultural partners to improve the health of the river by investing resources where they will provide the biggest bang for the buck by trading the thermal loads from our treatment facilities for streamside shading improvements outside of the Clean Water Services’ boundary.”³⁵

Despite these examples, ecosystem services markets remain small, and linking such markets to other Farm Bill conservation programs remains relatively untested. Yet opportunities for expanding payments for ecosystem services may be significant. For example, USDA’s Economic Research Service explores in a 2008 report whether farmers might benefit from participating in the wetland mitigation market. They note that:

*...data are too limited to allow us to estimate supply functions, but the available data allow us to compare wetland restoration costs. Based on WRP data from 1995 through 2007, county-level wetland restoration costs averaged \$73-\$525 per acre across counties with mitigation banks, with a maximum of about \$2,500 per acre. Conversely, restoration costs of mitigation banks, in most cases, exceed \$5,000 per acre and, in some cases, exceeded \$125,000.*³⁶

The report states that, “assuming that the mitigation banks were successful financially, agricultural producers in those same counties would have also benefited if they had established mitigation banks on their land.” Though their analysis is limited, the authors suggest that these data give “reason to believe that farmland owners may have a competitive advantage in wetland restoration.”³⁷

³⁴ Lynn Scarlett, “Green, Clean, and Dollar Smart: Ecosystem Restoration in Cities and Countryside,” New York: Environmental Defense Fund, 2010. For more detailed information, see “Tualatin River Subbasin Water Quality Management Report, Appendix 1, Oregon Department of Environmental Quality, August 2001.

³⁵ “Tualatin River Watershed-based Permit: Meeting the goals of clean water and healthy habitat,” Portland: Clean Water Services, available at <http://www.cleanwaterservices.org/content/documents/Permit/Watershed-based%20Permit%20Fact%20Sheet.pdf>

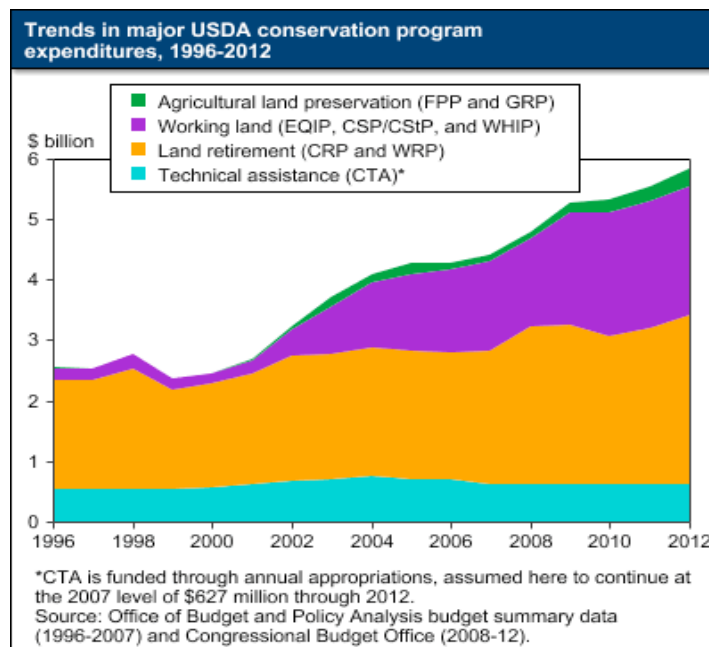
³⁶ Marck Ribaud, et al., “The Use of Markets to Increase Private Investment in Environmental Stewardship,” USDA, Environmental Research Service, Economic Research Report Number 64, September 2008, p. 35.

³⁷ Ibid.

3. Budgets and Spending

Since the introduction of the Conservation Title in the Farm Bill in 1985, conservation program spending has steadily increased, including a \$2.7 billion five-year increase in 2008 over previous five-year spending levels.³⁸ However, the current fiscal climate and tightened “pay go” rules requiring offsets for new spending make further increases doubtful as the Congress moves to reauthorize the Farm Bill. Moreover, several recent budget reports have identified Farm Bill programs for potential cuts. The Fiscal Commission’s December 2010 report, for example, proposes to decrease conservation spending for the Conservation Stewardship Program.³⁹ The Bipartisan Debt Reduction Task Force also recommends a consolidation and capping of agricultural conservation programs.⁴⁰

Figure 4. Trends in Major USDA Conservation Program Expenditures, 1996-2012



Source: USDA Economic Research Service, “Conservation Policy: Background,” January 13, 2009. Available at <http://www.ers.usda.gov/Briefing/ConservationPolicy/background.htm>

³⁸ Cowan and Johnson, Summary.

³⁹ National Commission on Fiscal Responsibility and Reform, *The Moment of Truth*, December 2010, p. 45, at http://www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12_1_2010.pdf

⁴⁰ Bipartisan Policy Center, Debt Reduction Task Force, *Restoring America’s Future*, November 17, 2010, pp. 108-112, at <http://bipartisanpolicy.org/sites/default/files/FINAL%20DRTF%20REPORT%2011.16.10.pdf>

IV. Farm Bill Programs in Action: Landscape Initiatives

Bruce Knight, former NRCS Chief, once described some Farm Bill conservation programs as “random acts of kindness.”⁴¹ Others, including analysts at the Office of Management and Budget and Congressional Research Service, have criticized program implementation as insufficiently focused on conservation outcomes and poorly targeted to conservation priorities in some cases.⁴² The 2008 Farm Bill made strides in giving USDA the direction and tools with which to more strategically allocate funding and assess performance. Building upon long-standing program flexibilities and these new directions and tools, NRCS has undertaken several significant landscape-scale initiatives using Farm Bill conservation programs.

