

Protecting Farmland in Developing Communities

A CASE STUDY OF THE TAX IMPLICATIONS OF AGRICULTURAL CONSERVATION EASEMENTS



By

Nanette Nelson, Laurie Fowler, and Jeffrey Dorfman

The University of Georgia
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February 2001

Sponsored by the Georgia Department of Community Affairs

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INTRODUCTION TO FARMLAND PROTECTION

“Farming is important to me because it is part of my family’s heritage. I also believe that farm life instills a hard work ethic and a belief in God – the creator of all.”

– Chip Brooks, farmer

Operating a sixth generation farm in Habersham County and serving as a local- and state-level Georgia Farm Bureau official, Chip Brooks was interested in how he could keep farming viable in his community and provide future generations with a way of life he believes is rewarding and enjoyable. Not finding the information he needed, Chip looked to the University of Georgia’s Public Service and Outreach Program for answers. The following report is a result of a collaborative effort by Chip Brooks, the Habersham County Farm Bureau, the Board of Commissioners of Habersham County, faculty and staff at the University’s Institute of Ecology and Department of Agricultural and Applied Economics, and the Georgia Department of Community Affairs.

One goal of this study is to introduce voluntary programs that provide financial incentives to farmers like Chip who are interested in permanently protecting their land for farm use. These programs provide landowners with alternatives to selling their land for development. A second goal is to inform the local government of the ad valorem tax consequences of these programs. Habersham County staff was concerned that the use of these tools would severely compromise their ability to generate tax revenue sufficient to pay for governmental services. This study reveals that this concern is unfounded.

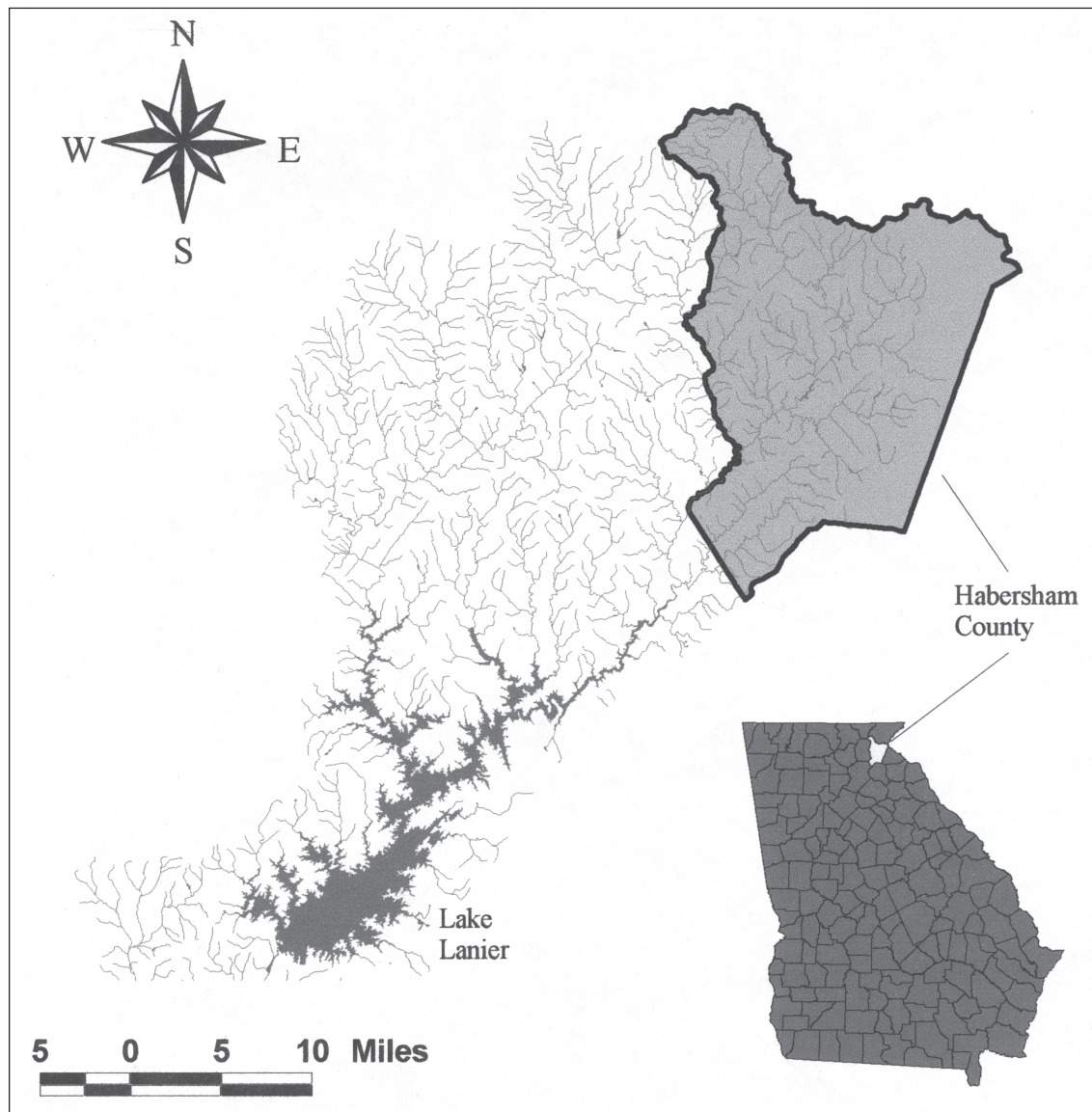
A number of tools have proven effective in protecting farmland in other states. These tools have not been widely used in Georgia and thus are not yet well recognized or understood by landowners, elected officials or planners in the state. This report introduces three of these tools and demonstrates their application to Chip’s farm in Habersham County. The tools presented are donated conservation easements, purchase of development rights, and transferable development rights. The costs and benefits of each of these tools are calculated and compared to the costs and benefits of the most frequently used state program intended to protect farmland – the Conservation Use program. A fourth tool, differential taxation, is briefly discussed.

Chip produces poultry and beef on a 170-acre farm (see Figure 1). With his father’s help, Chip operates five poultry houses and raises 50 head of Angus cattle. The farm has been in the family since the early 1800’s and a variety of crops have been cultivated including tobacco, corn, wheat, and hay. The family has also raised hogs, chickens, and sheep. The farm is in an area that

is designated on both the current and future Habersham County land use maps as agricultural and includes a diverse landscape and conservation features such as streams and wildlife habitat.

The farm is currently enrolled in the Conservation Use program, a state program that provides farmers a property tax break by valuing the land for its current use instead of its highest and best use (i.e., the potential for development). To receive the property tax reductions, Chip must keep his land in farming for a minimum of ten years. A penalty is imposed on landowners who withdraw early from the program. In areas where land prices have escalated due to development or speculation, property tax breaks keep farming profitable.

Figure 1 Location of Habersham County and the Upper Chattahoochee Watershed



WHY PRESERVE FARMLAND?

Farming is central to Habersham County's economy. In 1997, farming generated almost \$155 million in farmgate income (Bachtel and Boatright, 1998). Farming provides jobs in transportation, processing and marketing of farm products, and in farm support businesses – the feed, seed, hardware and machinery dealerships. Earnings from the farming sector comprised 15 percent of the \$440 million total earnings in the county for 1997, second only to manufacturing and tied with government (Gaquin and DeBrandt, 2000). Poultry and livestock dominate farm earnings in Habersham County.

In 1998, farmland, forest and open space in Habersham County generated \$1.42 in revenue for each dollar spent in services, while residential land use generated only \$.81.

Land use diversity as well as economic diversity have been shown to be critical to a county's ability to generate sufficient revenue to provide services without undue burden on the individual taxpayer. For the 1998 fiscal year, farmland, forest and open space in Habersham County generated \$1.42 in revenue for every dollar spent in services (Nelson and Dorfman, 2000). Residential land use, on the other hand, generated only \$0.81 for every dollar spent on services. Commercial and industrial land uses were essentially revenue neutral, generating \$1.04 for every dollar spent (Nelson and Dorfman, 2000). These expenditure-to-revenue ratios reveal that farm and forested land and open space require a lot less money to service than residential. Consequently, programs that reduce the tax burden on farm and forest land serve to bring the tax in line with the cost of servicing that property.

The presence of farmland imparts several "public good" aspects including scenic vistas, landscape diversity, and wildlife habitat. Land that is occupied by farms instead of development also contributes to the recharge of groundwater. Rain that falls on pasture or forest is absorbed into the soil and stored as groundwater for later release into streams and wells. With development, farmland is converted to roads, parking lots, rooftops, patios and sidewalks, and the rain can no longer pass through these impervious surfaces into the soil. The rain runs off into surface waters in torrents, resulting in erosion and sedimentation, so that there is less water available to recharge groundwater.

Agricultural operations, however, are not always environmentally benign. In some instances, farming practices are at odds with certain environmental goals like protecting water resources. The implementation of agricultural best management practices (BMPs) such as filter strips, riparian buffers, and grassed waterways filter sediments and nutrients from agricultural runoff before it reaches streams. BMP implementation, therefore, can improve

water quality. If the net effect is a positive contribution to the public good then it can be argued that we all should share the cost of sustaining these public benefits.

Recognizing the benefits we derive from well-functioning ecosystems like rivers and lakes is a relatively new concept in economic decision-making. Government entities at the federal, state and local levels are beginning to realize the cost-effectiveness of preventing the degradation of natural resources and initiating pollution prevention programs. For instance, Pennsylvania, Maryland, Virginia and Delaware are paying farmers to prevent soil erosion and pollutant-laden runoff from reaching Chesapeake Bay. Up to \$560 million in payments is available to farmers near the Bay to implement BMPs (CNN, 2000).

Another example of a regional approach to proactively protect natural resources is New York City's multi-million dollar program to protect drinking water supplies that originate in the Catskill Mountains. Beginning in 1995, the City began purchasing development rights from dairy farmers in the Hudson Valley to prevent further development in the watershed. In addition, the dairy farmers are paid to prevent farm runoff from reaching lakes, rivers, and streams (Daniels and Bowers, 1997). The program highlights the cost-effectiveness of protecting source water areas by providing farmers with incentives to continue farming while improving their agricultural practices. City officials also recognized the difficulty in reversing the impacts to water quality due to development and the greater expense that would incur.

Farmland protection programs affect the pattern and form of future development by directing growth to areas that have the appropriate infrastructure such as paved roads, water, and sewer and away from areas historically used in farming operations. Focus group participants in a study of farmland protection in Rhode Island suggested that "development is undesirable when it disrupts prevailing land use and cultural patterns, or when it specifically threatens groundwater quality or scenery, which are characteristics addressed by farmland preservation objectives (Kline and Wichelns, 1996)."

Land protection, and its converse, development, must be viewed in light of private property rights. Government spending programs, regulations, and an individual's rights as a property owner drives the land market in this country. Daniels and Bowers (1997) remind us that "[t]he tension between the private ownership of land and the public interest is a fundamental and continual issue in the community efforts to manage growth." What land will be developed and what land will be protected is up to landowners, elected officials and the public to decide.

ESTABLISHING GOALS FOR A FARMLAND PROTECTION PROGRAM

In their 1988 Comprehensive Management Plan, Habersham County identified farmland protection as a major objective. The importance of this issue is echoed in the results of a public forum and visioning exercise conducted in August 1999. Over 200 citizens participated in the Public Policy Symposium cosponsored by the Habersham Chamber of Commerce, Piedmont College, the Habersham Smart Growth Coalition and the Habersham County Farm Bureau. There were ten breakout groups, all of which identified the adoption and enforcement of land use regulations that preserve farmland and other green space and that protect water resources as the highest priority. At least five groups identified the maintenance of rural character and appearance of the county as critical.

