THE MANY VALUES OF AGRICULTURE

When considering the many values of agriculture, there are four points to keep in mind. First, without profit agriculture cannot exist. Second, without profit there is no room for rural enterprise. Third, land use tends to follow economics. And finally, changes in land use result primarily from economic decisions.

Economics, open space and the environment are all attributes of agriculture. Agriculture has a significant impact on our national, state and local economies. A significant amount of the landscape that we consider open space is devoted to agricultural uses. Additionally, agricultural land is a repository for many ecological values and provides habitat for a significant number of endangered species.

These attributes should be enough to convince others to preserve agriculture. However, policy makers, the public, and developers often perceive the situation differently. Why is their picture so disparate?

Economics. Agriculture is one of Oregon’s most important industries, producing $3.5 billion in “farm gate” value each year. Moreover, ag producers spend $3.5 billion per year to produce their crops and livestock.

This outlay for seed, feed, fertilizer, equipment, parts, fencing, land rent, employee compensation, and other costs goes into the businesses and communities where these farms exist — a significant economic contribution to rural and urban economies.

Ag also accounts for 1 out of every 12 jobs in Oregon, generates a payroll of more than $2.8 billion per year, and accounts for 9% of the state’s GSP.

Open space. Fifty-two percent of Oregon’s total land area is in public ownership. Of the remainder, more than 80% of Oregon’s private land is devoted to agriculture, pasture, and forestry.

These landowners control virtually:

*every acre to be used for future development,*

*every acre to be protected,* and

*every acre to remain in agriculture and forestry.*

These lands will be important in sustaining the state’s water resources, wildlife and open space. They are the lands needed for future food and fiber production. And they are the lands that will be need to provide the space and amenities for Oregon’s future growth.

Environment. Nationally, 75% of threatened and endangered plant and animal species are found on private agricultural and forest lands. Some endangered plant species are found exclusively on private agricultural lands. Furthermore, agriculture offers buffers between natural and developed areas, positive cash flow from property taxes (due to low demand for services), and a land use compatible with conservation as an alternative to public land purchases.
When carried out with environmental compatibility in mind, agriculture and forestry can provide:
- Preservation of wetlands
- Water storage
- Ground water recharge
- Water filtration
- Flood control
- Purification of air
- Carbon sequestering
- Generation of oxygen
- Forests and woodlands
- Ambient healthful living conditions

Hence, agriculture and forestry produce not only our food, fiber and horticultural products, but can accommodate many important resource values as well.

While natural habitats that are rare and fragile are considered priceless by society, our market economy gives them a low value. For example, if you have a wetland on your property, you might be lucky to have it appraise at $250 per acre. However, should you start to fill it in, you are likely to find yourself paying a $10,000 per day fine to the Environmental Protection Agency.

Unfortunately, almost NONE of the resources cited above will increase your property value. Neither will
- Wildlife Habitats
- Presence of Threatened & Endangered Species
- High Food Production Capability
- Clean Drinking Water
- Productive Fisheries
- Biological, Botanical and Scientific Opportunity
- Biological Diversity

In fact, most of these resources may actually DECREASE your property value.

The fault for this lies with our land appraisal process. Land is valued on the basis of how many housing units or condos it will accommodate if it lies close to an urbanizing area. The appraisal may also be based on the agricultural production value of the land if it lies in a significantly rural area. Appraisals are not based on the value of land for aquifer recharge or wildlife habitat.

The appraisal process greatly affects the decision a landowner makes regarding the use of land. The result is a tendency to eliminate the features from the land for which the lowest value is assigned—wetlands and wildlife habitat—and convert land to the economic activities for which the highest value is assigned. This often translates into shopping centers, commercial centers, and housing units in growth areas of the state.

**HOW TO KEEP RURAL AREAS “RURAL”**

Too often, the first response by concerned policy makers, planners, environmentalists and members of the public is to blanket rural areas under a cover of “no development” or very low density development in a misdirected effort to protect these areas. Without viable economic activities in rural areas, it is going to be almost impossible to maintain the amenities that go along with these working landscapes—which we tend to lump together and call “rural character.”
Effective Incentives. Incentives are needed to improve profitability, promote landowner equity and land use patterns appropriate to rural areas, improve compatibility with the environment, and encourage innovative planning and development. In June 2001, several new programs were successfully legislated in Oregon and Florida. These programs provide several new incentives for private landowners to participate in conservation activities on their properties. The 2002 Farm Bill also includes an innovative new program for maintaining rural values and promoting rural economic growth.

In order to better understand this trend, let us explore Florida’s Rural Lands Stewardship Program (RLSP). This program is designed to carry out three strategies: (1) the creation of market forces that preserve open space and encourage clustered patterns of development, (2) the valuation of property based on natural resource attributes, and (3) the creation of economic incentives for the implementation of best management practices and other voluntary conservation practices in order to maintain and enhance regional environmental value.

