



The Power of Leveraging Local and Federal Dollars to Strengthen Agricultural Land Easement Investments

Case studies of how conservation easements, facilitated by the USDA Farm and Ranch Lands Protection Program, are making a difference in four U.S. communities



Investing in Conservation Easements on Farm and Ranch Lands

Over the past 15 years, the **United States Department of Agriculture (USDA) Natural Resources Conservation Service's Farm and Ranch Lands Protection Program (FRPP)** has provided funding for the purchase of conservation easements from landowners who wish to sell their development rights, ensuring that their lands will remain in agricultural production for generations to come. More than \$1 billion¹ in federal FRPP funds have been doubled with matching funds from local and state governments, private donors, foundations and discounts on the appraised value donated by landowners to place conservation easements on farm and ranch lands.

FRPP's investment in agricultural land has ripple effects far beyond just the farms or ranches protected. The program strategically prioritizes conservation projects at the national and state level, considering such criteria as a property's proximity to markets and other farmland, proximity to other protected land, the extent of prime and other important farmland on the parcel as well as its historical and archeological

value, and how threatened agricultural land in the area appears to be (as indicated by recent decreases in farm or ranch land acreage in the county).

With the help of FRPP, core areas of permanently protected, productive agricultural lands will continue to support local agricultural markets and suppliers, as well as foster tourism-related activities attracted by scenic vistas and wildlife amenities. In addition, many communities enjoy other side benefits from these protected agricultural lands, such as fresh, locally grown produce and better water quality for years to come.

This publication will examine how FRPP has strengthened four unique communities across the country by assisting locally initiated farm and ranch land protection efforts.

.....
Cover photo by Ellie Johnson, Courtesy of Grand Traverse Regional Land Conservancy

¹American Farmland Trust. Farmland Information Center *Fact Sheet: Farm and Ranch Lands Protection Program*. January 2012.

What Landowners Should Know About FRPP

The Farm and Ranch Lands Protection Program (FRPP) is a competitive, voluntary program run by the USDA's Natural Resources Conservation Service (NRCS).

Land trusts and local or state government agencies apply for FRPP funding to help them cover the cost of buying a conservation easement on private agricultural land. A conservation easement is a binding legal agreement through which a landowner voluntarily cedes all or part of the development rights on a property. Conservation easements are tailored to specific properties, based on the needs and interests of the landowner and the nonprofit land trust or agency acquiring the easement.

The purchase price of a conservation easement is based on the appraised market value of a property's development rights. A FRPP conservation easement permanently restricts subdivision and building on all or part of the land.

Landowners continue to own and use the property for agricultural purposes and pay property taxes. They can also sell the land or pass it on to their heirs.

Many farm and ranch land owners have turned to conservation easement sales as a way of providing capital to invest in improvements to their agricultural businesses, to pay down debt or to apply to other financial needs. Conservation easements typically lower the market value of the property and assure that when sold, the property is conveyed at its agricultural value. In areas where development demand is raising land values, a conservation easement usually lowers estate taxes on a property, alleviating financial pressure on heirs to sell all or part of the land.

Find a local land trust at www.landtrustalliance.org or a NRCS field office at www.nrcs.usda.gov.



Keeping the Heart of a Michigan Industry Pumping

Slice into a cherry pie and there's a good chance the filling came from Michigan, the country's top tart cherry state. The majority of Michigan's cherries grow in the northwest corner of the state's Lower Peninsula, thanks to hills, well-drained soils and seasonal temperatures moderated by Lake Michigan. Food processors have developed alongside the orchards, producing dried fruit and fillings, jams, juices and packaged fresh apple slices for stores and restaurants. These businesses keep the pulse of the fruit suppliers they rely on. They report that locally led, FRPP-assisted conservation easement efforts are providing capital for farmers to invest in rejuvenating and expanding orchards and vineyards, as well as helping transition farms from one generation to the next. [PAGE 4](#)

Giving Wyoming's Ranches a Working Chance

Wyoming is poised for a large shift in land ownership. The vast majority of the state's private land is ranchland, and most ranch operators are at or near retirement age. The cost of some of the most productive lands has soared beyond the reach of agricultural buyers. As ranchlands are fragmented for development or bought as an amenity, stock growers are concerned about how to pass working ranches to the next generation. Ranches are the heart of Wyoming's agricultural industry and culture, and rangeland expanses provide critical wildlife habitat. In these areas, conservation easements offer retiring ranchers an alternative to selling their land for development and consequently, there has been a high demand for conservation easements assisted through FRPP. But matching funding sources necessary to work in concert with FRPP are limited, and time is of the essence. [PAGE 8](#)



Growing "Fruitlands Forever" in Colorado

Palisade, Colorado, is one of the top fruit producing towns in the nation and a key attraction for Mesa County's growing tourism industry.



Palisade peaches are renowned throughout Colorado and beyond, and vineyards and wineries draw tourists year-round. Through agricultural easement purchases, Mesa Land Trust and FRPP are helping Palisade landowners permanently dedicate land to farming while providing them with capital to improve and expand their farm operations. With a base of protected agricultural lands in the community, even farmers without agricultural easements are feeling more confident in making long-term investments in their orchards and vineyards. [PAGE 16](#)



Ensuring the Future of Farming in One Minnesota County

To the southeast of Minneapolis-St. Paul and bordered by the Minnesota and Mississippi rivers on the north and the state of Wisconsin on the east, 586-square-mile Dakota County is graced with a complex economic mosaic including information technology, aerospace, insurance and transportation businesses—from Fortune 500 companies to startups. This Minnesota county is also committed to keeping farming a part of its economic mix. It was the first in the state to develop a comprehensive farmland protection plan, and, in 2002, voters approved a \$20 million bond to conserve farmland and natural areas. This funding, combined with FRPP funding, has permanently protected 5,312 acres of farmland as of 2012 and established 57 miles of stream and river buffers. The agriculture-friendly atmosphere appears to be paying off with gains in farm operations and a strong food-processing sector. [PAGE 12](#)

From top: Cherries by Marjorie Doherty; cattle courtesy of USDA; bale barn courtesy of USDA; peaches courtesy of Grand Junction Visitor and Convention Bureau

Keeping the Heart of a Michigan Industry Pumping

Slice into a cherry pie and there's a good chance the filling came from Michigan, the country's top tart cherry state. The majority of Michigan's cherries grow in the northwest corner of the state's Lower Peninsula, thanks to hills, well-drained soils and seasonal temperatures moderated by Lake Michigan. Food processors have developed alongside the orchards, producing dried fruit and fillings, jams, juices and packaged fresh apple slices for stores and restaurants. These businesses keep the pulse of the fruit suppliers they rely on. They report that locally led conservation easement efforts, assisted by the U.S. Department of Agriculture Natural Resources Conservation Service's Farm and Ranch Lands Protection Program (FRPP), are providing capital for farmers to invest in rejuvenating and expanding orchards and vineyards, as well as helping transition farms from one generation to the next.