Farmland protection efforts exist all across the country. Property tax relief and right-to-farm laws exist in every state (Daniels and Bowers, 1997). Eighteen states have programs (either purchase of development rights or transfer of development rights) that offer farmers cash payment to keep their land in farming (Daniels and Bowers, 1997). Eleven states including Georgia require counties to adopt comprehensive land use plans to direct future growth and protect natural resources. Protection of agricultural land is emphasized in Hawaii, Oregon, and Wisconsin and to a lesser degree in Georgia and the eight remaining states (Daniels and Bowers, 1997).

Many of the programs pursue primarily agricultural objectives, such as protecting productive soils and viable farms. Secondary benefits listed by several of these programs are related to open space objectives such as wildlife habitat, improving air and water quality, and controlling development. Research has shown that incorporating these secondary benefits into farmland protection programs or pursuing these open space benefits directly may increase public benefits (Kline, 1996). To get the most from a farmland protection program, Habersham County should incorporate the other top concerns identified by citizens at the Symposium-- preservation of green space, protection of water resources, appearance of the county and maintenance of rural character.

CONSERVATION EASEMENTS

WHAT IS A CONSERVATION EASEMENT?

Ownership of land includes several legally recognized rights including the rights to subdivide, farm, harvest timber or minerals, and limit public access. Landowners can elect to sever one or more of these rights in order to protect a specified conservation value. These rights can then be donated or sold to a governmental unit or charitable organization such as a land trust, which retires the rights and ensures they will never be used. The landowner still holds title to the property, including the rights to sell, donate or transfer the property. In addition, the landowner may continue to use the land for purposes not specifically prohibited by the terms of the easement.

The agreement that documents the conveyance of these rights is called a conservation easement. A conservation easement is a voluntary, legally recorded agreement between a landowner and a government organization or a private, non-profit land trust. Typically conservation easements prohibit or limit subdivision or development of the land. The agreement is binding on both present and future owners of the property.

Conservation easement agreements are flexible documents. Their terms are negotiated between the landowner and the easement holder and can be tailored to suit the needs of the landowner. For instance, a farmer interested in a conservation easement might want to continue farming the land and possibly retain one or two future home sites for his children. The easement would then reflect the farmer's right to continue using the land for agricultural operations and to build new farm buildings or homes on limited sites. The details of the agreement are recorded in a Deed of Conservation Easement in the office of the clerk of the Superior Court in the county in which the land is located.

Conservation easements do not require a landowner to allow public access. Land that is actively being farmed and under an agricultural conservation easement would not generally be suitable for public access. In some cases conservation easements are initiated with the intent of providing public access to a river or a lake or for educational purposes. In these cases, the landowner and the easement holder can negotiate the terms of public access and include them in the Deed of the conservation easement.

When a landowner enters an agricultural conservation easement, she is forgoing the option to develop her land. In other words, the development rights are severed from the land. When a landowner donates her

development rights to a qualified organization and the donation satisfies the conservation purposes outlined by the IRS, then she is eligible for reductions in income and estate taxes. A landowner may also sell her development rights. The cash payment can then be used to buy down debt on the farm, purchase more land, or invest for the future. The next chapter will discuss the potential tax benefits in more detail and present specific tax savings for Chip Brook's farm in Habersham County.

Qualified easement holders include a government entity or a land trust. Land trusts are nonprofit organizations that work with private landowners to protect land for conservation. They are operated at the local, regional, state, and national level. They secure land, conservation easements, management agreements, or other interests in real property for the purpose of enabling public benefit from the land. The easement holder is responsible for enforcing the terms of the agreement and will typically visit the site of the easement at least once a year for monitoring purposes. To help offset enforcement and monitoring costs land trusts usually require a stewardship fee when an individual donates a conservation easement.

Stewardship fees are determined in a variety of ways. In general, a land trust will determine the cost of monitoring the land and then based on an annual rate of return of 5 to 7 percent, calculate the principal necessary to cover those costs (Land Trust Alliance, 1993). Determining the cost of monitoring can be based on one of several factors: 1) a flat rate based on the land trust's average cost per easement; 2) an amount based on the acreage and the complexity of the easement's restrictions; 3) an amount based on projected costs; 4) an amount based on a percentage of the value of the easement; and 5) an amount based on the ability of the owner to pay (Land Trust Alliance, 1993). The Athens Land Trust, for example, encourages landowners to make a tax-deductible donation of approximately \$5,000 (L. Hall, pers com). The land trust is willing to negotiate with landowners on the amount of the stewardship fee. The Oconee Rivers Land Trust specifies only that it will have, will receive or will raise the funds necessary to monitor and enforce the easement (S. Thompson, pers com).

The Georgia Land Trust Service Center (www.GEPInstitute.com) maintains an up-to-date list of land trusts in Georgia. There are approximately 48 land trusts in the state, and as of 1999, 70 conservation easements protecting 37,723 acres.

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EASEMENT VALUATION

The value of a conservation easement is the difference between the value of the land without the restrictions (unencumbered land) and the value of the land after the restrictions are imposed (encumbered land). Sales of property encumbered by conservation easements provide the most accurate values for conservation easements; however, such sales have not occurred in Georgia. Therefore, the easement must be valued indirectly using the Before and After method of appraisal. This method has been recognized by the courts and is repeatedly used by government agencies, pipeline and utility companies, and banks and other lenders (LTA, 1999).

The value of a conservation easement is the difference between the value of the land without the restrictions (unencumbered land) and the value of the land after the restrictions are imposed (encumbered land).

Determining the effect an easement has on the value of the property begins with the estimation of the property's highest and best use. This is the Before value. The unencumbered value of land is determined by its potential for being developed beyond agricultural use and its value in a state of productive agricultural use. The development potential is in turn influenced by the county's Comprehensive Plan and zoning regulations. Next, the value of the encumbered property is estimated in its current use (in this case as a farm). This is the After value. The value of the conservation easement is the difference between the Before and After values.

The more development potential a property has beyond its agricultural uses, the higher the value of the conservation easement. Conversely, the lower the potential for development, the lower the conservation easement's value. Interviews with fourteen private land trusts and government agencies active in preserving farm land revealed that the value of conservation easements can range from 25 to 85 percent of the unencumbered fee value (Lassner, 1998)¹. The wide range in values can be attributed to the variations in the terms of the agreements. The more restrictive the conditions of the easement, the higher the percentage; the more development rights an owner retains, the lower the percentage. The same study found that the majority of easements acquired ranged from 40 to 60 percent of the unencumbered property value (Lassner, 1998). Table 1 summarizes seven sales of encumbered farmland enrolled in the Massachusetts Agricultural Preservation Program (APP). The basic restrictions for land enrolled in the program include no new construction, no subdivision, no mining or excavation, no dumping, and/or no activities that would otherwise be inconsistent with the preservation of agricultural lands (Metro Appraisals, 2000). The average value of an agricultural conservation easement was 69 percent of the unencumbered property value.

¹The author did not specify location of land trusts or government agencies that she had interviewed.

Metro Appraisals, Inc., a professional appraisal firm in Gainesville, Georgia, was hired to estimate the value of an agricultural conservation easement on Chip's 170-acre farm. The firm estimated the current market value (the Before Value) of the land at \$970,000. The value of the land with the conservation easement (the After value) was estimated at \$485,000. The value of the conservation easement is the difference between the Before and After values or \$485,000. This represents a 50 percent change in land value due to the encumbrance of an agricultural conservation easement.

The appraisal process is discussed in more detail in the appraiser's summary report presented in Appendix A. A landowner can expect to pay between \$4,500 and \$5,500 for an agricultural conservation easement appraisal (Metro Appraisals, 2000). The cost of appraising easement-encumbered property should decrease as the number of easements increases and the sale of encumbered land becomes more common. In addition, any portion of the cost of an appraisal that exceeds two percent of an individual's adjusted gross income may be deducted as part of the costs incurred in the determination of tax under Internal Revenue Code Section 212 (Small, 1999).

Table 1. Sales of Encumbered Farmland in Massachusetts Agricultural Protection Program (APP)

Land Use	Acres	Restricted APP Acres	Price Paid for APP Restricted Land (per acre)	Fair Market Value of Unrestricted Land (per acre)	Percent Reduction in Price
60% dairy 40% woods	154	151	\$ 821	\$ 2,200	63 %
40% pasture 60% woods	140	138	\$ 950	\$ 2,200	57 %
all woods	20.6	20.6	\$ 146	\$ 800	82 %
hay & corn	145	145.4	\$ 585	\$ 2,300	75 %
22% corn/hay 78% woods	116	116	\$ 216	\$ 800	73%
hay	67.5	67.5	\$ 740	\$ 2,100	65 %
hay & corn	76	76	\$ 761	\$ 2,500	70 %

Source: Metro Appraisals, 2000

DONATING A CONSERVATION EASEMENT AND THE POTENTIAL TAX BENEFITS

Each person considering donating (or selling) development rights should rely on advice from a tax or financial advisor who can evaluate the possible financial benefits in light of the individual circumstances and determine how to maximize those benefits. The fees paid for professional tax planning in connection with an easement donation may be deducted under Internal Revenue Code Section 212 (Small, 1999).

Some benefits from entering a conservation easement are economic and some are purely altruistic. These altruistic benefits – the permanent protection of land or the ability to pass the farm on to future generations – generally drive an individual's decision to enter a conservation easement agreement. Tax savings are considered a supplemental benefit, and not the primary reason for entering the agreement.

Donors of conservation easements are eligible for income and estate tax reductions pursuant to federal and state laws and regulations. To qualify for these tax savings the easement must be granted in perpetuity and “exclusively for conservation purposes” to a qualified organization as defined under section 170(c) of the federal tax code. A qualified organization is either a government entity or a land trust. The conservation purposes for which easements may be donated are defined in section 170(h)(4) of the federal tax code:

- “(i) The preservation of land areas for outdoor recreation by, or the education of, the general public,
- (ii) The protection of a relatively natural habitat of fish, wildlife, or plants, or similar ecosystems,
- (iii) The preservation of open space (including farmland and forest land) where such preservation is (I) for the scenic enjoyment of the general public, or (II) pursuant to a clearly delineated federal, state, or local governmental conservation policy and will yield a significant public benefit, or
- (iv) The preservation of a historically important land area or a certified historic structure.”

The deductibility of conservation and historic preservation easement donations was first codified in 1976 with the adoption of the federal Historic Structures Act. The tax code provision, section 170 (f)(3)(b)(iii), allowed a taxpayer to claim an income tax deduction for the charitable donation of a 30-year easement to a qualified organization. A year later, in 1977, the law

was amended to make such a deduction available only for the donation of a perpetual easement.

In 1980, Congress amended the 1976 provision a second time and slightly modified the rules for deductibility of conservation easement donation. Under the amended section 170(h), a landowner who donates an easement is allowed an income tax deduction for the value of the conservation easement. In addition, the value of the land may be reduced for estate tax purposes. Future easement donors should be assured by a series of favorable court cases that 170(h) works and that a sound and professional appraisal will result in the expected tax benefits (Small, 2000).

The tax benefits received are based on the valuation of the development rights and the land uses eliminated by the easement. A professional appraiser must determine the fair market value of the conservation easement and establish the value of the gift. To receive federal estate and income tax deductions, landowners should provide the following documentation (LTA, 1999):

1. Deed of Conservation Easement drafted by either the easement holder or the property owner's attorney;
2. Baseline Inventory of the Property prepared by a biologist, consultant or planner;
3. Appraisal prepared by an independent appraiser working for the landowner;
4. Title search and verification usually prepared by the landowner's attorney;
5. Survey and Legal Description prepared by a surveyor working for the landowner;
6. Form 8283, an attachment to the federal tax return of all individuals claiming contributions more than \$5,000, prepared by the landowner or his/her accountant.