Using a “Conservation beyond Boundaries” framework, the NRCS is targeting a number of priority natural resource concerns with landscape-scale initiatives. The NRCS describes these initiatives as having national significance and a focus on critical resource concerns at a landscape level.⁴³ The initiatives build upon existing local partnerships, receive dedicated funding to enhance implementation, use science to inform management practices, and assess performance and outcomes. The initiatives apply resources from a mix of NRCS conservation programs, applying whichever set of programs have defined purposes relevant to the high-priority needs of a given geographic area or programmatic focus. This approach allows a “mixing and matching” of programs, depending on the landscape-scale ecosystem characteristics and partnership requirements.

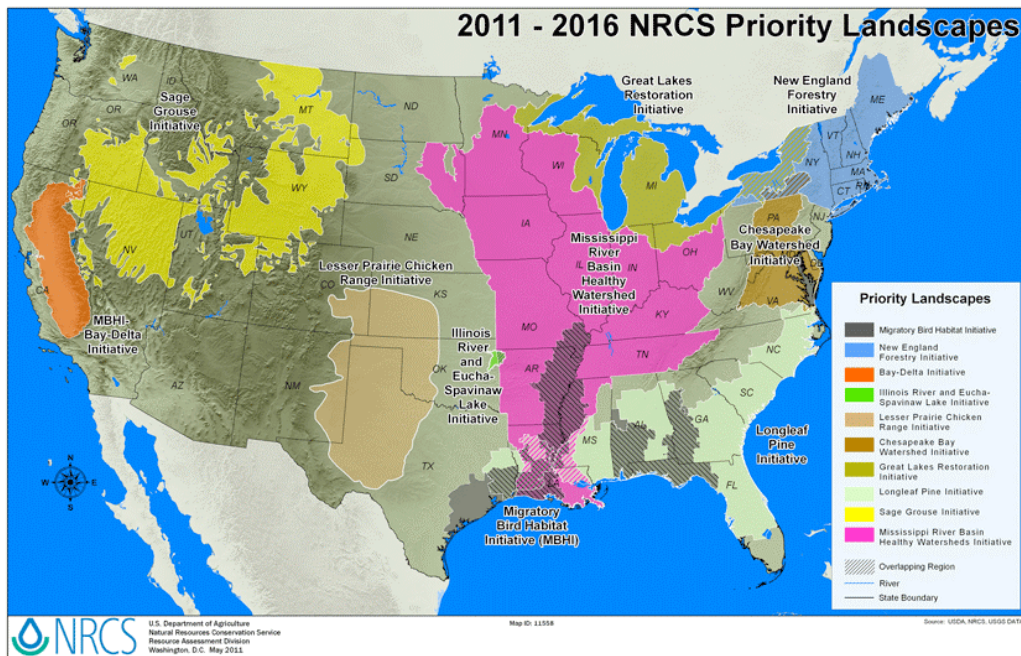
The initiatives focus on both landscapes (watersheds, species, and ecosystems) and national programs with a goal of leveraging action and enhancing consistent practices through partnerships, focusing funding to achieve specific and transparent results, and expanding capacity to accelerate action.

⁴¹ Bruce Knight, “Conservation Technical Assistance—Where We Are and What We Need to Do,” Remarks at the NRCS Conservation Technical Assistance Program State Allocation Formula Team Meeting, Arlington, VA, March 14, 2005, accessed at: <http://www.nrcs.usda.gov/news.speeches05/cta.html>

⁴² Bob Bendick, Policy Director at The Nature Conservancy, also made this point in an interview, March 30, 2011.

⁴³ Natural Resources Conservation Service, “Conservation Beyond Boundaries: NRCS Landscape Initiatives,” power point presentation, available from the NRCS, Office of the Chief, undated.

Figure 5. NRCS Priority Landscapes, 2011-2016



Source: “*Conservation Beyond Boundaries: NRCS Landscape Initiatives*,” available at: <http://www/nrcs.usda.gov/initiatives/index.html>.

The initiatives comprise several different delivery models.

- *The Chesapeake Bay Watershed Initiative*, for example, illustrates how NRCS is using its landscape focus to concentrate funding for specific purposes. Over 97 percent of new contracts with farmers in the region are located in priority watersheds within the larger Chesapeake Bay area, and actions target water quality priorities of reducing nitrogen, phosphorus, and sediment from agricultural sources.⁴⁴ In the 2011 Conservation Effects Assessment Project (CEAP) report for the Chesapeake Bay Region, NRCS demonstrates the effectiveness of targeting high-priority areas to reduce erosion and manage nutrients. The CEAP report notes that high-priority areas experience nitrogen losses of 53 pounds per acre in contrast to areas with a moderate need for treatment (26 pounds per acre) and low level of treatment need (2 pounds per acre).⁴⁵
- *The Great Lakes Restoration Initiative* involves 16 federal agencies, working with state, local, and private-sector participants, to combat invasive species, protect watersheds and shorelines from pollution, and restore habitat. The Environmental Protection Agency (EPA) oversees federal funding, with individual agencies contributing funds from programs within their authorized responsibilities. NRCS, contributing funds from EQIP, WHIP, FRPP, the Conservation Technical Assistance program, and other sources, has entered into contracts with some 220 partners to undertake actions on private lands.

