Southern Forests for the Future Incentives Series

Issue Brief 7

RESOURCES Institute

WORLD

American Forest Foundation

GAINING GROUND: Increasing Conservation Easements in the U.S. South

WRI ISSUE BRIE

LOGAN YONAVJAK AND TODD GARTNER

SUMMARY

- A "conservation easement" is a voluntary, legally enforceable land preservation agreement between two parties wherein a landowner sells or donates the development rights to a tract of land to a qualified holding organization, such as a land trust, effectively preventing forest conversion or other stipulated activities, usually in perpetuity.
- Conservation easements are attractive to conservation organizations and funders because such agreements often offer a more cost-effective means of securing land under some form of conservation status. Easements typically cost at least 40 percent less per acre than outright land purchases.
- Conservation easements have four major benefits to landowners: (1) they allow the retention of private ownership, (2) they provide a high degree of flexibility in terms of meeting landowner management and conservation objectives, (3) they allow active forest management, and (4) they offer financial benefits via income, estate and property tax reductions, and potential revenues from existing and emerging ecosystem service markets.
- Conservation easements have become an increasingly popular land conservation approach in the United States. The amount of land nationwide under conservation easement has grown from approximately 500,000 acres in 1990 to more than 30 million acres in 2011.
- However, the southern United States currently has a disproportionately low share of the nation's private land under conservation easement. Although the South constitutes approximately 37 percent of the private land area in the United States, to date

it has only 18 percent of the country's total conservation easement acres. The south also has a disproportionately low share of the total number of easements in the U.S.; only approximately 9 percent of the total number of easements in the country are located in the South.

- Key barriers to greater uptake of easements in the South and elsewhere include: (1) landowner misconceptions about what easements are and what easement agreements entail, (2) landowner perceptions that the financial costs of easements outweigh the benefits, (3) landowner concerns about the perpetual nature of most conservation easement agreements, and (4) limited financial and staffing resources by holding entities or land trusts to purchase easements, in addition to the small number of institutional buyers.
- There are three main ways these barriers can be overcome: (1) increase resources and capabilities of land trusts, (2) increase financial benefits and contract length flexibility, and (3) strengthen landowner education in order to correct misconceptions.
- This issue brief is intended to provide an overview for conservation professionals and conservation funders in the South of the current status of conservation easements in the region relative to the rest of the United States, and how easement use can be increased. It is also intended for landowners interested in exploring conservation easements for their own properties. Although this brief is part of a series dedicated to southern U.S. forests, the ideas presented here could be applied to a spectrum of ecosystems throughout the United States.

CONSERVATION EASEMENTS: A GOOD INVESTMENT FOR THE SOUTH

As profiled in *Southern Forests for the Future* (Hanson et al. 2010), the forests of the southern United States face a number of threats to their extent and health, including permanent conversion to suburban development. Unabated, these threats

will impact the ability of southern forests to provide a wide range of ecosystem services to people and to support the region's biodiversity. A variety of land use instruments are available to prevent forest conversion. One such instrument is the "conservation easement." A conservation easement is a voluntary agreement wherein a landowner sells or donates the development rights to a tract of land—effectively preventing forest conversion or other stipulated activities, typically in perpetuity—in return for a direct monetary payment and/or tax benefit of some form.

Over the past several decades, conservation easements have begun to rival some of the more traditional land conservation methods, such as park designations and government acquisition or "fee simple" purchases of land. An easement is an especially attractive tool for land conservation in the South, given that 87 percent of southern forest acreage is currently under private ownership (Hanson et al. 2010). However, the utilization of conservation easements on private land in the southern United States lags behind the rest of the country. What can be done to address this lag?

As part of WRI's *Southern Forests for the Future Incentives Series* (Box 1), this issue brief tackles this challenge by answering a series of related questions, including the following:

- What is a conservation easement?
- Why are conservation easements attractive?
- How does the use of easements in the South compare to the rest of the United States?
- What explains the low penetration of easements in the South?
- What can be done to increase adoption of easements for the benefit of southern forests?

This issue brief is intended to provide an overview for conservation professionals and conservation funders in the South of the current status of conservation easements in the region relative to the rest of the United States and how easement use can be increased. It is also intended for landowners interested in exploring conservation easements for their own properties. Although the brief is part of a series dedicated to southern U.S. forests, the ideas presented here could be applied to a spectrum of ecosystems throughout the United States.

Please note that the term "easement" in this issue brief, unless otherwise specified, refers to a conservation easement.

Box 1 About the Southern Forests for the Future Incentives Series

Over the coming decades, several direct drivers of change are expected to affect the forests of the southern United States and their ability to provide ecosystem services. These direct drivers include suburban encroachment, unsustainable forest management practices, climate change, surface mining, pest and pathogen outbreaks, invasive species, and wildfire. In light of these drivers of change, what types of incentives, markets, and practices---collectively called "measures"--could help ensure that southern U.S. forests continue to supply needed ecosystem services and the native biodiversity that underpins these services? The *Southern Forests for the Future Incentives Series*, available at www.SeeSouthernForests.org/issue-brief, explores several such measures.

The series follows the U.S. Forest Service convention of defining "the South" as the states of Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. Furthermore, the series is premised on the fact that southern U.S. forests provide a wide variety of benefits or "ecosystem services" to people, communities, and businesses. For example, these forests filter water, control soil erosion, help regulate climate by sequestering carbon, and offer outdoor recreation opportunities. This series follows and builds upon *Southern Forests for the Future*, a publication that profiles the forests of the southern United States, providing data, maps, and other information about their distribution and makeup, condition, and trends. It explores questions such as: Why are southern forests important? What is their history? What factors are likely to impact the quantity and quality of these forests going forward? The publication also outlines a wide variety of measures for conserving and sustainably managing these forests. The *Southern Forests for the Future Incentives Series* delves deeper into some of these measures.