ESTATE TAX

An easement's effect on estate taxes is usually more important to landowners with sizeable estates and substantial real estate holdings, since, depending on the year of death, the first \$600,000 to \$1 million worth of an individual's assets is exempt from estate taxes². This exemption is known as a unified credit. If the assets of the estate are divided between spouses then the heirs of each spouse's estate can use the unified credit, effectively doubling the exemption (Daniels and Bowers, 1997). This means that a husband and wife can pass along an estate worth \$1.2 million (or more depending on the year of death) to their heirs without any federal estate tax.

²In 1999 the first \$650,000 of an individual's estate is exempt from estate taxes. By 2006, the amount will have increased to \$1,000,000.

The Tax Relief Act of 1997 raised the estate tax exemption to \$1.3 million for small family-owned farms and businesses. For tax purposes, the IRS defines a family-owned business as any trade or business that is held at least 50 percent by one family, 70 percent by two families, or 90 percent by three families. To qualify for the \$1.3 million threshold, the aggregate value of the family-owned business passed on to heirs must exceed 50 percent of the adjusted gross estate (<http://moneycentral.msn.com/quickref/quickref.asp>).

Section 2031(c) of the Tax Relief Act of 1997 allows an executor, trustee, or heir to donate a qualified conservation easement after the death of the landowner and enjoy the estate tax benefits.

The Tax Relief Act of 1997 also included the American Farm and Ranch Protection Act that added section 2031(c), “Estate Tax With Respect to Land Subject to a Qualified Conservation Easement” to the tax code. The new law creates an additional incentive to donate conservation easements in the form of additional reductions to the value of the estate. Under the new law, an individual may exclude an *additional*³ percentage of the value of the land from his estate in addition to the reduction in value already attributable to the easement (Small, 2000). An executor can elect to exclude an

additional 40 percent of the value of the land that is subject to a conservation easement from a decedent’s estate. The exclusion applies regardless of when the easement was donated. The maximum amount that may be excluded from an estate was \$100,000 in 1998, increasing by \$100,000 each year up to a maximum of \$500,000 by 2002 and thereafter. In Chip’s case, his heirs would not benefit from the additional 40 percent reduction since they have no estate tax due if Chip places a conservation easement on his property.

³An amendment to 2031(c) was enacted by Congress in 1998 to clarify that post-mortem donors may take the 2031(c) exclusion and the 2055(f) deduction from their taxable estate. See section 6007(g) of the 1998 IRS Restructuring Act (R Shay, pers com).

More importantly, section 2031 (c) allows for an executor, a trustee, or an heir to elect to donate a qualified conservation easement after the death of the landowner and enjoy the estate tax benefits. Before the new law, if a landowner had not donated an easement during their lifetime or included an easement donation in their will, then the estate tax was based on the full, fair market value of the land. The donation of a post-mortem easement must be completed prior to the estate filing the estate tax return (nine months after death, although the estate may request a six-month extension) (Small, 1999).

Currently, this provision applies only to properties that are located within 25 miles of an official metropolitan statistical areas (MSA); or within 25 miles of a federally-designated Wilderness Area or National Park; or within 10 miles of any Urban National Forest (a designation of the U.S. Forest Service). In addition, the easement must prohibit all but minimal commercial recreational use of the land (Small, 2000). Chip's farm does not meet the geographic provision; however, growth in Athens and Atlanta translates into a widening MSA, thus his property may eventually meet this criteria.

Table 2. Estate Tax Savings

	Fair Market Value	Conservation Use	Conservation Easement
Land Value	\$970,000	\$970,000	\$485,000
Other Assets	\$510,000	\$510,000	\$510,000
Adjusted Gross Estate	\$1,480,000	\$1,480,000	\$995,000
¹ Total Exemptions	(\$1,300,000)	(\$1,300,000)	(\$1,300,000)
Federal Estate Tax Due	(\$124,600)	(\$124,600)	\$0
Net Estate Tax Savings	\$0	\$0	\$124,600

¹ The maximum allowable exclusion was taken for a Qualified Family Owned Business Interest in conjunction with the unified credit - \$675,000 + \$625,000.

Chip Brooks' 170-acre farm is valued at \$1.48 million including the land and all improvements. After he takes the maximum allowable exemption for a small family owned business plus his unified credit, equaling \$1.3 million, then his heirs will owe \$124,600 in federal estate taxes. There are no state estate taxes in Georgia. However, if Chip places a conservation easement on his farm then the value of the land is reduced by 50 percent, to \$485,000, and his total assets are worth \$995,000. Taking the same \$1.3 million in exemptions, Chip's heirs will not have to pay any estate taxes.

INCOME TAX

When a landowner donates a permanent conservation easement that fulfills the conservation purposes recognized by the IRS, she may deduct the full fair market value of the easement from federal and state income taxes. If the property has been owned for more than one year (long-term capital gain property), then the landowner may claim an income tax deduction for the full value of the easement up to 30 percent of their adjusted gross income in the first year. Any excess value may be carried over and deducted for the next five years until the amount of the conservation easement is fully used up or the five-year carryover period expires. Any deductions taken in that five year period cannot exceed 30 percent of the individual's adjusted gross income in any given year.⁴

⁴One additional limitation may apply. In 1991, Congress enacted an overall limitation on the deductibility of certain itemized deductions, including charitable contributions. For instance, in 1999, an individual who is married and filing jointly with an adjusted gross income greater than \$312,450 could not take a deduction for exemptions. See the *Deduction for Exemptions Worksheet-Line 38* in the *Instructions for Form 1040*.

As an alternative, the landowner may elect to increase the deductibility to 50 percent of adjusted gross income if she first decreases the value of the gift to what would have been long-term capital gain had the property been sold rather than donated. In effect, this alternative limits the deduction to the taxpayer's basis in the donated property. This may be the preferred option for a seriously ill person, a person who is expecting a large drop in income, or a person donating property that has appreciated very little. If the landowner has held the land for less than one year, she may deduct the cash value or the value of the basis up to 50 percent of her adjusted gross income in the year of donation. Any excess value may be carried forward for the next five years.

Table 3a. Federal Income Tax Savings for an Adjusted Gross Income of \$140,000

	Fair Market Value	Conservation Use	Conservation Easement
Adjusted Gross Income	\$140,000	\$140,000	\$140,000
Deduction for Conservation Easement (30% of AGI)	\$0	\$0	(\$42,000)
Taxable Income	\$140,000	\$140,000	\$98,000
Deductions and Exemptions	(\$45,000)	(\$45,000)	(\$45,000)
Net Taxable Income	\$95,000	\$95,000	\$53,000
Tax Due (28%)	(\$21,004)	(\$21,004)	(\$9,244)
Net Income	\$118,997	\$118,997	\$130,757
Savings	\$0	\$0	\$11,760
Total Saved Over 6 years			\$70,560

Table 3b. State Income Tax Savings for an Adjusted Gross Income of \$140,000

	Fair Market Value	Conservation Use	Conservation Easement
Adjusted Gross Income	\$140,000	\$140,000	\$140,000
Deduction for Conservation Easement (30% of AGI)	\$0	\$0	(\$42,000)
Taxable Income	\$140,000	\$140,000	\$98,000
Deductions and Exemptions	(\$44,800)	(\$44,800)	(\$44,800)
Net Taxable Income	\$95,200	\$95,200	\$53,200
Tax Due (6%)	(\$5,452)	(\$5,452)	(\$2,932)
Net Income	\$135,548	\$135,548	\$137,068
Savings	\$0	\$0	\$2,520
Total Saved Over 6 years			\$15,120

If Chip Brooks places an agricultural conservation easement on his land and donates the easement valued at \$485,000 to a qualified organization, he can deduct the full value of the easement from his federal and state income taxes. If Chip's adjusted gross income is \$140,000 in 1999 then he can deduct up to \$42,000. The excess value of the conservation easement may be carried forward over the next five years. In the first year, Chip saves \$11,760 in federal income taxes and \$2,520 in state income taxes.

Table 4a. Federal Income Tax Savings for an Adjusted Gross Income of \$70,000

	Fair Market Value	Conservation Use	Conservation Easement
Adjusted Gross Income	\$70,000	\$70,000	\$70,000
Deduction for Conservation Easement (30% of AGI)	\$0	\$0	(\$21,000)
Taxable Income	\$70,000	\$70,000	\$49,000
Deductions and Exemptions	(\$28,000)	(\$28,000)	(\$28,000)
Net Taxable Income	\$42,000	\$42,000	\$21,000
Tax Due (15%)	(\$6,300)	(\$6,300)	(\$3,150)
Net Income	\$63,700	\$63,700	\$66,850
Savings	\$0	\$0	\$3,150
Total Saved Over 6 years			\$18,900

Table 4b. State Income Tax Savings for an Adjusted Gross Income of \$70,000

	Fair Market Value	Conservation Use	Conservation Easement
Adjusted Gross Income	\$70,000	\$70,000	\$70,000
Deduction for Conservation Easement (30% of AGI)	\$0	\$0	(\$21,000)
Taxable Income	\$70,000	\$70,000	\$49,000
Deductions and Exemptions	(\$27,800)	(\$27,800)	(\$27,800)
Net Taxable Income	\$42,200	\$42,200	\$21,200
Tax Due (6%)	(\$2,272)	(\$2,272)	(\$1,012)
Net Income	\$67,728	\$67,728	\$68,988
Savings	\$0	\$0	\$1,260
Total Saved Over 6 years			\$7,560

If Chip's adjusted gross income is \$70,000 in 1999 then he can deduct up to \$21,000. His tax savings are \$3,150 and \$1,260 for federal and state income taxes, respectively. The state's ten-year Conservation Use program does not provide income tax benefits since a perpetual easement is not involved. The program is based on current use valuation and therefore participants only receive property tax benefits.

STATE INCOME TAX CREDIT PROGRAMS

In 1983, the state of North Carolina enacted the Conservation Tax Credit Program. The program allows a landowner to receive an income tax credit equal to 25 percent of the fair market value of the donated property or interest in property (CTNC, 2000). The credit is a dollar-for-dollar subtraction on the amount of income tax owed. The credit cap is \$250,000 for individuals and \$500,000 for corporations and may be carried forward for a period of five years. This credit can be used for an outright donation of land or a donation of development rights, such as a conservation easement or an easement for access. The donation must serve a public benefit such as public beach access and use, public access to water or trails, fish and wildlife conservation, or other similar land conservation purposes.

The program resulted from citizens and elected officials recognizing the need to provide public access to North Carolina's coastal areas, which were and are under significant development pressure. When the program was first enacted the credit cap was set at \$5,000 per individual. From 1983 to 1988, 2,383 acres were protected under the program (Tabas, 1999). Over the next ten years the cap was increased several times to its current amount of \$250,000 per individual. Consequently, the amount of acres protected under the program dramatically increased. In 1997 alone, 3,858 acres with a value of \$15.4 million were protected (Tabas, 1999). As of October 1998, nearly 33,000 acres of land had been protected under the program with a total value of \$80 million. A study estimated that the "cost" in lost revenue to the North Carolina treasury for lands donated between 1983 and 1995 amounted to approximately \$3.5 million or 8.5 percent of the value of the land contributed (Tabas, 1999). The result is the acquisition of significant conservation benefits for the public at a fraction of the cost of fee simple purchase. In 1999, Colorado, Delaware, and Virginia followed North Carolina's lead and enacted their own state income tax credit programs.