⁴⁴ Ibid.

⁴⁵ NRCS, *Assessment of the Effects of Conservation Practices on Cultivated Cropland in the Chesapeake Bay Region*, Washington, D.C., USDA, February 2011, p. 12.

- *The Mississippi River Basin Healthy Watershed Initiative* uses 597 EQIP and WHIP contracts to support conservation on private lands, coupled with Wetland Reserve Enhancement Program funds to provide financial assistance to partners. The initiative centers on 41 focus area watersheds and integrates data into a Conservation Effects Assessment, correlating information with U.S. Geological Survey and EPA data.⁴⁶
- *The Sage Grouse Initiative*, which covers activities in 11 states, targets spending and coordinates actions with other federal agencies, states, and landowners to reduce threats to sage grouse habitat. Actions have included moving or “marking” 180 miles of “high risk” fence, improving grazing systems on 640,000 acres, and removing 40,000 acres of encroaching conifers. Working with the U.S. Fish and Wildlife Service (FWS), NRCS completed a conference report “providing certainty to landowners who enroll that NRCS programs will benefit sage grouse.”⁴⁷ The agreement resulted in identification of 40 conservation practices to ensure that they are benign or beneficial to sage grouse so that landowners using these practices can “continue normal operations even if FWS lists sage grouse as a federally threatened or endangered species.”⁴⁸

V. Performance Challenges

1. Funding Issues

The NRCS initiatives exemplify landscape-scale conservation and may point the way to future opportunities. Current resources directed to these initiatives remain, however, a small percentage of overall conservation program spending. National landscape initiative obligations, for example, use 3.8 percent of overall EQIP funding. Related, state landscape initiatives use 3.3 percent of EQIP funds. The combination of all initiatives—statutory, national and state landscape initiatives, and programmatic initiatives—uses 10.2 percent of EQIP funds.⁴⁹ The percentage of other program funds allocated to these initiatives is, similarly, modest. A challenge in diverting more funding toward these purposes is continued expectation by some states, conservation districts, and landowners that Farm Bill conservation funding should be broadly distributed rather than focused on specific (high-priority) areas. Even where program managers and landowner participants agree that funding should focus on high-priority areas, an equally challenging issue is that of who should decide, using what criteria and processes.

But other funding challenges unrelated to resource allocation also limit agency capacity to administer the conservation programs in ways that target spending and track performance. Funding for program management has declined despite expansions in the scale and number of conservation programs. Low staffing levels, according to one report, limit the ability of NRCS to reach out to potential farming partners.⁵⁰

⁴⁶ Ibid.

⁴⁷ NRCS, “Sage Grouse Initiative (SGI) Fiscal Year (FY) 2010 Accomplishments,” USDA, Washington, D.C., 2011

⁴⁸ Ibid.

⁴⁹ NRCS, EQIP Initiative Funding Obligations in 2010, Spreadsheet, available from NRCS headquarters, Washington, D.C.

⁵⁰ Aimee Weldon, et al., “Conserving Habitat through the Federal Farm Bill: A Guide for Land Trusts and Landowners,” Washington, D.C., Defenders of Wildlife, 2010, p. 3. NRCS Chief Dave White confirmed this limitation in an interview, May 4, 2011.

However, current USDA authority to enabling nonprofit land trusts and other organizations to acquire and manage easements under the Farm and Ranchland Protection Program offers a way to leverage implementation capacity. Under this model, funding is provided through cooperative agreements and financial assistance to an applicant (and matched with a 50 percent share of non-NRCS resources). The State Conservationist receives and reviews applications, prioritizes projects, and submits them to NRCS for funding. As noted earlier, land trust participation may be limited by cash contribution requirements and the inability to use program funds for transaction costs. For other easement programs, such as WRP, the Emergency Watershed Protection Program, and Forest Legacy, in which the federal government holds the easements, 100 percent of transaction costs are funded through these programs. Removing these restrictions (and extending use of land trusts in easement acquisition to all programs, including the WRP) could expand land trust participation, yielding long-term benefits through shifting costs of oversight and monitoring from the federal government to State governments or nonprofit partners. Land trust participation could provide a tool for expanding collaborative relationships and coordinating public-private conservation efforts.