For additional information about southern U.S. forests, visit **www. SeeSouthernForests.org**. Developed by WRI, this interactive site provides a wide range of information about southern forests, including current and historic satellite images that allow users to zoom in on areas of interest, overlay maps that show selected forest features and drivers of change, historic forest photos, and case studies of innovative approaches for sustaining forests in the region.

WHAT IS A CONSERVATION EASEMENT?

A conservation easement, sometimes called a "conservation covenant" or a "conservation restriction," is a legally enforceable land preservation agreement between two parties for the purposes of conserving a tract of land, usually in perpetuity. Easements restrict certain activities on a property-such as real estate development, mineral extraction, and commercial and industrial uses-to a mutually agreed upon level with the goal of maintaining or even improving the property's ecological integrity and/or ability to provide ecosystem services. The decision to place a conservation easement on a property is voluntary. The property remains privately held by the landowner; the land does not become public. Once set in place, the restrictions for perpetual conservation easements are intended to be binding on all future owners of the property.¹ Conservation easements are not, however, protected against eminent domain.² A number of other legal considerations for perpetual conservation easements exist (Box 2).

Conservation easements are used to maintain agricultural land, timberland, wildlife habitat, and other forms of open space and working lands. Easements achieve protection from development by separating the right to build on the land or subdivide it from other rights of ownership. The landowner who gives up these "development rights" continues to privately own and manage the land and may often receive significant state and federal tax advantages for having placed the land under a conservation easement. Landowners either sell or donate conservation easements to entities such as private land trusts, nonprofit organizations, and federal, state, and local public bodies.³ The easement holder is responsible for monitoring future uses of the land to ensure compliance with the terms of the easement and to enforce the terms in cases of violations.⁴ Easements generally include declarations of rights that include what the owner, easement holder, and general public are allowed to do on the property (if it is negotiated that the public is allowed on the property).⁵

Although all easements are designed to protect the property's ecological or open space values, variations on their design exist. Some put in place restrictions on real estate development and any form of resource extraction; most mineral resource extraction is prohibited if landowners are to receive tax benefits.⁶ In short, some easements provide "strict" protection. Others allow sustainable resource extraction but still prevent conversion of the land to residential or commercial development: "Working forest conservation easements" are one such example, allowing for sustainable logging of timber or harvesting of nontimber forest products (Talberth and Yonavjak 2011b).

Existing Legal Challenges Facing Perpetual Conservation Easements

Box 2

To effectively achieve their ecological and land management goals, conservation easements need to provide clear public benefits and be legally defensible. But achieving both can be difficult. First, there are issues regarding the nature of a permanent easement agreement if the nature of the public benefit(s) changes. Essentially, if an easement holder is supposed to protect a specific purpose for the public (e.g., forests for recreation or other ecosystem services) in perpetuity under the terms of an easement agreement, issues arise if the land cover changes (e.g., the ranges of forest species shift because of climate change), the protected entity itself changes (e.g., an endangered species goes extinct), or the public interest in the good/protected purpose changes. Second, with regard to the defensibility of perpetual easements, it is unclear under existing laws if and when easements can be terminated, and who, if anyone, has the right to challenge an easement's termination. Because of the relatively recent use and development of perpetual conservation easements, these issues have not yet been fully developed or presented in court (or are just now reaching courts) (Jay 2011).

To date, there have been relatively few legal challenges to permanent conservation easements, despite known easement violations. Usually, rather than take the issue to court to terminate an easement, a landowner and easement holder will amend the terms of an easement if any changes to the public benefits occur. Another alternative is that a landowner will knowingly or unknowingly violate the easement terms and then settle the issue with the land trust out of court (i.e., pay a penalty). These amendments and settlements raise a host of ethical considerations for land trusts (with regard to maintaining the agreed-upon terms of the easement to supply public benefits), given that they are in charge of protecting public goods. States do not offer clear and consistent guidance on negotiating appropriate settlement terms and spending settlement funds (Holmes 2011). Also, there is inconsistent legal guidance on how to enforce terms of an easement agreement before the easement holder and landowner reach the settlement phase. To avoid court challenges, a state could theoretically amend its easement-enabling legislation to allow for terminations and penalties, require mitigation in the event of violations, and predetermine the role of the attorney general in these proceedings (Holmes 2011).

WHY ARE CONSERVATION EASEMENTS ATTRACTIVE?

Conservation easements have emerged more prominently in recent decades as a conservation instrument that benefits conservation organizations, landowners, and forests. For instance, easements are attractive to conservation organizations and funders because they are a cost-effective means of placing land into some form of protected status to achieve particular conservation goals. Acre per acre, an easement typically costs less—usually at least 40 percent less—than the full value of outright or "fee simple" purchases of land (Fishburn et al. 2009).⁷ As such, easements can be a cost-effective way to achieve conservation goals through investing in "green infrastructure" instead of "gray infrastructure."⁸ For instance, in 1998 a \$55 million easement on the approximately 15,000-acre Sterling Forest bordering New York and New Jersey saved water authorities \$600 million when compared to the "gray infrastructure" option of investing in a mechanical water filtration plant, which would have achieved the same water quality benefits in the region as the easement.⁹

Easements provide a number of benefits to landowners. First, they allow private landowners to retain ownership of their land. The land, even though conserved and encumbered, does not become the property of the government or easement-holding entity. Second, easements provide flexibility. Agreements are individually negotiated and can be tailored to meet the needs of the landowner while at the same time achieving specific conservation objectives; no two easements are alike (Eagle 2011). Third, easements do not necessarily "lock up" the land, barring it from being used. For example, working forest conservation easements allow landowners to maintain sustainable extraction of timber and other resources, such as wild foods, from their land if they follow a forest stewardship plan. Depending on the terms of the easement, landowners could also consider building a house in the future for an heir's family.

