



PRIVATE LANDS, PUBLIC BENEFITS

Principles for Advancing
Working Lands Conservation

National Governors Association/Center for Best Practices
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National Governors Association Center for Best Practices
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Since their initial meeting in 1908 to discuss interstate water problems, the governors have worked through the National Governors Association to deal collectively with issues of public policy and governance. The association's ongoing mission is to support the work of the governors by providing a bipartisan forum to help shape and implement national policy and to solve state problems.

The members of the National Governors Association (NGA) are the governors of the fifty states, the territories of American Samoa, Guam, and the Virgin Islands, and the commonwealths of the Northern Mariana Islands and Puerto Rico. The association has a nine-member Executive Committee and three standing committees—on Economic Development and Commerce, Human Resources, and Natural Resources. Through NGA's committees, the governors examine and develop policy and address key state and national issues. Special task forces often are created to focus gubernatorial attention on federal legislation or on state-level issues.

The association works closely with the administration and Congress on state-federal policy issues through its offices in the Hall of the States in Washington, D.C. The association serves as a vehicle for sharing knowledge of innovative programs among the states and provides technical assistance and consultant services to Governors on a wide range of management and policy issues.

The Center for Best Practices is a vehicle for sharing knowledge about innovative state activities, exploring the impact of federal initiatives on state government, and providing technical assistance to states. The center works in a number of policy fields, including agriculture and rural development, economic development, education, energy and environment, health, social services, technology, trade, transportation, and workforce development.

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Table of Contents

Executive Summary	1
1. Introduction	3
2. A New Vision for Working Lands Conservation	7
3. More Effective Working Lands Conservation Programs Can Increase Public Benefits	9
4. Increased Coordination Will Make Working Lands Conservation Programs More Effective	13
Michigan Case Study	16
Maryland-Virginia Case Study	19
Envision Utah Case Study	20
New York Case Study	21
5. Building Greater Public Support for Working Lands Conservation Requires Outreach	22
Pennsylvania GreenWorks Case Study	23
Iowa Case Study	24
Florida Case Study	24
Pennsylvania Growing Greener Case Study	26
Alabama Case Study	27
Utah Forest Legacy Case Study	27
6. Demonstrating the Benefits Working Lands Conservation Programs Produced for the Public Make Them More Accountable and Effective	29
Minnesota Case Study	32
7. A Greater Commitment of Resources for Working Lands Conservation Will Balance and Make More Effective the Universe of Agricultural Conservation Programs	33
8. Conclusion	36
Appendix A: Eight Suggestions for Improving Working Lands Conservation Programs and Policies	38
Appendix B: Land Retirement vs. Conservation Easements/Purchase of Development Rights	40

Appendix C: Comparison of How Working Lands Conservation Programs Presently are Coordinated and How an Improved System Could Operate42

Appendix D: Summary of Federal and State Government Conservation Programs Affecting Michigan Landowners44

Appendix E: Summary of USDA Working Lands Conservation Programs and Activities46

Endnotes50

Acknowledgements52

Executive Summary

“Working lands conservation” means conserving natural resources and protecting the environment using private farms, ranches, and forestlands that are in production. For example, one working lands conservation practice might help farmers employ more accurate fertilization methods to reduce chemical runoff to waterways. Another might help forest landowners use ground cover or rotational timber harvesting to maintain forest health.

Working lands conservation also protects open space and the traditional characteristics of rural communities. Moreover, it helps landowners maintain their business rather than selling their land to developers under pressure from urban sprawl. These benefits are important goals of many governors’ growth management initiatives. **All those who enjoy the benefits should share the costs of producing these “goods.”**

Through working lands conservation, farmers, ranchers, and forest landowners—the stewards of the nation’s working lands—can produce public “environmental goods” in conjunction with the food and fiber they have historically provided. The conservation practices that landowners implement can improve air and water quality, protect fish and wildlife habitat, maintain ecosystem biodiversity, preserve the rural heritage of communities, and improve the public’s overall quality of life.

Despite the many public benefits from working lands, no well-articulated policy exists today on what the nation wants from working lands conservation, by what means it will achieve national goals, or about how working lands conservation and other related policies and activities should relate to one another. A policy that coordinates federal, state, and local conservation goals could help define national priorities and the leadership roles of all levels of government. The current challenge for governors is to help define such a policy—as well as working lands conservation delivery systems—that more effectively utilizes the capabilities and resources of federal, state, and local governments.

At a landmark summit in March 2001 held by the National Governors Association’s (NGA) Center for Best Practices, five principles for improving working lands conservation were widely supported by summit participants (e.g., landowners, conservation officials at all levels of government, conservation non-profits, agricultural non-profits, private-sector groups, academics, etc.). These principles can help guide improvements to working lands conservation assistance programs and inform development of a broad coordinating policy:

1. *More effective conservation on working lands will produce many environmental benefits for the public.* Expanded and better coordinated working lands conservation programs can help to produce greater public environmental goods than land retirement programs or regulation alone. Land retirement programs can only assist a small portion of all working lands. Moreover, regulatory policies are not always the most effective or efficient choice for achieving environmental benefits. Working lands conservation policies and programs can be another way to produce environmental benefits for the public.

For example, a working lands conservation program might establish contracts with landowners who volunteer to produce environmental goods, one of which could be reducing non-point source pollution by filtering water through buffer strips. By paying landowners to better filter their runoff, working lands conservation programs meet some of the same goals as Clean Water Act Section 319 programs. However, since

controlling non-point pollution is only one goal of many defined in the contracts, duplicative oversight and evaluation is minimized. Therefore, costs are reduced. Greater public benefits of this working lands conservation program are derived from improved efficiency and perhaps more trust from landowners since it is locally led and voluntary.

2. *Increased coordination and simplification of local, state, and federal working lands conservation programs will make them more customer-friendly and effective.* First, better coordination between local, state, and federal conservation agencies will reduce the contradictions or redundancies of program requirements. It will also help provide “one-stop-shopping” for landowners seeking conservation assistance.

Second, increased coordination among the federal agencies that affect landowners will help state and local governments reduce time and money spent to meet national goals. Better coordination among federal agencies also will help set priorities for national goals.

Greater state leadership in coordinating working lands conservation will help to synthesize national goals with local, watershed, and ecosystem needs.

3. *Elected officials and government agencies must do a better job of building public support for working lands conservation if programs are to be improved and expanded.* Better public education, outreach to landowners, and involvement of non-profit conservation groups can generate more support for working lands conservation and leverage government assistance.

4. *Government-supported working lands conservation programs should demonstrate they produce valuable and measurable “environmental goods” or “conservation commodities.”* Clearly defining and measuring the environmental goods that working lands are producing (e.g., less phosphorus runoff into a stream or a healthier habitat for certain wildlife) provides greater accountability regarding public spending. The public can see how their tax dollars are protecting their environment, landowners are able to judge the success of their conservation practices, and government agencies are able to focus on more outcome-based goals rather than process-based goals. Furthermore, the public needs to see a clear distinction between government subsidies and voluntary, performance-based working lands conservation. **Providing evidence of real progress in meeting environmental goals can demonstrate that working lands conservation programs are not subsidies.**

5. *Producing more benefits from working lands conservation programs will require significantly greater public funding.* Recent analyses indicate that at least \$5 billion annually in government assistance may be needed to significantly improve the working lands conservation system. With stronger commitments of resources by all levels of government, the basic science can be developed to measure specific environmental goods, staff levels can be increased to provide more technical assistance, and greater coordination and outreach among all conservation stakeholders can be achieved.

In short, working lands conservation programs embody the approach to environmental and natural resource protection favored by the current political climate. National leaders are advocating greater state, local, and private leadership of conservation efforts; they are encouraging greater use of incentive-based programs that foster the stewardship activities of private groups and individuals.

Chapter 1: Introduction

Working lands—the nation’s farms, ranches, and forestlands—can and do produce much more than the commodities farmers, ranchers, and forest landowners sell at market. Beyond commodities such as corn, soybeans, meat, and timber, owners of the nation’s working lands preserve communities’ rural heritage and provide “environmental goods,” including cleaner air and water, fish and wildlife habitat, migratory corridors, and opportunities for carbon sequestration.

These amenities contribute to the overall quality of life of all citizens. Yet, most Americans do not realize the environmental importance of working lands; nor do they appreciate the enormous cost of providing such benefits. It makes sense that all those who benefit from the environmental goods produced by working lands conservation should help to pay for them. Government programs to assist landowners help distribute that cost.

“Working lands conservation” means conserving natural resources and protecting the environment using private farms, ranches, and forestlands that are in production. Government working lands conservation programs and policies help to place conservation practices such as manure management, erosion control, habitat restoration, and conservation easement strategies on working lands.

Almost 90 percent of the rain and snow that falls on the contiguous United States falls on private lands before making its way into streams, estuaries, and underground aquifers. More than 70 percent of wildlife finds food and shelter on working lands.¹ About half of the nation’s federally protected species rely on private lands for at least 80 percent of their habitat.² Privately owned working lands comprise approximately 69 percent of the acreage in the United States.³ (See Diagrams 1-3.)

The composition of land ownership is changing, as well. Land tenure and the average size of agribusinesses have been decreasing. More than 90 percent of private forestland owners, for example, own fewer than 100 acres; but 100 acres is the minimum size necessary for effective timber management. Thirty percent of private forestland owners hold significantly smaller tracts of land, making the forest of which the tract is a part vulnerable to fragmentation and development.⁴

In general, the number of both forest landowners and farmers is increasing while the size of each tract of working lands is decreasing. This puts isolated tracts at greater risk of conversion to development and makes the parcels more expensive to manage and more difficult to provide with technical and program assistance.⁵

Diagram 1: **Who Owns the Land**, in millions of acres (USDA-NRCS National Resources Inventory, 1997)⁶

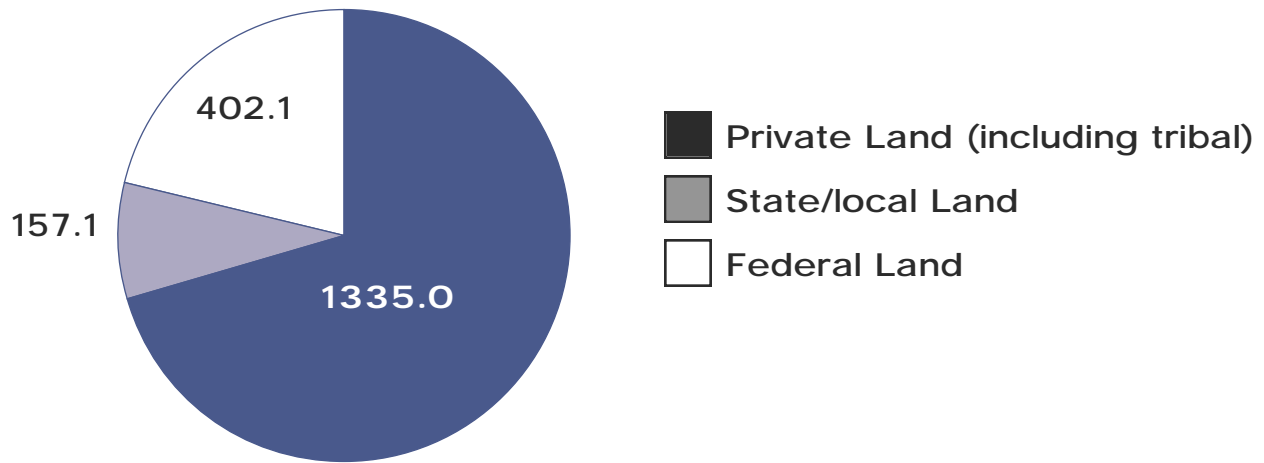


Diagram 2: **Rural vs. Developed Acreage**, in millions of acres

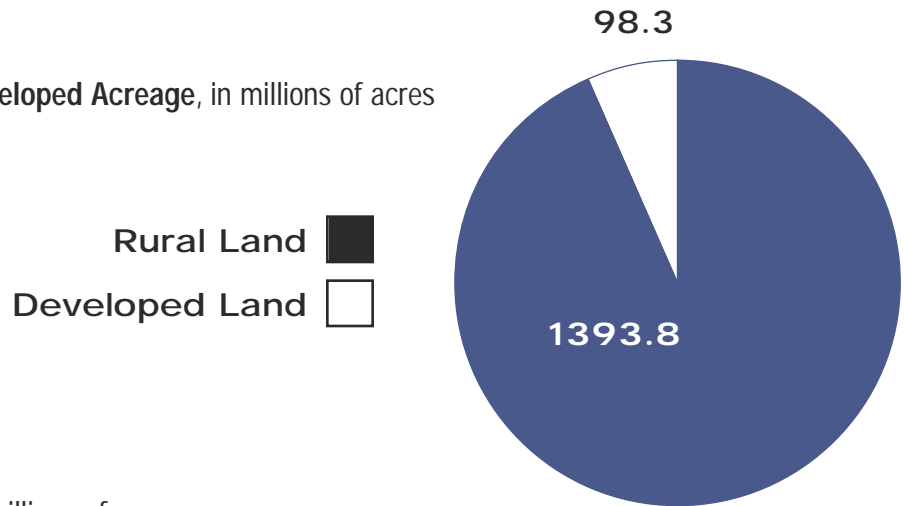
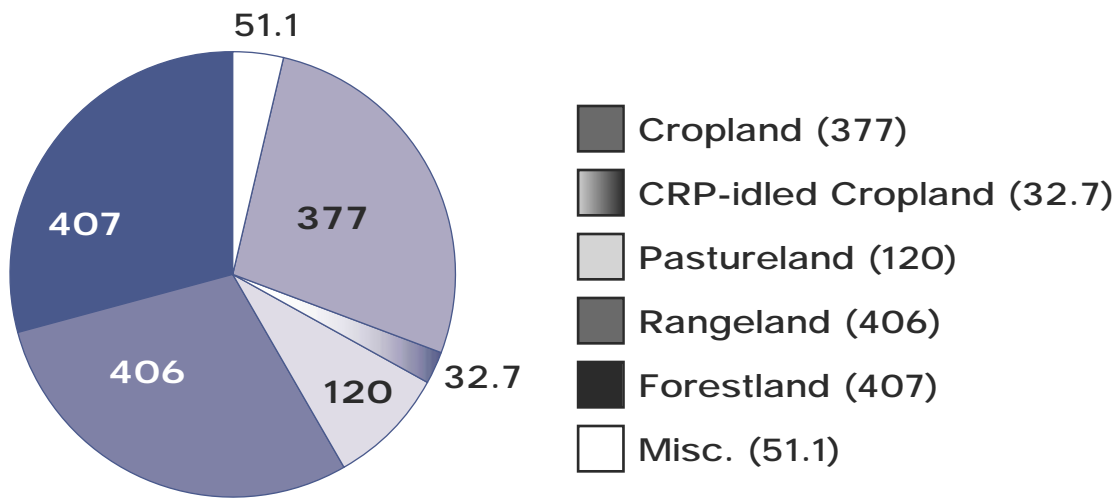


