

## MAKING THE CASE FOR FARMLAND PROTECTION

Agriculture is the dominant land use in the U.S. With more than 945 million acres in farms, critics sometimes ask "why save farmland?" The answer is that farmers and ranchers, by managing their land well, provide benefits to their communities, the economy and the environment, and improve our quality of life. This issue of *Connection* explores some tools and programs to protect farmland. In order to build public support for farmland protection, though, it's important to understand the benefits of agriculture.

### AGRICULTURE IS AN INDUSTRY

Agriculture is an important U.S. industry. In 1996, the reported market value of our agricultural commodities was nearly \$210 billion. We exported nearly \$60 billion in agricultural products, accounting for more than 10 percent of total exports. The U.S. food and fiber industry accounts for 15.2 percent of all domestic jobs.

Farm and ranch land is the basis of our agricultural industry. While we do have an abundance of agricultural land, not all land is equally suited to production. Prime, unique and "statewide important" soils are especially vital. Approximately 56 percent of our crops are grown on prime farmland, yet, according to the U.S. Department of Agriculture, prime soils are at the highest risk of conversion to non-farm use. AFT's *Farming on the Edge* study found that approximately 79 percent of fruit, 69 percent of vegetables and 52 percent of dairy products are produced in areas threatened by non-farm development.

Agriculture requires high-quality soils for efficiency. If development pushes farming and ranching onto marginal land, costs for inputs such as fertilizer may increase, and environmental problems such as erosion may result.

### AGRICULTURE CAN PROTECT THE ENVIRONMENT

Environmentalists sometimes express concern about pollution caused by agriculture. But even the harshest critics agree that farming the land is preferable to paving it, and there is growing recognition that good agricultural stewardship *benefits* the environment. For example, New York City found that suburban development, not farming, was the biggest threat to its water quality. The city is purchasing farm easements in its watershed and paying farmers to improve management practices. This program helped taxpayers avoid construction of a multi-billion dollar water filtration plant.

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## INNOVATIONS

### STRATEGIC FARMLAND MAPPING

State and local agencies and land trusts are using geographic information systems to make strategic decisions about land protection. GIS computer programs produce digital maps that store multiple layers of data about landscapes and individual land parcels. But GIS is more than mapping. The process of developing a GIS can help diverse interest groups agree on the need for farmland protection and the amount and type of land to protect.

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# LANDWORKS

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# Connection

LANDWORKS

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who conserve  
the land*

  
American Farmland Trust

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American Farmland Trust is the only private, nonprofit conservation organization dedicated to protecting the nation's strategic agricultural resources. Founded in 1980, AFT works to stop the loss of productive farmland and to promote farming practices that lead to a healthy environment.

Basic membership is \$20 per year. For membership or general information about AFT, contact the National Office at 1200 18th Street, N.W., Suite 800, Washington, DC, 20036, (202) 331-7300, or connect to our web page at <http://www.farmland.org>

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## POLICY REPORT

### LANDSLIDE FOR THE LAND

Americans spoke loudly for farmland and open space in the November elections. Voters endorsed land protection funding in eight states and more than 100 local jurisdictions. According to the Land Trust Alliance (LTA), more than 85 percent of state and local ballot initiatives to fund land protection programs were approved, with nearly \$4 billion committed. Voters also approved urban growth boundaries in eight California communities.

Why were land protection initiatives so successful? "Voters all around the country seem to be taking land use into their own hands—probably out of frustration with the inability or unwillingness of local politicians to deal with sprawl," reflects AFT President Ralph Grossi. Russ Shay, the LTA's policy director, agrees. "What's really interesting is the number of issues and the spontaneity with which they're popping up. These issues are not coming from an organized outside effort—these are local initiatives. The public perception is that there is a need that is not being filled."

In Colorado, where at least four counties approved funds for land acquisition, attorney Larry Kueter remarks that "development pressures...are pretty apparent to everyone. People value rural lifestyles and the beauty of the state and they don't want to see that disappear."

In a statewide ballot question, New Jersey residents voted to spend nearly \$1 billion over 10 years for open space and farmland protection. Local land protection initiatives passed in six out of seven counties and 45 out of 54 municipalities. "Just about all of us in New Jersey have seen some beautiful farm or natural area paved over," says David Yaskulka, director of communications for the New Jersey Conservation Foundation. He cites public awareness and a strong campaign as the keys to success. "Environmental and business leaders worked together," he reflects, "and we used powerful messages like 'save a million acres.'"