Fourth, easements can offer financial benefits.¹⁰ Landowners who convey a gift or sell a conservation easement at a bargain rate can be entitled to a number of tax benefits, including federal and state income tax breaks, estate tax reductions, property tax benefits, and other state-level tax benefits, such as transferrable tax credits.^{11/12} For example, after an easement is put in place, landowners can apply for a new tax assessment or enroll in a "current use" tax classification if the land previously was classified under a "highest and best use" category.¹³ These benefits often come with stipulations. For example, federal tax breaks are currently applicable only for perpetual easements.¹⁴

The tax benefits of easements are an important feature because they address one of the underlying drivers of forest conversion in the South (Hanson et al. 2010). For instance, according to the U.S. Forest Service, from 1987--1997, an estimated 1.3 million acres of nonindustrial private forestland were sold each year because the owner's assets were inadequate to pay federal estate taxes (Greene et al. 2006; Greene et al. 2003).¹⁵ Given the more recent higher estate tax credits, the number of forest estates affected by the federal estate tax and the number of forest acres sold because other assets are inadequate to pay the estate tax is around one third to one sixth of this amount, but the estate tax remains an issue for many landowners (Greene 2011). Rapidly developing areas often have higher property taxes, which can also encourage landowners—who otherwise want to keep their land intact—to sell off parcels to cover tax bills.¹⁶

Fifth, conservation easements can open the door to accessing revenue from ecosystem service markets such as watershed services or carbon sequestration that may require guarantees of permanence that easements provide.

Conservation easements also benefit forests and other ecosystems in a number of ways. First, they help keep forest as forest by preventing the conversion of woodlands to commercial or residential development. Second, if applied to large enough tracts of land, easements can limit forest parcelization and fragmentation.¹⁷ Third, they can require landowners with working forests to have sustainable timber management plans that are subject to periodic review and revision. In these ways, easements can help maintain the ecosystem services that forests provide.

How Does the Use of Easements in the South Compare to the Rest of the Nation?

Although not widely known three decades ago (Box 3), conservation easements have become an increasingly popular conservation approach in the United States. The amount of land nationwide held under conservation easement by regional, state, and local land trusts has grown from approximately 500,000 acres in 1990¹⁸ to more than 30 million acres in 2011 (Aldrich and Wyerman 2006; The Conservation Registry 2011; Macleod 2011).¹⁹ This number should be put in perspective, however, given that only approximately two percent of the total private land in the United States is currently under conservation easement.²⁰

For larger conservation organizations, easements are increasingly utilized to achieve land conservation objectives. For instance, by 2003, 70 percent of The Nature Conservancy's new U.S. protected areas on an annual basis were conserved via easements, and nearly 50 percent of the Conservancy's financial investments in land conservation were through easements (Fishburn et al. 2009).

However, the southern United States has a disproportionately low share of the nation's private land under conservation easement (Figure 1). Although the South constitutes approximately

Box 3 A Brief History of Conservation Easement Use in the United States

Easements in the United States were first used as a method of land protection in the late 1880s by Frederick Law Olmstead, the landscape architect for New York's Central Park and Prospect Park (Environmental Law Institute 2003 and Byers and Ponte 2005 from Fishburn et al. 2009). Although land trusts have used easements to protect property since the late 1950s (Wright 1998 from Fishburn et al. 2009), their popularity began increasing only in the 1970s (Fishburn et al. 2009). Increased utilization of easements grew out of concerns that zoning, regulations, and government planning processes were not adequately protecting open space and natural resource values (Fernholz 2006). For organizations such as The Nature Conservancy, the use of easements began to see widespread uptake around 1976, when the Tax Reform Act granted conservation easements a federal income tax deduction (Parker 2002 from Fishburn et al. 2009). Federal and state tax incentives have been significant drivers of growth in conservation easement use among land trusts across the United States (Di Leva 2002 from Fishburn et al. 2009).

Source: Adapted from Fishburn et al. 2009

37 percent of the private land area in the United States, it has only 18 percent of the country's total conservation easement acres in 2011 (ESRI 2008; U.S. Geological Survey National Gap Analysis Program 2009; The Conservation Registry 2011; Macleod 2011).²¹ The south also has a disproportionately low share of the total number of easements in the U.S.; only approximately 9 percent of the total number of easements in the country are located in the South (Figure 1) (The Conservation Registry 2011; Macleod 2011).²²

WHAT CONTRIBUTES TO THIS LOW PENETRATION?

The comparatively low penetration of easements on private land in the South is likely a function of both low "supply" of and low "demand" for easements.

Landowner misconceptions

One challenge to the supply of land for conservation easements is that landowners often do not fully understand what conservation easements are or what easement agreements entail. According to a 2009 survey and study of nonindustrial private landowners in the South conducted by the American



Source: The Conservation Easement Registry, 2011; Macleod 2011

Note: Data includes non-digital, digital, and withheld easements for the U.S. and the U.S. South. However, 847 easements and 186,345 acres of conservation easements were not included in this data chart because their locations were not known; the information was either not digitally entered into the National Conservation Easement Database, or the information was not given for proprietary reasons.

5

Forest Foundation (AFF), a lack of understanding of conservation easements by landowners was cited as the number one obstacle to signing easement agreements (American Forest Foundation 2009).

Of the southern landowners surveyed who had heard of conservation easements, many were unsure if their assumptions were correct and many held incorrect assumptions. In several cases, for example, the landowners thought they were enrolled in a working forest conservation easement, a specific type of easement, but in fact were enrolled in a term agreement or cost-share program (American Forest Foundation 2009). Misunderstandings such as these can arise in part because the term "easement" has many meanings, including a legal provision of "right-of-way" (Butler 2008).