As of October 1998, North Carolina's Conservation Tax Credit Program had protected nearly 33,000 acres with a total value of \$80 million. The "cost" in lost revenue amounted to approximately \$3.5 million, or 8.5 percent of the value of the land contributed. The Conservation Tax Credit Program has resulted in significant conservation benefits for the citizens of North Carolina at a fraction of the cost of fee simple purchase.

Table 5a. State Income Tax Credits for an Adjusted Gross Income of \$140,000

	Fair Market Value	Conservation Use	Conservation Easement
Adjusted Gross Income	\$140,000	\$140,000	\$140,000
¹ Tax Due	(\$5,452)	(\$5,452)	(\$5,452)
Tax Credit for Conservation Easement	\$0	\$0	\$5,452
Net Income	\$135,548	\$135,548	\$140,000
Savings	\$0	\$0	\$5,452
Total Saved Over 6 years			\$32,712

¹ From Table 3b

Table 5b. State Income Tax Credits for an Adjusted Gross Income of \$70,000

	Fair Market Value	Conservation Use	Conservation Easement
Adjusted Gross Income	\$70,000	\$70,000	\$70,000
¹ Tax Due	(\$2,272)	(\$2,272)	(\$2,272)
Tax Credit for Conservation Easement	\$0	\$0	\$2,272
Net Income	\$67,728	\$67,728	\$70,000
Savings	\$0	\$0	\$2,272
Total Saved Over 6 years			\$13,632

¹ From Table 4b

If Georgia offered a state income tax credit program similar to North Carolina's, Chip could receive an income tax credit equal to 25 percent of the fair market value of the donated development rights or \$121,250. If Chip's adjusted gross income is \$140,000 he would receive a tax credit of \$5,452; and if his adjusted gross income is \$70,000 he would receive a tax credit of \$2,272. He can carry forward the remainder of the income tax credit for a period of five years.

PROPERTY TAX

Currently there is no guaranteed amount of property tax savings that landowners will receive from entering a conservation easement agreement. The Georgia Uniform Conservation Easement Act of 1992 provides that property owners who grant conservation easements receive “reevaluation of the encumbered real property so as to reflect the existence of the encumbrance on the next succeeding tax digest of the county.” (Section 44-10-3(e)).

When land is encumbered by a conservation easement, the land can no longer be developed to its full extent. The estimated value of the encumbered property should reflect this restriction, as should the tax on the property. Providing information on conservation easements and their valuation to assessors at the local level should help ensure that the encumbered property is properly assessed. The state might also consider requiring the local governments’ property tax assessment to incorporate or at least to take into consideration the property owner’s independent appraisal conducted for IRS purposes. Another option would be for the state to adopt a uniform easement valuation program similar to the Conservation Use program currently in use. The state has developed a schedule of land values for this program based on crop type, soil productivity, and market sales.

Many local governments throughout the country provide property tax abatement as an additional incentive for farmers to participate in the state’s conservation easement program (Daniels and Bowers, 1997). For instance, farmers who give up their development rights in Hartford County, Maryland are exempted from paying any property taxes on their land though they are still required to pay property taxes on improvements.

Table 6. Property Tax Savings

	Fair Market Value	Conservation Use	Conservation Easement
Land Value	\$970,000	\$74,580	\$485,000
Other Assets	\$510,000	\$510,000	\$510,000
Total	\$1,480,000	\$584,580	\$995,000
¹ Net Taxable (40% of value)	\$592,000	\$233,832	\$398,000
² Tax Due (18.89 millage rate)	(\$11,183)	(\$4,417)	(\$7,518)
Savings	\$0	\$6,766	\$3,665

¹ No exemptions taken.

² Based on Habersham County's 1999 unincorporated millage rate.

Chip's farm is currently enrolled in the state's Conservation Use program. The program bases the value of land on current use (farming) instead of highest and best use. If Georgia did not offer a preferential tax assessment for farmers then Chip would owe property tax on the fair market value of his land, \$970,000. Under the Conservation Use program Chip's land is valued at \$74,580. He therefore owes \$4,417 in local property taxes saving \$6,766 compared to the taxes owed on the fair market value. If Chip were to donate a conservation easement, his land would be valued at \$485,000. He would owe \$7,518 in property taxes saving \$3,665 compared to the taxes owed on the fair market value. Chip's property taxes under the conservation easement are higher than the Conservation Use program due to the higher estimated value for the encumbered property versus the state's preferential assessment value. Chip may continue to keep his encumbered property in the Conservation Use program and receive that tax rate. The adoption of an agricultural conservation easement does not preclude the owner from entering or remaining in the Conservation Use program if that program provides a more generous property tax break.

PUBLIC / PRIVATE CONSERVATION PROGRAMS

Two programs pay landowners not to develop their property – the purchase of development rights and the transfer of development rights. The cash generated from the sale of the development rights may be used by a landowner to pay down debt on the farm, reinvest in the farm operation, or invest for retirement. If a landowner decides to sell her development rights rather than donate them, then she does not qualify for the federal and state tax benefits described earlier. The value of the property will likely be reduced since the development potential is limited, resulting in savings on estate taxes and local property taxes.

In addition, the sale of development rights is considered a capital gain and a landowner will have to pay federal and state capital gains tax on the payment received. Since 1998, the federal capital gains rate for property owned for more than one year is 20 percent. Beginning in 2001, the rate drops to 18 percent for land held five or more years (Daniels, 2000). Because the easement sale is taxed as a capital gain, the landowner can deduct the basis in the farm from the payment. Therefore, the tax consequences of the sale will be dependent on the landowner's basis in the property and whether the sale is completed in one lump sum or in installments spread over several years (Daniels, 2000). Virginia is the only state that currently offers a capital gains exemption to landowners that sell their development rights or unimproved land for the purpose of open space. The land must be maintained as open space for at least 30 years to qualify.

PURCHASE OF DEVELOPMENT RIGHTS

The county or state typically operates a Purchase of Development Rights (PDR) program. A landowner interested in selling his development rights would submit an application to the program. An oversight committee composed of representatives from the community with technical support from the planning department reviews the applications and prioritizes the development rights to be bought. Prioritization is based on how well the development rights meet program goals. An offer is then made to purchase the development rights from the landowner. The landowner can either accept or reject the offer.

While landowners can receive tax savings for donating easements, these incentives are generally small compared to sums that developers can offer. PDR programs offer

PDR Programs cannot offer the premiums that developers can, but a fair monetary offer can help farmers in need of campital or retirement income. If a farmer makes a "bargain sale" by accepting an offer below the appraised value of the easement, he or she can claim the difference between the appraised value of the easement and the actual payment as a charitable deduction for income tax purposes.

landowners cash payment in return for restricting development rights. Although PDR programs cannot offer the premiums that developers can, a fair monetary offer may satisfy young farmers who are in need of capital and older farmers who need income for their retirement. PDR programs generally make offers that are below the appraised value of the conservation easement since the landowner retains title to the land. When landowners accept an offer that is below the appraised value of the easement, this is known as a bargain sale - part cash payment, part tax deduction. Landowners may claim the difference between the appraised value of the easement and the actual payment as a charitable deduction for income tax purposes (Daniels and Bowers, 1997). In a bargain sale, the deductible basis is reduced by the percent difference between the cash payment and the appraised value of the easement.

PDR programs can be used to protect critical pieces of land in areas designated agricultural or environmentally sensitive such as water recharge areas. In the Catskill Mountains and Hudson Valley of New York, farmers are paid for their development rights as a means of protecting the watershed that provides New York City with its drinking water. PDR programs, therefore, may be used to influence location, rate and timing of development (Daniels, 1991). However, the use of public funds can potentially be a major obstacle to initiating a PDR program. Educating the public on how they will benefit from protecting farmland is critical to getting voter approval.

Currently, there are funds available through the Governor's Green Space program for the purchase of development rights. The goal of the program is to preserve 20 percent of Georgia's land as green space. Initially, the program will be focused on high growth counties and the amount of funds available per county will be based on current population and population growth rate. Therefore, more populous counties like Gwinnett and Fulton will be eligible for \$5,000,000 for their green space program compared to a smaller county like Jackson that will be eligible for \$139,000.

Funds for a PDR program can be raised in a variety of ways, including through Special Purpose Local Option Sales Taxes (SPLOST); increases in property taxes; increases in hotel/motel taxes; or sale of general obligation bonds.

Funds for a PDR program can be raised in a variety of ways including through Special Purpose Local Option Sales Taxes (SPLOST), through increases in property taxes, through increases in hotel/motel taxes, or through the sale of general obligation bonds that voters pay off through future sales, property, or hotel/motel taxes. One advantage to using bond financing is the money is all available upfront, so that development rights can be purchased more

quickly and affordably. The extra burden on taxpayers to fund a PDR program is generally modest. For example, a millage rate increase of 1.0 mill would result in the owner of a \$50,000 home paying an additional \$20 a year and the owner of a \$100,000 home would pay an additional \$40⁵. A

PDR Funding Alternatives

The Maryland farmland preservation program partially funds the purchase of development rights through a 5 percent conversion tax on the sale of farmland that will no longer be used for agriculture. Additional funds are received through Program Open Space, which is funded by a state imposed 5 percent real estate transfer tax. The citizens of Peninsula Township, Michigan decided to increase their property taxes to protect the landscape. Blessed with rolling orchards and stunning views of Lake Michigan, the township was under significant development pressure. Elected officials voted to increase the property tax rate by 1.25 mills generating \$2.6 million over the next 15 years. The funds will be used to purchase the development rights to over 2,000 acres of vineyards and cherry orchards (La Placa, 1995).

In Kentucky, Fayette County officials are looking at a combination of state and local sources to fund the purchase of development rights. Officials propose to use \$100 million in public money over the next 20 to 30 years to pay rural farmers not to develop their land. The money would come from the city's existing funds, an increase in the local hotel room tax (which would require state enabling legislation), and matching funds from the state's tobacco settlement (Baniak, 2000).

An installment purchase financing plan is helping Howard County, Maryland raise the money it needs to purchase development rights on farmland in the western part of the county. A portion of the county's local real estate transfer tax funds the plan. Initially the county adopted a PDR program whereby purchase agreements were paid for up-front. By 1989, \$9 million had accumulated in the acquisition fund. However, the county realized that these revenues were insufficient in a market where developers were offering more than \$15,000 per acre for farmland (Servary and Neubert, 1991). The county responded by developing the installment purchase plan in part as a result of talking with farmers. The plan allowed the county to leverage the \$9 million in their preservation program and the estimated future dedicated revenues of \$3 million a year. Essentially the plan gave the county immediate financial resources to purchase nearly \$55 million worth of easements (Howard County, 1997).

Each installment purchase agreement lasts for a period of 30 years. Every two years after the agreement is initiated the county pays a portion of the purchase price (usually \$5,000) with the remainder paid at the end of 30 years (Howard County, 1997). The county pays semi-annual interest on the remainder of the purchase price and the interest payments are exempt from federal, state, and local income taxes. In addition, landowners may defer payment of capital gains tax on the sale of the development rights until the principal is received (Servary and Neubert, 1991).

From 1980 to 1988 the county and state spent slightly more than \$11 million in cash to purchase easements on 7,504 acres averaging only \$1,480 per acre. From the initiation of the installment purchase plan through 1996, the county has purchased easements on 9,287 acres averaging \$5,800 per acre (Howard County, 1997). In other words, with the installment purchase plan the county was able to offer the landowner more money per acre than previously. In combination with the potential deferral of capital gains tax and the tax-exempt semi-annual interest payments, the county has a program that developers cannot match. The county has since expanded its goal to 30,000 acres due to the land use policies adopted in the 1990 General Plan. The new development policies include clustering and the transfer of development rights, expanding the means for protecting farmland.

⁵ No exemptions are taken in these property tax calculations.

one percent increase in the hotel/motel room tax would add an additional \$1 to a hotel bill of \$100.