Diagram 3: **Rural Land Uses**, in millions of acres



Note: In aggregate, the total amount of non-federal agricultural land constitutes approximately 69 percent of all U.S. acreage. Total U.S. acreage is 1,894.2 million acres. Non-federal lands, totaling 1,492.1 million acres, include the conterminous United States, Hawaii, Puerto Rico, and U.S. Virgin Islands only.

Despite the acreage private landowners are responsible for, and despite the land's importance to the environment, the owners of private working lands amount to only 2 percent of the U.S. population.⁷ Moreover, the average age of farmers and ranchers is 55 years old; and almost one-third of all farmers and ranchers are over 70 years old.⁸ In other words, the landowners who serve as stewards of almost 70 percent of the nation's land are few and far between and are aging. Without an increased focus on working lands conservation that demonstrates to the public the real benefits working lands provide, this "dying breed" of landowners will take with them the knowledge of how to protect our natural resources with little public appreciation of what has been lost.

Considering these statistics, three facts emerge as important for public policymaking:

1. The owners of private working lands have a substantial ability to affect the quality of the nation's environment and natural resources and, thus, its quality of life and place.
2. These stewards of the nation's natural resources are aging. In the next 10 to 20 years, tens of millions of acres will change hands. What the heirs and buyers elect to do with this land will have significant effects on local economies, the quality of environmental and natural resources, the ability to manage growth, and individuals' quality of life.⁹
3. The governmental programs in place to assist working lands conservation will influence the practices landowners adopt and the choices new landowners make as working lands change hands.

This paper focuses upon the last point: Improved working lands conservation policies and programs at the federal, state, and local levels (and, perhaps more importantly, the coordination among all of these policies and programs) can better protect the nation's quality of life.

At a summit in March 2001, three Governors—Iowa Governor Thomas J. Vilsack, Oklahoma Governor Frank Keating, and Maryland Governor Parris N. Glendening—brought attention to the need for improved working lands conservation policy. NGA's Center for Best Practices hosted "Private Lands, Public Benefits: A Policy Summit on Working Lands Conservation." More than 200 people attended, including U.S. Senator Tom Harkin (D-Iowa) and EPA Administrator Christine T. Whitman. They represented 37 states, and a multitude of public interest organizations, commercial interests, and universities.

Five principles to guide conservation program improvements were supported overwhelmingly by summit participants:

1. More effective conservation on working lands will produce more environmental benefits for the public.
2. Increased coordination and simplification of state and federal working lands conservation programs will make such programs more customer-friendly and effective.
3. Elected officials and governments must do a better job of building public support for working lands conservation if programs are to be improved and expanded.

4. Government-supported working lands conservation programs should demonstrate that they produce valuable and measurable “environmental goods” or “conservation commodities.”
5. Producing more benefits from working lands conservation programs will require significantly greater public funding.

The summit echoed President Theodore Roosevelt’s conservation ethic, articulated almost 100 years ago when he convened the nation’s governors in 1908 to discuss conservation issues at that time and set in motion the formation of NGA. At this year’s NGA summit, Theodore Roosevelt IV, President Roosevelt’s great grandson and an ardent conservationist in his own right, helped refocus attention on the importance of conservation. He called on federal, state, and local governments; non-profit organizations; and private citizens to form a covenant that binds them together in protecting the nation’s natural resources:

“Stewardship seems to leave us alone with our responsibilities to shoulder them as best we can and at whatever personal cost. But the word ‘covenant’ conveys a sense of mutuality—that we have mutual obligations to one another. I suspect that this may be something that Thomas Jefferson had in mind when he envisioned a commonwealth of small landowners, educated and well informed, who could find enough good will among themselves to sit down and talk to one another, to engage with one another fairly, to get past the rhetoric and pursue the common good...I further believe that the American people, who are so blessed with the bounty of this land, can find the good will and good sense to honor that covenant.”¹⁰

Improvements to working lands conservation policy would help governments, the public, and private landowners alike honor a new covenant to protect natural resources. Improvements could achieve the very real benefits for all citizens that such a covenant provides.

At present, there is no well-articulated policy on what the nation wants from working lands conservation, by what means it will achieve national goals, or about how working lands conservation and other related policies and activities should relate to one another. Governors can play a role in defining such a policy. A policy on how conservation agencies should coordinate and share resources could help articulate the vision for working lands conservation.

Chapter 2: A New Vision for Working Lands Conservation

Imagine a farmer standing on a rural road. On one side of him is 500 acres on which he is growing soybeans. On the other is another 200 acres where he grazes cattle. A stream meanders through the pasture and runs lazily beside the fields. Behind him is the wooded land his family has hunted for generations, which he periodically opens for timber harvesting.

The farmer turns and heads up toward his house. He thinks to himself that he wants to preserve this way of life. He wants to make sure that the soils remain fertile, the waters clean, the wildlife abundant and his business financially sound.

However, the muddied waters of the stream signal erosion from his fields and destruction of the stream banks as the cattle walk through it. On the horizon in front of him, just a few miles away, the farmer can see a new luxury subdivision being built. Already, much of the land between this farm and the city, about 20 miles away, has been gobbled up by new suburban subdivisions. The farmer remembers the families that sold their land to build those new homes, no longer willing to continue farming with its meager and unpredictable financial rewards when a windfall profit was offered by developers.

So the next morning, the farmer makes a phone call to his local conservation district office and asks what he can do to plan for the future. A district staff member meets with the farmer, and at the district official's fingertips are the vast resources of the federal and state governments. He is able to call upon the county government, as well, to determine how its comprehensive growth management plan affects this farmer.

The district official knows the public in this community has committed resources to protecting the farms they drive past each day, because they have been educated about the many benefits the farms provide, benefits beyond a pretty place to look at or even food to eat. The public knows the farms protect the water they drink, the vistas and wildlife they cherish, and the lake on which they recreate.

The farmer and the district official walk the property and determine a comprehensive method for protecting both the public's and farmer's environmental quality and the farmer's agribusiness. They agree to install stream buffers where the soybean crops abut the stream bank. They agree to erect fences and build a crossing over the stream so cattle no longer track manure through it.

The two talk about how reconstructing converted wetlands and rotational grazing will provide habitat for migratory birds the farmer wishes to see thrive. They explore the possibility of collecting hunting fees by opening the habitats to hunters, thus providing the farmer greater income stability. They also discuss how restored wetlands will recharge water as it runs off the pasture and fields, and protect the farm and downstream neighbors from flooding. They talk about how donating conservation easements can help protect the working lands from the pressures of development; and they talk about generating air and water quality benefits and periodic income by sustainably managing the forest.

After they explore the full extent of the steps the farmer can take to protect his land and the natural resources for which he serves as steward, the district official and the farmer meet with neighboring farmers interested in similar conservation planning. Together, farmers draw up contracts with the district official.

The farmers agree to implement specific conservation practices on their properties to protect their watershed or ecosystem. In turn, the official agrees to pay them fees and provide technical assistance to produce these environmental goods.

Then, each farmer completes one form and submits it to his conservation district. This one application can be used for all of the federal and state programs to which he and the district official have determined he should apply. The state has tailored federal program requirements to the states' specific watersheds or ecosystems through collaboration with local agencies and private entities, and the district office is able to provide "one-stop" financial assistance based upon the goals local, state and federal agencies created together.

Next, the state disburses money to the landowners from the various sources of government funds it coordinates and integrates. Money is leveraged with local and non-profit resources earmarked for the farmer's watershed. This increased coordination provides more accountability for public spending.

The district official then works with state and federal officials to arrange ongoing technical assistance to the farmer, and his resource conservation contract is set in motion to develop a sustainable farm, one that benefits financially from traditional agriproducts and additional environmental products. For the first time in a long time, the farmer feels confident that neither he nor his family will feel compelled to sell their farm to a developer.

This is not the end of the story, however. The conservation district office does not provide assistance to the farmer in a vacuum. The office is working with federal, state, and local officials to determine the best regional plan for conservation and is fully aware of growth management plans that affect the rural community's viability. It is helping to secure the farmers' tenure on the land through the purchase of conservation easements that will ensure that these farms, now an even more important source of environmental goods for their community, will not be lost to development. The office is making sure that working lands are not fragmented, which can decrease their productivity and harm the ecosystem. It is analyzing where migratory corridors are most desirable for wildlife. It is targeting the owners of environmentally sensitive lands to educate them about their options for improving environmental quality.

This scenario is an exciting alternative to current conservation policy. Its intent is not to offer the one best way to improve conservation policy but to serve as a reminder of the goal of working lands conservation: to encourage landowners to implement conservation practices that protect the public's environmental quality and provide for landowners' business and stewardship needs using straightforward, flexible, and well coordinated government policies and programs. Current conservation programs have not fully achieved this goal. Improvements are needed.

Chapter 3: More Effective Working Lands Conservation Programs Can Increase Public Benefits

Policymakers can increase the environmental benefits that accrue to the public by providing incentives for more landowners to implement conservation practices on more lands than they do now. Working lands conservation programs and policies should receive greater resources and attention to encourage landowners to produce “environmental goods” on the hundreds of millions of acres they work each day.

Land retirement programs—such as the Conservation Reserve Program (CRP) and the Wetlands Reserve Program (WRP)—produce benefits only from those lands that the programs can afford to idle or permanently retire. Regulatory programs can produce many environmental benefits but may not always be the most effective means of achieving them and therefore do not always provide incentive for landowners to implement as many conservation practices as they could. A third way of producing public environmental goods that complements the benefits provided by land retirement and regulatory programs is to develop voluntary, incentive-based programs that promote greater working lands conservation.

This chapter addresses Principle One—more effective conservation on working lands will produce many environmental benefits for the public. Summit participants emphasized that voluntary, incentive-based programs will help landowners provide benefits that they are presently unable to provide.

A. IF WORKING LANDS CONSERVATION PROGRAMS CAN BE MADE MORE EFFECTIVE, THEY CAN PRODUCE MORE ENVIRONMENTAL GOODS ON LANDS IN PRODUCTION.

Working lands conservation programs can be made more effective by increasing coordination of conservation programs, building greater support for them, demonstrating clear benefits that derive from them, and providing more resources for them. These improvements will be discussed in subsequent chapters.

In addition, NGA summit participants stated that working lands conservation programs are more effective when they are voluntary, flexible, and incentive-based. Programs that reward landowners for good conservation practices and that are flexible enough to meet the needs of local areas provide landowners with positive reasons to increase their stewardship of natural resources. If rewards are financial, they can also help stabilize landowners’ traditional agribusiness income, providing further incentive to produce environmental goods.

The United States Department of Agriculture (USDA) implements a program that meets many of the above-mentioned qualifications of a good working lands conservation program. The Environmental Quality Incentives Program (EQIP) is flexible, voluntary and incentive-based. It could potentially serve as a model for making working lands conservation programs more effective.

The Natural Resource Conservation Service (NRCS), the USDA agency that administers EQIP, enters into five- to 10-year contracts with landowners who must address serious threats to soil, water, and related natural resources. All EQIP activities are carried out according to a conservation plan developed for each farm or ranch. The plans must conform to NRCS technical standards adapted for local conditions and be approved by the local conservation district. Producers are not obligated (but are encouraged) to develop comprehensive or total resource management plans.¹¹

NRCS offers financial, educational, and technical help to install or implement structural, vegetative, and management practices defined in the contracts. If fully funded, 65 percent of program funds would target designated priority areas identified by a locally led process, and the remainder would be used for statewide priorities.¹² (At the present time, the program only has enough funds to primarily provide assistance to priority areas.)

Of course, EQIP is presently but one working lands conservation program; it does not meet all of the characteristics of improved working lands conservation. It does not focus resources on building support for working lands conservation by the public-at-large; it does not improve the coordination of all conservation programs affecting landowners; and it does not provide significant funding for working lands conservation.