Some of the surveyed nonindustrial private woodland owners were not aware that they retained rights to their property even if they sell or donate the conservation easement, or that they have a high level of flexibility when it comes to negotiating the agreement terms in the easement (American Forest Foundation 2009). Furthermore, some landowners are not aware of how to use conservation easements to become eligible for emerging markets in biodiversity offsets and wetland mitigation, among others.²³

Landowners perceive low financial benefit and have expressed concerns about perpetuity

Another supply-side challenge is that many southern landowners perceive the financial costs associated with easements to be higher than the financial benefits, which are typically taxrelated (American Forest Foundation 2009). In particular, landowners in the region often cite two financial reasons for their hesitation in putting land under a conservation easement: the permanence of the agreement and the considerable upfront costs for attorneys and appraisers.²⁴

The majority of conservation easements are "permanent," binding the landowner and all subsequent owners to the easement's restrictions in perpetuity. Although not required by easementenabling legislation in most states, perpetuity is a condition for conservation easements to receive federal tax benefits.²⁵ As such, a conservation easement implies an opportunity cost for the current and future landowners by deliberately forgoing future development (Mahoney 2002). Landowners can be hesitant to make decisions for their heirs or to make decisions that preclude their ability to sell land for development (or other land uses not allowed in the agreement) in the future. Likewise, many landowners prefer to keep "options open" in case they need to address a financial emergency. Furthermore, permanent easements have the potential to reduce the liquidity of landholdings, since properties with easements can attract fewer buyers, extend the period a property is on the market, or result in discounts off the "highest and best-use" value (Mendell 2006).²⁶

In addition, donating or selling a conservation easement can be costly for landowners because of up-front transaction costs for services such as appraisals and baseline documentation—unless the easement buyer offers to cover these costs. Taking an example from the western United States, landowners had to pay average upfront costs of \$25,000--\$30,000 for donated conservation easements for an average parcel size of 1,700 acres (Holmes 2010) and nearly \$50,000 for bargain sale transactions in Colorado for parcels ranging in the thousands to tens of thousands of acres (Ross and Holmes 2010).²⁷ Although costs vary by parcel size, Table 1 summarizes costs by line item for an actual *donated* conservation easement on about 160 acres.

Furthermore, for easement donations, private land trusts often accept conservation easements only with a cash endowment attached to ensure proper management, monitoring, and enforcement of the easement terms. Easement endowments are often referred to as stewardship clauses, the cost of which can vary considerably by parcel size. The easement holder has

Table 1

Example Costs for a 160-acre Donated Conservation Easement in Colorado

Category	Cost
Appraisal	approximately \$8,000
Baseline reporting	\$4,200
Title insurance (includes recording fees)	\$1,800
Attorney review	\$8,000
Stewardship contribution	\$5,000*
Total cost	\$27,000

° This cost for monitoring/defense costs, which are usually listed under stewardship costs, is on the low side but is not atypical.

Note: These costs are not average but rather based on a specific donated easement project. Baseline costs may shift depending on the type of property (i.e., rangeland versus timberland). Some deals also require environmental assessments or mineral remoteness reports, water rights inventories (mostly in the western United States), or due diligence. This particular project tract is a mix of ponderosa pine savanna and wetland/ riparian areas; no active timber production or ranching is occurring on this particular property at present.

Source: Holmes 2011.

to be able to financially support, for example, the professional review of forest management plans, compliance inspection, and professional expertise to respond to violations (Lind 2001). These costs can discourage landowners from participating in the donation or sale of an easement.

Limited resources on the demand side

One challenge to the demand for conservation easements is resource limitations in terms of funding (although this is not unique to the South), staffing capacity, and the small number of institutional easement buyers. Sufficient and timely funding needed to complete easement transactions is often missing. For example, depending on the sources of financing and the particular circumstances of the landowner, it can take anywhere from six months to three years to negotiate and raise sufficient funds to purchase a conservation easement (Holmes 2011; Parrish 2011). However, many private landowners want to move more quickly than this, putting easement deals at risk.

Funds are required for more than just purchasing an easement, and certain initial costs are borne by the landowner. Pass-through loans or grants are sometimes needed to help landowners pay the up-front costs of preparing a conservation easement for sale or donation and to pay for stewardship costs. Monitoring by the easement holder requires funding, too. The number of institutional buyers in the South, namely state and local land trusts, is relatively low compared to the rest of the United States. (Land Trust Alliance Census 2006). The South has just 11 percent of the nation's 1,861 land trusts (Land Trust Alliance 2010 and Weaver 2010), a disproportionately low share given that the region has more than one quarter of the nation's states and land area and one third of its population.

With regard to staffing capacity, the South has only 12.5 percent of the nation's 3,637 full-time land trust staff, nine percent of the nation's 89,610 active land trust volunteers, and seven percent of the nation's 2,541 part-time land trust staff.²⁸ In addition, approximately 88 percent of southern land trusts have a staff of five or less, about the same as the national average.²⁹ Low staffing capacity can make it difficult to sufficiently perform outreach to prospective landowners, pursue deals, and handle easement paperwork.

What Can Be Done to Increase Conservation Easements in the South?

A number of approaches exist to address these obstacles and thereby increase the uptake of conservation easements in the South. The approaches address the demand, supply, and transactional infrastructure necessary for executing conservation easements (Figure 2).