Because a PDR program is voluntary, and a landowner can choose to sell his development rights or not, there is no guarantee that critical farmland will be protected. Each landowner will respond differently to the incentives presented above and the opportunity to sell the land for a premium. The result may be a patchwork of protected farmland interspersed with development that would ultimately jeopardize the viability of a farming industry.

Daniels (1991) notes that PDR programs alone may be insufficient in protecting the critical mass of farmland necessary to protect the industry. To make his point, Daniels summarizes the experiences of Suffolk County, New York and King County, Washington. The Suffolk County program began in 1972 and spent \$26.5 million to buy the rights to 5,682 acres. In some cases, the purchase price of the development rights was as much as 85 percent of the fee simple value and exceeding the agricultural value of the land. From 1969 to 1987, nearly one-third of the farmland acreage in the county or 20,000 acres was converted to other uses. Essentially development in the area out paced the program. In its second phase, the program had another setback when only one-quarter of the PDR applicants accepted the offers given. The result was scattered patches of protected farmland. In King County, Washington, a PDR program was operated from 1984 to 1986. Of the eleven regions targeted for protection, only four regions purchased development rights for blocks of farmland over 1,000 acres resulting in a patchwork of protected land. Initial purchases of development rights in the King County program averaged \$8,000 an acre with the total program average amounting to slightly over \$4,000 an acre. A total of \$53 million was spent to protect 12,568 acres revealing the expense of protecting farmland in a mostly urban county. Both programs highlight the difficulty of protecting large tracts of contiguous land for farming.

Timing of the PDR transaction is often crucial to landowners. PDR programs that involve government at the local and state level can result in lengthy review processes – applications must be reviewed and ranked, offers made and accepted, and approvals obtained from various government agencies. In Pennsylvania, for instance, the state may take two months to review an application after it has been approved at the county level. Another four months may pass until a check is presented to the landowner (Daniels, 1991). The length of time involved in the acceptance of an offer may discourage some landowners and inconvenience others looking for a tax benefit for a particular calendar year (Daniels, 1991). Keeping the program simple will help to shorten the time it takes to complete a purchase.

Several essential issues must be addressed in order for a PDR program to work effectively. Some initial decisions include how many acres to protect, what are the priority areas for protection, how to raise the money, and how much to spend over time. In the case of Howard County, Maryland, these decisions resulted in a payment cap of \$6,600 per acre (Daniels and Bowers, 1997). The program will operate more efficiently if a simple decision process is adopted for deciding which development rights will be bought. Having a clear idea where agriculture is likely to continue in the county and developing a ranking system will help simplify the process. Mapping and prioritizing parcels will lend credibility to the program by making the process visible to landowners. The county must also decide which department will oversee the program or whether a new department or committee should be formed. Operation of the program includes (but is not limited to) processing applications, making and finalizing offers, and monitoring and enforcing the terms of the easement.

Several essential issues must be addressed in order for a PDR program to work effectively. Some initial decisions include how many acres to protect, what are the priority areas for protection, how to raise the money, and how much to spend over time...

One last consideration is whether to include an “escape clause” in the program. The intent of a PDR program is to permanently retire development rights on a piece of land. With an “escape clause”, a landowner with encumbered property that becomes surrounded by development can petition to have the easement removed. PDR programs in California, Maryland, and Pennsylvania have incorporated an “escape clause.” In these programs, owners of the land that becomes surrounded by development must wait 25 years before they can seek to buy back their development rights. The landowner must buy back the development rights at the current fair market value.

TRANSFER OF DEVELOPMENT RIGHTS

Under a transferable development rights (TDR) program, a landowner may choose to sell the development rights to their land just as they can in a PDR program. There are, however, key differences in the two programs. First, development rights in a TDR program are not retired, as they are in a PDR program. Instead, they are transferred to another property. Second, the sale of development rights is a private transaction between a landowner and a developer; there is no use of public funds. Third, a TDR program relies on zoning to function. The program aims to create a market whereby a landowner with property in an area that has been designated for protection (sending area) may sell their development rights to a developer in an area designated for growth (receiving area). TDR programs essentially compensate landowners for the restrictions placed on their potential development options. The following sections will highlight some of the important questions that local governments must ask themselves and their community when considering a TDR program as a conservation tool.

HOW A TDR PROGRAM FUNCTIONS - SENDING AND RECEIVING AREAS

A typical TDR program uses zoning to establish a market for development rights. The market is driven by a demand for the rights in a receiving area and a supply of rights from the sending area. Developers who want to build at higher densities in the receiving area purchase development rights from landowners in the sending area. Sending and receiving areas are well-defined areas established before the program is initiated.

TDR Legislation

More than 20 states have enacted or amended statutes to accommodate TDR programs. Seven of these states currently have TDR statutes specifically to protect farmland (Lawrence, 1998). With the passage of Georgia House Bill 1540, municipalities and counties are given the authority to create and implement TDR programs in order to: 1) protect significant resources with a minimum investment of government funds; and 2) encourage development in those areas where infrastructure can support increased development. Hundreds of counties and municipalities across the nation have passed legislation to use TDR programs (Daniels and Bowers, 1997). To date, Cherokee County is the only county in Georgia to pass TDR legislation.

Protection of farmland, for example, is a criterion for identifying a sending area. The sending area is designated an agricultural district or zoned agricultural. The area is usually downzoned and landowners are compensated with development rights or credits. The number of development rights granted can be based on acreage or value of land being preserved. The simplest compensation formula is at a rate equal to the original zoning density. Rating systems and credit valuation formulas can become as controversial as land use designations (Johnston and Madison, 1997).

A receiving area is where the county wants to encourage development. These areas are designated in the Comprehensive Land Use zoning maps and must be approved by the local government. Receiving areas have adequate infrastructure including roads, water and sewer capacity to handle increased densities. They should be located in areas where people want to live and thus where developers will build. In other words, receiving areas should be attractive for development from the market perspective. Permitted densities in the receiving area must be less than the current market demand for new construction in the area. This is how demand for development rights is generated. Additional density is allowed via purchase of TDRs. Other incentives that will encourage the purchase of TDRs include quicker review periods or priority for water and sewer services.

Montgomery County, Maryland TDR Program

The Montgomery County, Maryland TDR program compensates landowners at a rate equal to the original zoning density. The sending area was rezoned as a "Rural Density Transfer Zone" and downzoned from one dwelling per five acres to one dwelling per 25 acres. Landowners received development rights (often called TDRs or development credits) based on the original zoning of one credit per five acres. Thus, a landowner who owns 100 acres in the Rural Density Transfer Zone would receive 20 development credits.

To receive development credits for their land, landowners in Montgomery County simply submit a property deed to the local government. The allotted development credits are usually received within four working days. Once a landowner sells the credits, a conservation easement in favor of the county is placed on the property restricting the development in accordance with the TDR ordinance. A landowner has the option of selling all his development rights or retaining some for future security including development on the farm. Unique to the Montgomery County TDR program is the right of property owners to build one house per 25 acres even after they have sold their TDRs (Daniels and Bowers, 1997).

Establishing a receiving area is the biggest challenge in implementing a TDR program. Identifying communities that will accept higher density development is difficult given that the public generally does not value centered development. However, this opinion is changing in many parts of the country due to ongoing educational efforts and quality examples of centered development. To overcome the public's aversion to density and the establishment of a receiving area, the county could undertake a public education program. It might explain that higher density means two additional units per lot rather than five or ten additional units. Showing photographs and providing examples of attractive higher density development can also generate public support.

ESTABLISHING GOALS

Clearly defined goals are an integral part of an effective TDR program. These goals become the essential elements in determining the structure and legal design of the program (Johnston and Madison, 1997). TDR programs in other states have been used to protect agricultural and forest land, to preserve environmentally sensitive lands and open space, or to guide

development to areas with the appropriate infrastructure and public services. For instance, the preservation of agricultural land on a large scale is the primary goal of both Howard County and Montgomery County's TDR program. The New Jersey Pinelands TDR program is addressing a number of goals including the protection of groundwater recharge areas, the preservation of blueberry and cranberry farms as well as other farmland, and to reduce urban sprawl. Dade County, Florida recently adopted a TDR program to help with the preservation of more than

100,000 acres of the Everglades ecosystem (Lane, 1998). The goals of the program will ultimately determine the areas for protection (sending areas) and the areas where development is to be encouraged (receiving areas).

The goals of the TDR program will ultimately determine the areas for protection (sending areas) and the areas where development is to be encouraged (receiving areas).

Several programs have also identified the number of acres they wish to protect before implementing the program. This is helpful in determining the initial number and size of sending and receiving areas as well as the ratio of development rights or credits to development units. Montgomery County designated 110,000 acres as an Agricultural Reserve. As of November 1997, 6,000 TDRs had been purchased and about 43,000 acres in the Agriculture Reserve have been permanently protected (Bledsoe et al., 1998). Calvert County, Maryland designated 36,000 acres of farmland for protection. From the program's inception in 1977 to 1996, 400 transfers of development rights have occurred protecting 6,000 acres of farmland (Daniels and Bowers, 1998). The New Jersey Pinelands TDR program has protected 5,800 acres through the

transfer of 250 development rights from 1981 to 1996 (Daniels and Bowers, 1998).

IDENTIFYING THE MARKET

When considering whether to adopt a TDR program, local governments must first examine the real estate market to determine if this type of conservation tool is appropriate for their area. TDR programs are only effective insofar as there is a demand for the rights to develop. Demand is generated when a growing real estate market is coupled with a well-crafted TDR program that is efficiently administered.

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Communication is a crucial component of developing an effective TDR program. Local governments must solicit input from realtors, developers, and mortgage lenders. Understanding the real estate market from the perspective of these groups will help create a program that responds to the local market. TDR programs are by no means a “one-size-fits-all.” There is a myriad of approaches to establish the desired market demand for development rights. Therefore, local governments should make every effort to tailor the program to fit their particular circumstances. Early dialogue amongst these groups can generate the support that is needed to make the TDR program effective.

Table 7. Alternative Development Unit Allowances

Development Unit Allowance	Description
Dwelling Unit Bonus	Increase in the total number of dwelling units permitted on an acre of land
Minimum Lot Size Reduction	Reduction in the total amount of land required for each structure
Floor Area Ratio Bonus	Increase in the permitted ratio of a structure's floor area to the total size of the lot upon which it stands
Height Allowance	Increase in the allowable height of a structure
Traffic Generation Allowance	Increase in the anticipated traffic volume created by a development

Source: DCA, 2000

One would expect landowners to sell their development rights if the value of the right is equal to or greater than the property's value for development less its value for agricultural purposes.

A careful analysis of the real estate market should be undertaken to determine if there are sufficient numbers of potential buyers and sellers. An analysis of recent sales data will determine if the market will support greater densities in the receiving area and the price that developers would be willing to pay for a TDR (Cravens, 1990b). Estimating a price for development rights can help to determine if landowners in the sending area will participate in the market. One would expect these landowners to sell their development rights if the value of the right is equal to or greater than the property's value for development less its value for agricultural purposes.

The program must clearly establish the bonus a developer will receive for purchasing a TDR. For example, developers could be granted one extra dwelling unit for every development right owned up to two additional units per acre. Several measures may be used in determining the bonus or development unit allowance. A few of the most common are described in Table 7. The market analysis should include an assessment of the current demand for development in the receiving area including types of development so that the appropriate development unit allowances are chosen. For instance, should the TDRs be used to increase density in single family residential, multi-family, or commercial zones? In Montgomery County, Maryland, county officials decided to initially restrict the application of TDRs to single family residential development due to the relative strength of the market.