Strategy 1. The first stratagem of the RLSP is to create market forces that reserve open space and encourage clustered patterns of development. Rural development policies that are appropriate to rural areas, in their reflection of the characteristics of rural communities, are needed. The goal of this strategy is to develop land use policies that:

- Promote rural economic development
- Maintain the viability of agriculture
- Enhance regional environmental protection
- Incorporate agriculture into the landscape
- Control sprawl
- Protect the character of rural areas, while promoting reasonable and sustainable growth.

Included in this goal is a vision for rural communities that produces a thriving rural and agricultural economy, a healthy natural environment, and well planned, clustered developments surrounded by extensive areas of open space.

Strategy 2. The second stratagem of the RLSP is the valuation of property based on natural resource attributes. This valuation is intended to enhance landowner equity by emphasizing that land has more than a one-dimensional value based on the units per acre that can be built upon the landscape. There is a need to develop incentive programs that reward landowners to retain, protect and manage natural resources. If landowner equity were provided, landowners could realize the full value of their land without converting it out of natural uses, agriculture, or forestry. Options for the provision of equity include:

- Maintainance of landowner equity through assignment, transfer and consolidation of density allocation credits in areas where population growth threatens to crowd out farms
- Provide incentives for environmental and resource values
- Provide incentives to encourage and reward conservation practices

If natural amenities are to be protected, a landowner is entitled to fair compensation for these amenities.

Strategy 3. The final stratagem of the RLSP is the creation of economic incentives for the implementation of best management practices and other voluntary conservation practice in order to maintain and enhance regional environmental value. Landowners and operators need to be rewarded and acknowledged for their private stewardship efforts. Additionally, programs need to be adjusted to improve the ability of these landowners and operators to nurture the ecological values associated with the lands under their care.

For example, the improvement of conservation easement programs is needed to make easements more attractive to private landowners. Some steps toward this goal are

- Addressing the inherent conflict of having permanent agreements conserving lands where current economic activities have uncertain futures
- Ensure easements encourage and promote agriculture
• Easements should allow for all normal operations while promoting environmental compatibility
• Easements should also allow for and promote economic flexibility so agriculture and rural enterprises can remain competitive in the global economy

Furthermore, conservation tools are needed to fill the gap between short-term restoration programs and permanent protection, particularly for private landowners who are not in the market for public purchases or permanent easements.

The Rural Lands Stewardship Act (F.S.), which created this program, is multi-dimensional. It establishes five pilot projects to test the concept of rural land stewardship areas, ranging in size from 50,000 to 250,000 acres. It creates a system for Transferable Land Use Credits that provide equity for private landowners with environmentally sensitive resources on their properties. The Act allows private owners to convey development rights and receive compensation for environmental values in return for Transferable Land Use Credits, which may be used only within designated receiving areas. The number of credits is also tied to mitigation values of environmental resources, with higher credits for more valuable resources.

A TEST CASE: THE IMMOKALEE STUDY AREA OF COLLIER COUNTY, FLORIDA

The issues addressed in this study are continued agricultural viability, environmental resource protection, and the long-term economic prosperity and diversification of Collier County.

IDENTIFY THE MATERIAL BELOW AS FIGURE 1 —

Collier County Study Area Profile

Land use data:

Total Acreage 195,080
Agriculture 112,996 ac.
Grazing Leases 63,616 ac.
Conservation Lands 12,933 ac.
Other 3,582 ac.
Water 1,953 ac.

The city of Naples, on the Gulf Coast of Florida, is 20 miles due west of this area.

This 300-square-mile area is the home of Collier County’s Agricultural industry.

One-third of the Area is within the Big Cypress Area of Critical State Concern.

Includes two privately owned wetland flow ways, the Camp Keais Strand and Okaloacoochee Slough.
Before Implementation of the RLSP. Agricultural zoning limited future development potential on all lands to 1 unit per 5 acres. Development under the Collier County Growth Management Plan was limited to construction of residential units, no clustering was allowed, no transfers of development rights were allowed, no commercial construction was allowed and no retail construction was allowed. Significant areas were designated as “environmentally sensitive,” but the identification of these areas was not scientifically based (much of the work had been done by infrared aerial survey and had not been verified on the ground by field surveys), and many of these areas were not clearly delineated.

The initial proposal for these rural lands included downzoning to 1 unit per 20 acres on all agricultural lands and 1 unit to 40 acres on land with wildlife habitats, wetlands and flow ways. Such downzoning would reduce the value of land without giving the landowner any value in return. It would also destroy the collateral value of the land, interfering with those agricultural operations that rely on annual production loans.

After Implementation of the RLSP. The resulting proposal offered something different. If a landowner opted in, they became eligible for:

- Basic density credit on all lands of 1:4
- Transfer of density credits to other lands
- Clustered development
- Commercial development
- Retail development

The additional credit bonuses offered included:

- Early-entry bonus (an additional 3700 development units created – these units went to landowners who were the first to opt in)
- Additional density credit for affordable housing
- Additional bonus of ½ credit per acre for restoring or initiating protection of environmentally sensitive lands

The RLSP implementation meant that natural resource areas are clearly defined. Extensive, ground-verified GIS map overlays were created and show all natural resources along with densities of such resources. Development is allowed, with minimum impact on agriculture. The development footprint is reduced by 90% and Collier County aims to reduce the number of agricultural lands lost to development to 8,500 acres from an estimated 85,000 in 2025.