However, it does stand as an example of how a contract- and incentive-based conservation program can operate. It is enormously popular, as well. Seventy-five thousand farmers sought assistance through EQIP in fiscal 2000, though less than 20,000 received it due to funding limitations.¹³

B. WORKING LANDS CONSERVATION PROGRAMS CAN COMPLEMENT LAND RETIREMENT PROGRAMS

Working lands conservation programs do not receive the resources that land retirement programs do right now. If given more resources and made more effective, however, working lands conservation programs can provide environmental benefits that land retirement programs cannot.

Many of today's agricultural conservation programs do not focus on working lands conservation at all. Indeed, 85 cents of every dollar USDA spent on conservation in 2000 was spent on land retirement or restoration. The remaining 15 cents had to cover technical assistance, research, education, and financial assistance for conservation on lands in production.¹⁴ A better balance between land retirement programs and working lands conservation programs could be struck, and would allow working lands conservation to complement the benefits retirement programs provide.

Land retirement programs take two forms:

- Through fee acquisition, a government or non-profit entity buys the land outright to prevent development on it. Generally, land protected through acquisition is wild green space rather than agricultural lands. In some instances, however, working lands are purchased and permanently retired through acquisition. For example, some historic farms or environmentally sensitive forests are purchased and removed from productive use in the face of development pressure.

- Much more commonly, land is also retired from production for a set number of years through contracts to protect natural resources. A key example of this type of program is USDA's Conservation Reserve Program (CRP).

Land retirement programs are not to be confused with conservation easement or purchase of development rights (PDR) programs. Conservation easement and PDR programs are powerful working lands conservation tools. See Appendix B for an explanation of how these programs differ.

To be sure, land retirement programs provide many benefits. Idling land allows a struggling agribusiness to protect profits and provides owners with additional income. In addition, land retirement programs protect the health of environmentally sensitive lands. CRP has reduced erosion on all enrolled acres from more than 20 tons to about two tons per acre per year, according to NRCS statistics. Viewed another way, CRP has reduced overall erosion nationwide by more than 22 percent (an estimated 700 million tons per year) although less than 10 percent of cropland is enrolled.¹⁵

Working lands conservation programs can further these goals by providing incentives to landowners to implement specific natural resource protection practices on the lands they keep in production. The programs can have a greater impact on more lands than retirement programs alone.

For example, the current cap on acres that can be enrolled in CRP is 36.4 million, but there is a total of 1,335.0 million acres of non-federal agricultural lands.¹⁶ Providing landowners with incentives to implement conservation practices on all of their lands, not just those retired, will produce benefits from the hundreds of millions of acres not in retirement.

C. WORKING LANDS CONSERVATION PROGRAMS CAN COMPLEMENT REGULATORY PROGRAMS

As with land retirement programs, working lands conservation programs can complement the benefits provided by regulatory programs. Regulatory programs are becoming more expensive. The law of diminishing returns dictates that as more environmental goals are met, the burden to meet the remaining goals becomes more and more costly. It also becomes harder to judge their effectiveness.

This is especially true for non-industrial, non-point sources of pollution like that from working lands.¹⁷ Moreover, it is difficult to decide how much responsibility a single farmer must assume to clean up pollution in a waterway, for instance, and how to measure whether he has indeed met those requirements since non-point pollution by definition does not have a clear origin. The imposition of regulatory requirements on landowners when their contribution to pollution is difficult to measure and mitigation is increasingly expensive can lead to some unintended consequences.

- Often, regulation only creates enough incentive to meet the statutory requirements, not exceed them.
- Regulation does not reward “good actors.”

- Sometimes, regulation can create a disincentive to undertake seemingly unrelated conservation activities that might expose the landowner to the regulation.

In reaction to the disincentives of regulation, some policies are providing incentives for landowners to meet program goals by reducing the regulatory burden. For example, federal and state regulators realized that landowners who wanted to construct wildlife habitat were wary of doing so for fear that Endangered Species Act (ESA) restrictions would be imposed on their land should an endangered species end up making the habitat its home.¹⁸

Under “safe harbor” agreements legalized by the Endangered Species Safe Harbor Act of 1997, federal and state governments agree to place no new ESA or related state restrictions on the land if the landowner agrees to restore or enhance a habitat. For example, if a landowner agrees to create a wetland, no further land-use restrictions will be placed on the wetland if an endangered species happens to use it for its habitat. These agreements have generated praise from landowners and environmentalists alike.¹⁹

The success of safe harbor agreements can serve as a lesson to policymakers. **Incentive-based working lands conservation can complement regulatory requirements by supporting landowners’ efforts to be good stewards of natural resources beyond that set by regulation. Government support of incentive-based working lands conservation is a way to obtain environmental results that would not likely be obtained cost effectively or perhaps at all with traditional regulatory approaches.**

Chapter Four: Increased Coordination Will Make Working Lands Conservation Programs More Effective

Working lands conservation programs work most effectively when well coordinated among federal, state, and local agencies, and each level of government performs the functions for which it is most suited.

- The federal government can best set national priorities, distribute funds to meet those priorities, research and define best practices, provide technical assistance to augment state and local capacity, and provide accountability for the expenditure of federal funds.
- State governments can best meld local and regional needs with national goals and provide accountability for the expenditure of state funds.
- Local governments are most suited to work with local landowners and non-profits to deliver conservation programs to their communities, and to help measure accountability on the ground.

With coordination, these three levels of government can enhance their strengths and compensate for each other's shortcomings, making the delivery system more than the sum of its parts. Two different types of coordination should be increased to make conservation programs more effective:

- Vertical coordination among federal, state, and local agencies that impact landowners, and
- Horizontal coordination among all federal agencies with jurisdiction over working lands conservation.

This chapter addresses Principle Two—increased coordination and simplification of local, state, and federal working lands conservation programs will make them more customer-friendly and effective. Summit participants reported that all conservation programs must remember the landowner on the ground. In order to be successful, working lands conservation programs must be designed to minimize the confusion and duplication a landowner must endure.

A. STATES CAN TAKE THE LEAD TO PROVIDE GREATER VERTICAL COORDINATION

Working lands conservation can be improved by increased vertical coordination among local, state, and federal programs. States are in the best position to harmonize broad, national goals and local needs, and more easily and systematically introduce the unique characteristics of watersheds or ecosystems into federal program formulation and implementation. Therefore, state governments should have the first opportunity to direct and coordinate the working lands conservation programs affecting their states.

State agencies could take the lead in harmonizing working lands conservation programs, similar to the way state environmental agencies function under the Clean Water Act (CWA) Section 319 program. In 1987, the Section 319 program instructed states to create non-point pollution management provisions according to broad federal standards and to implement plans for managing pollution from runoff. Federal grants were authorized to cover as much as 60 percent of the costs of implementing a state's management plan. If a state's management plan does not meet the standards set under Section 319, then the federal government manages non-point pollution in that state until the state is able to comply.²⁰

The Section 319 program is not without its problems and was formulated by a somewhat "top-down" process relative to the ideal process for creating working lands conservation programs, but the concept could serve as a model for better coordination among working lands conservation programs. All levels of government could collaborate to set broad goals for working lands conservation. Then, states could utilize federal programs, design state programs, and incorporate local programs to meet those broad goals. If a state chooses not to take the lead in coordinating its conservation programs according to the broad goals, then the federal government could assume the role.

In this way, state conservation and agriculture agencies that were prepared to assume an expanded role would have the federal assistance to do so. Indeed, the level of conservation funding and staff dedicated to working lands conservation in some states warrants the opportunity for those states to lead the coordination of conservation programs.

The federal government provides half of the staff and technical assistance for working lands conservation; but state and local governments provide the other half. For example, about 8,000 conservation district and state conservation employees work side-by-side with NRCS staff to deliver assistance to landowners, primarily farmers and ranchers. State and local contributions dedicated to working lands conservation in the local-state-federal delivery system that exists today approach the federal level of investment, excluding funds dedicated to land retirement.²¹ (See Table 1.)

Table 1: District, State and Federal Resources for Conservation Programs²²

Partner	Staff	Non-financial Assistance Funds*	Financial Incentives*
USDA ■ NRCS ■ FSA	11,900 <i>FSA: covered by salaries and expense account</i>	\$827.025 million <i>FSA: covered by salaries and expense account</i>	\$416.829 million \$1.660 billion
Conservation Districts ■ District Officials ■ District Employees	16,500 7,100	\$750 million	\$450 million
State Conservation Agencies ■ State Employees ■ Commission Members	1,100 270		

*Funding levels were derived from several sources detailing fiscal 1999 and fiscal 2000 appropriations and outlays. Consult NACD for further information.

As another example, in fiscal 2001, the USDA Forest Services (FS) spent \$22.561 million to implement the federal Forest Health Management program. Though states only contributed \$1.5 million in cost sharing, they contributed much more through in-kind contributions such as survey work, training, and quality assurance.²³ In fact, when state contributions are given a dollar value, the total state funding dedicated to forestry programs exceeds federal funding.²⁴ (A more detailed discussion of forest conservation spending can be found under Chapter Seven.)

Moreover, some states are already taking the lead in establishing policies for better vertical coordination. For instance, the Michigan Agriculture Environmental Assurance Program (AEAP) is a program under development that encourages landowners to establish a comprehensive nutrient management plan that will meet both federal and state nutrient management regulations (see next page).

Michigan Implements a Comprehensive Program to Reduce Agricultural Pollution*

The Michigan Department of Agriculture is working to establish a broad environmental stewardship program called the Michigan Agriculture Environmental Assurance Program (AEAP). It is a comprehensive, voluntary program, begun by the agriculture industry, which seeks to assure that a comprehensive nutrient management plan (CNMP) implemented by a landowner will meet the requirements of federal and state nutrient management regulations.

AEAP is currently under review by federal agencies and is being scrutinized by other stakeholders. While all agencies have not agreed that it is an appropriate approach for nutrient management, the formulation and implementation of this program illustrates how states are attempting to streamline federal program requirements to provide "one-stop shopping" for landowners.

The program was developed through the collaboration of many interested parties: the Michigan Department of Agriculture, the Michigan Department of Environmental Quality (DEQ), USDA-NRCS, Michigan State University, and several environmental groups. It has three phases:

1. Education about the Agricultural Environmental Assurance Program and about what makes a good CNMP.
2. On-farm risk assessment and development of a CNMP for farmers who volunteer to enter the program.
3. At the farmers' request, verification that the CNMP will meet federal and state standards and, if successfully reviewed, issuance of an environmental certification.

Program staff expects to begin issuing environmental certificates by Summer 2001. At the farmer's request for a review of his CNMP, the agriculture department and DEQ will issue a joint environmental certification assuring that the farming operation meets the nutrient management standards required under state and federal laws. Although it does not exempt landowners from any action if they do discharge pollutants, the certification gives them a first line of defense against litigation and DEQ enforcement actions, since the CNMP is considered a good faith effort to comply with all applicable laws. It also lets local governments and landowners' neighbors know landowners are implementing sound environmental practices. The program has been reviewed and approved by federal concentrated feed operations officials. According to Vicki Pontz-Teachout, Michigan's Environmental Stewardship Division Director, it will likely become the model by which national standards for a nutrient management program are developed. Insurance and farm credit corporations are interested in this new program, as well, and they are considering offering incentives for participation.

**Some information on the program can be found in the "Agricultural Pollution Prevention Implementation Plan," at www.mda.state.mi.us/environm/pollimple.html.*

The disjointed collaboration that exists today among local, state, and federal agencies is far from being as simple and user-friendly for landowners as it could be. Since states are in the best position to consider local needs while also following broad, national goals, their increased leadership could alleviate some of the lack of coordination that exists now. (See the diagrams in Appendix C for a more detailed comparison of how working lands conservation programs are presently coordinated and how an ideal system could operate.)

B. BETTER HORIZONTAL COORDINATION AMONG FEDERAL PROGRAMS WOULD MAKE WORKING LANDS CONSERVATION PROGRAMS MORE EFFECTIVE

Better coordination is not just needed among federal, state, and local levels of government but also among various federal agencies. Though some working lands conservation assistance is coordinated within parts of USDA, the many programs administered throughout USDA and other federal agencies are not

entirely coordinated. The lack of any kind of national coordinating policy that articulates the broad goals of working lands conservation makes comprehensive coordination difficult.

The 1935 Soil Conservation Domestic Act (the 1935 Farm Bill) established a conservation delivery system that relies on state agencies and local conservation districts to assist in the delivery of conservation programs and assistance. This infrastructure is ratified through memoranda of understanding with each local conservation district, each governor, and the secretary of agriculture. Though the infrastructure provides coordinated technical assistance, program goals and implementation are not always well coordinated because no overarching coordinating policy or approach exists. NRCS, the Farm Service Agency (FSA), and Forest Service (FS) administer 27 different programs for conservation, most of which have different program requirements, application procedures, award formulas, etc. (See Appendix E.)

USDA conservation programs do not begin to describe the universe of programs that affect landowners, either. The Environmental Protection Agency (EPA), Department of Interior (DOI), Army Corps of Engineers, National Oceanic and Atmospheric Administration (NOAA), and other agencies to a lesser extent, all have jurisdiction over some aspect of working lands conservation.