The agriculture and food processing industries collectively generate \$97 million a year in the counties of Leelanau, Grand Traverse, Antrim, Benzie, Kalkaska and Wexford in Michigan's northwestern Lower Peninsula. Mark Doherty, Northern Michigan representative for food processing company Peterson Farms, communicates regularly with suppliers and potential suppliers. Recently, he has done so in order to fill the growing demand for packaged fresh sliced apples. "I'm trying to work very closely with the next generation of farmers and encourage them to consider high-density apple planting and renovation in orchards," he says.

As he sees today's farm owners nearing retirement age, Doherty is concerned about cultivating tomorrow's farmers.

That's how FRPP and local farmland preservation efforts can play a critical role, he says. "Farmland preservation programs provide more incentives for young people to come to the farm, stay at the farm and transition to the farm." When landowners relinquish development rights by selling a conservation easement, it is easier for the next generation of farmers to inherit or buy the land at usually lower, primarily agricultural land prices.

Elevated land in the center of Peninsula Township (also known as Old Mission Peninsula) is ideal for fruit growing because Lake Michigan protects the 32-square-mile peninsula from harsh temperature swings. "If Peninsula Township were a state, it would be the fourth-largest cherry producer



Courtesy of Grand Traverse Regional Land Conservancy

in the nation,” says Brian Bourdages, farmland protection specialist for Grand Traverse Regional Land Conservancy.

Township residents have repeatedly supported conserving this unique farmland by voting for property tax increases for farmland protection and parks in 1994, 2002 and 2008. Such local support, along with Michigan’s Farmland Preservation Program, have leveraged FRPP transactions with an average funding match of 65%—well beyond the program’s requisite 50% match. As of 2012, FRPP easements have conserved 79 parcels totaling 11,198 acres throughout the state.

Through its local farmland protection program, Peninsula Township was one of the first Michigan FRPP partners. FRPP helped the town purchase conservation easements on 595 acres. Conservation easements cover nearly half of the land within the town’s designated 9,200-acre agricultural protection zone, identified by town planners. Only one farm has been lost within the zone since the beginning of the town’s purchase of development rights program in 1994, despite



Left: Anderson Farm. Above: Jim and Jan Bardenhagen turned to an FRPP-supported conservation easement sale to assist with transitioning their farm to the next generation. Photo courtesy of Leelanau Conservancy

demand for vacation homes with scenic vistas. Recently Burnette Foods purchased the last remaining cherry processing plant on the peninsula, an investment that Chief Operating Officer John Pelizzari says was made, in part, because of the extensive farmland preservation there.

Grand Traverse Regional Land Conservancy, through a contract with the township, has administered the local farmland protection program for many years. “If those matching federal dollars wouldn’t have been out there, the program

wouldn’t have been nearly as successful,” Bourdages says.

Many landowners who sold conservation easements through the programs have used the revenues to invest in their farms, diversifying crops and rejuvenating aging orchards, Bourdages says. “The farm community is incredibly vibrant. There is a massive amount of investment going on.”

One way farms are diversifying is by adding vineyards in Peninsula Township and across the region. Michigan is the fourth-largest grape-producing state in the nation, and the wine industry continues to develop.²

Kerm Campbell, co-owner of Blackstar Farms, purchased land in Leelanau County that was already under an FRPP-funded conservation easement. He started one of the first wineries on Leelanau Peninsula, and has since added a second winery on Peninsula Township. He credits the easement for likely lowering the price of his Leelanau County land, making it more affordable for an agricultural enterprise. However, Campbell says the most important aspect of FRPP and local farmland protection efforts is the permanence of

“The farm community is incredibly vibrant. There is a massive amount of investment going on.”

BRIAN BOURDAGES, FARMLAND PROTECTION SPECIALIST, GRAND TRAVERSE REGIONAL LAND CONSERVANCY

the agricultural land base that these programs provide to businesses in planning for the future.

“The wine industry is a perfect example,” he says. “When there were two or three people producing wines, no one bothered to come up here. Now there are close to 40 wineries on both (Leelanau and Old Mission) peninsulas. There are wine tours coming from all around, people coming from many states. That growth was enhanced by the purchase of development rights programs.”

As with wineries that take local grapes from vine to bottle and often sell directly to the consumer, more farmers

are looking at ways to add value to their products. Jim Bardenhagen is one example.

“We’re trying to do value added in most everything we sell now,” he says. “We run sweet cherries over a line and grade them and put them in local stores. We distribute some currents and table grapes. A lot go to schools in the fall. Our specialty potatoes we take to restaurants and stores.”

Bardenhagen joined with about 30 local farmers to hire a distributor to take their produce to stores and schools in other parts of the state. The effort is helped by a statewide initiative to encourage grocery stores, schools and other institutions to purchase at least 20% of their food from Michigan farms by 2020.³ More than 12% of northwestern Lower Peninsula farms sold some products directly to consumers in 2007 compared with just 9% statewide, and a larger than average number of the region’s farms sell value-added products—perhaps to cater to the 1.4 million visitors who pass through every year.⁴

Through FRPP, the Leelanau Conservancy purchased a conservation easement on the Bardenhagen family’s 80-acre farm in Leelanau County. The conservation easement sale will help Jim and Jan Bardenhagen pass the farmland to their children, Jim says. “We used some of the value of it to help pay off debt and make the farm more viable that way. It will enable us to move the land to the next generation at a lower cost. Land here is selling for \$8,000 to \$12,000 an acre. That’s just too high for farming purposes.”