The victory in New Jersey highlights two important trends: the importance of leadership, and the universal political appeal of the issue. While environmental protection often is cast as a Democratic cause, Republican Christine Todd Whitman made funding for land protection the central issue in her second term as governor. In Ohio, Republican Governor-elect Robert Taft proposed a \$200 million Ohio Environment Preservation Fund that would provide matching funds to local governments or private nonprofit organizations to protect farmland and greenways and develop sites for outdoor recreation.

### LESSONS FROM THE LOSERS

While winners vastly outnumbered losers, land protection advocates can draw important lessons from the failures. There was strong farmer support for an open space and farmland protection program in Washtenaw County, Michigan, but a coalition of realtors, developers and homebuilders used a few dissenters to create a perception that the agricultural community opposed the initiative. Also, according to Barry Lonik, executive director of the Potowatomi Land Trust, advocates started their campaign too late, after the opposition was well organized. "You can't start too early working with potential supporters," he reflects. "And it's important to work on an individual basis—farmer talking to farmer."

In Georgia, where voters defeated a small increase in the real estate transfer tax to fund land protection, Campaign Manager Charles Halloran faults voter education efforts. "We mentioned taxes twice in the ballot," he says. "Although it was an obscure fee that only occurs when you sell your home, Georgians saw it as affecting them more than it actually would have." Does that mean the *continued on page 3*

## **Landslide** *continued from page 2*

funding mechanism was the problem? Halloran says no. "I think if the legislature had voted through an increase in the real estate transfer tax, no homeowner would have ever noticed it. We're talking about a tax on a \$300,000 home sale that would cost you \$300 in closing costs. You can't paint your kitchen for that," he says. "But ...voters in the booth didn't have time to contemplate what it meant in dollars and cents. Given better voter education, I think they would have voted for it."

What does the "landslide" mean for the future? In an interview cited in a *New York Times* analysis of the election results, Vice President Al Gore reflected "I've come to the conclusion that what we really are faced with here is a systematic change from a pattern of uncontrolled sprawl toward a brand new path that makes quality of life the goal of all our urban, suburban and farmland policies." 🚗

## **USING RESOURCES WISELY**

### **LAND PROTECTION AND AFFORDABLE HOUSING**

Conservation and housing advocates sometimes struggle over competing goals and limited public funds. But not always. In Vermont, conservation and housing advocates have shared the same office for a decade. Since 1989, the Vermont Housing and Conservation Trust Fund has provided funds to protect nearly 75,000 acres of farmland. It has helped conserve 95,000 acres of land for ecological and recreational values, and has given local organizations the resources to develop 4,810 units of affordable housing. The program speaks to the wisdom of including farmland protection in broad community priorities.

The Trust Fund was *created* by conservationists and affordable housing advocates. "We got together in 1986 during a roaring land market," explains Vermont Land Trust President Darby Bradley. "Affordable housing groups were dealing with the same land pressures as conservation groups. And we realized that housing, farmland, recreation areas and natural areas are all part of what makes up a livable community. That became the link between us."

Conservationists first proposed state funding for a purchase of agricultural conservation easement program in 1985. But Vermont was facing a budget deficit, so the proposal went nowhere. The following year, the program was broadened to include natural areas and wildlife habitat but legislative efforts were still unsuccessful. At the same time, affordable housing advocates were addressing the conversion of federally subsidized rental units to market-rate housing. The groups joined forces in 1986. The new coalition included advocates of farmland protection and affordable housing, representatives of low-income groups and environmentalists. They hired a lobbyist to draft and promote a bill to provide funding for farmland and natural lands protection and affordable housing development. Their efforts paid off in 1987, when the legislature approved the Vermont Housing and Conservation Trust Fund Act.

To date, the Trust Fund has spent \$18 million on resource protection and recreation, \$29 million on farmland protection and \$54.2 million on affordable housing. A few projects have involved both farmland protection and affordable housing, but this is the exception, not the rule. While the underlying philosophy is for "towns to deal with both goals in the most appropriate manner, that doesn't always mean on the same parcel," says administrator Larry Mires.