The Catalog of Federal Funding Sources for Watershed Protection, Second Edition, prepared by EPA's Office of Water, offers a list of only those federal programs that provide funding for watershed protection. Some programs discussed in the catalog do not apply solely or directly to landowners, but the sheer numbers of grant programs and their administering federal agencies demonstrate the maze of requirements and programs that a landowner must navigate. The catalog lists 69 different grant programs administered by 13 different federal agencies.²⁵

Environmental Laws Affecting Agriculture is an online, state-by-state inventory of federal and state programs affecting landowners. (Presently, inventories are available for Maine, Massachusetts, Michigan, North Carolina, Vermont, and Virginia.) Appendix D lists many of the federal and state government programs that affect Michigan landowners as an example of the volume of government requirements and assistance that landowners must negotiate. Michigan landowners must understand how at least 49 different federal and state policies and programs have an impact on them.²⁶

Federal goals could be achieved more efficiently if programs were coordinated under one policy and/or agency and federal monies were dedicated to clear, coordinated priorities. State governments would then be able to easily tailor their programs to both national priorities and the specific needs of their landowners and public, since conflicting and duplicative federal requirements would be eliminated. Some policies can be identified as models for better federal coordination among working lands conservation policies, at least in theory if not in practice.

- The National Environmental Performance Partnership System (NEPPS) is an example of EPA's efforts to coordinate programs with state and local partners. Created in 1995, NEPPS has been designed to give states a stronger role in priority setting, focus scarce resources on priority issues, and tailor the amount and type of EPA oversight to an individual state's performance. EPA also has a new performance partnership grant authority that allows states to combine funds from multiple EPA grants to address their highest environmental priorities across all media; more effectively link

program activities with environmental goals and program outcomes; and carry out innovative pollution prevention, cross media, ecosystem, and community-based strategies.²⁷

Policy ideas from NEPPS that could be applied to a local-state-federal coordinating policy for working lands conservation are: 1) states are given greater leadership responsibilities once they prove their program performs at or above federal standards; and 2) multiple EPA funding streams are pooled to allow states to direct funds to their priorities.

- The National Invasive Species Council is composed of eight federal departments (Agriculture, Commerce, Interior, State, Treasury, Defense, Transportation, and EPA) and charged with preparing a plan to minimize the economic and ecological impacts and the harm to animal and human health associated with invasive species. More than 20 federal agencies now share responsibility and authority over some facet of invasive species management, along with various agencies of all 50 states and a number of territories. To coordinate the policies and programs formulated and implemented by these various authorities, the council is working to establish an oversight policy, a crosscutting budget, and a flexible dispute resolution mechanism. The council has already established a comprehensive Web site where users can learn about the various laws, at all levels of government, concerning invasive species in their region (www.invasivespecies.gov) in order to begin outreach and education efforts.²⁸

Policymakers may wish to use some ideas presented by this coordinating council, such as harmonization of authorities and cross-cutting budgets, to determine how best to coordinate working lands conservation programs at the federal level.

- The watershed approach to managing federal lands also coordinates the efforts of several different agencies. In 2000, the Departments of Agriculture, Interior, Commerce, Defense, and Energy; the Environmental Protection Agency; the Tennessee Valley Authority; and the Army Corps of Engineers announced a joint policy to protect water quality and aquatic ecosystems on federal lands, titled “A Unified Federal Policy for a Watershed Approach to Federal Land and Resource Management.” It is to serve as a framework for land and resource management that focuses on total watershed health, includes assessment and monitoring of numerous conditions, and identifies priority watersheds.²⁹

This coordinating policy could serve as an example of how federal, state, and local agencies approach priority setting for working lands conservation at the national level. National goals should be broad, cross media, and keep in mind that various regions have unique characteristics and needs. A watershed approach to conservation could be one way to allow for flexibility in the national goals, thus allowing states to tailor working lands conservation to their needs.

None of these three models—NEPPS, the National Invasive Species Council, or the unified federal watershed policy—attempts to coordinate a set of programs as large as the federal agricultural conservation programs. However, they could serve to provide a starting point for crafting a much-needed coordinating policy to support working lands conservation at the federal level.

The Potomac Watershed Partnership serves as a good example of how the watershed approach has been put into practice.

The Potomac Watershed Partnership Comprehensively Addresses Restoration and Stewardship Needs

The Potomac Watershed Partnership* addresses one of 15 watersheds across the country as part of a national initiative to better coordinate restoration and stewardship needs. The project is a public-private venture to address restoration needs and management challenges impacting riparian, wetlands, and upland forest areas in high-priority areas of the Potomac River Basin.

The Potomac Watershed Partnership unifies the efforts and programs of six primary partners: the USDA Forest Service, Maryland DNR Forest Service, Virginia Department of Forestry, Ducks Unlimited, Inc., and the Potomac Conservancy. It is built on collaborative relationships between these local, state and federal resource agencies and private conservation organizations. The collaboration accelerates watershed restoration activities and reaches more landowners and citizens about ways they can help improve and protect watershed conditions. Each partner offers financial and human resources to meet the targets and commitments of the project.

This large-scale watershed restoration project is a unique approach for several reasons:

- It takes a focused approach—targeting areas of the highest need and identifying key watershed issues to be addressed with local communities and groups.
- It takes an integrated approach—from upland forest health and management, to urban and community connections, to waterfront impacts and challenges.
- It takes a holistic view—from assessment of the problem and current condition, to restoration and outreach action, and then the monitoring of response and success.
- Success is measured by outcomes as well as outputs—commitments have been made to monitor the long-term changes in conditions as well as specific quantified goals of acres and community actions.

Using a large-scale watershed restoration project is a new way of doing business. The key factors are a focus on solving resource issues in a specific geographic area, the employment of a variety of programs and pooled resources to accomplish goals, and a strong emphasis on monitoring results. The project has developed a business plan that outlines the watershed problems, a plan of action to address them, a benefit/cost analysis, and a financial plan. Although the primary funding partner is the USDA Forest Service at about \$1 million for five years, the total investment by all partners program and assistance brings approximately \$3.5 million a year to the effort.

**For more information, see the Potomac Watershed Partnership Web site at www.potomac.org/pwp/; or the U.S. Forest Service's information on large-scale watershed initiatives www.na.fs.fed.us/briefs/lq_watershed_proj01/lq_watershed_proj01.htm.*

C. COORDINATION AMONG WORKING LANDS CONSERVATION PROGRAMS AND BROADER GROWTH MANAGEMENT PROGRAMS CAN IMPROVE BOTH

Working lands conservation could be more effective in protecting a watershed or ecosystem's amenities if it is coordinated with broader growth management initiatives, and vice-versa. For example, a high-density growth zone in a suburban area might damage a watershed despite the conservation plan put in place in a nearby rural area. Coordination will help anticipate and mitigate such problems. Through a coordinated approach, programmatic resources could also be leveraged against one another for more efficient use.

Working lands conservation is consistent with the many growth and quality-of-life initiatives of state and local governments. It provides the rural counterpart to urban revitalization efforts. Both working lands conservation and growth management initiatives are processes by which decisionmakers examine the impact

of development and conservation decisions on surroundings and use those analyses as a basis for future growth planning and policy formulation.

Two states that have already developed growth management plans that integrate working lands conservation into their long-range growth goals are Utah and New York.

**Utah Develops a Coordinated Growth Strategy
that Includes Working Lands Conservation***

In 1999, the Envision Utah Quality Growth Strategy was developed to protect the Greater Wasatch Area in Northern Utah, which is experiencing tremendous growth. Though residents viewed the growth as positive, they recognized that the challenges of population growth needed to be addressed to preserve community character and quality of life.

After extensive research and outreach, Envision Utah identified six primary goals that articulate what residents value and how growth should proceed to protect their quality of life:

- enhance air quality;
- increase mobility and transportation choices;
- protect critical lands, including agricultural, sensitive, and strategic open lands, and address how they interact with developed areas;
- conserve and maintain the availability of water resources;
- provide housing opportunities for a range of family and income types; and
- maximize efficiency in public infrastructure investments to promote the other goals.

Overlapping strategies for each goal were laid out and the purpose, project leaders, and broad objectives were identified. In the coming years, the protection of agricultural lands will be achieved through many growth initiatives that also meet the other goals listed above: by providing incentives that promote walkable development, reuse of currently developed areas, use of transfer of development rights (TDR) programs and conservation easements, identification and protection of sensitive lands, and trades between private and public lands.

This coordinated approach to working lands conservation will ensure that programs developed to assist working-land owners are not negated by other growth goals or development plans. Envision Utah has helped the state direct growth in a way that will maintain all facets of the character residents cherish.

**For more information, see Envision Utah Quality Growth Strategy, November 1999, or go to www.envisionutah.org.*

New York Looks to Agriculture to Help Create "Quality Communities"*

Governor George Pataki created a Quality Communities Interagency Task Force in 2000 to learn what shape the public wanted their communities to take. From 10 roundtable discussions held across the state, the task force learned that the demands of daily living have caused New Yorkers to place an increasingly greater value on the quality of life in their own communities, and that the renewal of New York agriculture was an important component of "Quality Communities."

Roundtable participants pointed to two main threats to New York agriculture: "a complex mix of land-use changes grouped under the heading of urban sprawl and the erosion of the economic underpinnings of the state's agricultural industry." They also identified several steps New York state officials and landowners had already taken to meet these threats. For example, in 1999, the New York Department of Agriculture and Markets created the Farmers' Market Nutrition Program—one of the leading programs of its kind in the nation—to help farmers bring their produce to urban and suburban farmers' markets. It provided over \$2.8 million to 220 farmers' markets and supported over 786 farmers in 1999.

Moreover, the task force offered seven broad recommendations to coordinate future working lands protection in the state. Among the recommendations are those to:

- help landowners implement comprehensive "environmental management plans" and create incentives to encourage conservation;
- provide economic relief from increasing property taxes; and
- tailor assistance to specific regions and tie conservation into landowners' broader business plans.

The seven working lands recommendations were only part of the full 41 recommendations proposed to actively improve the quality of life in New York communities. Other recommendations sought to foster interagency coordination and local government assistance, use technology to improve coordination, revitalize downtowns, conserve open space, rethink transportation planning, assist all citizens of communities, and promote economic growth.

**For more information, see the Quality Communities Interagency Task Force Report, State and Local Governments Partnering for a Better New York. (January 2001), or go to www.state.ny.us/ltgovdoc/cover.html.*

Chapter Five: Building Greater Public Support for Working Lands Conservation Requires Outreach

Educating the public about the benefits working lands provide can encourage greater involvement in working lands conservation by both landowners and their neighbors. In particular, educating younger generations about working lands conservation benefits, as agriculture is increasingly removed from youths' daily lives, can create an appreciation for rural heritage and natural resource stewardship that is rarely cultivated today.

Furthermore, greater outreach could encourage landowners who are affecting environmentally sensitive lands in a watershed or ecosystem to practice better working lands conservation. Finally, involving non-profits and citizen groups in working lands conservation programs could foster valuable partnerships in implementing conservation programs in their regions.

This chapter addresses Principle Three—elected officials and government agencies must do a better job of building public support for working lands conservation if programs are to be improved and expanded. Summit participants stated that the public must realize the benefits they gain from working lands conservation to understand why they should support it.

A. EDUCATING THE PUBLIC ABOUT THE BENEFITS OF WORKING LANDS CONSERVATION STIMULATES GREATER SUPPORT FOR IT

Without education programs, the public might not realize the explicit connections between their environmental health, natural resource protection, and working lands conservation. Education programs can highlight explicit benefits that working lands conservation provides as well as benefits that cannot be demonstrated through measurable program outcomes.

For example, amenities like improved quality of life are not tangible benefits that a landowner will explicitly produce; however, the cleaner air and protection of wildlife accruing to the public from working lands certainly impacts quality of life. Education programs can illustrate the connections between public health and welfare and private land use in a way that a simple reporting of reductions in soil erosion or phosphorus runoff cannot.

Moreover, children are rarely educated about the many environmental and social benefits that working lands provide, even if they are educated about the benefits of their agricultural commodities. Part of educating the public must be teaching young people in an increasingly urban nation what working lands conservation can provide to them and why their lives are intertwined with good land use.

The public has a vague idea of what benefits working lands provide, and when surveyed they often support protection of neighboring farm, ranch and forestland. A national telephone survey of 1,000 voters, conducted in March 2001 and commissioned by the National Association of Realtors, found that farmland and

forest protection are high on the list of lands that the public wishes to see preserved. (See Table 2.)

Table 2: Survey of public attitudes about open space preservation³⁰

Type of Open Space	Total % who ranked its preservation as either "important" or "very important"
Land being used for farming/agricultural purposes	89%
Natural areas such as forests, wetlands, or deserts	88%
Stream corridors	88%
True wilderness areas remote from human settlement	83%
Historic landscapes	85%
Open fields (old working lands no longer being used)	58%

Outreach and education programs can reinforce the general idea that protecting working lands is important. Outreach efforts to develop Envision Utah and the Minnesota LARS program, mentioned under Chapters Four and Six, respectively, help educate the public about the benefits of conservation on working lands by measuring outcomes and tracking benefits. Another innovative approach is Pennsylvania's GreenWorks.

TV and Web Broadcasting Help Illustrate the Public Benefits of Conservation in Pennsylvania*

The Environmental Fund for Pennsylvania (EFP) produces www.GreenWorks.tv and the Emmy Award-winning *GreenWorks for Pennsylvania* television series, in partnership with the Pennsylvania Department of Environmental Protection. *GreenWorks for Pennsylvania* airs monthly and showcases individuals, communities, businesses, and government bodies that are taking innovative, positive steps to help preserve and protect the Pennsylvania environment.