Like his family, other farmers nearing retirement age are looking to conservation easement sales as a way of preserving their farmland for the next generation, Bardenhagen says. “Otherwise it pretty much involves selling part of the farm to pay estate taxes.”

With funding for conservation easement purchases and other tools, Bardenhagen says he is hopeful that farming in the area will continue to strengthen, and he’s seeing robust farmers’ markets and community-supported agriculture ventures. “We’ve got a lot of young people who are interested in farming now, but you’ve got to have the land to do it,” he says.

Jim Bardenhagen’s farm is one of 10 FRPP projects the Leelanau Conservancy has completed as of 2012. Because there is no local government-funded farmland protection program on Leelanau Peninsula, the land trust raises funds to match FRPP dollars from private donors and foundations. Many of those donations come from community residents and visitors who care about preserving the area’s farmland, says Thomas Nelson, director of farm programs for Leelanau Conservancy.

“Farmland really is a core component of the character of this community,” he says. “A really significant percentage of tourism is based on the agricultural industry as well as the shoreline. Many people realize that tourism and the agricultural industry are hugely important to keep the area prospering.”

Michigan’s Agricultural Engine

Michigan’s food and agriculture system is the state’s second-largest economic sector, accounting for approximately \$91.4 billion in direct, indirect and induced economic activity and more than 923,000 jobs both directly, indirectly and through induced activity.⁵ The state is a major producer of fruits, especially apples, blueberries and tart cherries. There are many steps in the fruit supply chain that add value—from grading and sorting fruit to transporting it and processing it for packaged goods such as applesauce or canned pie filling. The total economic activity related to fruit production is \$758.4 million.

Agriculture-Related Businesses⁶

BUSINESS TYPE	OPERATIONS	EMPLOYEES	ANNUAL PAYROLL
GRAND TRAVERSE COUNTY			
Food Manufacturing	19	756	\$29,469,000
Wineries	5	73	\$2,366,000
LEELANAU COUNTY			
Food Manufacturing	5	391	\$2,168,000
Wineries	11	86	\$2,317,000
TOTAL	40	1,306	\$36,320,000

A Year Without Cherries

Communities in Michigan’s northwestern Lower Peninsula have seen a year without tart cherries. And they don’t want to see it again.

In the spring of 2012, a premature warming trend coaxed out cherry blossoms and freezing weather followed, destroying nearly all of the area’s cherry crop. There are 17,431 acres of tart cherries in the region’s six-county area, accounting for 51.7% of Michigan’s acreage. The annual value of tart cherry production in the region is typically more than \$24.7 million.⁷ A Michigan State University study of statewide economic losses due to sweet and tart cherry losses estimated the total at more than \$92 million.⁸

“We’re finding that it’s a much larger industry in the state than people had really recognized,” said Mark Doherty of Peterson Farms, noting that fertilizer suppliers, hardware and welding shops, equipment dealers, builders and truckers experienced severe losses related to the crop disaster.



Photo by Marjorie Doherty

With an estimated 97% of the crop destroyed, food processors, a local cherry festival, and even some farm stands imported cherries from Europe. “A year like this gives you a sense that, indeed, you can’t just look to another part of the state or region in the country and buy what you could’ve gotten here; it’s nonexistent,” says Thomas Nelson of Leelanau Conservancy.

Estimated Economic Impact of FRPP-Protected Farmland in Partnership with Peninsula Township, Grand Traverse Regional Land Conservancy and Leelanau Conservancy as of 2012^{*9}

FRPP ACRES	ACRES	DIRECT VALUE	INDIRECT VALUE
Sweet Cherries	460	\$710,103	\$1,022,548
Tart Cherries	1,006	\$1,427,766	\$2,055,984
TOTAL FRPP	1,466	\$2,137,869	\$3,078,532

*Assuming 75% of protected acreage is used for cherry production

Note: Indirect impacts are the effects of activity in one industry on the industries that support it. For example, the value of sales of agricultural inputs (e.g., fertilizer, seed, pesticides, fuel) are indirect impacts of farming. Indirect value here includes employment earnings. Jobs are not specifically broken out.

²Michigan Grape and Wine Industry Council. *Michigan’s Grape and Wine Industry Fast Facts*. March 2012.

³Michigan Good Food. *Michigan Good Food Report Card*. June 2012. <http://www.michiganfood.org>

⁴Krieger, Doug. *Northwest Michigan’s Farm Factor: Economic Impacts, Challenges, and Opportunities*. Prepared for Michigan Land Use Institute. February 2009.

⁵Knudson, William and H. Christopher Peterson. *The Economic Impact of Michigan’s Food and Agriculture System, The Strategic Marketing Institute Working Paper*. Michigan State University. March 2012.

⁶US Census Bureau. 2010 County Business Patterns.

⁷Krieger. February 2009.

⁸Knudson, William. *The Economic Impact of This Spring’s Weather on the Fruit and Vegetable Sectors*. The Strategic Marketing Institute, Michigan State University. Working Paper 01-052012. May 2012.

⁹These calculations follow the methodology used by Krieger in *Northwest Michigan’s Farm Factor: Economic Impacts, Challenges, and Opportunities*.

Giving Wyoming's Ranches a Working Chance

Wyoming is poised for a large shift in land ownership. The vast majority of the state's private land is ranchland, and most ranch operators are at or near retirement age. The cost of some of the most productive lands has soared beyond the reach of agricultural buyers. As ranchlands are fragmented for development or bought as an amenity, stock growers are concerned about how to pass working ranches to the next generation. Ranches are the heart of Wyoming's agricultural industry and culture, and rangeland expanses provide critical wildlife habitat. In these areas, conservation easements offer retiring ranchers an alternative to selling their land for development and consequently, there has been a high demand for conservation easements assisted through the U.S. Department of Agriculture Natural Resources Conservation Service's Farm and Ranch Lands Protection Program (FRPP). But matching funding sources necessary to work in concert with FRPP are limited, and time is of the essence.

"We've got quite a backlog of projects throughout the state awaiting match dollars," says Pam Dewell, executive director of the Wyoming Stock Growers Land Trust. The nonprofit land trust, founded by the Wyoming Stock Growers Association, has partnered with FRPP on 16 completed conservation easement purchases and another 16 are in progress.