2. Roles and Responsibilities—Program Implementation

A signature characteristic of large landscape conservation is collaboration and network governance in which multiple public, private, and nonprofit participants jointly identify priorities, take actions, and assess results. Farm Bill conservation programs have long used local councils and conservation districts to assist in identifying priorities and actions. As one congressional report notes, “local planning and implementation of conservation programs through locally constituted councils is an important aspect of conservation management and a long-standing characteristic of US local-federal relations.”⁵¹ However, as the report continues, “A significant question raised by conservation groups . . . is the extent to which conservation efforts would be more effective and more efficient if they took place at larger scales, for example, through regional or multistate resource planning and multistate conservation planning.”⁵² Through its landscape initiatives, the NRCS has transcended this issue, at least in these instances. Nonetheless, some critics perceive tensions and trade-offs between the interests of local councils versus the efficiencies and conservation benefits that may flow from pooling financial and planning resources at a more regional, or even multi-state scale. And a broader governance issue accompanies efforts to set priorities, implement actions, monitor results, and adjust actions to new information: specifically, what is the appropriate scope for large-scale planning, who initiates such efforts, and who participates in the governance of these cross-jurisdictional (often public-private) endeavors?⁵³

Some observers do not view this trade-off as intrinsic to the council structure or program rules, pointing to some Conservation District leadership in cooperative (and landscape-scale) conservation.⁵⁴ However, rural areas with low populations may have difficulties staffing the

⁵¹ Cowan and Johnson, CRS-3.

⁵² Ibid.

⁵³ For a general discussion of these questions, see McKinney, Scarlett, and Kemmis, *Large Landscape Conservation: A Strategic Framework for Policy and Action*.

⁵⁴ Interview with Bruce Knight, former NRCS Chief, April 20, 2011.

highly decentralized, small conservation districts. Consolidation, with some of the advantages such consolidation might bring for using a larger-scale framework when considering conservation priorities, could overcome the local-regional trade-off problem.

3. Programmatic Details

Despite significant conservation program flexibility, several implementation features constrain, or may make more difficult, landscape-scale conservation efforts. These include requirements, for some working lands programs (EQIP), that the recipient or participant be an individual producer, landowner, or entity.

Alternative models exist in which groups of landowners jointly come together and apply for a single project over an expanse of land. The Mt. Grace Land Trust, for example, conserves a land corridor using several easements across multiple land parcels resulting in an interconnected network of 80,000 acres of protected habitat.⁵⁵ At Fisheating Creek in the Northern Everglades, USDA partnered with four landowners on five ranches and with local agencies and nonprofit organizations to “create one of the largest contiguous easement acquisitions in the history of the Wetlands Reserve Program (WRP).”⁵⁶ The NRCS used \$89 million in WRP funding to acquire easements on nearly 26,000 acres of the Fisheating Creek Watershed and, in partnership with the South Florida Water Management District and The Nature Conservancy, undertake wetlands restoration planning and monitoring.

Such multi-agency, multi-parcel, collaborative efforts are possible within the parameters of existing Farm Bill conservation programs. A central question is whether revisions to implementation guidance or, ultimately, changes in programs during reauthorization could further encourage and stimulate such larger scale, partnered efforts. The experiences at Mt. Grace and Fisheating Creek reflect an emerging NRCS emphasis on conservation outcomes rather than on programs and the relevance of this changing focus for landscape-scale conservation.

4. Performance Measures

All the Farm Bill programs involve some degree of ranking for ecological benefits. However, ranking criteria have typically focused on the characteristics of the lands receiving payment, with less evaluation of how the conservation status of agricultural lands leads to ecosystem benefits, such as improved water quality, delivered “off-site.” Recognizing the importance of these benefits, the 2008 Farm Bill laid the groundwork for USDA to evaluate ecosystem services and ecosystem market potential associated with farmlands and forests.

Earlier, in response to increased conservation funding in the 2002 Farm Bill, USDA and other federal agencies established the Conservation Effects Assessment Project (CEAP) to quantify the

⁵⁵ Description of the Mount Grace project is available at: <http://www.landtrustalliance.org/land-trusts/ne-success/thousands-acres>.

⁵⁶ Everglades Foundation News Release accessed at: <http://www.evergladesfoundation.org/news/entry/USDA-ANNOUNCES-MAJOR-WETLAND-RESTORATION-PROJECT-IN-THE-NORTHERN-EVERGLADES/>

environmental effects of conservation practices, programs, and payments.⁵⁷ Through CEAP, USDA has begun to develop and apply performance and accountability measures for conservation payments.

Despite this evolving focus on benefits assessment, Farm Bill conservation programs face some continued criticism for allocating funds to projects and areas that are not high-priority ecosystems and for evaluating results based on “basic indicators such as acreage protected rather than on ecosystem functionality or ecosystem services provided.”⁵⁸ Though metrics for evaluation performance are improving, key questions remain regarding how to better harness these programs to further increase their benefits:⁵⁹

- How robust is the selection of priority conservation areas?
- Should a broader set of criteria be used?
- Are funds always allocated based on the priority designations, or do other factors, such as equal geographic distribution, affect fund allocation?

The growing interest in large, landscape-scale conservation and the NRCS focus on some targeted ecosystem initiatives highlight the need for quantifiable outcome measures. In addition, the increasing availability of such measures also may demonstrate the cost-effectiveness of allocating Farm Bill conservation funding on a regional basis to high-priority areas.