To demonstrate that environmental protection produces tangible results, the shows focus on real-life actions taken in familiar Pennsylvania communities that have provided direct benefits to area citizens. The program was awarded the 2000 Mid-Atlantic Emmy for Outstanding Public Affairs Series this past September and was nominated for Outstanding Documentary Program.

The accompanying Internet site, GreenWorks.tv, allows continuous access to the television shows and provides links to contacts related to each show's topic. *GreenWorks for Pennsylvania* and GreenWorks.tv reach over 10 million viewers, delivering practical environmental and natural resource information in an engaging format. The show currently airs on over 80 public-access stations throughout the state and secured its first series run on public television's Philadelphia station in November 2000.

EFP produces the *GreenWorks Gazette*, a circular distributed in newspapers throughout the state that reaches over a million people. They also provide low-cost, expert production services to other environmental nonprofits in the state that wish to produce a video product.

*See www.GreenWorks.tv for more information.

B. OUTREACH TO LANDOWNERS ALSO MAKES WORKING LANDS CONSERVATION PROGRAMS MORE EFFECTIVE

Conservation programs will be only as successful as the landowners who participate in them. Programs can be more effective in protecting a watershed or ecosystem's environmental quality if they ensure that landowners who own or live near the most environmentally sensitive lands are aware of the impact on the broader watershed or ecosystem.

Because Americans value their property rights, it is also important to demonstrate that conservation programs can help landowners be good stewards without compromising those rights. Landowners sometimes distrust incentive-based programs because of the historic rigidity of regulatory programs. To ensure the success of programs, the newer, working lands conservation approach must be explained clearly to landowners as a voluntary, flexible, incentive-based approach.

Outreach Helps Enroll Iowa Landowners in Conservation Programs

This year, two partnerships among Iowa and federal conservation and wildlife agencies, landowners, and local interests resulted in practices to improve habitat and water quality in Iowa.* First, a coalition of federal and state agencies and local conservation and environmental groups targeted local landowners who could help protect the Middle Raccoon River, just west of Des Moines. The coalition has asked these farmers to participate in a program of cost sharing, low-cost equipment rentals, and other incentives to install streamside buffers. To date, landowners have installed about 75 miles of buffer and protected 1,000 acres of sensitive riparian habitats.

Second, in northeastern Iowa's Alamakee County, conservation officials targeted local farmers whose land adjoined certain trout streams to reduce the runoff from their lands. Over the course of several months, the officials' outreach persuaded county farmers to enroll approximately 1,700 acres of land and 40 stream miles in USDA's Conservation Reserve Program (CRP).

Outreach to owners of key working lands, such as that performed in these two Iowa examples, can lead to better protection of an ecosystem or watershed.

**For more information, see www.asafishing.org/newsroom/pressreleases/farmbill.htm.*

Moreover, if landowners are not involved in the development of a program, then they will often be less inclined to participate in it and more inclined to distrust it. On the contrary, greater involvement could spark enthusiasm for the program.

Florida Landowners Produce a Statewide Conservation Program through Collaboration with Stakeholders and Conservationists*

In 1993, a process was begun in Southern Florida to protect the endangered Florida panther. The first ESA plan was a failure, however, because the interagency task force did not seek landowner input. Thus, landowners distrusted the program and disagreed with its requirements.

One of the task force agencies and a non-profit group started over by convening a 27-member landowner working group, whose members controlled almost half a million acres of private land in Southern Florida. This group produced recommendations for a new program that was then presented to a review committee of 109 stakeholders who provided comments back to the landowners. This process removed some of the contentiousness from the plan's development.

The interagency task force liked the plan so much, that the state and federal agencies and several non-profits, led by the Florida Stewardship Foundation, developed it into a more general conserva-

tion program for Florida's landowners. The resulting Resource Conservation Agreement (RCA) is a program by which landowners are essentially hired to perform one or more conservation-related services.

RCA creates a flexible coordinating system by which the public can hire landowners to produce the environmental services they want. Florida landowners are eager to participate in the program. Twenty different landowners are awaiting the opportunity to enroll 170,000 acres into a state RCA program. The RCA program was approved by the Florida legislature as part of a new fiscal 2002 working lands conservation initiative for the agriculture department. Governor Jeb Bush is expected to sign it.

The Oregon State legislature approved a conservation bill based on the RCA, and members of the U.S. Congress are considering advancing it as a national program.

**For more information, see www.privatelands.org/RCA_open.htm.*

C. INVOLVING NON-PROFIT AND CITIZEN GROUPS CAN MAKE WORKING LANDS CONSERVATION PROGRAMS MORE EFFECTIVE

Non-profit and citizen groups can help define local needs, outreach to landowners, implement programs, educate the public and school children, and measure results. Moreover, members often volunteer their time—helping to leverage public spending—and are knowledgeable about a specific watershed or ecosystem's needs.

The commitment to local needs that many of the groups have also instills landowners with confidence in a government program that they might otherwise distrust. For example, 75 percent of those surveyed in a "smart growth" poll supported non-profits purchasing or preserving land to protect it from development.³¹

On the other hand, many areas of the country distrusted government involvement. The area identified in the survey as the "Farm Belt" most objected to federal involvement in protecting land from development: 68 percent thought the federal government should not be involved in growth management, compared to 30 percent who agreed with federal involvement. Only survey respondents who were from New England supported federal involvement in growth management.³²

Working lands conservation programs can be improved by involving non-profits and citizen groups in on-the-ground implementation. The following discussions of Growing Greener, the Alabama Treasure Forest Association, and the Utah Forest Legacy Program demonstrate the success non-profits and other groups can help achieve.

Pennsylvania's Growing Greener Program Helps Partners Achieve Broad Conservation Results*

Signed into law by Governor Tom Ridge on Dec. 15, 1999, Growing Greener provided \$37.5 million in grants in its first year to watershed organizations, teachers, schools, clubs, colleges, and conservation districts to produce numerous environmental benefits for Pennsylvania. Hundreds of volunteers helped to replant trees, sample water quality, provide outreach, and much more.

For example, Pike County is the fastest growing county in Pennsylvania. The rural character has attracted an influx of metropolitan people from neighboring states who are unaccustomed to rural life and the impacts increased populations have on watersheds. Through a Growing Greener grant, Pike County has developed educational workshops on topics such as land-use planning using a watershed approach and organizing a watershed association.

Growing Greener grant recipients have taken noticeable steps to improve the commonwealth's environment. They are in the process of:

- restoring 3,603 acres of wetlands and 117 miles of riparian buffers;
- cleaning up 279 miles of streams impacted by acid mine drainage;
- reclaiming nearly 800 acres of abandoned mine lands;
- building improvement structures on 43 miles of stream; and
- eliminating the Department of Environmental Protection (DEP) backlog of mine reclamation and oil and gas well plugging projects, thus reclaiming an additional 612 acres of abandoned mine lands and plugging more than 134 abandoned oil and gas wells;

In addition, they have:

- produced 55 watershed assessment and protection plans;
- implemented 85 restoration/demonstration projects;
- developed 58 environmental education projects;
- created 21 watershed protection groups; and
- leveraged the grants to produce \$44.5 million in matching funds to supplement the commonwealth's investment.

All of these projects could not have been completed without the assistance of thousands of committed volunteers and non-governmental organizations. Growing Greener is a testament to the possibilities made real when government agencies partner with stakeholders.

**For more information, see the "Growing Greener First Year Report: 2000," at www.dep.state.pa.us/growgreen/GGFirstYearReport/; or see the Growing Greener home page at www.dep.state.pa.us/growgreen/default.htm.*

The Alabama Treasure Forest Association Helps Promote Forest Stewardship*

Established in 1974, the Alabama Treasure Forest Association was designed to promote responsible stewardship by private forest owners. It is a 501 (c)3 non-profit, educational corporation.

The Forest Treasure Program provides voluntary guidelines for responsible forest management and is a recognition program for landowners who are good stewards of their forestland. Its success inspired USDA's Forest Stewardship Program.

The program is a simple, straightforward one. Anyone owning 10 or more acres of forestland can be considered for the certified Treasure Forest Award. To be eligible, a landowner must:

- identify one primary and at least one secondary management objective for the property based on the following list of choices: timber production, wildlife, recreation, aesthetics, and environmental education;
- develop or already possess a written multiple-use management plan for the property; and
- actively practice multiple-use management on the property;

To be considered for a certificate:

- the property must be nominated by someone associated with one of the member agencies or groups of the Alabama Forestry Planning Committee;
- a registered forester and wildlife biologist must inspect the property; and
- the nomination and inspection report must be submitted to the Treasure Forest Subcommittee of the Alabama Forestry Planning Committee for review and approval.

If a forest landowner receives a certified award, the landowner is recognized as a responsible steward of the forest. The public, other landowners, and businesses are able to identify those landowners striving to protect natural resource and environmental quality and, in the process, learn what benefits they derive from forestland conservation.

Since the inception of the Forest Treasure Program, state air and water quality, as impacted by forests, has continually improved; more trees have been regenerated and harvested; many species of wildlife are larger and healthier; and the general environmental and economic well-being of Alabama is significantly better. The work of this statewide non-profit has educated landowners and the public alike about good stewardship, and has served as a model for national policy.

**For more information, see the Alabama Treasure Forest Association home page at www.atfa.net/; and "Alabama's Treasure Goes National" at www.pfmt.org/treasure/national.htm.*

Utah Forest Legacy Program Takes a Grassroots Approach to Protecting Family Forests

The story is told that the protection of the 7,300-acre Peaceful Valley Ranch* started with a father asking his children to vow not to develop or sell off the property that had helped support the family since 1918. That vow resulted in a family member contacting the state forester to see if the Utah Forest Legacy Program would be interested in purchasing an easement that would allow the family to keep title and rights to the working lands while preventing development.

The request spurred new partnerships between resource agencies and non-profit groups and led to conservation easements protecting over 16,000 acres of prime working land in Utah. The Trust for Public Land provided expertise and advice to help negotiate the transaction. The U.S. Forestry Service Region 4 Office was essential in planning and funding the project. The newly established Utah Quality Growth Commission awarded their first grant to the project in the amount of \$700,000.

Over time, partner participation expanded to include the Rocky Mountain Elk Foundation, Utah Open Lands, and several private foundations. Additional project supporters included the Historic Trails Foundation; National Park Service; Long Distance Trails Office; State of Utah, Department of Natural Resources (Division of Wildlife Resources, Division of Parks and Recreation, Division of Water Resources, Division of Water Quality); and Trout Unlimited.

The Peaceful Valley Ranch project is an example of how the Forest Legacy program operates.

- Utah sets clear objectives for forest areas that are eligible for the program;
- willing landowners request participation;
- the state forester and local partners assist the landowner through the process;
- federal, state and local partnerships are developed to produce measurable accomplishments.

The project exemplifies how private-public partnerships can work together to protect open space.

**For more information on the Peaceful Valley Ranch Project, see the Rocky Mountain Elk Foundation Web site at www.rmef.org/newsroom_media.html?main=/press_releases.php3&articleid=45; or the Utah Open Lands Web site at www.utahopenlands.org/pvec.html. For more information about the Forest Legacy Program, see www.utahopenlands.org/pvec.html.*

Chapter Six: Demonstrating the Benefits Working Lands Conservation Programs Produce for the Public

Make the Programs More Accountable and Effective

Programs that can identify clear environmental and conservation benefits with explicit outcomes allow the public and landowners to measure success. Building measurable goals into working lands conservation programs help:

- landowners understand their role in the working lands conservation program in which they participate;
- the conservation agency working with the landowner determine whether the landowner is meeting his responsibilities; and
- the public evaluates the results of programs their tax dollars are paying for.

Linking assistance to demonstrable public benefits also removes the stigma that the program is another subsidy to agricultural producers. Conservation programs are sometimes regarded as substitutes for traditional price supports and other subsidies to landowners. However, if fashioned correctly, working lands conservation programs will not function as a “government handout.” Instead, they will provide payment for clear environmental goods.

Contract-based conservation programs, which pay landowners based upon the specific environmental benefits they produce, make it possible to demonstrate how public funds are being spent. If a contract is brokered between the government and a landowner, or a group of landowners, both the landowner and the public know clearly what to expect from a working lands conservation program. Demonstrating the benefits and measuring the environmental impacts of a working lands conservation program will require creative approaches that extend beyond current conservation program capacities. The Environmental Quality Incentives Program (EQIP) and a few state programs serve as a basis to start thinking about how this approach might be structured, even though they have yet to fully define the ideal working lands conservation approach.

This chapter addresses Principle Four—government-supported working lands conservation programs should demonstrate they produce valuable and measurable “environmental goods” or “conservation commodities.” Summit participants stated that programs that successfully demonstrate they have achieved explicit desired outcomes enjoy greater participation and public support and can justify funding increases more easily than other programs.

A. EQIP SERVES AS ONE MODEL FOR CONTRACT-BASED WORKING LANDS CONSERVATION

EQIP authorizes NRCS officials to establish contracts with landowners and define specific environmental goods to be produced. Of course, EQIP does not meet all of the needs of a comprehensive working lands conservation strategy. It is but one program in the somewhat confusing, uncoordinated system that currently exists; but it could serve as a model for a broader, state-coordinated approach to working lands conservation because:

- through EQIP, conservation officials develop a contract with a landowner that defines a conservation plan with specific conservation practices the landowner will implement; and
- the program evaluates plans based on local environmental needs that provide the most benefit to the public.