The bulk of FRPP funding has focused on Sublette County, where land trusts and agencies have partnered to protect a core area of prime sage grouse habitat on ranchlands. (See "Sage Grouse" box, page 10).

In Sublette County and across the state, ranchlands are being carved up by low-density home development in rural areas.¹⁰ American Farmland Trust estimates that 2.6 million



acres of prime ranchland in Wyoming could be converted to residential development by 2020.¹¹

When a ranch's development rights are restricted through a conservation easement, the market value of the land typically drops to agricultural use prices. This can help landowners' heirs avoid high estate taxes that could force them to sell part or all of the land. With a conservation easement, ranchers can continue to own and use the land for agriculture, or they can sell it, knowing it will remain available for agricultural use.

"The economics of ranching is that you don't make a lot of money," says Albert Sommers, who owns a ranch in partnership with his sister Jonita. "In the end, either your kids take care of you or you sell the ranch to pay for your retirement."

Neither of the Sommers siblings have children, so revenues from selling a conservation easement will help fund their retirement. "We couldn't afford to simply donate a conservation easement on our land, but we didn't want to see our ranchland broken up and sold," Sommers says.

The Sommers ranch was part of one of Wyoming's largest and most complex FRPP conservation projects, involving support and contributions from numerous organizations and government agencies¹² to purchase conservation easements on 19,000 acres of the Sommers ranch and neighboring Grindstone Ranch, operated by Maggie Miller through Grindstone Ranch Cattle Company. The landowners donated one-third of the land's value, and the Stock Growers Land Trust holds the conservation easements.

The historic ranches were homesteaded in the late 1800s and early 1900s, and include archaeological sites and buildings listed in the National Register of Historic Places. Part

of the land links the Bridger Teton National Forest to the Green River. Two of the easements link large tracts of Bureau of Land Management land.

Although 80% of the land in Sublette County is public, wildlife relies on private land for winter range, wetlands and river and stream corridors. The Sommers and Grindstone ranchland is prime habitat for moose, elk, deer and many birds, including sandhill cranes and sage grouse.

FRPP conservation transactions rarely include (and certainly don't require) public access rights, but Miller and Albert and Jonita Sommers chose to convey a public access easement to the Wyoming Game and Fish Commission. The easement allows public fishing access by foot or boat to five miles of the Green River. "Our family has always allowed fishing on our property," Albert Sommers says. "With more and more ranches being bought as fishing estates, we wanted to include the access to continue our legacy of allowing the public to fish."

The Sommers siblings are taking additional steps to ensure ranching will continue on the land that has been in their family more than 100 years. They are negotiating to bring two young ranchers into their business partnership, with a path for the new partners to gradually take over the business and the land. The partnership could provide a model for other ranchers looking to transition their ranchlands, says Jim Magagna, executive vice president of the Wyoming Stock Growers Association.

With at least 8.7 million acres of agricultural land in the state operated by ranchers aged 65 and older,¹³ the association is committed to helping ranchers transition land to the next generation. It runs a matching and mentoring program

"If we don't preserve that land and we have to rely on other nations like we do for our oil, we are at a serious disadvantage."

ALBERT SOMMERS, WYOMING RANCHER

Left: The Espenscheid family gathers with some of the people who helped them complete a complex conservation easement sale. Adults, left to right: Luke Lynch of The Conservation Fund, Wyoming Game and Fish Director Scott Talbott, Annie Espenscheid, Brian Espenscheid, Chad Espenscheid, Wyoming Assistant State Conservationist Paul Shelton, NRCS State Conservationist Astrid Martinez, Stock Growers Land Trust Executive Director Pam Dewell, NRCS staff Jennifer Hayward, (front row) Gudrid Espenscheid, NRCS Chief Dave White. Photo by Brenda Ling, NRCS

for ranchers and prospective successors, and provides seminars on the topic.

Generational transition spurred another complex conservation transaction in Sublette County through FRPP, completed in January 2012. Brothers Chad and Brian Espenscheid were interested in continuing their family's ranching business, but they knew that splitting the land where they were raised would yield marginal ranching returns for their two young families, explains Chad Espenscheid. "Our goal has always been to double the ranch instead of splitting it because we both wanted to continue in the business," he says.

The Conservation Fund managed the transaction and led the fundraising effort to match the \$4 million from FRPP. The Stock Growers Land Trust now holds conservation easements on more than 5,800 acres of the historic family ranch, and on 4,800 acres of a neighboring ranch that the Espenscheids purchased. Both brothers hope to pass the land and viable businesses to their children one day.

Magagna says he senses growing interest among younger ranchers like the Espenscheids in taking over or buying into a working ranch, and there is increasing interest in conservation easement sales as a tool. "I'm far more optimistic than I was five to 10 years ago," he says.

Sage Grouse Add Urgency to Ranchland Conservation

The Natural Resources Conservation Service's Sage Grouse Initiative has invested \$78 million in Wyoming ranchland protection through FRPP as a step toward protecting critical habitat for the bird, a candidate for listing under the federal Endangered Species Act. The initiative is working to stabilize and improve grouse populations, with the goal of eliminating the need for federally listing the bird as threatened or endangered.

The Sage Grouse Initiative focuses on voluntary partnerships with ranchland owners to improve rangeland health and keep broad expanses of western rangeland intact. Practices such as grazing rotation and removing conifers from encroaching on sage savannah can increase productivity for ranchers as well as enhance sage grouse habitat. FRPP funding goes toward purchasing conservation easements on unfragmented expanses of rangeland and wetlands where the grouse breed, feed and nest.

"When you do good things for sage grouse, you also do good things for other iconic species that people care about like mule deer, elk, songbirds and pronghorn," says NRCS Sage Grouse Initiative Science Advisor Dave Naugle, explaining that a population of grouse requires miles of unbroken habitat.

The Wyoming FRPP investment through the Sage Grouse Initiative will help protect an estimated 208,000 acres in the state.