Bradley reflects that "there have been many efforts to divide the Trust in two—to say, for example, two-thirds should go to conservation, and one-third to housing. But keeping it together has worked well in the long term. I think that this is the principal reason why the Trust Fund has remained relatively well funded—housing issues may be hot one year, agriculture the next."

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**An extensive list of results was posted on the LandWorks web site within days of the election.**

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## Affordable Housing *continued from page 3*

Competition for land between developers, agriculture, conservationists and affordable housing advocates has increased. Real estate interests sometimes fight conservation initiatives by arguing that they drive up land and housing costs. But the Trust Fund clearly demonstrates that communities don't have to choose between conservation and housing. Innovative partnerships like the Vermont coalition could help protect agriculture and natural resources while providing funds for inner-city and brownfields redevelopment, creating strong rural and urban communities that are the best antidote to suburban sprawl. 🏡

## GOOD DEALS

### CALIFORNIA RANCHERS PROTECT LAND, RESOURCES

The Carinalli Ranch in Sonoma County, California, is a good example of how farmland protection programs can tailor standard agreements to unique properties and individual needs. The Carinalli family worked closely with the Sonoma Agricultural Preservation and Open Space District to craft a unique, three-part easement that protects both their agricultural operation and natural resources on the land. The deal safeguarded wildlife habitat and extended a greenbelt or "community separator" between two sprawling cities.

The Carinalli Ranch lies near Highway 12 in a swath of open land between Santa Rosa and Sebastopol. A hundred years ago, the region was covered by wetlands. Fifty years ago, agriculture dominated the landscape. But today, asphalt is replacing pasture, leaving farmers and wildlife struggling in an increasingly urban environment.

*Below: A unique easement protects agriculture and the environment on this California ranch.*

Photo courtesy of Sonoma Agricultural Preservation and Open Space District staff.



Domenic Carinalli took over his parents' dairy operation in the 1970s. In 1981, he and his wife Lynda bought a 408-acre ranch for pasture and silage production. "We stuck our necks out, bought this ranch, and then milk prices went down, feed prices went up, and left us in a bind," says Lynda. Domenic and Lynda sold 152 acres of wetlands to the state Wildlife Conservation Board in 1989 to reduce their mortgage. The property encompasses critical wildlife *continued on page 5*

## California Ranchers *continued from page 4*

habitat and shelters one of the area's few remaining stands of ancient oak trees. In 1995, they sold an easement on the remaining land to the Open Space District.

The District uses three types of easements: *unlimited agriculture*, which allows for intensive agricultural activities such as crop production and irrigation, *limited agriculture*, which permits low-intensity activities such as grazing; and *forever wild*, designed to protect ecologically sensitive land. Normally, the district uses just one type of easement per property. The Carinalli easement, however, incorporates the three different levels of protection for different sections of the ranch.

The 108-acre unlimited agriculture easement covers irrigated cropland, a 20-acre vineyard, a turf operation, a composting facility and the residential area. Approximately 110 acres are covered by the limited agriculture language, which allows grazing and silage production. The forever wild section is a small, 28-acre parcel adjacent to land now owned by the state Department of Fish and Game. Fences divide the three sections. Because different levels of protection were involved, the easements had different values. The Carinallis received \$760,000 in total, accounting for 90 percent of the fee simple value for the forever wild section, but only 40 percent for the unlimited agriculture parcel.

The Carinallis are careful and creative stewards of the land. The ranch uses treated wastewater from the city of Santa Rosa for irrigation. "It's a win-win situation for the city and the farmers both," says Lynda, explaining that laws limit releases into local waterways, and urban residents generate more wastewater than the city can manage. The Carinallis also have plans to restore vernal pools on the forever wild section of the ranch. A unique local program will allow them to sell wetland mitigation credits to developers, providing an additional source of income for the family. Finally, as part of the easement agreement with the District, Domenic and Lynda improved landscaping along a major county road to conceal intensive agricultural operations that neighbors found unsightly.