Demand: Increase resources and capabilities of land trusts

Land trusts in the South need greater and timelier access to capital and other resources to more effectively purchase conservation easements. Some steps that would help address these constraints include the following:

- Increase flexible dollars for easement purchases. High net worth individuals, foundations, and other institutions could increase grants or loan capital to land trusts so that the latter could more proactively—and quickly—purchase easements or be able to cover costs associated with accepting donated easements. This source of funding is especially important during periods of public funding shortages.
- Increase the number of conservation-related ballot measures. Conservation groups could continue working to increase the number of state or county conservation-related ballot measures designed to raise funds for purchasing conservation easements or covering transaction costs on donated easements (Hanson and Yonavjak 2011).
- Increase land trust accreditation. Becoming accredited through programs such as the Land Trust Accreditation Commission, and enrolling in conservation insurance programs, provides land trusts with public recognition of a commitment to the long-term protection of land in the public interest. Accreditation also helps ensure that land trusts meet national standards for excellence and that they credibly operate in a legal, ethical and technically sound manner.³⁰ To date, however, only 31 land trusts have undergone accreditation in the South, which is approximately 23 percent of the nation's 135 accredited land trusts.³¹
- Share and leverage resources. Land trusts could increasingly share among themselves their strategic conservation plans so that as a community they can better focus limited resources. Initiatives such as the National Conservation Easement Database, a system launched in August 2011 designed to track and map voluntarily protected easement lands in the United States, is a positive step and can facilitate such collaboration.³²

Supply: Strengthen landowner education in order to correct misconceptions

Improving landowner education about easements, their benefits, and implications is critical for dispelling misconceptions and achieving greater enrollment in conservation easement programs (American Forest Foundation 2009).³³ Some "best practices" for strengthening education include the following:

1. Target the outreach

Prioritizing which forest landowners to target for outreach can save time and money for resource-constrained land trusts and related institutions. Possible prioritization parameters include the following:

- *Parcel size.* Target large tracts of intact forest. On average, conserving larger, intact tracts of forest conveys greater biodiversity and ecosystem service benefits than conserving smaller tracts (Fernholz 2006).
- *Conservation value.* Target forests with the highest conservation value. Nonprofit organizations such as The Nature Conservancy and public entities such as state wildlife and forest agencies have maps and other tools for identifying and prioritizing tracts of land with the highest conservation value.
- Preexisting level of interest. Finding landowners who are already inclined toward land conservation can increase the returns on outreach and education investment. Examples of landowners who might have such a predisposition include those who have participated in the U.S. Department of Agriculture Natural Resource Conservation Service, U.S. Fish and Wildlife Service, or state-level cost-share programs.³⁴ Likewise, candidates with such a predisposition include landowners participating in one of several certified forest management programs, such as the American Tree Farm System, Forest Stewardship Council, the Sustainable Forestry Initiative, or the U.S. Forest Service Forest Stewardship Program. These landowners are likely to be more informed and comfortable with agreements and contracts associated with long-term sustainable ownership and management of their woodlands and may be more willing to work with agency representatives and/or conservation professionals.

2. Provide direct and personal contact

Landowners who are prospective conservation easement grantors can be reached through a variety of means. However, landowners prefer to speak with an individual directly (American Forest Foundation 2009) and are most receptive to information that is provided by other landowners or local representatives with whom they have had previous contact (American Forest Foundation 2009; Butler 2008). Therefore, the best form of engagement is face-to-face and via fellow local landowners. Complementary ways of educating landowners about easements include the following:

- Hosting workshops and writing local news articles about estate planning, with a focus on how easements can help ensure heirs can afford to retain familial land
- Honoring or otherwise publicizing through local media families who have placed their land under a conservation easement—such stories provide personal, local stories and highlight role models for other landowners
- Offering informational DVDs and workbooks via programs such as Oregon State University's *Ties to the Land*³⁵
- Placing flyers or brochures about conservation easements in local retail stores that landowners frequently visit, such as agricultural supply and hardware stores
- Educating resource professionals who deal with landowners on a regular basis, including consulting foresters and extension officials, on the value of integrating conservation easements into their portfolio of options to discuss with landowners
- Educating local real estate attorneys, estate planning attorneys, bankers, tax advisors, and accountants on the value of integrating conservation easements into estate planning as a means of enabling inheritors to retain their land

3. Focus on emotional and familial reasons

When making the case for why landowners should consider putting land under a conservation easement, the AFF survey of nonindustrial southern woodland owners indicated that they are motivated more by emotional or familial benefits than by arguments about the value of conservation. Other research supports similar conclusions. For instance, a study based on telephone interviews and mail surveys in the Midwest United States found that "place attachment," which is a measure of personal connection to a location or property, was the greatest motivation for implementing an easement (Farmer et al. 2011). Other researchers, cited in Farmer et al. (2010), have consistently found that altruism (McLeod, Woirhaye, and Menkhaus 1999), emotional connection to the land (de Haven-Smith 1988; Robinson 2004), environmental values (Jacobson 2002; Ryan, Erickson, and deYoung 2003; Miller et al. 2011), and protection of open space for social reasons (Miller et al. 2011) are the primary motivating factors for individuals to adopt conservation easements.

Messaging should reflect these motivations. Some themes that may resonate when articulating why one should consider putting his or her land under a conservation easement include the following (American Forest Foundation 2009):

- Maintaining forever the deep connection with and love for one's land
- Leaving a legacy by keeping land in one's family so children and grandchildren will continue to enjoy it
- Ensuring recreation and wildlife viewing opportunities with family
- Keeping the land as predecessors did
- Maintaining family traditions and bonds
- Preserving forever the trees and wildlife one loves

4. Be clear on terms and conditions of the easement

The terms and conditions of a conservation easement need to be clearly articulated to landowners. Themes that are important to highlight include the following:

- *Flexibility.* Emphasize the flexibility associated with easements and that landowners can prioritize terms and conditions most important to them, such as long-term wildlife habitat management or timber management.
- *Continued land management.* Articulate that economic activity on the land does not necessarily stop simply because the development rights are sold or retired as part of the easement. Depending on the terms, for instance, easements can allow landowners to continue hunting or to continue to sustainably harvest timber.
- *Financial terms.* Clearly outline the tax and other financial benefits provided by an easement.³⁶ Likewise, be clear on how the level of restrictions in the easement can determine the price at which one can sell the development rights.
- New opportunities. Explain how conservation easements can be combined with sustainable forestry certification programs to potentially address concerns about enforcement, assure that forestlands under easement practice responsible forestry, and help decrease monitoring and verification costs (Fernholz 2006). Furthermore, articulate how having land under easement can potentially help owners glean additional revenue streams from ecosystem service markets—such as markets for carbon sequestration—or increase their priority status for competitive government cost-share funding.