In Wyoming, the NRCS is working with landowners to protect sage grouse habitat and expanses of healthy rangeland through FRPP. Photo: iStockphoto.com/twilidlife

Eight partners, including nonprofit land trusts and state and local government agencies, have been racing the calendar to raise FRPP's requisite 50% funding match for the conservation transactions before applying to the program. Foundations, wildlife agencies and others have all pitched in to support the effort. "The Sage Grouse Initiative has given us a huge opportunity to work with more landowners than any of us could have otherwise without the FRPP funding," says Lara Ryan, executive director of Wyoming Land Trust, which also holds FRPP easements.



Budd-Espenscheid Ranches; photo courtesy of Mark Gocke

Ranching—What’s it Worth?

Ranching has long provided an economic foundation for Wyoming. Livestock production and hay account for most of the state’s \$1 billion-a-year agricultural sector. Agriculture is the state’s third-largest industry, but Wyoming’s extensive ranchlands also contribute greatly to tourism and recreation—the state’s second-largest industry at \$2.9 billion a year.

Sublette County, with a population of just over 10,000, brings in more than \$34 million¹⁴ a year from livestock and crops. But it’s hard to put a figure on ranching’s true value, says Joel Bousman, president of the Wyoming County Commissioners Association and chair of the Sublette County Commission. “You can’t quantify it,” he says. “The economic importance goes far beyond the economic value of the marketing of livestock. The open space values associated with ranching provide a lot of benefit to recreation, for example. People come here and spend their dollars in the county because of the open space values. They buy motel rooms, watch people

move livestock down a gravel road and write letters to the newspaper about how that was their favorite experience.”

Hunting, fishing, retail and equipment supply businesses all have close ties to ranching, Bousman adds. “The dollars that turn over in the economy of our county, lots of those are generated because of production agriculture and because of those open space values that our working lands inadvertently provide.”

Typically, working ranches rely on grazing leases on nearby public lands where livestock spend summers. Ranches, in turn, provide winter range for elk, deer and other wildlife that descend from higher elevation national forests and other public lands.

To ranch owner Albert Sommers, the value of agricultural lands is that they keep food on Americans’ plates. “It’s the most basic need of society,” he says. “If we don’t preserve that land and we have to rely on other nations like we do for our oil, we are at a serious disadvantage.”

¹⁰Ruckelshaus, William D. et al., *Wyoming’s State of the Space: A Comprehensive Review of Land Use in Wyoming*. University of Wyoming Haub School & Ruckelshaus Institute of Environment and Natural Resources. May 2009.

¹¹American Farmland Trust. *Strategic Ranchland in the Rocky Mountain West: Mapping Threats to Prime Ranchland in Seven Western States*. 2002.

¹²Project funders include the Pinedale Anticline and Jonah Field mitigation funds (JIO & PAPO), Natural Resources Conservation Service, Wyoming Wildlife and Natural Resource Trust, Wyoming Game and Fish Commission, U.S. Fish and Wildlife Service Landowner Incentive Grant Program, Walmart Acres for America through the National Fish and Wildlife Foundation, Wyoming Landscape Conservation Initiative through the Bureau of Land Management, Doris Duke Charitable Trust through The Nature Conservancy, Turner Foundation, Wyoming Governor’s Big Game License Coalition, Wildlife Heritage Foundation of Wyoming, Rocky Mountain Elk Foundation and the Mule Deer Foundation.

¹³Ruckelshaus, William D. et al. May 2009.

¹⁴Bureau of Economic Analysis. CA45 Farm Income and Expenses. 2012.

Ensuring the Future of Farming in One Minnesota County

To the southeast of Minneapolis-St. Paul and bordered by the Minnesota and Mississippi rivers on the north and the state of Wisconsin on the east, 586-square-mile Dakota County is graced with a complex economic mosaic including information technology, aerospace, insurance and transportation businesses—from Fortune 500 companies to startups. This Minnesota county is also committed to keeping farming a part of its economic mix. It was the first in the state to develop a comprehensive farmland protection plan, and, in 2002, voters approved a \$20 million bond to conserve farmland and natural areas. This funding, combined with U.S. Department of Agriculture Natural Resources Conservation Service's Farm and Ranch Lands Protection Program (FRPP) funding, has permanently protected 5,312 acres of farmland as of 2012 and established 57 miles of stream and river buffers. The agriculture-friendly atmosphere appears to be paying off with gains in farm operations and a strong food-processing sector.



Photo by Lisa West, Dakota County Parks and Open Space Department



Dakota County farmer Ray Taylor poses in front of native prairie he planted to buffer the Cannon River. Photo by Lisa West, Dakota County Parks and Open Space Department

“Some land that I’ve got has been in the family since the late 1890s. When you’ve had it that long, it means something to you.”

RAY TAYLOR, MINNESOTA FARMER

Dakota County has a long agricultural heritage that has grown into a \$185 million-a-year industry.¹⁵ Most farmers sell corn and soybeans to grain elevators, food processors and livestock feed companies, although there is a growing market for consumer fruit and vegetable sales through farmers’ markets, farm stands and “U pick” fields.

In 2003, the county launched its Farmland and Natural Areas Program to purchase conservation easements on agricultural and natural lands after voters chose to raise their property taxes to fund the effort. “People here really value these rural landscapes,” says Al Singer, Dakota County Land Conservation Manager.

FRPP has significantly augmented the county program. Singer believes that without FRPP, the county would not have included farmland protection in its comprehensive land conservation vision. “By providing matching funds, FRPP has more than doubled the amount of farmland we’ve been able to protect,” he says. In a typical conservation easement purchase, the county pays 30% of the development rights value, the landowner donates 20% and FRPP covers 50%.

Dakota County farms support local businesses that provide farm inputs and services which, in 2009, represented 30 businesses selling farm supplies, equipment or machinery in the county, with payrolls of \$24 million.¹⁶ Dakota County was the sole county in Minnesota’s seven-county metro region to gain farm operations in recent years.

“We’re sending an important signal to neighborhood implement dealers that there is a long-term commitment to agriculture in the county,” Singer says of the county’s farmland protection program.

The close relationship of food manufacturing to the regional agriculture industry means it is relatively stable, even in tough economic times. Food manufacturing was one of only two manufacturing sectors in the county that saw job growth during the recent recession. Between 2006 and 2009, the number of food-manufacturing jobs in Dakota County increased by 26.4%, adding 558 jobs, to become one of the county’s leading manufacturing employers.¹⁷

Faced with limited funding to protect farmland in a county with 230,000 acres of productive agricultural land and rich, deep topsoil, the county prioritizes lands within a half-mile of streams and rivers to achieve water quality benefits along with farmland protection. The easement purchase program also gives preference to applicants with land near other protected properties. “What has evolved over time are clusters of agricultural lands along waterways,” Singer says.