Lynda Carinalli is happy with the decision to protect the ranch. "For one thing, it's going to make sure that this land stays in agriculture," she says. "Not 'preserve' it, but keep it viable. Also, it provides a larger area of habitat for wildlife that can intermingle with agriculture." Finally, she says, "It helps us monetarily. We strongly believe in agriculture and want to see it remain here." 🚜

## THE LAND ON THE LINE

### EVERYONE BENEFITS—WHO PAYS?

In many communities, support for farmland protection depends on the answer to a single question: Who pays? While there are several successful farmland protection techniques and different ways of implementing them, ultimately, the cost of protecting land falls on someone. Regulatory strategies such as zoning, growth management laws and environmental restrictions tend to impose costs on landowners. Purchase of agricultural conservation easement programs are generally funded publicly, with bonds, general appropriations or property taxes. Developers and homebuyers usually bear most of the cost of transfer of development rights programs. A few jurisdictions are experimenting with programs that require developers to pay directly for farmland protection.

Who do you think should pay for protecting farmland—Landowners? Developers, and, by extension, buyers of new homes? Taxpayers? And if you think that government should pay, at what level—federal, state or local? Let us know what you think. Share your opinions with LandWorks subscribers by joining our listserver. Send an email message to [landworksonline@farmland.org](mailto:landworksonline@farmland.org). Write <subscribe> in the subject heading, and leave the body of the message blank. 🚜

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Comment

## Making the Case *continued from page 1*

Farmland also plays an important role in flood prevention. Pavement generates runoff, while farm fields and pastures absorb water. The federal government offers grants to communities to purchase easements on flood-prone land.

Development fragments wildlife habitat, creating “islands” of open space that are too small to support healthy populations of large mammals, migratory birds and other endangered species. Farms and ranches, in contrast, serve as feeding, breeding and wintering areas, and provide stopovers for migrating wildlife.

### THE LAY OF THE LAND

Percent of total U.S. land in farms, 1992 <i>U.S. Census of Agriculture, 1992</i>	42%
Market value of agricultural commodities, 1996 <i>National Agricultural Statistics Service</i>	\$209.625 billion
Funds allocated to states, dedicated for road maintenance and construction under the Transportation Equity Act, 1999 <i>TEA-21 User's Guide, <a href="http://www.tea21.org/guide/guideonline.htm">http://www.tea21.org/guide/guideonline.htm</a></i>	\$13.3 billion
Federal funds allocated to erosion control and soil conservation programs Farm Services Agency and Natural Resources Conservation Service, 1998 <i>Public Law 105-277 and FSA budget, 1998</i>	\$2.7 billion
Funds allocated to states under the federal Farmland Protection Program, 1996-1998	\$36 million
Funds allocated to states under the federal Farmland Protection Program, 1999	\$0

Agricultural land also can buffer natural habitat areas from developed communities. New federal, state and private programs are helping farmers increase habitat through stream corridor management, prairie and wetland restoration, seasonal flooding, and planting food crops for migratory birds.

Scientists are beginning to document the extent of agriculture's ecological benefits. As concern about global warming increases, policy makers are looking to farmers to help reduce atmospheric levels of carbon dioxide and other “greenhouse gases.” Agriculture can help capture carbon in the soil through conservation tillage and better management of cropping systems, crop residues and irrigation. Land in the Conservation Reserve Program, Wetlands Reserve Program and vegetative buffers also takes carbon out of the atmosphere, and growing crops such as switchgrass and poplar for fuel to replace oil, coal and gas can help reduce carbon dioxide emissions.

#### AGRICULTURE IS ESSENTIAL TO OUR QUALITY OF LIFE

Farms and ranches contribute to scenic beauty and a sense of place in rural communities. Agricultural landscapes are the basis of our national pride in “America the Beautiful.” They also attract tourists. From the rolling pastures and historic barns of Vermont to wineries in Napa and Sonoma counties, California and high-country ranches near Steamboat Springs, Colorado, agricultural landscapes and thriving farms form the basis of billion-dollar tourist industries.

Farms and ranches contribute to our quality of life. Producers who sell locally through farmers and specialty markets, roadside stands, pick-your-own operations, community supported farms and restaurants offer consumers fresh,  
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**Visit the online edition of Connection at <http://www.farmland.org/landworks.html> for a bibliography on the benefits of agriculture.**

## **Making the Case** *continued from page 6*

high-quality food. Local farms often provide the best access to a wide variety of produce, as well as food grown without the use of synthetic pesticides.