• *Contract length.* Before signing a contract, clearly outline the legal terms for a permanent easement agreement and discuss options for amending the conditions of the easement agreement.

Infrastructure: Increase financial benefits and contract length flexibility

Several strategies exist for increasing the financial benefits of placing land under conservation easement, including the following:

- Bridge financing. Bridge loan programs, also known as revolving loan programs, allow land trusts to provide cash advances, low-interest loans, or no-interest loans to help landowners with the up-front legal, appraisal, and other costs of preparing a conservation easement for sale or donation. The Colorado Conservation Trust, for instance, has pioneered a low- or zero-interest revolving loan program to help landowners cover these costs (Ross and Holmes 2010). The program lends money to a land trust, which subsequently relends the funds to a landowner. Loans are then subsequently repaid when landowners sell a state income tax credit as part of their donation or bargain sale of a conservation easement. Lending has merit only if the landowner receives new financial benefits from an easement donation or bargain sale, such as substantial tax relief or a cash payment (Holmes 2011). To date, few states or organizations offer such bridge loans or grants to landowners to cover up-front easement preparation costs.
- Enhanced federal tax incentive. The enhanced federal conservation easement tax incentive, initiated in 2006, allowed landowners to deduct 50 percent of their adjusted gross income (formerly 30 percent) over 16 years (formerly 6 years) for a donated conservation easement, based on the value of the conservation easement. Qualifying modest-income agricultural owners could actually deduct up to 100 percent of the adjusted gross income, based on the value of the conservation easement. This incentive expired in December 2009. Although Congress renewed it in December 2010, it is slated to expire again in December 2011.³⁷ According to a 2009 survey conducted by the Land Trust Alliance, land trusts across the United States acquired more than 6,000 conservation easements in 2006 and 2007, about 2,000 more than in 2004 and 2005. The South was the region with the greatest increase, with twice as many easements acquired in 2006 and 2007 as in the previous 2 years. Although it is not possible to definitively know how much of this increase was due to the enhanced federal conservation easement tax

incentive, land trusts report that the enhanced incentive was a significant factor driving the increased uptake (Robinson and Shay 2009).

- State tax credits. State income tax credits for easements, sometimes called "conservation credits," complement federal tax incentives and provide an additional financial incentive to landowners who voluntarily preserve their land through the donation of a conservation easement.³⁸ Conservation credits are typically dollar-for-dollar write-offs of state income taxes if the land meets certain qualifications. Currently, only five of the 13 southern states have dedicated tax credits for conservation easements: Florida, Georgia, North Carolina, South Carolina, and Virginia.³⁹ Virginia's experience shows that enacting a conservation credit program can significantly increase the number of easement transactions and acres (Figure 3).
- *Transferable tax credits.* Landowners who want to put their property under a conservation easement but have little or no taxable income cannot derive much tax benefit. They may be less inclined, therefore, to enter into an easement agreement. Allowing tax credits to be transferred to another party who has sufficient tax liability is a way of addressing this obstacle (Pentz 2007). In the South, however, only South Carolina, Georgia, and Virginia offer a transferrable tax credit program.⁴⁰ Another approach would be to allow credits to be carried forward into future years, when the landowner might have a tax liability.
- *Term easements.* Term easements, also called "nonperpetual easements" or "lease easements," are a form of conservation easement that apply for only a defined period of time; they are not permanent. Although many tax benefits, such as federal tax benefits (Cremer 2010), are conditional upon easements being permanent, conservation easements are not required to be perpetual.

One argument in favor of term easements is that they can be more economical by lowering opportunity costs, transaction costs, and public agency and monitoring costs (Cremer 2010). For instance, a term easement reduces the risk of forgone revenue from not being able to shift land to alternative uses at some point in the future. Transaction costs can be lower because standardized term easements are less costly than individually negotiated easement agreements (Cremer 2010). And enforcement costs can also be lower because term easements last for a relatively short period of time.

Another argument in favor of term easements is that they may be more successful at enrolling a larger pool of land-



owners since term easements circumvent hesitations about "forever". Once enrolled, landowners would establish relationships with easement-holding land trusts, increasing landowner comfort with and understanding of conservation easements in general. Over time, some of these landowners may opt to make their easement permanent. Thus, term easements could be stepping stones to perpetual easements.

In terms of design features, term easement durations could be 25, 50, 75, or 100 years, with tax benefits proportionally weighted. For instance, a 25-year period would qualify for a 25 percent income tax deduction of the appraised value of the term easement. Likewise, there could be an option at the end of the easement period wherein landowners could roll the easement over to an additional period of equal or greater length. At any point during the period, landowners could have the option to convert to a perpetual easement. Additionally, if the landowner decided to sell the property once the period expired, the entity holding the conservation easement could have an agreed-upon window of opportunity or "right of first refusal" to acquire the lands fee simple, perhaps at a discounted rate. Finally, to ensure the conservation values of a forested parcel during the easement period, third-party forest management certification could be required over the length of the contract including agreed upon forest management practices to conserve and enhance priority ecosystem services.