The county’s conservation easements include requirements to buffer waterways with native vegetation, clean up farm dumps and seal unused wells. The Farmland and Natural Areas Program shares the cost of installing waterway buffers, cattle crossings and fencing to keep livestock away from streams. Through a partnership agreement, the Dakota County Soil and Water Conservation District designs water

A Legacy of Land and Water

When Carl Hunter heard about Dakota County's efforts to purchase agricultural easements on farmland bordering waterways, he was one of the first landowners to apply in 2003. The easement sale, partly funded by FRPP, provided the cash he needed to purchase his mother and brother's share in the family's 156-acre farm, and to keep it intact as a working farm.

"The farm has been in the family since 1854," he said. "I just didn't want to see it developed. I wanted to do what I could to preserve farmland."

Hunter grows alfalfa and corn as feed for a nearby dairy. He also keeps some heifers on the land. To sell the easement to the county, Hunter first needed to prevent runoff into a creek that flowed through a livestock pasture. He says he welcomed the county's expertise and financial assistance to establish a 30-foot buffer around the creek and build crossing areas for trucks and livestock.

In 2005, the Dakota County Soil and Water Conservation District helped Hunter tap into state and federal funding to cover part of the costs to build a lagoon below a feedlot that was draining into a tributary of the Canon



Dakota County Farmer Carl Hunter sold a conservation easement through FRPP and has made changes on his farm to improve local water quality. Photo by Lisa West, Dakota County Parks and Open Space Department

River. Manure from the lagoon's concrete floor is now pumped onto fields as fertilizer. "I haven't bought fertilizer in years," he says.

Hunter is proud of the water quality improvements on the land he plans to pass on to his daughter and her husband one day. "Not everybody sees a farm the same way," he says. "Some people see it as dollar signs; I see it as a legacy."

protection systems for landowners who sell easements to the county. In all, nearly a hundred acres of prairie grasses and flowers have been reestablished, thanks to the expertise, seed and planting equipment the program provides. (Farmers provide tractors and labor.)

Dakota County has good reason to focus on water. The Mississippi and Minnesota rivers define its north and eastern borders, the Cannon River forms a portion of the south boundary and the Vermillion River bisects it. By improving waterway protection and buffering, the county is helping ensure drinking water quality as well as enhancing river recreation for its immediate area and beyond.

Perhaps most notable is fishing. According to Trout Unlimited, the Vermillion River is the only remaining world-class trout stream in a major metropolitan area in the United States.¹⁸ This too has direct economic benefits. One study found that every angler spends \$29 per day around his or her home area or \$57 when away from home while fishing in streams. In 2002, the total economic impact of coldwater

angling accounted for up to \$157 million in direct sales, \$95.2 million in income and 3,480 jobs in Minnesota.¹⁹

Farmer Ray Taylor has worked with the Dakota County Soil and Water Conservation District to reduce erosion and runoff from his land bordering a three-quarter-mile stretch of the Cannon River. He welcomed the opportunity to plant a vegetative filter strip along the river, and minimizes tilling to reduce erosion. "It's worked out very well," he says, noting that his fields experienced little erosion when record-breaking torrential rain hit on June 14, 2012.

A committed land steward, Taylor was the first to sell a conservation easement through Dakota County's Farmland and Natural Areas Program in 2003. He was so pleased with the program that he sold additional easements on additional parcels in following years for a total of 338 acres.

Taylor hopes that his son, who helps with the farm, and future generations can continue farming the land. "Some land that I've got has been in the family since the late 1890s," he says. "When you've had it that long, it means something to you."

Estimated Annual Economic Impact of Dakota County Agriculture²⁰

	CROP PRODUCTION	LIVESTOCK PRODUCTION	TOTAL IMPACT	EMPLOYMENT IMPACT
Direct	\$117,300,000	\$67,400,000	\$184,700,000	1,231
Indirect	\$57,500,000	\$75,200,000	\$132,700,000	666
Induced	\$36,600,000	\$26,300,000	\$62,900,000	536
TOTAL	\$211,400,000	\$168,900,000	\$380,300,000	2,433

Dakota County Agriculture-Related Businesses (2009)²¹

BUSINESS TYPE	OPERATIONS	EMPLOYEES	ANNUAL PAYROLL
MANUFACTURING			
Food manufacturing	38	3,155	\$121,460,000
Textile product mills	9	95	\$3,690,000
Farm machinery and equipment manufacturing	3	74	\$2,260,000
NON-MANUFACTURING			
Nursery, garden center and farm supply stores	20	159	\$4,740,000
Farm supplies merchant wholesalers, nursery, garden center and farm supply stores	16	n/a	\$13,020,000
Farm and garden machinery and equipment merchant wholesalers	14	178	\$11,030,000
Support activities for animal production	5	20	\$190,000
TOTAL	105	3,681	\$156,390,000

¹⁵ U.S. Department of Agriculture. *2007 Census of Agriculture*. 2009.

¹⁶ U.S. Census Bureau. 2009 County Business Patterns.

¹⁷ Harper, Jessica. *Food Manufacturing Thrives Despite Recession*. Dakota County Tribune. Vol. 31 #12. May 20, 2010.

¹⁸ U.S. Environmental Protection Agency. *Targeted Watersheds Grants: Vermillion River, Minnesota*. 2005.

¹⁹ Gartner, W.C., L.L. Love, D. Erkkila, and D.C. Fulton. *Economic Impact and Social Benefits Study of Coldwater Angling in Minnesota*. Prepared for Minnesota Department of Natural Resources. 2002.

²⁰ Source: Output data taken from USDA *2007 Census of Agriculture*. Output impacts calculated using methodology from Ye, Su. *Economic Impact of Minnesota's Agriculture*. Agricultural Marketing Services Division, Minnesota Department of Agriculture. 2003. Employment impacts calculated using methodology from Ye, Su. *Economic Impact of Minnesota's Agricultural Industry*. Agricultural Marketing Services Division, Minnesota Department of Agriculture. 2003.