EQIP offers five- to 10-year contracts that provide incentive payments and cost-sharing for conservation practices called for in site-specific conservation plans. Conservation plans are developed by producers with help from NRCS or other service providers. All plans are subject to NRCS technical standards adapted for local conditions and are approved by the conservation district.³³

NRCS conducts an evaluation of the environmental benefits the producer offers. Offers are then ranked according to previously approved criteria developed with the advice of the local work group and weighted against the costs of applying the practices. The Farm Service Agency (FSA) County Committee approves funding the highest priority applications.³⁴

Because EQIP has not been fully funded, it has not been able to address all of the environmental concerns defined by local working groups and state conservation officials. It also is not designed or authorized to coordinate any other working lands conservation programs. The EQIP contracts, therefore, do not define the universe of environmental goods landowners could produce or are required to produce under other programs, nor do they demonstrate what the majority of public agricultural conservation funds presently pay for.

Still, the characteristics just mentioned—the collaborative process among local, state, and federal agencies; the identification of specific benefits a landowner will produce; and the ranking of contracts according to clearly defined priorities—could inform the process of creating a broad working lands conservation approach that is much more accountable to the public.

B. STATE PROGRAMS ALSO SERVE AS MODELS FOR CREATING PROGRAMS WITH MEASURABLE OUTCOMES

The Resource Conservation Agreement (RCA), mentioned in Chapter Five, could serve as a model for a program that could provide more accountable working lands conservation. Unlike EQIP, it is designed to blend together all other working lands conservation programs and coordinate them under one contract made between a landowner and a local conservation district official.³⁵ Therefore, **the RCA concept can serve as a model for a working lands conservation program that defines measurable outcomes for all conservation activities—and one that clearly involves state and local leadership in setting priorities with landowners.**

Both Florida and Oregon are in the process of creating RCA programs. The RCA concept has been formulated over the past seven years, and its basic tenants are well defined: The agreements address landowners' agricultural, forestry and resource extraction activities, as well as specific management practices. Incentives in the form of bonus payments are offered to landowners converting their agreements into permanent conservation easements, or providing government agencies with the right of first refusal if their land is put up for sale. Similarly, the agreements provide bonus payments to those who can demonstrate a significant improvement in the ecological integrity of the natural resources under their stewardship.³⁶

A private landowner is, in effect, hired and paid to perform one or more conservation-related services. On the ground, local conservation districts, non-profit organizations, land-grant universities, extension services and others carry out the agreements. Compensation for producing environmental benefits, or goods, could include:

- direct fees for services, based on the cost of providing each service;
- annual per acre stewardship fees, similar to those now offered by the USDA's Conservation Reserve Program;
- a base annual payment for all properties enrolled (such a payment would support those landowners whose properties contain important habitats and/or ecological resources, but whose holdings are small); and
- tax incentives, such as annual income tax deductions, state and local property tax credits, capital gains tax exclusions, and immediate estate tax reductions.³⁷

In short, the RCA provides a contract-based approach to coordinating working lands conservation programs. Under such a program, the many conservation requirements landowners must meet to participate in the myriad conservation programs affecting them could be harmonized and made more accountable using contracts that define specific, measurable environmental goods landowners must produce and the public can expect to receive.

Besides the RCA programs in Oregon and Florida, Minnesota has developed a program that could serve as a model for better measuring working lands conservation benefits and results. The state has developed a strong reporting system that defines how program goals are actually measured. The reporting system provides incentives for landowners to participate in working lands conservation programs by listing the expected outcomes up front. It thus provides accountability to the public by measuring success. Their reporting system makes it easier to define and justify expenditures in the face of competing state budget priorities, as well.

The Minnesota program could serve as a model of how to measure the environmental goods provided under a program like RCA or EQIP.

Minnesota Proves that Local Water Protection Programs are Working for the Public*

The Minnesota Board of Water and Soil Resources (BWSR) funnels money to local governments to assist them in a number of natural resource protection projects, such as erosion control, water quality improvement practices, and easements. Minnesota recognized a need to account for the benefits state resources were funding. So, in 1998, the state began collecting data on local governments' activities through the Local Government Annual Reporting System (LARS).

LARS measures soil saved, sediment reduction, and phosphorus reduction. The system can also provide project and financial reporting. Through LARS, Minnesota can estimate statewide pollution reduction resulting from state-funded conservation programs.

One example of the reporting available through LARS is the 1998-1999 Land and Water Treatment Summary:

- Total projects: 5,986
- Total cost: \$26.1 million
- State cost: \$10.7 million
- Occupier cost: \$8.3 million
- Local government unit cost: \$4.2 million
- Federal government cost: \$2.6 million
- Other costs: \$0.3 million

Of the almost 6,000 projects, more than 4,000 were analyzed with pollution reduction calculations. Their soil loss reduction was calculated at 777,000 tons/year; sediment reduction at 166,000 tons/year; and phosphorus reduction at 438,000 pounds/year.

This type of reporting allows the public to see the "goods" it is receiving for its money.

** For more information, see www.bwsr.state.mn.us/news/LARSatBWSR.html.*

Chapter Seven: A Greater Commitment of Resources for Working Lands Conservation Will Balance and Make More Effective the Universe of Agricultural Conservation Programs

Current agricultural conservation programs are unbalanced because of the emphasis on land retirement programs at the federal level. Working lands conservation programs could be improved and balanced with land retirement by committing more resources to working lands conservation so that local, state, and federal capacities can be expanded and coordinated. State and local resource commitments to working lands conservation should remain strong, and the federal commitment to working lands conservation should increase.

This chapter addresses Principle Five—producing more benefits from working lands conservation programs will require significantly greater public funding. Summit participants wanted a strong commitment of federal, state, and local resources for working lands conservation to make sure working lands conservation programs have the capacity to meet the needs of various landowners, watersheds, ecosystems, and the public at-large.

A. STATE COMMITMENTS TO WORKING LANDS CONSERVATION HAS INCREASED OVER THE PAST 20 YEARS

State and local government spending for working lands conservation has increased significantly over the past two decades. State appropriations for conservation programs totaled \$154 million in 1985, and local appropriations totaled \$113 million. In 1997, those totals increased to \$454 million and \$242 million, respectively.³⁸ By contrast, federal financial assistance for working lands conservation declined 38 percent from 1985 to 2000, from \$509 million to \$317 million.³⁹

From 1985 to 2000, the federal investment in research, scientific support, and direct technical assistance has increased less than 1 percent annually. This low level of investment forced a 6-percent reduction in staff years devoted to conservation in USDA's Agricultural Research Service and a 16-percent reduction of staff years at NRCS.⁴⁰ Yet, NRCS estimates that 41,300 field staff—from NRCS and state/local partners—is needed to provide the basic technical assistance landowners demand.⁴¹

State investment in support of conservation on private forestlands far exceeds federal investment, as well. For fiscal 1998, federal resource commitments for forestry programs totaled approximately \$840 million. By contrast, state resources totaled \$1.034 billion. In addition, "other government" resource commitments totaled about \$47 million.⁴²

Although the federal, state, and local commitments to forestlands conservation for fiscal 1998 reflect increases from fiscal 1994, the levels of state resources dedicated to forestry programs have remained greater over that time period. In fiscal 1994, states committed a total of \$672 million to forest programs; federal resources committed to forestry programs totaled \$87 million.⁴³

The low Forest Service (FS) commitment to working lands conservation is partially due to the fact that the state and private forestry branch of FS, as a small federal entity, leaves much of the technical assistance and implementation of programs to state foresters. However, it still suggests the need for a greater federal commitment if working lands conservation is to significantly improve and expand.

B. FEDERAL CONSERVATION RESOURCES HAVE SHIFTED FROM WORKING LANDS CONSERVATION TO LAND RETIREMENT PROGRAMS

Simply comparing the commitment by states and the federal government to conservation programs would suggest that federal assistance has not kept pace with state and local commitments. More to the point, federal investment in agricultural conservation programs has increased, but the greater investment has been dedicated to land retirement programs rather than to working lands conservation.

USDA financial assistance for land retirement increased from \$13 million in 1985 to \$1.76 billion in 2000 (12,000 percent). As mentioned previously, financial assistance for working lands conservation declined 38 percent in that same period, from \$509 million to \$317 million. Viewed another way: In 1985, 97 cents of every USDA financial-assistance dollar supported working lands conservation, and 3 cents were spent on land retirement. In 2000, 15 cents of every USDA financial-assistance dollar supported working lands conservation, and 85 cents were spent on land retirement.⁴⁴

Even the federal land retirement programs, however, have not been able to keep up with demand for conservation assistance. In the enrollment periods since 1997, the number of acres offered for enrollment in CRP have far exceeded those that were accepted; program caps prevent all of the acres from being enrolled in the program. In the four enrollment periods listed in Table 3, an average of 32 percent of the lands offered for enrollment did not receive financial assistance under CRP.⁴⁵

Table 3: Acres Offered and Accepted for CRP Enrollment, 1997-2000.⁴⁶

Enrollment Period	Acres Offered	Acres Accepted
March 1997	23.3 million acres (from 300,000 bids)	16.1 million acres (11.7 million already enrolled in CRP)
November 1997	9.5 million acres (from 125,000 bids)	5.9 million acres (3.9 million currently or formerly enrolled)
December 1998	7.1 million acres (from 90,000 bids)	5.0 million acres (2.1 million currently or formerly enrolled)
February 2000	3.5 million acres (from 56,000 bids)	2.5 million acres (200,000 already enrolled)

Such excess demand is common for other land retirement programs, too. Three out of four farmers and ranchers seeking federal assistance to restore lost wetlands are rejected due to inadequate funding or program caps. Yet, many of the lost wetlands being offered by farmers and ranchers are in places where scientists have concluded wetlands restoration is among the most cost-effective solutions to many of the areas' environmental problems.⁴⁷

In testimony before the U.S. Senate Agriculture, Nutrition, and Forestry Committee on February 28 to March 1, 2001, it was noted that between \$5 billion and \$10 billion in federal resources per year would be necessary to begin to see environmental protection improvements on private working lands.⁴⁸ Regional workshops held by the Soil and Water Conservation Society over the last two years yielded recommendations of a 25 percent to over a threefold increase in funding for USDA programs alone—from \$2.621 billion to a minimum of \$3.304 billion and a maximum \$8.809 billion.⁴⁹

By increasing federal commitments to general agricultural conservation, working lands conservation programs can receive the resources needed to be more in balance with the retirement programs. That is not to say that land retirement programs must be neglected. They need adequate resources to meet their demand, as well. More simply, working lands conservation programs need greater attention. Strong local, state, and federal commitments to working lands conservation will build the capacity to meet the other principles described in this paper. Greater resource commitments will:

- allow for more coordination among local, state, and federal conservation agencies and among the many federal agencies that affect landowners' conservation practices;
- increase the outreach and education capabilities of working lands conservation; and
- make possible increased measurement of program outcomes.

Chapter Eight: Conclusion

Today, there exists a unique opportunity to advance natural resource conservation and environmental protection through improved working lands conservation policies and programs. Each watershed moment in U.S. conservation history has corresponded to the emergence of a new communications and/or transportation network; related changes in economic, demographic, and land-use patterns; and environmental changes or disruptions.⁵⁰

The United States is now experiencing a communications and transportation revolution that is changing how individuals work and live, and, consequently, how we use the land. The Internet, wireless communication systems, and express delivery services have drastically changed the organization of business, labor, and consumer markets.⁵¹ “New Economy” businesses, for example, are capable of locating wherever they choose. Thus, quality of life has increasingly influenced where businesses and knowledge workers locate.⁵²

Fundamentally, population growth is causing greater land consumption. Throughout the nation, the amount of land used per person is also much greater.⁵³ Within this context of sprawl, private working lands are placed in direct competition with development. **If the public values rural heritage and the environmental benefits produced by working lands, they must provide mechanisms for landowners to resist the pressure to sell their lands to developers.** Landowners need tools to continue providing the benefits they have been providing, as well as benefits previously unidentified.

Current land protection efforts have successfully protected a considerable amount of key green spaces and working lands. Improvements to conservation policies could complement this success by creating stronger working lands conservation programs that not only protect land from development but also guarantee that specific environmental benefits will come from lands in production.

No coordinating policy exists to articulate national conservation goals and delivery of assistance. Political support for more coordinated working lands conservation policies and programs is growing. For instance, the political climate favors greater state, local, and private leadership in conservation matters.⁵⁴

In short, governors and other policymakers have a unique, historic opportunity to fashion a stronger local-state-federal working lands conservation effort that simultaneously addresses several prominent needs of American society:

- **The need for state and national agencies to better protect the environment and natural resources.**

Working lands conservation addresses problems that increasingly cannot be efficiently addressed through regulatory programs or land retirement programs.

- **The need to promote greater rural economic development without degrading natural resource amenities and while reducing reliance on agricultural subsidies.**

Working lands conservation helps maintain sustainable agriculturally-based economies, while pro-

moting economic growth driven by high-quality environmental amenities. It is an alternative to reliance on subsidies that benefit limited numbers of agricultural producers.

■ **The need to contain suburban sprawl and other land development that is consuming open spaces, destroying natural amenities, and causing more environmental problems.**

Working lands conservation reduces the economic need of landowners to sell their land to developers. By helping to steer development into older suburbs and cities with existing infrastructure, working lands conservation reduces high infrastructure costs to government and taxpayers.