ADMINISTERING THE PROGRAM

Experience has shown that a simple and well-designed TDR program imposes few administrative burdens once adopted (J. Daniel, pers com). This is especially true if valuation of development rights is based on zoning and not individual property assessments. Most of the activity in the program occurs as real estate transfers. Keeping track of the number of development rights sold and the number retained by a landowner is critical so that development rights are not sold more than once. A staff person familiar with the program should be available to ensure that developers have the required rights when applying for a development permit. This staff function can easily be incorporated into the subdivision review process as is the case in Montgomery County, Maryland. They reported negligible costs once the program was implemented (Bledsoe et al., 1998).

ADDITIONAL CONSIDERATIONS

PROVISION OF A GOVERNMENT SPONSORED LAND BANK

Montgomery County decided to create a Development Rights Fund as part of their TDR program. The Fund was created to act as a buyer of last resort for the TDRs in the event there was low demand by developers. This Fund was designed to bank TDRs and then sell them at auction to the highest bidder. The Fund was also designed to provide guaranteed loans by private institutions to landowners that use development rights as collateral. To date the Fund has not been used since the private market has been strong enough to support the program.

INCLUSION OF AN “ESCAPE CLAUSE”

As with the PDR program, the inclusion of an “escape clause” should be considered. The “escape clause” allows a landowner to petition for removal of a permanent easement if after a period of time (typically 25 years) the property becomes surrounded by development and can no longer provide the functions intended by the program.

COMPREHENSIVE LAND USE PLAN

Comprehensive planning is the key to any successful TDR program. Using the comprehensive plan to define the goals of a TDR program helps to focus the design and implementation of the program and protect it from court challenges. The local government should consult the comprehensive plan to align local goals and existing land use conditions with the siting of protection (sending) areas and growth (receiving) areas.

Three cases have been brought against Montgomery County’s TDR program. In the first case, the court ruled that the downzoning necessary to implement the TDR program was legal (Bledsoe et al., 1998). The other two cases involved procedural issues. Once the court determined that Montgomery County was in compliance with zoning procedure, they upheld the TDR program (Bledsoe et al., 1998). Courts in other jurisdictions have ruled similarly.

Comprehensive planning is the key to any successful TDR program. Using the comprehensive plan to define the goals of a TDR program helps to focus the design and implementation of the program and protect it from court challenges.

EDUCATING THE PUBLIC

Perhaps the most important factor in creating a successful TDR program is the commitment to educate and sell the program to the citizenry.

Perhaps the most important factor in creating a successful TDR program is the commitment to educate and sell the program to the citizenry. Every effort should be made to inform the public of the benefits of the program. Simple materials like brochures or fact sheets that explain the TDR process should be made available. The program should be promoted through meetings with all interested parties. These meetings should include slide presentations that clearly demonstrate sending and receiving areas, centered development, and the program's overall goals. Journalists should be encouraged to write newspaper articles that explain the program and the benefits and costs to the community.

Participation is how this program protects land and guides growth. TDR programs in other regions have been successful because the participants and the community at large were well educated on how the program works. Success of the Montgomery County TDR program is attributed to a commitment to educate and inform landowners, developers, realtors, and attorneys about the program (Bledsoe et al., 1998). Property owners, developers, real estate agents, mortgage lenders, and attorneys will participate if they understand the benefits to them.

DIFFERENTIAL TAXATION

This section will present a brief discussion on the fourth conservation tool, differential taxation. Differential taxation or two-tiered taxation involves establishing one tax rate for land and a second tax rate for improvements. Differential taxation has been used successfully in Pittsburgh to spur development in the downtown area. In that case, city officials taxed land high and improvements low, effectively making it more profitable to build instead of leaving the land open or covered in parking spaces. If preserving rural areas or open space were the goal, local governments would want to take the opposite approach – tax land low and buildings high. Thus, owning large tracts of land becomes affordable which helps farmers keep farming. To date, differential taxation has not been used to protect farmland.

Differential taxation, or two-tiered taxation, involves establishing one tax rate for land and a second tax rate for improvements.

Differential taxation can be viewed as an extension of the philosophy behind Georgia's Conservation Use Tax Act. This program assesses agricultural land, forest land, and environmentally sensitive land at its current use value instead of its fair market value. This favorable tax treatment is designed to protect these property owners from the pressure of property tax liability to convert their land from agricultural use to residential or commercial use.

Differential taxation programs can be revenue neutral. The county simply shifts the burden of revenue generation from land to improvements and vice-versa. To estimate the differential tax rates, the county identifies areas where development will be encouraged and where farmland and open space will be protected. To establish two-tiered taxation in Georgia, an amendment to the state's constitution would have to be passed (J. Dorfman, pers com). A constitutional amendment is necessary because it would change the way the state taxes property and essentially create an inequality across classes of property. In addition, enabling legislation would have to be enacted at the local and state level.

THE PUBLIC COST OF PROTECTING FARMLAND

COSTS TO THE TAXPAYER

Georgia currently offers preferential assessment or use-value assessment for lands devoted to agriculture and forestry and environmentally sensitive lands. This program, known as the Conservation Use program, assesses property on its current use as a farm instead of its highest and best use. Use-value assessment in Georgia only applies to land; buildings and houses are taxed as commercial and residential property. The value of the land is determined from a state schedule and is dependent on several things including the crops grown. The program offers farmers a significant property tax break. In 1999, Chip saved \$6,770 dollars in property taxes by having his farm enrolled in the program.

Consequently, taxpayers are already paying for farmers to keep their land in farming. In 1999, Habersham County had 37,180 acres of farmland enrolled in the Conservation Use program. The resulting loss in ad valorem revenue amounted to \$830,860, assuming that the 37,180 acres enrolled in the program are in the unincorporated areas of Habersham County. This resulted in a 1.01 mill rate increase in the unincorporated areas of the county and a 1.06 mill rate increase in the incorporated areas (see Table 8). For a \$100,000 home in unincorporated Habersham County that equated to \$40 per year in additional property taxes and \$42 per year for incorporated areas. On average, the cost of the Conservation Use program to the county in lost ad valorem tax revenue was \$22.35 per year per acre of farmland enrolled in the program.

Table 8. Change in Mill Rate Versus Acres Enrolled in Conservation Use

Acres in Conservation Use	Change in Mill Rate ¹		Ad Valorem Tax for a \$100,000 Home ²		Difference in Tax	
	Unincorporated	Incorporated	Unincorporated	Incorporated	Unincorporated	Incorporated
0	(1.01)	(1.06)	\$716	\$753	(\$40)	(\$42)
1,000	(0.98)	(1.03)	\$717	\$754	(\$39)	(\$41)
5,000	(0.88)	(0.92)	\$721	\$758	(\$35)	(\$37)
10,000	(0.75)	(0.79)	\$726	\$764	(\$30)	(\$31)
20,000	(0.48)	(0.50)	\$737	\$775	(\$19)	(\$20)
37,180 ³	0.00	0.00	\$756	\$795	\$0	\$0
50,000	0.37	0.39	\$771	\$811	\$15	\$16

¹ The 1999 millage rates were 18.89 and 19.87 for unincorporated and incorporated areas, respectively. Calculations based on the assumption that 67 percent of the revenue was generated from unincorporated areas and 33 percent from incorporated areas.

² No exemptions taken.

³ Number of acres enrolled in the Conservation Use program in Habersham County for 1999.

Is farmland really being protected under this program? The Conservation Use program is a covenant whereby a landowner agrees to devote his land to its current use for a period of ten years. A landowner may leave the program but he will have to pay a penalty plus back taxes and interest. In areas where development pressure is high or increasing, developers have been willing to pay these penalties plus make an offer that is extremely attractive to landowners. An abundance of literature exists on the efficiency of preferential taxation programs in preserving farmland. A review of the research by Malme (1993) found that, in general, the economic incentive offered by use-value assessment has had minimal effect in preventing farmers from selling their land for development. In urbanizing areas, the loss of farmland continues because the tax savings have not matched the profits available from selling the land for development. Preferential taxation programs have delayed development while providing those individuals who wish to remain in farming substantial tax savings. At a minimum, this delay could give growing communities the opportunity to enact smart growth initiatives that reflect their vision of the future while promoting fiscal responsibility.

A conservation easement, on the other hand, provides permanent protection. A landowner forgoes her option to develop in return for tax relief. The land is permanently protected and the community pays for that protection in the form of lost governmental revenue. In Chip's example, he would save \$3,665 in property taxes in the first year if he were to donate an agriculture conservation easement to a land trust or the government. On average, this would cost the county \$21.56 each year in ad valorem tax revenue for every acre encumbered by a conservation easement. A summary of the change in millage rates based on the number of acres with conservation easements is presented in Table 9.

On average, the loss in revenue to the county and the resulting increase in taxes to a household in Habersham County are equivalent whether an acre of farmland is enrolled in the Conservation Use program or in a permanent agriculture conservation easement. The average annual cost of \$21.56 per acre for a conservation easement may be slightly high given that Chip's property has a high potential for development due to the amount of road frontage on the property, the mix of pasture and forested land, and the scenic views (Metro Appraisals, Inc., 2000). If the average cost to the county of \$21.56 per acre is indeed higher than average then the taxpayers would be better off (pay less) for every acre in a conservation easement versus the Conservation Use program. The real difference is in the protection afforded under the two programs – ten years versus in perpetuity.

The loss in revenue to the county, and the resulting increase in taxes to a household in Habersham County, are on average equivalent whether an acre of farmland is enrolled in the Conservation Use Program or in a permanent agriculture conservation easement.

Another way to look at the public costs of farmland protection is to consider the converse – the cost of development. New residential development results in additional revenue but also requires services which incurs an expense. Nelson and Dorfman (2000) completed a Cost of Community Services (COCS) study for Habersham County using the 1998 tax digest. They found that residential land use on average generated \$0.81 in revenue for every \$1.00 used in services. This particular study did not include expenses for schools. If school financial data were included, the revenue shortfall for residential land use would be even greater. It is important to remember that the revenue-to-cost ratios are averages and do not depict the effect one additional residential development would have on the county's revenue stream. Therefore, it is impossible to predict with the COCS study which residential developments will result in a drain to the county's coffers.

Table 9. Change in Mill Rate Versus Acres with Conservation Easements

Acres in Conservation Use	Change in Mill Rate ¹		Ad Valorem Tax for a \$100,000 Home ²		Difference in Tax ³	
	Unincorporated	Incorporated	Unincorporated	Incorporated	Unincorporated	Incorporated
0	(1.01)	(1.06)	\$716	\$753	(\$40)	(\$42)
1,000	(0.99)	(1.03)	\$717	\$754	(\$39)	(\$41)
5,000	(0.89)	(0.93)	\$721	\$758	(\$35)	(\$37)
10,000	(0.76)	(0.80)	\$726	\$763	(\$30)	(\$30)
20,000	(0.50)	(0.52)	\$736	\$774	(\$20)	(\$21)
50,000	0.32	0.34	\$769	\$809	\$13	\$14

¹ The 1999 millage rates were 18.89 and 19.87 for unincorporated and incorporated areas, respectively. Calculations based on the assumption that 67 percent of the revenue was generated from unincorporated areas and 33 percent from incorporated areas.

² No exemptions taken.

³ Difference based on tax paid for \$100,000 home in 1999 - \$756 and \$795 for unincorporated and incorporated areas, respectively .

Let's assume a developer buys Chip's 170-acre farm and creates a 150-unit subdivision with homes selling for \$75,000⁶. The property tax revenue from the new subdivision would equal \$85,000 using the 1999 unincorporated millage rate of 18.89 and taking no exemptions. However, the average annual cost to service the new subdivision on average would equal \$104,940 (calculated from the revenue-to-cost ratio). The annual revenue shortfall for this subdivision would be \$19,940. Compare this to the loss in ad valorem tax revenue due to Chip's enrollment in either the Conservation Use program or adopting a conservation easement. Under the Conservation Use program, the annual cost to the county was \$6,770. If Chip entered into a conservation easement, the annual cost would be \$3,665.