²¹ U.S. Census Bureau.

Growing “Fruitlands Forever” in Colorado

Palisade, Colorado, is one of the top fruit producing towns in the nation and a key attraction for Mesa County’s growing tourism industry. Palisade peaches are renowned throughout Colorado and beyond, and vineyards and wineries draw tourists year-round. Through agricultural easement purchases, Mesa Land Trust and the U.S. Department of Agriculture Natural Resources Conservation Service’s Farm and Ranch Lands Protection Program (FRPP) are helping them with capital to improve and expand their farm operations. With a base of protected agricultural lands in the community, even farmers without agricultural easements are feeling more confident in making long-term investments in their orchards and vineyards.

Competition is tough among Colorado tourism destinations. Striking scenery, hiking, biking and other outdoor activities abound in and around many of the state’s cities and mountain towns. In Mesa County, Colorado, there is high desert mountain biking, fishing and river sports, and the awe-inspiring rock formations of Colorado National Monument. But the orchards and wineries centered in the town of Palisade may be the county’s sweetest selling point of all.

“When you look at other destinations, what really does set us apart is the wine, the fruit and the orchards,” says Barbara Bowman, division manager of the Visitor and Convention Bureau for Grand Junction, western Colorado’s largest city, just 12 miles from Palisade. A 2006 study estimated that \$20.6 million funnels into the Mesa County economy through tasting room and winery visits and tours.²² Wine tasting was cited as the top activity in a 2010 visitor survey.²³



Courtesy of John Fielder



Courtesy of Grand Junction Visitor & Convention Bureau

Festivals such as the annual Palisade Peach Festival, Colorado Mountain Wine Fest, and the growing Colorado Lavender Festival draw tens of thousands of visitors annually. In addition to organized events, many visitors come to the area to tour the wineries or stop by fruit stands on their own. Driving and biking the back roads of the Fruit and Wine Trail (also known as the “Fruit Loop”) is a popular activity.

The tourism boost to Mesa County is a prime example of how strong agriculture benefits communities well beyond farmers and farm suppliers. Nonetheless, agriculture itself is highly important to the county. In 2007, Mesa County agriculture brought in more than \$61.2 million in sales revenue. This includes \$10.2 million in fruits, tree nuts and berry sales, making the county the top fruit producer in the state, and in the top 1/10 of 1% in the nation.²⁴

A river valley sheltered by the dramatic Book Cliffs, Palisade has a unique microclimate within a 3,000-acre pocket that is uniquely suitable to fruit. Its mild springs typically allow fruit trees to bud without freezing, and its crisp summer nights contrast with hot days to maximize fruit sugars. The town is on Interstate 70, and just a half-day drive from the Denver metropolitan area, facilitating fruit shipping and tourism alike. Mesa County raises 80% of Colorado’s grapes and 75% of its peaches. Most of this fruit is grown in Palisade.²⁵

Many in the community recognize that agricultural lands are worth protecting. Palisade residents view the local agriculture industry as an important part of the economy, as evidenced by a recent community survey²⁶ that found a vast majority of residents would support incentives to encourage agribusiness (such as orchards, vineyards and wineries).

Despite local support for farming, threats to this productive land are significant. From 1997 to 2007, Mesa County

lost 280 productive orchards—about 26 acres of orchards a year. In 2009, Mesa Land Trust launched its “Fruitlands Forever Initiative” to permanently protect a critical mass of farmland so agriculture can survive and thrive over time.

“The work around Palisade has been going on literally for decades and the protection efforts now include over 50 family farms,” says Rob Bleiberg, executive director of Mesa Land Trust. “Our organization was founded by fruit growers in 1980 and our goal is to protect a critical mass of farm ground to sustain the fruit industry into the future.” FRPP has been an invaluable partner, he adds. “It has enabled us to launch ‘Fruitlands Forever’ and increase the pace and scale of our conservation work around Palisade.” Mesa Land Trust holds conservation easements on 1,283 acres in the area, about half of which were acquired with FRPP support.

Many orchards and wineries are small, family-owned operations. The vast majority of farm operators (93%) live on the land they work, and a typical orchard size is less than 15 acres. Purchasing agricultural easements has been crucial to farmers who would otherwise have to sell their land for development to fund their retirement. Easement purchases also provide capital to new farmers, and those who need to invest in expansion and improvements such as worker housing or equipment, Bleiberg says. “The fruit growing business is very capital-intensive, with high barriers to entry. You have to invest in trees, irrigation systems, labor and then wait two or three years before you get any money from the first fruit crop.” Peach trees have an average lifecycle of about 20 years and about 5% of an operation must be planted each year to keep it sustainable—an investment of more than \$3,100 per acre.

Conservation easements typically make productive land affordable for farmers by lowering land prices to primarily reflect their agricultural value. Without easements, land prices in the area could easily reach as high as \$40,000 to \$50,000 per acre.

Between 2002 and 2012, \$3.44 million in FRPP funds helped Mesa Land Trust protect 678 acres in the county, including 13 orchards with estimated annual revenues of \$3.77 million. Matching funding for the purchases came from Great Outdoors Colorado, a state lottery-funded program, Mesa County, the town of Palisade, and from land value reductions donated by landowners, among other sources.

Bruce Talbott, a fifth-generation Palisade fruit grower who runs Talbott Farms with his father and brothers, explains that they have purchased land under agricultural easement at agricultural value and also sold agricultural easements on other land through FRPP. The sale helped the family invest in fruit-packing equipment and other capital needs. On top of helping cash flow, there are long-term benefits to agricultural easements, Talbott explains. “It’s the psychology of being stable. What we don’t want to do is plant an orchard that gets surrounded by houses that conflict with our agricultural practices.”