Included in the RLSP is the creation of an economic development program. Guidelines are provided to direct development into compact towns, villages, and crossroads. Town centers, public places, libraries, commercial, retail, and professional services are allowed and encouraged.

By opting into the RLSP, landowners sacrificed development in flow ways, vegetative and wildlife habitats (including the development of golf courses with exceptions made in some vegetative habitats). However, landowners who did not opt in limited their development potential significantly. Their residential development zoning remained at a density of 1:5. They are unable to obtain public funding for infrastructure and must make significant outlays to widen and extend roads, build schools, and meet stormwater requirements. With these outlays, it is impossible to make housing prices competitive.

Under the RLSP, Collier County’s environment fares extremely well. The limited development footprint accommodates the projected population in compact form and protects 5 to 10 acres of stewardship area for each acre developed. The plan places 100,000 acres of flow ways and habitats into environmental protection designations. It protects 90% of native upland and wetland vegetation in a 300-square-mile area and incorporates 91% of telemetry points for the endangered Florida panther into habitats. The RLSP successfully protects 75,000 acres of agricultural land and 18,000 acres of water retention areas.1
**Benefits of the RLSP.** The Rural Lands Stewardship Plan for Collier County provides these benefits:

- Incentive based
- Controls urban and rural sprawl
- Separates urban and rural land uses
- Maintains asset value of rural lands
- Preserves open space for agriculture and natural environment
- Accommodates future development in well planned clustered patterns
- Allows for flexibility in location of future development
- Allows ALL landowners to economically benefit from development
- Allows landowners to choose options that offer future appreciation … even when protecting natural resources

The RLSP is extremely cost effective. The investment for its creation was $1 million. With this investment, development is limited to just 10% of the land area. The rural character is maintained with the creation of “villages” and “towns.” The RLSP permanently protects 90,000 acres of environmentally sensitive lands with conservation easements and removes development rights from another 85,000 acres of land that will remain in agriculture and open space.

All of this will be accomplished without the expenditure of a single public dollar to buy easements or development rights. In comparison, the same amount of protection, using traditional land protection tools, would cost $280 million (at today’s land prices). Hence, for every $1 spent, the public is receiving $280 of value, a ratio of 1:280. Moreover, this means that $279 million in public revenues has been saved, and can now be directed to other public needs.

**CONSERVATION ON THE NATIONAL LEVEL**

The 2002 Farm Bill provides for $2.5 billion per year in conservation funding. Included in the 2002 Farm Bill are 12 programs that will provide landowners incentives to protect, maintain, and even improve the natural resources that exist on their lands. There also is a program (Section 2003 of the Farm Bill) that uses “stewardship agreements” to tie together all conservation tools and incentives into one agreement with one application, and allows national programs to be adjusted to address unique local conditions.

The stewardship agreements are significant because they can be used:

- to implement conservation practices on private agricultural lands anywhere in the U.S.
- to fill in gaps between existing conservation programs
- to combine different regulatory obligations into a single operating plan, and
- to buy any service from a private owner/operator in which there is a public benefit.

Conservation incentive programs that have been passed into law in two states (Oregon and Florida) have taken the federal concept of stewardship agreements and expanded their benefits even further.

**CONCLUSION**

The results of the development of Oregon’s Conservation Incentives Bill, Florida’s Rural Lands Stewardship Program, the federal funding for conservation programs in the 2002 Farm Bill programs, and the federal initiative to provide increased flexibility for the delivery of conservation programs to rural landowners everywhere through stewardship agreements is an increase in the number of tools in the “conservation toolbox”. These tools now include:

- Public Land Acquisition
- Permanent Conservation Easements
- Conservation Incentives Programs (Oregon & Florida)
• Locally oriented “service contracts” to purchase conservation and environmental services from producers (building blocks for the stewardship agreements)
• Rural Lands Stewardship Program (No public funding required)
• Expanded Farm Bill Programs (Up to $2.5 billion per year available)
• Stewardship agreements (that allow for the “assembly” of up to 600 different federal programs … plus state, local & private programs … all in ONE contract!)

Used together, these programs and conservation tools harness market-based incentives. As a result, they can help producers maintain landowner equity and improve profitability by generating new, ongoing sources of additional revenue. They can also improve compatibility with the environment. By installing practices that will reduce operating expenses and help agricultural operations become more efficient, these programs are moving conservation in the right direction. Using them in the most effective combination will be our next challenge.

\(^1\) Additional information regarding the design and functioning of the RLSP, including valuation criteria and credit calculations, can be obtained by contacting Craig Evans, chair, Rural Lands Stewardship Council, 621 NW 53rd Street, Suite 240, Boca Raton, Florida 33487, email craig@privatelands.org