A growing number of agricultural operations are welcoming visitors. Farm tours and festivals, hayrides, petting zoos and dude ranches offer non-farmers the chance to learn about agriculture and connect with our agricultural heritage. Farms also provide traditional recreational opportunities such as hunting, hiking, birdwatching and snowmobiling. In Texas, where 96 percent of the land is privately owned, more than 27 percent of farmland, range and pasture is leased for hunting. This on-farm recreation can be a major contributor to the economy—in 1996, Texas hunters spent more than \$1.4 billion on goods and services.

### **AGRICULTURE IS GOOD FOR THE TAX BASE**

Privately owned and managed farmland generates more in local taxes than it costs to provide services to the land. Cost of community services studies conducted in more than 50 local jurisdictions around the nation show that farmland generates surplus tax revenues, while revenues generated by residential development as a whole fail to cover the costs of providing services to residents.

Some local governments promote commercial and industrial development to offset the costs of providing education and infrastructure. While commercial and industrial development does generate surplus revenue in the short term, research done by the Vermont consulting firm, Ad Hoc Associates, in several northeastern states has found tax bills are the highest in towns with the most commercial and industrial activity.

Findings of local fiscal research should not be used to make a case against development, but to inform decisions about “smart growth.” Local governments must plan carefully to ensure the availability of education, affordable housing, police and fire protection and other public services for residents. Protecting agricultural land is an important component of good planning, and contributes to the fiscal stability and well-being of growing communities. 🚗

## **Farmland Mapping** *continued from page 1*

The technology also gives professionals and politicians an objective tool to make complex value judgements about land protection on a day-to-day basis.

Recent GIS projects in Delaware and Maryland demonstrate how the technology can help build community consensus and identify resource protection priorities. The Delaware Department of Agriculture used a GIS to develop a strategic plan for protecting farmland. “We took better than a year and a half struggling through an iterative discussion with the affected parties, including farmers... land use professionals...real estate interests and environmental groups to work through what is important in making a decision as to which farmland should be preserved, and...the weight of these things,” says Planning Manager Mike McGrath. The group settled on six variables to represent the value of land for agriculture. Every parcel of land in the state received a score for each of the six factors. But the group decided that some factors should be more important than others. To account for this, the state gave each factor a different mathematical weight—soil quality was most important, followed by the absence of sewer lines. Scores for each variable were multiplied by the weighting factor, then all scores for each parcel were added. The result is the Agricultural Lands Strategy Map, which identifies and ranks the state’s most valuable farmland.

In Maryland, American Farmland Trust worked with the nonprofit Chesapeake Farms for the Future project to create a statewide strategic farmland map. As in Delaware, a diverse group of stakeholders defined the types of resources they *continued on page 8*

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**Farmland Mapping** *continued from page 7*

wanted to protect. The Farms for the Future map shows farmland with prime and productive soils and environmental, cultural and historic features. It displays the market value of agricultural products sold, projected increases in housing and land protected by easements, agricultural zoning or districts.

The Delaware Agricultural Lands Preservation Foundation uses their map and database to make decisions about where to purchase easements on farms. "We have standards that are agreed on in advance. It takes a tremendous amount of pressure off the people making the decision *and* it buys a lot of goodwill and faith in our objectivity. People may be disappointed, but they understand," says McGrath. In contrast, the Farms for the Future project board decided *not* to make value judgments about which characteristics of farmland are most important. Rather, the map is intended to serve as a statewide resource to help local governments make their own decisions about which land to save.

Setting up a GIS can be expensive, but small communities and land trusts are finding creative ways to make it affordable. The Valley Land Conservancy in western Colorado took advantage of existing data provided by state agencies, local governments and the nonprofit Southwestern Colorado Data Center. It obtained additional information through a contract with a private company, and assembled all the data to produce a digital map of the Uncompaghre River corridor. The map shows irrigated farmland, wildlife habitat, wetlands and public lands. VLC is using the GIS to identify critical parcels of land for conservation. It is focusing its efforts on privately owned lands that will link the river with wildlife habitat on public land.

Land conservation professionals who use GIS emphasize the importance of involving the public. "Publicizing maps showing conservation value on private parcels tends to irritate landowners if they are not already working on a program with you," warns Brian Stark, who works on GIS maps for the Land Conservancy of San Luis Obispo County, California. McGrath agrees. "It was absolutely vital to have a public participation process generating our map," he says. "The process validates the model, and gets buy-in to the final result. People need to understand why they are where they are on the map." 

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