■ **The need to protect private property rights.**

Working lands conservation fairly compensates landowners who voluntarily agree to produce specific and measurable environmental goods or conservation commodities. No type of landowner is categorically excluded or automatically included.

■ **The need to improve quality of life of all citizens.**

Working lands conservation can provide a higher level of protection of natural resource amenities and rural community heritage that are highly valued by all citizens, no matter where they live.

■ **The need of Americans to find common ground and common cause.**

Working lands conservation offers a unique opportunity for Americans to participate in a collaborative covenant to protect our unique natural world.

States are in a strong position to lead the development and implementation of a coordinated approach to working lands conservation. The nation's governors have the ability to help guide how working lands conservation might be better coordinated, funded, and directed towards both landowner and public needs. Consequently, the governors have an opportunity to define how states will honor the conservation covenant of which all citizens are a part.

APPENDIX A: Eight Suggestions for Improving Working Lands Conservation Programs and Policies

For quick reference, this appendix provides the main themes presented in this paper, structured as eight suggestions for improving working lands conservation programs and policies.

1. **Coordinate government conservation programs to streamline priority setting, information to landowners, and award processes.** The federal government can set broad goals for environmental protection, but it is often too removed from the needs of a particular watershed or ecosystem to prioritize regional spending and target resources where a region most needs them. Coordinated program development, where state and local governments and area landowners develop the details of a system according to national goals and with federal technical assistance, might better shape a successful conservation program.
2. **Coordinate government resources so comprehensive planning is possible.** This will avoid duplication and contradictory program goals and leverage public spending.
3. **Provide the necessary level of funding for improved coordination of programs and technical assistance support.** Without adequate funding to meet the current demands of landowners, any attempts to increase capacity and program outcomes will likely fail. With stronger commitments of resources by all levels of government, the basic science can be developed to measure specific environmental goods, staff levels can be increased to provide more technical assistance, and greater coordination and outreach among all conservation stakeholders can be achieved.
4. **Identify specific, measurable environmental goods that a landowner can produce.** Programs that can identify clear environmental and conservation benefits with measurable outcomes can demonstrate what a landowner must do to receive assistance and what public tax dollars paid for. Therefore, such programs can build greater public support.
5. **Outreach to landowners.** Conservation programs are only as successful as the landowners who enroll in them. Programs must inform landowners of their most environmentally sensitive lands, how the program can help them, and what impact it will have on the ecosystem of which they are a part.
6. **Involve private and non-profit organizations.** Non-profit organizations and citizen groups can help define local needs, outreach to landowners, implement programs, educate the public and school children, and measure results. Moreover, members often volunteer their time (helping to leverage public spending) and are knowledgeable about a specific watershed and ecosystem's needs.
7. **Educate the public.** The public has a vague idea of what benefits working lands provide to them, and when surveyed they often support protection of neighboring farm, ranch and forestland. If people know the specific benefits working lands conservation provides, they will have more reason to support it. In addition, educating schoolchildren about the benefits private working lands provide will ensure that future generations fully understand why working lands conservation is important.

8. **Coordinate working lands conservation plans with broader growth management and rural development plans.** Working lands conservation is consistent with the many growth-planning initiatives of state and local governments. It provides the rural counterpart to urban revitalization and new community design. Working lands conservation will be more successful in protecting a community's or region's amenities, if it is coordinated with broader regional growth planning efforts, and vice-versa.

APPENDIX B: Land Retirement vs. Conservation Easements/Purchase of Development Rights

Land retirement programs should not be confused with conservation easements. Through conservation easement programs, landowners donate the development rights of their land to a government entity or a private land trust, protecting the working land for the future and generating significant tax benefits for the landowner. Nor should land retirement programs be confused with Purchase of Development Rights (PDR) or Transfer of Development Rights (TDR) programs, such as the Farmland Protection Program (FPP) and the Forest Legacy Program (FLP), which pay landowners for the development rights of their property.

Land retirement programs, such as the Conservation Reserve Program (CRP), remove land from production either temporarily or permanently. Conservation easements, PDR, and TDR programs do not remove land from production. Instead, they alleviate pressure to sell to developers by accepting or buying the development rights to working lands, thus restricting development while keeping the land in production and providing needed income to landowners facing rising property values correlated to sprawl development.

Conservation easements, PDR, and TDR programs can be powerful components of working lands conservation, since landowners cannot produce greater environmental goods if they are forced to sell their forestland, farm or ranch. The popularity of FPP and the growth of FLP offer evidence that easement and PDR/TDR programs can help keep working lands working. FPP has seen seven times as many farmers apply to the program than its initial \$35 million in funding could support.⁵⁵ By the end of 1998, USDA's NRCS had approved FPP funding for 460 easements, which permanently protected about 127,000 acres of mostly prime and unique farmland from conversion to nonagricultural uses. (Limited funding has prevented much more land from being protected since that time.)⁵⁶ The FLP, which began with the 1992 Farm Bill, has invested \$48 million in protecting over 207,600 acres of forest, producing environmental services and a flow of products in 18 states and U.S. territories.⁵⁷

Working lands conservation is much more than idling the most environmentally sensitive lands. Working lands conservation is a comprehensive approach to creating an environmentally sustainable agribusiness. Ideally, working lands conservation programs should:

- educate landowners about how to produce environmental goods;
- pay for the specific environmental goods landowners produce for the public;
- measure how successful the landowner is at producing defined environmental goods; and
- utilize conservation easements and PDR/TDR programs to remove sprawl development pressure from landowners so they can, indeed, produce desired environmental goods.

In short, working lands conservation incorporates conservation practices into landowners' day-to-day agricultural activities. Conservation easements and PDR/TDR programs are a key part of working lands

conservation programs because they protect the land from development so other conservation practices can be implemented. Land retirement programs do not address these same goals, though they do protect certain environmentally-sensitive lands that cannot support a sustainable agribusiness.

APPENDIX C: Comparison of How Working Lands Conservation Programs Presently are Coordinated and How an Improved System Could Operate.

Diagram C1: The structure of today's working lands conservation delivery system.

Both vertical and horizontal coordination are lacking in the current structure of today's working lands conservation delivery system.

Federal agencies share resources and programmatic control with state and local agencies via defined delivery systems, USDA State Technical Committees, EPA's CWA Section 319 program, and other channels of communication. This assistance and input is not well coordinated, however. Moreover, with limited funding for federal technical assistance, and since many federal programs target specific landowners that might not be the specific landowners state or local officials would choose, current conservation programs are not as effective as they could be. In short, vertical coordination is not simple or straightforward in the current delivery systems.

A lack of federal interagency coordination exacerbates the problems created by fragmented vertical coordination. Each federal agency provides direction and funding for various programs with little internal or interagency collaboration (i.e., horizontal coordination). Staff resources, technical assistance, and funding are not filtered through any coordinating policy or system before reaching states, local governments, and/or landowners. Therefore, the number of piecemeal conservation requirements that other government entities and landowners must address is simply overwhelming.

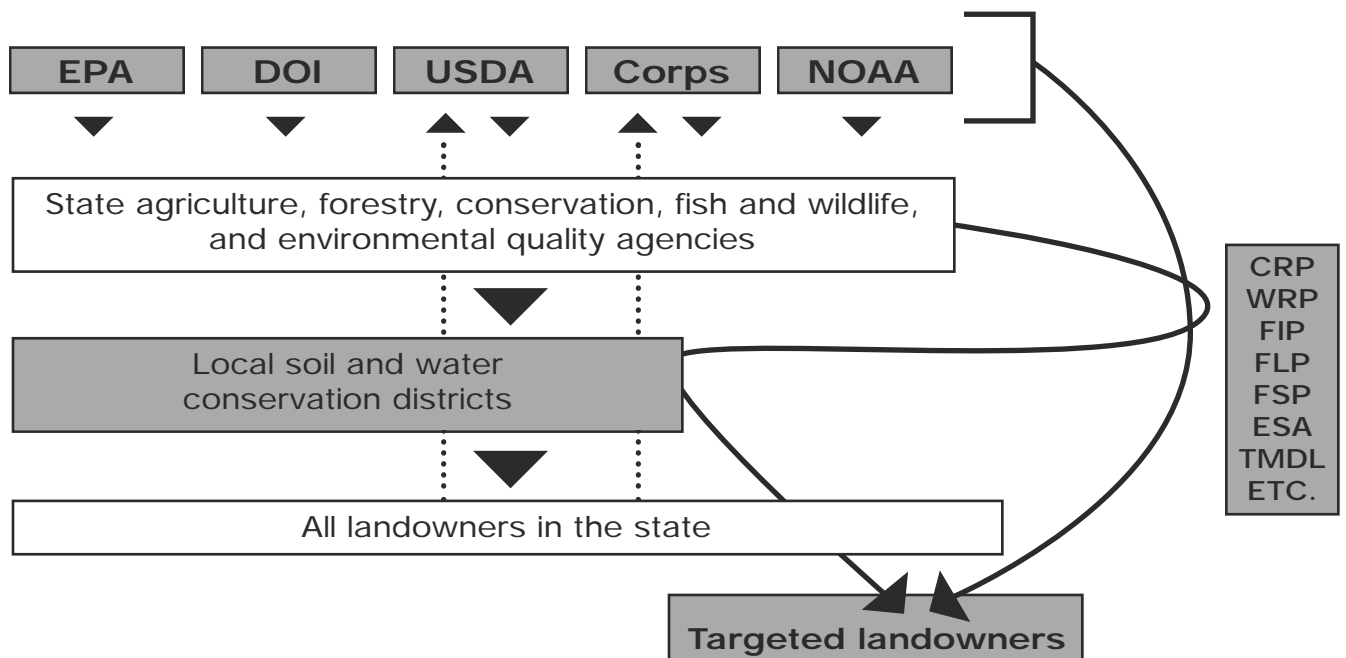


Diagram C2: An option for improving the working lands conservation delivery system.

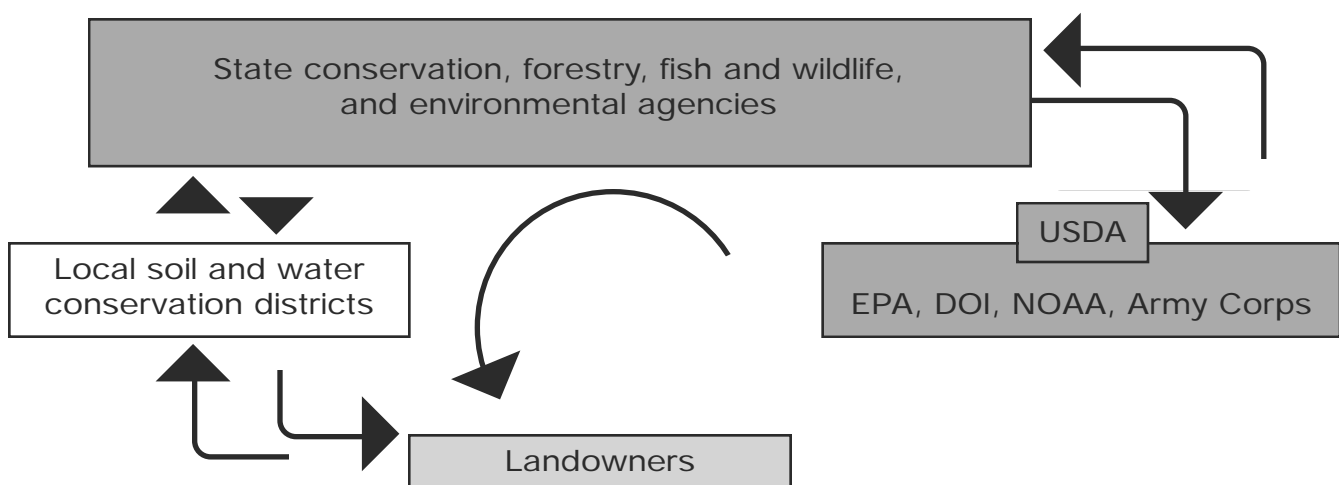
Local, state, and federal governments can construct a better working lands conservation approach.

In the option suggested below, states would take the lead in coordinating working lands conservation programs. As occurs under the CWA Section 319 program, state plans would be evaluated according to agreed upon national goals. If a state plan were able to fulfill national goals, then the state would take the lead in coordinating federal and state working lands conservation programs, and perhaps even in broader agricultural assistance. If a state does not take the lead, then the federal government would assume the leadership role.

Local and federal conservation officials would provide input into the state-led conservation programs. Local conservation offices would also provide on-the-ground assistance and outreach. Therefore, the arrows flow both ways in the diagram below to denote coordinated communication from bottom to top and back again. A state-led system would help mesh federal, state, and local goals, and thus address the problem of limited vertical coordination mentioned in Diagram C1. (For those states that were not yet taking the lead for their working lands conservation programs, the federal government could use the same channels of communication described by the arrows to maintain coordination among various policymakers.)

The diagram below also offers an option to address the need for increased horizontal coordination. USDA and state agriculture agencies serve as coordinating bodies for the many conservation agencies at their respective levels. This is simply one option. Governors could appoint another agency as the lead, just as Congress or the President could appoint another department to coordinate the federal level. The main point is that a coordinating body should integrate various conservation needs into a coherent conservation system at both the federal and state level.