5. Multi-Agency Coordination

It is tempting to examine Farm Bill conservation programs in isolation from other Federal and state programs to identify possible administrative and legislative changes that would support landscape-scale conservation. However, some of the challenges that NRCS and FSA face derive from the policy tools of other agencies such as the Environmental Protection Agency and Fish and Wildlife Service that may be misaligned with using an ecosystem-based, multi-species, and outcome-based focus. Using provisions of Section 7a4 of the Endangered Species Act, NRCS developed a sage grouse agreement with the FWS through which over 40 conservation measures were identified and approved as consistent with sage grouse protection. In turn, producers that participate in NRCS programs who agree to implement these measures in their program contracts receive a “certainty” statement that, should the species be listed, they will not be subject to further restrictions on their production activities. The agreement suggests the creative possibilities that result from interagency collaboration. But NRCS officials continue to point to interagency regulatory challenges as limitations on their ability to implement outcome-focused, landscape-scale projects.⁶⁰

VI. Looking to the Future: Supporting Landscape-scale Conservation

Farm Bill conservation programs over the past two decades have protected millions of acres of farmlands, some permanently and some for specific periods of time. The programs have also

⁵⁷ Duriancik, Lisa, et al., *The First Five Years of the Conservation Effects Assessment Project*, *Journal of Soil and Water Conservation*, Nov/Dec 2008—vol. 63, no. 6.

⁵⁸ Boyd and Scarlett.

⁵⁹ *Ibid.*

⁶⁰ Interview with Dave White, NRCS Chief, May 4, 2011.

expended millions of dollars in partnership with agricultural producers and others to restore and enhance lands and reduce environmental impacts associated with agricultural practices. Many of these efforts have unfolded one farm at a time in dispersed areas with only limited relationship to high-priority ecosystems. Despite these limitations, through both statutory changes and administrative improvements, these programs increasingly are allocating funds more strategically toward high-priority areas and to address high-priority environmental threats or problems. Recent innovations also include growing efforts to focus some funding and actions using a landscape-scale or regional framework. The NRCS “Conservation beyond Boundaries” initiatives exemplify this approach.

As reauthorization of the Farm Bill looms—and as ongoing implementation improvements continue—a central challenge is how conservation effectiveness might be enhanced by strengthening capacity for large, landscape-scale conservation through Farm Bill conservation programs and their intersection with other agency programs and actions. While current laws and regulations provide sufficient flexibility to support “conservation beyond borders”, the 2012 Farm Bill reauthorization provides an opportunity to strengthen Farm Bill tools that support collaboration, multi-participant initiatives, and investment in landscape-scale initiatives that address priority issues.

Policy Opportunities and Recommendations

- **Environmental Markets:** The 2012 Farm Bill should retain and strengthen ecosystem services provisions, and Farm Bill architects should consider providing some dedicated funding to assist USDA to undertake pilot studies explicitly designed as policy experiments associated with ecosystem services payments.
- **Performance Measures:** The 2012 Farm Bill should direct USDA to continue development of CEAP outcome-based measures and use of these measures to assess program performance and inform allocation decisions. CEAP should include comparative evaluation of the effectiveness on conservation measures at different project scales.
- **Funding Allocation:** The Cooperative Conservation Partnership Initiative should be continued in the 2012 Farm Bill, but with revisions that allow CCPI funds to be used for integrated, ecosystem-focused purposes.
- **Eligibility:** Three eligibility and allocation considerations could support large landscape, collaborative conservation.
 - Funding eligibility for partnership organizations that engage directly in conservation projects should be considered
 - Eligibility provisions that reward projects identified by states, tribes, and others as high-priority regions could help steer funds to areas of high potential for cost-effective investments
 - Project rankings that reward multi-partner projects would help support coordinated, landscape-scale conservation investments.
 - *Adjusted Gross Income:* Restrictions on eligibility based on adjusted gross income may merit reconsideration in a reauthorized farm bill to take maximum advantage of participation in large landscape, priority-focused conservation efforts.
- **Rural community and partnership capacity:** The Resource Conservation and Development Program funding of NRCS staff to assist state and local units of government and nonprofits to develop and implement conservation and natural resource improvement measures, which catalyzes farmer participation in collaborative conservation efforts and leverage local knowledge and resources, should continue.
- **Federal Capacity:** The Farm Bill reauthorization presents an opportunity to assess federal capacity and needs for effective program implementation, perhaps through use of tools such as activity-based cost analysis.
- **Program Implementation Efficiency:** Landscape-scale conservation would benefit from efforts in the 2012 Farm Bill to streamline and consolidate programs and simplify their administration. In addition, several specific implementation issues are particularly germane to landscape-scale conservation partnerships.
 - Provision of easement authority to certified land trusts under the Farm and Ranchland Protection Program should be extended to the Wetland Reserve Program.
 - Re-introducing a competitive bidding program, carefully structured to maintain program access by new and small farmers and ranchers, may help steer funds toward cost-effective projects and, where larger-scale collaborative efforts generate economies of scale and greater cost-effectiveness, could reward such efforts while still sustaining participation by smaller-scale landowners.

Policy Opportunities and Recommendations

Office of Environmental Markets: In creating a USDA office focused on researching and assisting in development of markets for ecosystem services, the 2008 Farm Bill provided, for the first time, a federal context for: 1) focusing on these opportunities, 2) developing the analytic tools necessary to support these markets; 3) identifying policy tools to support these markets; and 4) promoting ecosystem market transactions. With public conservation funding constrained by ongoing federal deficits, ecosystem services markets offer a potential revenue stream for farmers that is pegged to protecting water supplies for communities, providing water storage and flood mitigation, and supporting regulatory requirements for agencies and the private sector to mitigate impacts to wetlands and endangered or threatened species. To support this market development, a number of challenges persist.