On the other hand, there are several counterarguments to term easements. For instance, term easements may cannibalize potential perpetual easements; landowners who would have otherwise enrolled in a perpetual easement may instead choose the alternative which does not confer permanent protection. Term easements may not necessarily confer significant cost savings to conservation organizations; the net present value of a tract of land over the course of 50 years may not be significantly different from that over perpetuity due to discounting. Furthermore, conservation organizations, foundations, and other stakeholders may find term easements less appealing because of a preference for guaranteed permanent protection (Cremer 2010).

The details of term easement agreements are at the beginning stages of discussion. Further exploration is needed to ensure that both conservation objectives and landowner goals can both be met before broad application is pursued.

GOING FORWARD

With the ongoing challenges of forest conversion and fragmentation in the South, conservation easements are one of the most promising approaches for conserving southern forests and ensuring that they are sustainably managed to provide a variety of ecosystem services, such as erosion control and water flow regulation. Their design fits well with American patterns of private land ownership, volunteerism, and tax code-related benefits. Going forward, the challenge for conservation organizations and their funders is to take the necessary steps to address the resource and awareness obstacles easements face, in both demand and supply, and thereby realize this incentive's potential to conserve forests and other ecosystems in the South.

ABOUT THE AUTHORS

Logan Yonavjak is a Research Analyst with WRI's People & Ecosystems Program. Email: Lyonavjak@wri.org.

Todd Gartner is a Senior Associate with WRI's People & Ecosystems Program. Email: Tgartner@wri.org.

ACKNOWLEDGMENTS

The authors are grateful to the following colleagues and peers who provided critical reviews and other valuable contributions to this publication: Craig Hanson (WRI), Patrick Holmes (Colorado Conservation Trust), Sarah Lupberger (WRI), Josh Parrish (The Nature Conservancy), Kristin Snyder (WRI), Ariel Steele (Tax Credit Connection, Inc.), and Matt Steil (WRI).

The publication process was helped along by WRI's experienced publications team, particularly Hyacinth Billings, David Tomberlin, and Ashleigh Rich. We thank Emily Krieger for editing and proofreading. We also thank Maggie Powell for the publication layout.

The authors would like to especially thank the American Forest Foundation for contributing significant research to this issue brief.

We are indebted to Toyota for its generous financial support of this brief.

This report is released in the name of the World Resources Institute (WRI) and the American Forest Foundation (AFF) and represents the perspectives and research of its authors alone. It does not necessarily represent the views of WRI, the American Forest Foundation, Toyota, the publication reviewers, or their affiliated organizations and agencies.

ABOUT THE WORLD RESOURCES INSTITUTE

The World Resources Institute (WRI) is a global environmental think tank that goes beyond research to put ideas into action. We work with governments, companies, and civil society to build solutions to urgent environmental challenges. WRI's transformative ideas protect the earth and promote development because sustainability is essential to meeting human needs and fulfilling human aspirations in the future.

WRI spurs progress by providing practical strategies for change and effective tools to implement them. We measure our success in the form of new policies, products, and practices that shift the ways governments work, companies operate, and people act.

We operate globally because today's problems know no boundaries. We are avid communicators because people everywhere are inspired by ideas, empowered by knowledge, and moved to change by greater understanding. We provide innovative paths to a sustainable planet through work that is accurate, fair, and independent.

For more information, visit www.wri.org

REFERENCES

- American Forest Foundation. 2009. *Report on working forest conservation easement focus groups*. Prepared for the American Forest Foundation. New York, NY: GfK Roper Public Affairs and Media.
- Aldrich, R., and J. Wyerman. 2006. 2005 National Land Trust census report. Washington, DC: Land Trust Alliance. Online at: <<htp://www.landtrustalliance.org/about-us/land-trustcensus/2005-report.pdf>>.
- Alig, R. J., and A. J. Plantinga. 2004. Future forest land area: Impacts from population growth and other factors that affect land values. *Journal of Forestry* 102: 19–24.
- Alvarez, M. 2007. The state of America's forests. Bethesda, MD: Society of American Forests.
- Butler, B. J. 2008. Family forest owners of the United States, 2006. Gen. Tech. Rep. NRS-27. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station.
- Butler, B. J., J. H. Hewes, P. Catanzaro, J. L. Greene, M. A. Kilgore, D. B. Kittredge, J. Langer, Z. Ma, A. Reuben, and M. Tyrrell. 2010. Effects of federal, state, and local tax policies on family forest owners: Technical report. Amherst, MA: U.S. Department of Agriculture Forest Service/University of Massachusetts Amherst, Family Forest Research Center. FFRC Research Paper No. 2010–01. Online at: <<htp://www.familyforestresearchcenter.org/ projects/taxes.html>>.
- Byers, E., and K. M. Ponte. 2005. The conservation easement handbook, 2nd ed. Washington, DC: Land Trust Alliance.
- Crehan, C. L., D. H. Newman, W. A. Flick, and H. Neuhauser. 2005. Land trust activity and highest and best uses under conservation easements in Georgia, USA. *Natural Areas Journal* 25: 91–100.
- Cremer, J. T. 2010. Fighting the lure of the infinite: Lease conservation easements at the urban fringe. Environmental Law Institute.
- Comas, S. U. S. Department of Agriculture Forest Service, Cooperative Forestry. Open space conservation: Frequently asked questions. Online at: <<http://www.fs.fed.us/openspace/faq.html>>.
- D'Amato, A. W., P. F. Catanzaro, D. T. Damery, D. B. Kittredge, and K. A. Ferrare. 2010. Are family forest owners facing a future in which forest management is not enough? *Journal of Forestry* 108 (1): 32–38.
- deHaven-Smith, L. 1988. Environmental belief systems: Public opinion on land use regulation in Florida. *Environment and Behavior* 20:176–199.
- Di Leva, C.E. 2002. The conservation of nature and natural resources through legal and market based instruments. *Review of European Community and International Environmental Law* 11: 84–95.
- Eagle, J. 2011. Notional generosity: Explaining charitable donors' high willingness to part with conservation easements. *Harvard Environmental Law Review* 35: 47–90.
- ESRI. 2008. ESRI Data and Maps 9.3.1. DVD. Redlands, CA: Environmental Systems Research Institute.