⁶The estimated average home value in Habersham County in 2000 (W. Phillips, pers com)

In addition, farmland, forested land, and open space on average generated \$1.42 in revenue for every \$1.00 used in services in 1998 (Nelson and Dorfman, 2000). In 1999, farmland, forested land and open space generated \$1,152,297 in property tax revenue for Habersham County (see Appendix B). Subtracting the cost of services amounts to a revenue surplus of \$483,965 when the land is used for farming, forestry or open space⁷. The calculations above serve to illustrate that the community has a choice between paying for farmland protection or to service new development.

The community has a choice between paying for farmland protection or paying to service new development.

⁷This represents 3 percent of the total tax revenue collected in Habersham County.

PROGRAM ADMINISTRATION COSTS

In general, the cost of operating a farmland protection program is dependent on its complexity. For instance, a simple program like Montgomery County's that can be incorporated into the review process requires a knowledgeable staff person to be present during the subdivision review process (Bledsoe et al., 1998). This may require one-quarter of the staff person's time and represents a negligible cost. There is also the (one-time) expense of developing a program to consider. The installment purchase agreement program in Howard County, Maryland is an example of a more complex program. Their annual operating budget in 1996 was \$130,000, which included salaries and operating expenses. The operating budget does not include the cost of purchasing easements (Servary and Neubert, 1991). The county spent approximately \$150,000 in consulting and legal fees to develop the plan. This one-time cost represented legal research, meetings, and the development of standardized documents that are now routinely used.

RECOMMENDATIONS

The tools discussed in this study offer more comprehensive protection for farmland than the Conservation Use Program does. They can also help guide future development so that counties continue to grow in a way consistent with the community's goals.

Georgia already recognizes the importance of farming and farmland to its economic health. The state currently offers preferential taxation to individuals who agree to keep their land in farming or forestry (or unimproved for environmentally sensitive lands) for a period of ten years. However, this program has its weak points, particularly the impermanent nature of the agreement. The tools discussed in this study, on the other hand, offer more comprehensive protection for farmland. In addition, these tools can help guide future growth such that counties develop in line with the community's goals.

A regional approach to farmland protection should be explored. For farming to remain profitable, farm-related businesses like feed, seed, and hardware stores and processing or transport facilities should be close by. Correspondingly, for farm-oriented businesses to remain profitable, a critical quantity of farm products needs to be produced. Regional protection of farmland helps both the farmer and the farming industry.

A regional approach to farmland should be explored. A critical mass of farmland is necessary to ensure the profitability of the industry. Further, the environmental benefits of protecting farmland have regional impacts. A regional approach to water resource protection is also an efficient use of the limited resources available.

Retaining a critical mass of farmland is necessary for ensuring the economic viability of farming and farm-related businesses. According to Daniels (2000), a "critical mass" of farmland is dependent on the type of agriculture. In general, a critical mass for a county is about \$50 million in gross farm sales and 100,000 acres in farm use (Daniels, 2000).

An additional argument for a regional approach to farmland protection is the ensuing environmental benefits. Protection of farmland in Habersham County can benefit downstream counties in terms of improved water quality and quantity. A regional approach to water resource protection is also an efficient use of the limited resources available for protection. Therefore, funding of these programs should reflect the

regional benefits provided.

Nearly one half of Habersham County comprises the headwaters of the Chattahoochee River. Concern over Lake Lanier water quality standards has prompted EPD to consider a nutrient trading program as a means of improving the lake's water quality while allowing continued development. Below Lake Lanier, a moratorium is in place for new or expanded point source discharge to the Chattahoochee River due to ongoing water quality issues primarily from nonpoint sources. Protection of farmland in Habersham County could conceivably reduce nutrient loading to the lake and river.

Potential nonpoint sources of nutrients include runoff from cities, neighborhoods and agricultural operations as well as poorly maintained septic systems. Farmland protection efforts may help reduce these inputs. Development outside of incorporated areas in Habersham is not serviced by sewers but relies on septic systems. Promoting growth in areas with adequate infrastructure is a cost-effective way to reduce potential sources of pollution through the provision of wastewater treatment and stormwater management. In addition, providing farmers with incentives to contain runoff from animal operations and minimize the over-application of nutrients to the soil reduces the potential of nonpoint source pollution. Research into the contribution of nutrients from land use and land disturbing activities in Habersham County will have to be conducted to determine the primary sources of nutrients and the appropriate means of reducing those inputs.

Protection of farmland is also relevant to the issue of water quantity. Sprawling development increases the impervious surface coverage in a watershed. Impervious surfaces impede the absorption of rainfall into the soil, decreasing the volume of water available to recharge groundwater supplies and to supply baseflow in streams and rivers. Counties must also contend with the increased volumes of stormwater runoff. Stormwater infrastructure and maintenance can be costly.

Retaining farmland as well as forests, open spaces, and riparian buffers in the headwaters of the Chattahoochee is a cost-effective means for improving downstream water quality and reducing water shortages. The public also derives aesthetic and recreational benefits from protecting these lands. Therefore, the burden of protection should not fall solely to the jurisdiction or the individual landowners that occupy the region. Instead regional cost sharing should be encouraged among the governments in the watershed. The Georgia Regional Transit Authority (GRTA) acts as an advisor to the Governor on development-related issues and is also responsible for developing the statewide land use management plan. In this role, GRTA would be a natural facilitator for encouraging counties to devise and initiate region-wide natural resource protection. Other organizations who could provide a similar function would include the Georgia Mountain Regional Development Center and the Georgia Department of Community Affairs.

Farmland protection is relevant to water quality and water quantity issues.

CONCLUSIONS

In the long run, keeping farming profitable will do the most to dissuade farmers from selling their land to developers (Daniels and Bowers, 1997).

In the long run, keeping farming profitable will do the most to dissuade farmers from selling their land to developers.

This means retaining farm support businesses and providing incentives for agricultural economic development. But other factors, including planning and affordable property taxes, are also important and can be addressed at the local level. This report presents three tools – donation of conservation easements, PDRs and TDRs – that provide farmers financial incentives to keep their land in farming. To date these tools have not been widely used in Georgia although they have been used in eighteen states (Daniels and Bowers, 1997). However, as part of his green space initiative, the Governor’s green space report encourages the use of PDRs and TDRs as a means of fulfilling the 20 percent green space goal. These tools can be easily modified to fit the community and fulfill its objectives. They can also be used in tandem with other programs such as the Conservation Use program and planning concepts such as cluster development.

This report details the specific tax savings that would result should Habersham County farmer Chip Brooks donate his development rights to a qualified organization. Chip would retain title to the property, the use of the land for commercial agriculture, and the right to sell. Severing the development rights from his property would necessarily affect the property’s value and the property tax. This report also details the cost of farmland protection to the county as a result of Chip adopting an agricultural conservation easement and compares the cost to the state’s current Conservation Use program. The two methods cost the county the same amount in lost revenue per acre, differing by only four percent but varying dramatically in their level of protection. Permanent agricultural conservation easements protect farmland in perpetuity whereas the Conservation Use program is a ten year covenant to keep the land in its current use with a “roll-back” penalty for early withdrawal.

For individuals motivated by the economics of permanently protecting their land, tax savings may not be a sufficient incentive to relinquish their development rights (C. Brooks, pers com). One possible improvement may be to offer a greater tax savings in the form of a state income tax credit. North Carolina was the first state to enact a state income tax credit to landowners who donated their development rights. A study has estimated the “cost” of this program to be 8.5 percent of the value of the land contributed. In other words, the state acquired substantial public benefit at a fraction of the cost for fee simple purchase of the land. By 1999, Colorado, Delaware, and Virginia adopted similar state income tax credit programs.

Georgia may realize greater success at preserving farmland if it offers income tax credits to farmers who adopt agriculture conservation easements.

In contrast to donating development rights, farmers like Chip may be more inclined to sell their development rights. PDR and TDR programs offer landowners direct compensation for their development rights. If Chip sold his development rights he would no longer be eligible for income and estate tax benefits. In addition, he would have to pay capital gains tax on the monies received for the sale of his development rights. The value of his property would be reduced to reflect the forgone right to development, thus reducing his property taxes and his taxable estate.

Efforts to protect farmland will not be successful without the support of farmers. Farmland protection programs have worked in other regions for several key reasons: 1) farmers wanted to continue farming; 2) the land protection tools offered farmers sufficient economic incentive; and 3) farmers recognized the financial gain from limiting development in the farming community (Daniels and Bowers, 1997). When development begins to encroach on land traditionally used in farming, and farmers see the land being subdivided into house lots and commercial outlets, they tend to reduce the level of reinvestment in their farms. This process has been noted by several researchers and is collectively known as the impermanence syndrome (Daniels and Bowers, 1997). On the other hand, if farmers know that their neighbors are committed to farming and that the community supports farming in the region, then a farmer is more likely to continue to reinvest in his farm. A viable farming industry contributes to the region's economic vitality and lends stability through employment diversity.

When development begins to encroach on land traditionally used in farming, farmers tend to reduce the level of reinvestment in their farms. On the other hand, if farmers know that their neighbors are committed to farming and that the community supports farming in the region, they are more likely to continue to reinvest in their farms.

Planning for future growth that incorporates farming also helps to curb costly sprawl. Unplanned development can often times result in financial difficulties as a county struggles to provide infrastructure. Counties that plan for future growth are investing in a strategy that may help them avoid this condition.

A successful farmland protection effort takes time, commitment, flexibility and patience. The public and especially farmers will need to be educated on these tools – how they work, what are the tradeoffs. Crafting a farmland protection program that engages local farmers in the design process can add credibility to the program and influence its level of success. Experience elsewhere has shown that the success of a farmland protection program is based on a county's commitment to educate its citizenry and get them involved.

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APPENDIX A

APPRAISAL REPORT EXECUTIVE SUMMARY

August 31, 2000

Ms. Nanette Nelson
Institute of Ecology
University of Georgia
Athens, Georgia 30602-2202

Re: Brooks Property; 170 acres in the northern portion of Habersham County, Georgia; District 11, Land Lots 79, 80, & 81; Owned by Grady (Chip) E. Brooks, Jr. and Pamela J. Brooks.

Dear Ms. Nelson:

At your request we have appraised the property referenced above for the purpose of estimating the current market value of the unencumbered fee simple interest in the property, as of August 15, 2000; AND the market value as if encumbered with a permanent Farm Land Conservation Easement. A complete appraisal has been developed, and is presented in this self-contained appraisal report. Listed below are our general observations and conclusions concerning the Brooks property.

1. The subject property is located on both sides of Alley's Chapel Road and both sides of Ivy Mountain Connector Road, less than one mile west of Ga. Highway 197. This is in northern Habersham County, Georgia, approximately three miles north of Clarkesville. This location is less than six radial miles southeast of the Batesville community, and less than five radial miles southwest of The Orchard Golf Course. Heritage Golf Course is located approximately three radial miles to the south.

2. The subject is a 170-acre farm, owned by Chip and Pamela Brooks. It is comprised of three tax parcels; 27 acres of mostly pasture land, 80 acres of mostly pasture land, and 63 acres with a residence, five poultry houses, and two barns. Due to high land prices, few people purchase land in the subject neighborhood on which to build new poultry houses. Typically, new poultry house construction is on family land. The highest and best use of the subject property, if it were vacant, would be for residential development. With the extensive frontage on both sides of two roads, most of the tract could be subdivided into numerous road lots. As improved, the poultry houses contribute value to a portion of the land, and should continue operation. The drawback with regard to the vacant land, is the potential influence the subject poultry houses, and other nearby poultry houses, will have upon the vacant land value. Most realtors we surveyed reported that new homebuyers do not want to be exposed to poultry houses (sight and smell).