Many ecosystem services activities, policies, and initiatives target a single benefit stream rather than focusing on multifunctional benefits and tools to support such integration of benefits.⁶¹ Many efforts to invest in ecosystem services still lag from a lack measures, metrics, and protocols to assess benefits in a policy setting. Moreover, “few policy tools and practices exist to protect benefits at a landscape scale and across jurisdictional boundaries, including international boundaries.”⁶²

Section 2709 of the 2008 Farm Bill directs the U.S. Department of Agriculture, through the Office of Environmental Markets, to develop technical guidelines for quantifying, reporting, registering, and verifying the environmental benefits of land management activities to facilitate development of environmental markets. The 2012 Farm Bill should retain and strengthen these provisions, and Farm Bill architects should consider providing some dedicated funding to assist USDA in undertaking pilot studies explicitly designed to be policy experiments, as Jim Boyd and I suggest in a 2011 Resources for the Future Report on ecosystem services markets.⁶³ In that report, we note that: “Pilots should feature an experimental design to identify legal, regulatory, and administrative barriers to policy innovation; identify objective performance and accountability measures; relate the relationship of trades, payments, planning rules, or regulations to biophysical outcomes that are socially meaningful and comprehensible to nontechnical audiences; identify the beneficiaries of produced and delivered ecosystem services; identify sources of demand for ecosystem services and associated funding sources or legal/regulatory drivers; and identify the suppliers of ecosystem services and assess the inducements necessary to stimulate greater supply.”⁶⁴

Performance Measures: USDA has taken significant strides, particularly in the recent development and application by the NRCS of its Conservation Effects Assessment Project, to shift toward outcome-focused measures for Farm Bill programs. Key findings from these assessments affirm the relevance of focused allocation of Farm Bill conservation funding. For example, in its assessment of cropland practices in the Chesapeake Bay region, NRCS finds that “19 percent of cropped acres (810,000) have a high level of need for additional conservation

⁶¹ Jim Boyd and Lynn Scarlett, “Ecosystem Services: Quantification, Policy Applications, and Current Federal Capabilities,” Discussion Paper, Washington, DC: Resources for the Future, 2011.

⁶² Ibid.

⁶³ Ibid.

⁶⁴ Ibid.

treatment...Model simulations show that adoption of additional conservation practices on these 810,000 acres would, compared to the 2003-06 baseline, further reduce edge-of-field sediment loss by 37 percent, losses of nitrogen with surface runoff by 27 percent, losses of nitrogen in subsurface flows by 20 percent, and losses of phosphorus (sediment-attached and soluble) by 25 percent.”⁶⁵

Outcome-based Measures: The 2012 Farm Bill should direct USDA to continue development of CEAP outcome-based measures and use of these measures to assess program performance and inform allocation decisions. Specifically, all Farm Bill programs should include selection criteria linked to outcome-based measures where feasible and relevant.

Scale and collaboration measures: Consistent with the increased formation of large landscape-scale, multi-participant conservation partnerships that benefit from Farm Bill conservation programs, CEAP should include comparative evaluation of the effectiveness on conservation measures at different project scales. The Rural Voices for Conservation Coalition also proposes that USDA create performance measures for collaborative work by its agencies.⁶⁶ Such measures can be established administratively, but 2012 Farm Bill language could explicitly reference landscape-scale projects and direct agencies to strengthen collaborative processes.

Funding Allocation and Eligibility Criteria: The 2008 Farm Bill includes several provisions that promote and facilitate conservation partnerships and funding allocation to state, regional, and other high-priority areas, including the Cooperative Conservation Partnership Initiative. That Initiative should be continued in the 2012 Farm Bill, but with revisions that allow CCPI funds to be used for integrated, ecosystem-focused purposes rather than restricting fund usage to the specific purposes of individual programs from which CCPI funds are drawn.

Eligibility: Three eligibility and allocation considerations could help support large landscape, collaborative conservation.

- Funding eligibility for partnership organizations that engage directly in conservation projects should be considered for the CCPI and other Farm Bill programs.
- Eligibility provisions that reward projects identified by states, tribes, and others as high-priority regions could help steer funds to areas of high potential for cost-effective investments. Of particular note is the EQIP Conservation Innovation Grants program that awards competitive grants to state and local agencies, nongovernmental organizations, tribes, and individuals to implement innovative conservation techniques. Similarly, the Conservation Reserve Enhancement Program, in which states propose sub-state priority areas, such as watersheds, should continue.
- Project rankings that reward multi-partner projects would help support coordinated, landscape-scale conservation investments.
- *Adjusted Gross Income:* Farm Bill conservation program participation from 2009 to 2012 restricts eligibility to those with an average adjusted nonfarm income of greater than \$1 million, unless two-thirds of that average adjusted gross income is farm

⁶⁵ NRCS, “Assessment of the Effects of Conservation Practices on Cultivated Cropland in the Chesapeake Bay Region,” USDA Natural Resources Conservation Service, Conservation Effects Assessment Project, February 2011.

⁶⁶ Rural Voices for Conservation Coalition, “Rural Capacity for Conservation and Job Creation,” RVCC Issue Paper, May 2011.

income. Current law allows the NRCS Chief to waive these eligibility restrictions. However, these restrictions may merit reconsideration in a reauthorized farm bill to take maximum advantage of participation in large landscape, priority-focused conservation efforts.