Economic Impact of Orchards²⁷

	MESA COUNTY	FRPP PROTECTED
Number of orchards	280	13
Number of peach orchards	186	
Acres of orchards (including new plantings and various fruits)	2,740	353
Acres of fruit-bearing peach trees	1,490	No Data
SALES		
Yield per acre of peaches		5.7 tons
Price received per ton		\$1,870
Revenue per acre		\$10,700
TOTAL GROSS PROFIT	\$15,900,000	\$3,780,000
JOBS		
Average seasonal jobs per acre		.28
Average full-time jobs per acre		.03
Total average jobs per acre		.31
TOTAL NUMBER OF JOBS	463	109

Orchards provide employment, especially for laborers hurt during the recent economic downturn in the construction industry. During harvest, one Palisade orchard operation hired as many as 100 workers. Even during off-peak times in late fall or early spring, the operation still employs 30 workers for tasks such as thinning and pruning. A smaller 50-acre orchard hired as many as 12 workers during harvest.

The region's growing wine industry is helping fruit growers diversify their businesses. Grand Junction has dubbed itself "Colorado's Wine Country," and Mesa County produces the lion's share of Colorado wine grapes. Between 2001 and 2010 Colorado's wine production increased more than 180%.²⁸ The total economic impact of the county's wine industry is an estimated \$14.3 million, not including related tourism.

Indeed, tourism businesses are sprouting up with the wine industry. In 2008, an 80-room Victorian-style hotel opened

adjacent to two Palisade wineries. Other Palisade businesses supported by an increasing influx of tourists include a bike rental shop, brewery and distillery.

Investments by farmers and agritourism operators represent a mental shift in a community shaken by the boom and bust cycle of energy companies speculating on the area's oil shale and natural gas, Bleiberg notes. "We've seen this sea change in perspectives from those who thought it was inevitable that the fruit growing district would be converted for development," he says. "We've stabilized the land base in the community. Some farmers who might not have an easement on their place are still much more comfortable investing because they know their neighbors are not going to be selling for development."

Estimated Economic Impact of Mesa County's Wine Industry*²⁹

VINEYARDS	
Average yield of grapes per acre	2.5 tons
Price received per ton of grapes	\$1,300
Value per acre	\$3,250
Mesa County grape acres	566
MESA COUNTY ANNUAL GRAPE VALUE	\$1.84 million
WINE SALES	
Gallons of wine per acre of grapes	375
Wine bottles (750 ml bottle) per gallon	5
Price per bottle of wine	\$14
Annual gross profit per acre (wholesale)	\$13,125
Mesa County acres	566
TOTAL GROSS REVENUE FROM WINE SALES	\$7,428,750
JOBS	
Average winery annual labor cost	\$28,000
Number of Mesa County wineries	20
TOTAL ANNUAL SPENDING ON LABOR	\$560,000
ECONOMIC IMPACT	
Direct effects	\$7,430,000
Indirect effects	\$3,140,000
Induced effects	\$3,710,000
TOTAL ECONOMIC IMPACT	\$14,280,000

*This does not include wine-related tourism.

Farmland Part of the Business Plan

Scenic agricultural land and the increasing presence of wineries were behind Rapid Creek Cycles and Sports owners Rondo Buecheler and Scott Winans' decision to take a chance on setting up shop in Palisade in 2006.

"Nowhere else in the state can one bike for miles through orchards and vineyards, surrounded by the incredible geology of the Book Cliffs and Grand Mesa," says Buecheler.

After selling a bike shop in a nearby community where stores and houses were rapidly replacing orchards, Mesa Land Trust's farmland conservation efforts in Palisade were a draw for Buecheler. To boost bike sales and rentals, he organizes bike races, tours and events year-

round. Many highlight local wineries. Buecheler is also developing a separate rafting and stand-up paddle board business, capitalizing on a section of the Colorado River that flows through farmland.

"I know 20 years from now I'll be able to offer tours through Palisade. There will always be agricultural land here," he says.



Rondo Buecheler is co-owner of Rapid Creek Cycles and Sports. Photo courtesy of Rondo Buecheler

²² Kress, G., D. Thilmany, and P. Watson. *The Economic Contribution of Colorado's Wine Industry*. Colorado State University. 2006.

²³ Hill Aevium. *Grand Junction Visitor & Convention Bureau: 2010 Conversion Study*. 2010.

²⁴ U.S. Department of Agriculture. *2007 Census of Agriculture*. 2009.

²⁵ U.S. Department of Agriculture. 2009.

²⁶ Four Corners Planning and Design. *Palisade, Colorado Comprehensive Plan*. May 15, 2007.

²⁷ Orchard acreage based on U.S. Department of Agriculture. *2007 Census of Agriculture*. FRPP-protected numbers generated based on assumption that all FRPP-protected acres are peach-growing.

²⁸ Colorado Wine Industry Development Board. *Colorado Wine Production Statistics*. 2011.

²⁹ Methodology Sources: Titus, Stephen. *Making Wine on the Western Slope: Grand Junction, Palisade Vineyards Appealing to a National Taste*. ColoradoBiz. July 2005.

This material is based upon work supported by the Natural Resources Conservation Service, U.S. Department of Agriculture, under number 68-3A75-11-263. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. Department of Agriculture. For more information about NRCS programs, see www.nrcs.usda.gov.

This work is published by the Land Trust Alliance, Washington, D.C., ©2012. Duplicating and distributing this document in its original published format for education and information purposes is permissible. For more information about the Land Trust Alliance and land trusts, see www.landtrustalliance.org.

ECONOMIC ANALYSTS // Jessica Sargent, Daniel Stevens—The Trust for Public Land
WRITER/EDITOR // Kendall Slee—Kendall Slee Communications
EXECUTIVE EDITORS // Lynne Sherrod, Christina Soto—Land Trust Alliance

Thank you to the land trusts, businesses, government agencies and landowners who provided information and shared their experiences for this publication.

About the Land Trust Alliance

The mission of the Land Trust Alliance is to save the places people love by strengthening land conservation across America. Land trusts are nonprofit organizations that work with private landowners to voluntarily conserve forests, farms, parks and other cherished places that enrich our lives. We focus our work on three strategic goals: accelerating the pace, improving the quality, and ensuring the permanence of conservation. By building highly effective and well-governed land trusts that protect lands with the highest values to their communities and ensure their protection in perpetuity, we can preserve healthy human and natural communities, clean air and water, beautiful vistas, recreation areas and working lands.



For more information about the Land Trust Alliance and land trusts, see www.landtrustalliance.org.

LAND TRUST ALLIANCE
1660 L Street NW, Suite 1100 · Washington, DC 20036
(202) 638-4725 · www.landtrustalliance.org