3. The subject farm has been appraised, AS IS, whereby the current market value of the unencumbered fee simple interest was estimated. The subject farm was also appraised AS IF it were encumbered with a permanent Farm

Conservation Use easement. The purpose of this appraisal is to evaluate the impact upon the value of a property, which is placed in this type of conservation program. This is different than the 10-year conservation programs offered by county governments, primarily due to permanency. The Institute of Ecology, at the University of Georgia, is using this appraisal as part of a study, which is evaluating the impact permanent conservation easements might have on county tax digests.

4. In estimating the unencumbered market value, recent sales of large acreage tracts in Habersham County were used for comparison. The value of the subject land, exclusive of improvements, was estimated at around \$5,700 per acre. The contributory value of the improvements, such as the residence and poultry houses, was added to the land value for a total farm value. In estimating the value as if encumbered with a farm conservation easement, recent sales of large acreage tracts in South Georgia counties were used. The South Georgia land sales are pure farmland, with little potential for more intensive uses, such as residential development. Also, sales from Jasper, Elbert, and Gilmer counties were used.

5. In an appraisal of a property involving a conservation easement, the current market value of the unencumbered fee simple interest is estimated. Then, the market value of the property as if encumbered by a conservation easement is estimated. Appraisal fees for this type of work are typically in the \$4,500 to \$5,500 range.

CURRENT MARKET VALUE – 170 Acre Farm, Unencumbered (NO EASEMENT)

In order to estimate the current market value of the subject property, the Cost Approach, and the Sales Comparison Approach were utilized. The value indications are summarized below.

<u>Approach</u>	<u>Indicated Value</u>
Cost Approach	\$ 1,490,000
Sales Comparison Approach	\$ 1,465,000

Cost Approach: In the Cost Approach, we estimated the value of the 170 acre tract, as if vacant; the contributory value of the poultry houses, and other farm related improvements; and the contributory value of the dwelling house, and other residential improvements. The total current market value of the 170 farm, as improved, is estimated as follows:

Contributory Value of Poultry and Other Farm Improvements	\$330,000
Contributory Value of Dwelling/Other Residential Improvements	\$190,000
Estimated Value of 170 Acre Tract, As If Vacant	<u>\$ 970,000</u>
Total Estimated Farm Value by the Cost Approach	\$ 1,490,000

Sales Comparison Approach: In the Sales Comparison Approach, we have estimated the contributory value of the poultry houses, and other farm related improvements; and the contributory value of the dwelling house, and other residential improvements. The value of the 170 acre tract, as if vacant, was estimated in the Cost Approach section, using sales comparison. The total current market value of the 170 farm, as improved, is estimated as follows:

Contributory Value of Poultry and Other Farm Improvements	\$ 315,000
Contributory Value of Dwelling/Other Residential Improvements	\$180,000
Estimated Value of 170 Acre Tract, As If Vacant	<u>\$ 970,000</u>
Total Estimated Farm Value by Sales Comparison Approach	\$1,465,000

CONCLUSION – Current Market Value, Unencumbered (No Easement)

We used the Sales Comparison Approach to estimate the value of the subject 170 acres, as though vacant. Based on numerous Habersham County land sales, we concluded that a reasonable market value for the subject land is \$5,700 per acre, or \$970,000. We used the Cost Approach, and the Sales Comparison Approach to estimate the contributory value of the subject improvements, and concluded a range of \$495,000 to \$520,000. Within this range, \$510,000 appears reasonable for the improvements. The total current market value of the subject 170 acre farm, unencumbered (No Farm Conservation Easement), is concluded to be

\$1,480,000

**ONE MILLION FOUR HUNDRED EIGHTY
THOUSAND DOLLARS**

NOTE: Farm use covenant - the Brooks property is under a 10-year covenant (Conservation Use contract) with Habersham County whereby the owner, Chip Brooks, agreed to continue a conservation, or farm use, of the property. He is bound by a legal agreement for the duration of the 10-year covenant to maintain the conservation use. To get out of the covenant early requires paying a tax penalty, which we have estimated could be around \$34,000. The value conclusion above is an unencumbered market value. If the subject farm was being marketed, prospective buyers might want the value discounted, by at least the penalty amount. However, we believe this would be a negotiable item.

VALUE CONCLUSION – Subject Property with Farm Conservation Easement

We used three methods to appraise the subject, as if encumbered with a farm

conservation easement. In the Farm Land Sales Method, we concluded that \$425,000, or \$2,500 per acre, is a reasonable value for the subject, with an easement; in the Before and After Method we concluded that \$485,000 or \$2,850 per acre, is a reasonable value for the subject, with an easement; and in the Direct Comparison Method we concluded that \$485,000, or \$2,850 per acre, is a reasonable value for the subject, with an easement.

We have concluded that the value of subject land is \$5,700 per acre, or \$970,000 without the easement (Before). We have estimated that the land could suffer approximately a 50% to 60% value loss, with the imposition of the permanent conservation easement (After). This equates to a value range of approximately \$425,000 to \$485,000, for the land with an easement. Within this range, we conclude that the market value of the subject land, encumbered with a Farm Conservation Easement is \$485,000, or \$2,850 per acre. The contributory value of the improvements remains unchanged at \$510,000. The total market value of the subject 170-acre farm, with a Farm Conservation Easement, is

\$995,000

NINE HUNDRED NINETY FIVE THOUSAND DOLLARS

The values are allocated as follows:

Before Value (unencumbered by the easement), Land	\$970,000	\$5,700 per acre
Before Value (unencumbered by the easement), Improvements	\$510,000	
- Value of conservation easement interests	\$485,000	
After Value (encumbered by the easement)	\$995,000	

Marketability

No Conservation Easement - The highest and best use of the subject tract, as if vacant, appears to be for near to moderate term residential development. The poultry improvements have contributory value, and are a good interim use. The 170-acre tract is large enough, and shaped such that most of it could be developed, residentially, and the poultry operation could continue. The market appeal of the subject tract is rated good, given its extensive road frontage, pasture land, views, and location in north Habersham County. In our opinion, a reasonable marketing period for the subject, with no farm easement, and at the appraised value, is twelve to eighteen months. The exposure period is estimated at twelve to eighteen months.

With Conservation Easement - The financially feasible uses for the subject, with an easement, are limited by the restrictions set forth by the

conservation easement agreement. The primary limitation is related to development. The market appeal of the subject, with the easement, is rated good given its location. In our opinion, a reasonable marketing period for the subject, with a farm easement, and at the appraised value, is twelve to eighteen months. The exposure period is estimated at twelve to eighteen months.

The reader of this report is advised to review the attached Statement of Limiting Conditions, which may limit or qualify the concluded value estimate.

This report has been prepared in compliance with our interpretation of the Uniform Standards of Professional Appraisal Practice as set forth by the Appraisal Foundation, except that the departure provision of the USPAP shall not apply to federally related transactions.

Employment of the appraisers was not conditional upon the appraisers producing a specific value or a value within a given range. Future employment prospects are not dependent upon the appraisers producing a specified value. Employment of the appraisers and payment of the fee is not based upon whether a loan application is approved or disapproved.

We appreciate the opportunity to be of service on this property. Please let us know if we can be of further assistance in this or other matters.

Sincerely,

Robert A. Jaeger, MAI
President
Certified General Appraiser
Georgia No. 112
South Carolina No. 1222
North Carolina No. A294

Wes Phillips
Associate Appraiser
Certified General Appraiser
Georgia No. 2093

SUMMARY OF SALIENT DATA AND CONCLUSIONS

Name/Location:	Brooks Property; Habersham County, Georgia. District 11, Land Lots 79, 80, and 81. Tax I.D. 064-042, 064-071, and 064-072.
Owners of Record:	Grady E. Brooks, Jr. and Pamela J. Brooks.
Total Tract Size:	170 acres.
Access:	Fee simple, public road.
Public Utilities:	Electricity and telephone.
Flood Zone:	No designated flood plain area.
Existing Improvements:	3,360 sq. ft. house; 5 poultry houses; barn; sheds.
Property Rights Appraised:	Fee simple interest.
Purpose of Appraisal:	Estimate current market value of the subject property in fee simple, and as if encumbered by a permanent conservation easement.
Date of Inspection:	The subject property was last inspected August 15, 2000.
Date of Report:	August 28, 2000.
Effective Date of Appraisal:	August 15, 2000.
Current Zoning:	AR-IV, Agricultural/Residential.
Highest and Best Use:	Agricultural/Residential.
VALUE CONCLUSION:	\$1,480,000 – Unencumbered, (NO EASEMENT)
VALUE CONCLUSION:	\$995,000 – AS IF Encumbered - PERPETUAL EASEMENT

APPENDIX B

TAX CALCULATIONS

REVENUE CALCULATIONS FOR HABERSHAM COUNTY, 1999

<u>Summary</u>	40% Value	Exemptions	Net Digest	Percent of Total
residential	523,428,043	32,757,215	490,670,828	63%
commercial/industrial	244,168,815	14,607,578	229,561,237	29%
farm/forest/open space	106,344,666	46,371,047	59,973,619	8%
notes: TOTAL	873,941,524	93,735,840	780,205,684	100%

mobile homes incorporated into residential
 motor vehicles - 85% to residential and 15% to commercial/industrial
 utility incorporated into commercial/industrial
 timber incorporated into farm/forest/open space

County

County	net digest	Total
incorporated	257,467,876	5,115,887
unincorporated	522,737,808	9,874,517
TOTAL	780,205,684	14,990,404

Farm/Forest/Open Space

total revenue	59,973,619	1,152,297
net revenue	25,188,920	483,965

notes:

Assumed 67% of total revenue was generated from unincorporated and 33% from incorporated.
 Actual percent contributions not available at the time this was written.

COST PER ACRE OF CONSERVATION USE VERSUS CONSERVATION EASEMENT FOR CHIP BROOKS' 170-ACRE FARM IN HABERSHAM COUNTY

	Fair Market Value	Conservation Use	Conservation Easement
AVERAGE VALUE PER ACRE	\$5,700	\$440	\$2,850
PROPERTY TAX			
Land Value	970,000	74,580	485,000
Exemptions		895,420	485,000
Net Taxable	388,000	29,832	194,000
Tax Due (18.89 millage rate)	(7,329)	(564)	(3,665)
Change in Revenue	0	(6,766)	(3,665)
Per acre change in revenue	0	(39.80)	(21.56)
COST OF FARMLAND PROTECTION			
1,000 acres		(39,799)	(21,557)
5,000 acres		(198,994)	(107,784)
10,000 acres		(397,988)	(215,568)
20,000 acres		(795,976)	(431,136)
¹ 37,180 acres		(1,479,719)	(801,483)

¹ Number of acres enrolled in the Conservation Use program in Habersham County in 1999. Actual cost of the Conservation Use program to Habersham County was \$830,860 in 1999 assuming all 37,180 acres are in the unincorporated areas of the county. The average cost per acre for the Conservation Use program in 1999 was \$22.35 in Habersham County.

The University of Georgia, as the state's land grant university, is committed equally to education, to research, and to public service. The Institute of Ecology Office of Public Service and Outreach helps fulfill the University's service mission by providing research and policy assistance to government agencies, community groups and citizens. Most of our efforts focus on Georgia's land use, biodiversity, water and air quality, but we also work on regional, national and international problems.

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Institute of Ecology
Office of Public Service and Outreach
Athens, Georgia
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February 2001