Partnerships and Cost-sharing: While cost-sharing is an important dimension of collaborative, landscape-scale efforts, some restrictions on allowable matches may impede opportunities for multi-agency, public-private partnerships. For example, Department of Defense Readiness and Environmental Protection Initiative (REPI) funds had been an authorized source of matching for Farm and Ranchland Protection Program projects in several states, but the shift of FRPP into what is essentially a financial assistance (cost-share) program in the 2008 Farm Bill resulted in disallowance of REPI funds as a match under general “no federal match” provisions.⁶⁷

Rural community and partnership capacity: The Resource Conservation and Development Program provides NRCS staff coordinators that assist state and local units of government and nonprofits to develop and implement conservation and natural resource improvement measures. With many landscape-scale partnerships and rural community conservation organizations lacking technical and financial capacity, this sort of funding can help catalyze farmer participation in collaborative conservation efforts and leverage local knowledge and resources. If program consolidation occurs in the reauthorization of the Farm Bill, this program should be retained or its purposes included in a consolidated program.

Federal Capacity: While Farm Bill conservation programs depend upon private landowners and their stewardship to achieve program goals, effective selection, technical support, funding allocation, and assessment of project outcomes requires adequate federal staffing. Such funding generally is shaped by annual appropriations decisions. However, the Farm Bill reauthorization presents an opportunity to assess federal capacity and needs for effective program implementation, perhaps through use of tools such as activity-based cost analysis.

Program Implementation Efficiency: Many Farm Bill analysts have pointed to program implementation issues and challenges, including the difficulties for landowners to apply for program participation in the context of dozens of different programs with different eligibility requirements, application processes, appraisal processes, and other program details. Addressing such issues is relevant, regardless of project scale. Nonetheless, landscape-scale conservation would benefit from efforts in the 2012 Farm Bill to streamline and consolidate programs and simplify their administration. In addition, several specific implementation issues are particularly germane to landscape-scale conservation partnerships.

- *Easement Authority:* Provisions that give easement authority to certified land trusts in the Farm and Ranchland Protection Program of the 2008 Farm Bill leverage federal funds by shifting oversight and other responsibilities to professional land trusts. Extending this authority to other Farm Bill easement program such as the WRP could expand opportunities for Farm Bill investments to better link to local and regional collaborative conservation initiatives. Broader use of these provisions might occur if easement transaction costs were fully covered through provisions to allow a small fraction of

⁶⁷ Land Trust Alliance, “Proposed Modifications to the Conservation Title of the 2012 Farm Bill, Discussion Paper, May 18, 2011.

program dollars to be allocated for this purpose. Such provisions would have small near-term costs by slightly reducing the amount of funds available for direct investment into easements but could produce long-term savings for the federal government by shifting costs of easement oversight to land trusts in more projects. Currently, within the WRP, only governmental entities (i.e., states and other federal agencies) may hold easements under the program and manage and monitor their enforcement. Land trusts with validated expertise, authority, and resources should be eligible to fulfill these functions for WRP.

- *Competitive Bidding:* The 2008 Farm Bill eliminated the competitive bidding options for the EQIP program, as a consequence of concerns that such provisions had the effect of limiting program access by new and smaller farmers and other underserved communities. On the other hand, some analysts have reported that “cost-sharing and incentive payments were much lower than maximum rates when bidding was allowed in 1996-2002. During that time, the average bid on cost-shared structural practices was 35 percent of practice cost, compared with the 50-75 percent rates allowed.”⁶⁸ Re-introducing competitive bidding could provide impetus for steering funds toward cost-effective projects and, where larger-scale collaborative efforts generate economies of scale and greater cost-effectiveness, could, in effect, reward such efforts. However, reintroduction of such provisions would require a structuring that did not disproportionately disadvantage ne, smaller-scale underserved participants. Such options could include funding set-asides for this group, or selection criteria for partnership applications that include small-scale participants, or other similar approaches.

VII. Conclusion

Farm Bill conservation programs provide significant national investments for land protection and improved land and water conditions that benefit both farming landowners and the Nation. With some modest changes, these programs have potential to deliver the “All Lands, All Hands” land management vision articulated by Secretary of Agriculture Tom Vilsack and articulated by several successive Administrations, including the large landscape conservation framework of the America’s Great Outdoors initiative and the vision advanced in the 2004 Executive Order on Cooperative Conservation.

With increasing scrutiny over the past decade on performance and outcomes, Farm Bill programs are moving toward more cost-effective spending. Moreover, the multi-benefits portfolio of programs provides both flexibility and breadth in program purposes. NRCS has taken advantage of this flexibility and breadth to invest at a landscape-scale in several priority locations. Reauthorization of the Farm Bill in 2012 presents opportunities to further support such landscape-scale collaborative conservation through maintaining and strengthening some programs and refining the eligibility and other implementation details of all programs. The concepts presented in this White Paper highlight several of those opportunities, which are intended to stimulate discussion rather than offer a detailed roadmap.