While the federal programs that now target specific landowners remain in Diagram C2, they would become integrated into the comprehensive system the state has devised. Therefore, state and local needs would be given even more consideration than they are now in these federally managed programs.



APPENDIX D: Summary of Federal and State Government Conservation Programs Affecting Michigan Landowners

Note: The two tables in Appendix D were obtained from one source, and do not represent fully the entire universe of programs that have an impact on working lands in Michigan.

Table D1: Federal Programs Impacting Landowners⁵⁸

Issue Addressed	Program/Statute	Agency with Primary Jurisdiction
Water Quality	Clean Water Act: <ul style="list-style-type: none"> ● State Water Quality Standards ● National Pollutant Discharge Elimination System (NPDES) ● Concentrated Animal Feeding Operations (CAFO) regulations ● Unified National Strategy for Animal Feeding Operations ● Section 404 permits for dredging and filling wetlands ● Section 319 non-point source plan ● Oil spill liability ● Many special pollution control programs for certain waters, like the Chesapeake Bay and the Gulf of Mexico, and estuaries in the National Estuary Program like the Puget Sound area in Washington. 	EPA EPA EPA EPA and USDA Army Corps of Engineers and EPA EPA EPA EPA
	Coastal Zone Management (CZM) programs	EPA
	Coastal Non-point Pollution Control (CNPC) programs	NOAA and EPA
Groundwater	Safe Drinking Water Act (SDWA)	EPA
	Groundwater Pesticide Management Plans	EPA
Air Quality	The Clean Air Act (CAA)	EPA
Solid & Hazardous Waste	Resource Conservation and Recovery Act (RCRA) <ul style="list-style-type: none"> ● Disposal permits ● Underground Storage Tanks ● Used oil storage regulations 	EPA
	Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund)	EPA
	Toxic Substances Control Act (TSCA)	EPA
	Emergency Planning and Community Right-to-Know-Act (EPCRA)	OSHA
	OSHA hazardous waste training requirements	OSHA

Pesticides and Chemigation	Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)	EPA
Protection of Wildlife	Endangered Species Act (ESA)	DOI
	Federal Migratory Bird Treaty Act	
General Agricultural Conservation	Conservation Reserve Program (CRP)	USDA
	Conservation Reserve Enhancement Program (CREP)	
	Wetlands Reserve Program (WRP)	
	Environmental Quality Incentives Program (EQIP)	
	Swampbuster	
	Sodbuster	
	Conservation Farm Option (CFO)	
	Flood Risk Reduction program	
	Farmland Preservation Program (FPP)	
	Everglades Ecosystem Restoration programs	
	Wildlife Habitat Incentives Program (WHIP)	
	Conservation of Private Grazing Land program	

Table D2: Michigan Laws Affecting Working Lands Conservation⁵⁹

Issue Addressed	Program/Statute	Agency with Primary Jurisdiction
Water Quality	Michigan Water Quality Standards	DEQ
	Michigan CAFOs and NPDES permit systems	DNR
	Part 303 of the Natural Resources and Environmental Protection Act (NREPA), Public Act 451 of 1994	DEQ
	Iron ore mining and phosphorus rules	DEQ
Groundwater	Freshwater Protection Act	DOA
Air Quality	Michigan Air Pollution Control Act (APCA)	DEQ
Solid & Hazardous Waste	Michigan Solid Waste Management Act (SWMA), Public Act 641 of 1978	DEQ
	Michigan Farm Implements and Junk Motor Vehicle Statute	Counties or municipalities may establish a program
	Michigan Underground Storage Tank program	DEQ
	Michigan Hazardous Waste Management Act, Public Act 64 of 1979	DEQ
Pesticides	Michigan Pesticide Control Act (PCA), Public Act 171 of 1976	DOA
Protection of Wildlife	Michigan endangered and threatened species laws	DNR
Other	Michigan farmland and open space preservation programs	DNR
	Michigan Right to Farm Act <ul style="list-style-type: none"> ● Generally Accepted Agricultural and Management Practices (GAAMPs) ● Agricultural Environmental Assurance Program (AEAP) 	DOA and DEQ

APPENDIX E: Summary of USDA Private Lands Conservation Programs and Activities*

The following USDA programs provide direct assistance to farmers, ranchers, and foresters to implement conservation practices on their lands. The USDA agency responsible for each program is noted in parenthesis at the end of each paragraph.

The **Agroforestry Program** is a joint venture of the USDA Forest Service and Natural Resources Conservation Service. Its purpose is to educate technical assistance providers, landowners, and stakeholders about the benefits of agroforestry, resulting in increased adoption. Through research, development, applications, and training, the program provides appropriate technologies, documentation, and tools to extension agents and others participating in efforts to incorporate agroforestry into conservation and production systems for farms, ranches, and communities. (Forest Service, NRCS)

The 1996 Farm Bill set up the **Conservation Farm Option (CFO)**. This pilot program is for producers of wheat, feed grains, upland cotton, and rice who are eligible for Agriculture Market Transition Contracts. Under this voluntary program, landowners must create a conservation farm plan and will receive one annual CFO payment when they agree to forego CRP, WRP, and EQIP payments. (NRCS)—NOT FUNDED.

The **Conservation of Private Grazing Land Initiative (CPGL)** is a nationwide program that maintains and improves the management, productivity, and health of the nation's privately-owned grazing land. This program has formed coalitions that represent the grassroot concerns impacting private grazing land. The coalitions actively seek sources to increase technical assistance and public awareness activities that maintain or enhance grazing land resources. (NRCS)—NOT FUNDED.

The purpose of the **Conservation Plant Material Centers** program is to provide native plants that can help solve natural resource problems. Beneficial uses for which plant material may be developed include biomass production, carbon sequestration, erosion reduction, wetland restoration, water quality improvement, stream bank and riparian area protection, coastal dune stabilization, and other special conservation treatment needs. (NRCS)

The **Conservation Reserve Enhancement Program (CREP)**, part of CRP discussed in the next paragraph, allows USDA to work in partnership with states and local stakeholders to meet four specific conservation objectives to improve stream habitats: reduced erosion, improved water quality, enhanced wildlife, and improved air quality. Currently, CREP agreements have been approved in 15 states: California, Delaware, Illinois, Maryland, Michigan, Minnesota, Missouri, New York, North Carolina, North Dakota, Ohio, Oregon, Pennsylvania, Virginia, and Washington. Nine other states—Arkansas, Florida, Iowa, Kentucky, Nebraska, New Jersey, Vermont, West Virginia, and Wisconsin—have submitted CREP proposals that have not been approved to-date. (FSA)

The **Conservation Reserve Program (CRP)** seeks to provide both farm income support and environmental protection. CRP is a voluntary program in which farmers and ranchers enter into 10- to 15-year contracts with USDA to take highly erodible land and other environmentally sensitive cropland out of pro-

duction by applying protective vegetative cover best suited for wildlife. CRP is the nation's largest private lands, long-term retirement conservation program. (FSA)

The **Conservation Technical Assistance (CTA) Program** is unique in that it offers site-specific technical assistance to private land-users, communities, units of state and local government, and other federal agencies in planning and implementing conservation systems. It provides the core funding for the nation's conservation delivery system and provides the foundation upon which most other conservation programs rely. (NRCS)

The **Emergency Conservation Program (ECP)** provides financial assistance to farmers and ranchers for the restoration of farmlands on which normal farming operations have been impeded by natural disasters. ECP also helps with funds for carrying out emergency water conservation measures during periods of severe drought. (FSA)

The USDA secretary can purchase floodplain easements on lands that have serious recurring flooding problems under the **Emergency Watershed Protection Program**. Assistance also includes: both removing and establishing vegetative cover; controlling gullies; installing stream bank protection devices; removing debris and sediment; and stabilizing levees, channels and gullies. (NRCS)

The **Environmental Quality Incentives Program (EQIP)** provides cost-share assistance for up to 75 percent of certain conservation practices. EQIP replaced several programs: the Agricultural Conservation Program (ACP), the Water Quality Incentives Program, the Great Plains Conservation Program, and the Colorado River Basin Salinity Control Program. (NRCS)

Under the **Farmland Protection Program**, USDA partners with state or local governments to purchase conservation easements from farmers who volunteer land they wish to preserve for agricultural use only. The program provides funding to state, local or tribal entities with existing farmland protection programs to purchase conservation easements or other interests. (NRCS)

The **Flood Risk Reduction Program** was established to allow farmers who voluntarily enter into contracts to receive payments on lands with high flood potential in return for agreeing to forego certain USDA programs benefits. These contract payments provide incentives to move farming operations from frequently flooded land. (FSA)—NOT FUNDED.

The **Forest Legacy Program (FLP)** protects private lands from being converted to non-forest uses through the purchase of conservation easements or fee simple titles from willing private landowners. The program encourages the continuation of forestry on these lands, including the harvest of timber. The program is voluntary on two levels: 1) state decides whether or not to join; and 2) private forest landowners voluntarily agree to place conservation easements on their properties. The purpose of FLP is to protect environmentally important forest areas threatened by conversion to nonforest uses. (Forest Service)

The **Forest Products Conservation and Recycling Program** helps communities and businesses find new and expanded business opportunities based on forest resources. (Forest Service)

The **Forest Stewardship Program** brings professional natural resource management expertise to non-industrial private forest landowners to help them in developing forest stewardship plans. Properly managed

private forests provide numerous benefits, including timber, wildlife habitat, watershed protection, and recreational opportunities. Forest management plans encourage landowners to become active in planning and managing their forests. This greatly increases the likelihood that their forests will remain productive and healthy, and that the social, economic and environmental benefits of these lands will be realized. (Forest Service)

The **Forest Taxation Program** provides non-industrial private forest landowners with a consolidated source of information on the complex tax issues associated with forest maintenance and management. (Forest Service)

The **Forestry Incentives Program (FIP)** supports good forest management practices on privately owned, non-industrial forestlands nationwide. Eligible practices for which landowners can receive assistance are tree planting, timber stand improvement, site preparation for natural regeneration, and other related activities. (NRCS)

The **Highly Erodible Land Conservation (HELC) Program** requires that a conservation plan be developed and implemented on highly erodible lands as a condition of eligibility for certain USDA programs. (NRCS)

The **Market Development and Expansion Program** helps develop new markets for natural resource-based goods and services. (Forest Service)

The **National Conservation Buffer Initiative** is a public-private partnership that is committed to helping America's farmers install 2 million miles of conservation buffers by 2002. The Buffer Initiative is a partnership with other USDA agencies, other federal agencies like EPA, state conservation agencies, conservation districts, agribusinesses, and agricultural and environmental organizations. There are approximately 100 partners. (NRCS)

The **National Cooperative Soil Survey Program (NCSS)** is a partnership of federal land management agencies, state agricultural experiment stations, and local units of government that provide soil survey information necessary for understanding, managing, conserving, and sustaining the nation's limited soil resources. (NRCS)

The 1996 Farm Bill created the **National Natural Resources Conservation Foundation**, a charitable non-profit corporation that funds research and educational activities relating to conservation on private lands. (USDA)—NOT FUNDED.

The **Resource Conservation and Development (RC&D) Program** accelerates the conservation, development, and utilization of natural resources; improves the general level of economic activity; and enhances the environment and standard of living in authorized RC&D areas. The program establishes or improves coordination systems in rural areas. (NRCS)

The **Rural Community Assistance Programs** help rural communities build skills, networks, and strategies to address social, environmental, and economic changes. Specifically, the Forest Service: has a presence and vested interest in communities that have a natural resource base; carries out land management respon-

sibilities that affect the opportunities available to local communities; has professional expertise needed by communities; and can provide seed money to catalyze local action and leverage other resources. (Forest Service)

The **Rural Forestry Management (RFM) Program** provides a foundation for federal technical assistance to the states. It provides states with well-informed, trained, and equipped forest professionals to help non-industrial private forest (NIPF) landowners with the confounding set of forestry-related issues that confront them. RFM matching funds are offered to the states to support their on-the-ground technical assistance programs. RFM provides matching funds directly to state forestry programs, which, in turn, assist NIPF landowners in answering their questions about forest management. (Forest Service)

The **Small Watershed Program** and **Flood Prevention Program** work through local government sponsors and help participants solve natural resource and related economic problems on a watershed basis. Projects include watershed protection, flood prevention, erosion and sediment control, water supply, water quality, fish and wildlife habitat enhancement, wetlands creation and restoration, and public recreation in watersheds of 250,000 or fewer acres. (NRCS)

The **Snow Survey and Water Supply Forecast Program** provides Western states and Alaska with information on future water supplies. (NRCS)

The **Stewardship Incentives Program (SIP)** provides technical and financial assistance to encourage non-industrial private forest landowners to keep their lands and natural resources productive and healthy. (Forest Service)

Wetland Conservation (Swampbuster) requires mitigating wetland degradation as a condition of receiving certain USDA program benefits. The goal is to promote the restoration, enhancement, or creation of wetlands to mitigate the loss of wetland function or value in another area. (NRCS)

The **Wetland Reserve Program (WRP)** is a financial assistance program that funds permanent easements, 30-year easements, or restoration cost-share agreements with private landowners to preserve environmentally sensitive wetlands. (NRCS)

The **Wildlife Habitat Incentives Program (WHIP)** helps landowners improve wildlife habitat on private lands through technical assistance and through cost-share payments of as much as 75 percent. (NRCS)

*For a complete list of USDA conservation programs and activities go to www.nrcs.usda.gov/NRCSProg.html.

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