⁶⁸ USDA Economic Research Service, “Conservation Policy: Working-land Conservation Programs,” available at <http://www.ers.usda.gov/Briefing/ConservationPolicy/workingland.htm>

Appendix I

The 2008 Farm Bill: Titles and Selected Programs and Policies

- Title I, Commodities: Income support to growers of selected commodities
- Title II, Conservation: Environmental stewardship of farmlands and improved management practices through land retirement and working lands programs
- Title III, Agricultural Trade and Food Aid
- Title IV, Nutrition: Domestic food and nutrition and commodity distribution programs
- Title V, Farm Credit: Federal direct and guaranteed farm loan programs
- Title VI, Rural Development: Business and community programs for planning, feasibility assessments, and coordination activities with other local, state, and federal programs
- Title VII, Research
- Title VIII, Forestry: USDA Forest Service programs, including forestry management, enhancement, and agroforestry programs
- Title IX, Energy: Bioenergy programs and grants for procurement of biobased products to support development of biorefineries and assist eligible farmers, ranchers, and rural small businesses in purchasing renewable energy systems
- Title X, Horticulture and Organic Agriculture
- Title XI, Livestock: Livestock and poultry marketing and competition, country-of-origin labeling requirements, state inspections, etc.
- Title XII, Crop Insurance and Disaster Assistance
- Title XIII, Commodity Futures: Reauthorizes the Commodity Futures Trading Commission and other provisions
- Title XIV, Miscellaneous
- Title XV, Trade and Tax Provisions: Tax-related provisions to offset spending initiatives for some programs, and supplemental disaster assistance and disaster relief trust fund, etc.

Chart adapted from Jim Monke and Renee Johnson, "Actual Farm Bill Spending and Cost Estimates," Washington, D.C., Congressional Research Service, December 13, 2010, p. 2.

Appendix II

Summary of Key USDA Conservation Programs

Program	Purpose/Priorities
Agricultural Management Assistance	Supports conservation practices for water management, water quality, and erosion control and to mitigate risk through product diversification
Conservation Reserve Program--General	Retires land from crop production to provide specific environmental benefits, including soil erosion control, water quality, air quality, and wildlife
Conservation Reserve Program--Continuous	Supports conservation practices that provide large benefits, such as riparian buffers and grass filters, bottomland hardwood and wetland restoration
Conservation Reserve Enhancement Program	Supports conservation needs defined by state and federal partnerships, such as sediment reduction, nutrient runoff reduction into the Chesapeake Bay, Everglades, and Illinois, Ohio, and Minnesota River watersheds
CRP Farmable Wetlands Program	Retires small wetlands on cropland for wildlife benefits
Conservation Security Program	Promotes conservation and improvement of soil, water, air, energy, plant and animal life, and other conservation purposes, and requires meeting minimum standards for water quality and soil quality for eligibility
Environmental Quality Incentives Program	Promotes adoption of specific management and structural measures to address resource quality issues such as erosion, at-risk species habitat, air quality, water quality, state and local resource concerns, and conservation
Ground and Surface Water Conservation	Conserves ground and surface water on agricultural operations
Conservation Innovation Grants	Stimulates development and adoption of innovative conservation approaches and technologies while leveraging federal environmental investments
Farm and Ranchland Protection Program	Protects farm and ranchland from conversion in areas of key resource concern and significance
Grassland Reserve Program	Conserves vulnerable grasslands from conversion to other uses and helps maintain viable ranching operations
Healthy Forest Reserve Program	Restores and enhances forest ecosystems to promote recovery of T & E species, improve biodiversity, and enhance carbon sequestration
Wetland Reserve Program	Restores and protects wetlands and associated upland resources and the plant and animal populations they support; contributes to improved water supply and water quality and mitigates flooding
Wildlife Habitat Incentives Program	Establishes and improves fish and wildlife habitat and reduces impacts of invasive species on wildlife habitats. Includes a focus on T & E species, at-risk species, and aquatic wildlife species habitats
Conservation Technical Assistance	Technical support for conservation planning, design, and implementation; conservation compliance; and technology development and transfer
Cooperative Conservation Partnerships Initiative	Supports conservation priorities in watersheds and airsheds of special significance through partnerships

Adapted from: USDA, "Conservation and the Environment," 2007 Farm Bill Theme Papers, June 2006, pp. 36-38.

Appendix III

Persons Interviewed for this Project

Bob Bendick, Director of Government Affairs, The Nature Conservancy

Jim Boyd, Co-Director, Center for Management of Ecological Wealth, Resources for the Future

Leslie Deavers, Farm Bill Coordinator, U.S. Department of Agriculture

Alex Echols, Sand County Foundation

Claude Gascon, Chief Science Officer, National Fish and Wildlife Foundation

Marianne Horinko, President, The Horinko Group (former Assistant Administrator, Office of Solid Waste, Environmental Protection Agency)

Bruce Knight, former Chief, Natural Resources Conservation Service

Arlen Lancaster, former Chief, Natural Resources Conservation Service

Ann Mills, Deputy Undersecretary of Natural Resources, U.D. Department of Agriculture

Mark Rey, former Undersecretary of Natural Resources, U.S. Department of Agriculture

Jim Stone, Rolling Stone Ranch and Blackfoot Challenge, Montana

Gary Tabor, Center for Large Landscape Conservation, Montana

Jeff Trandahl, Executive Director, National Fish and Wildlife Foundation

Dave White, Chief, Natural Resources Conservation Service