- Environmental Law Institute. 2003. *Legal Tools and Incentives for Private Lands Conservation in Latin America*. Washington, DC: Environmental Law Institute.
- Farmer, J. R., D. Knapp, V. J. Meretsky, C. Chancellor, and B. C. Fischer. 2011. Motivations influencing the adoption of conservation easements. *Conservation Biology* 25 (4): 827–834.
- Fernholz, K., J. Howe, and J.L. Bowyer. 2006. Conservation easements to protect working forests. Minneapolis, MN: Dovetail Partners, Inc.
- Fishburn, I. S., P. Kareiva, K. J. Gaston, and P. R. Armsworth. 2009. The growth of easements as a conservation tool. *PLoS ONE* 4(3): e4996.
- Gies, E. 2009. Conservation: An investment that pays. The economic benefits of parks and open space. The Trust for Public Land. Online at: <<http://www.tpl.org/content_documents/EconBenefitsReport_7_2009.pdf>>.
- Greene, J.L., T. Cushing, S. Bullard, and T. Beauvais. Effect of the Federal Estate Tax on Rural Landholdings in the U.S. Proceedings of global initiatives and public policies: first international conference on private forestry in the 21st century. Auburn, AL: Auburn University, Forest Policy Center.
- Greene, J. L., S. H. Bullard, T. L. Cushing, and T. Beauvais. 2006. Effect of the federal estate tax on nonindustrial private forest holdings. *Journal of Forestry* 104(1): 15–20.
- Greene, J. Personal communication with Logan Yonavjak. February 4, 2011.
- Guistanski, J. A., and R. H. Squires, eds. 2000. Protecting the Land: Conservation Easements Past, Present, and Future. Washington, DC: Island Press.
- Hanson, C., L. Yonavjak, C. Clarke, S. Minnemeyer, L. Boisrobert, A. Leach, and K. Schleeweis. 2010. Southern forests for the future. Washington, DC: World Resources Institute. Online at: << http://www.seesouthernforests.org/files/sff/SouthernForestsfortheFuture.pdf>>.
- Hanson, C., and L. Yonavjak. 2011. Funding for forests: The potential for public ballot measures. Washington, DC: World Resources Institute. Online at: <<http://www.seesouthernforests.org/issuebrief>>.
- Holmes, P. 2011 (forthcoming). Colorado Conservation Trust annual survey of land protection, interim report. Denver, CO: Colorado Conservation Trust. Online at: <<htp://coloradoconservationtrust.org/resources/resource-library/>>.
- Holmes, P. 2011. Personal communication with Logan Yonavjak. July 7, 2011.
- Jacobson, M. G. 2002. Factors affecting private forest landowner interest in ecosystem management: Linking spatial and survey data. *Environmental Management* 30: 577–583.

- Jay, J. E. 2000. Land trust risk management of legal defense and enforcement of conservation easements: Potential solutions. *The Environmental Lawyer* 6(2): 441-501. Online at: <<htp://www.conservationlaw.org/publications/03-LandTrustRiskManagement.pdf>>.
- Jay, J. E. 2011. Personal communication with Logan Yonavjak. July 22, 2011.
- Kilgore, M. A., J. L. Greene, M. G. Jacobson, T. J. Straka, and S. E. Daniels. 2007. The influence of financial incentive programs in promoting sustainable forestry on the nation's family forests. *Journal of Forestry* 105(4): 184–191.
- Kline, J., and D. Wichelns. 1994. Using referendum data to characterize public support for purchasing development rights to farmland. *Land Economics* 70: 223–233.
- Land Trust Alliance. 2006. 2005 National Land Trust Census Report. Online at: Washington, DC: Land Trust Alliance. Online at: <<http://www.landtrustalliance.org/land-trusts/land-trustcensus/2005-report.pdf>>.
- Land Trust Alliance. 2010. 2010 southeastern land trust survey report. Land Trust Alliance Southeast Regional Program. Online at: <<htp://atlanticcoastconservancy.org/Documents/2010%20Southeastern%20U.S.%20Land%20Trusts%20Survey%20Report.pdf>>.
- Lind, B. 2001. Using conservation easements to protect working forests. Washington, DC: Land Trust Alliance.
- Lynch, L., and J. M. Duke. 2007. *Economic benefits of farmland preservation: Evidence from the United States*. Department of Agriculture and Resource Economics, The University of Maryland College Park. Online at: <<htp://ageconsearch.umn.edu/bitstream/7342/2/wp070004.pdf>>.
- MacLeod, R. 2011. Personal communication with Logan Yonavjak. August 30, 2011.
- Mahoney, J. D. 2002. Perpetual restrictions on land and the problem of the future. *Virginia Law Review*. 88: 739.
- McLaughlin, N. A. 2006. Amending perpetual conservation easements: A case study of the Myrtle Grove controversy. *University of Richmond Law Review* 40: 1031. Abstract online at: http://ssrn. com/abstract=903845
- McLeod, D., J. Woirhaye, and D. Menkhaus. 1999. Factors influencing support for rural land use control: A case study. Agricultural and Resource Economics Review 28: 44–56.
- Mendell, B. C., ed. 2006. Conservation easements, supply agreements, and green certification. *Timberland Report* 8(1). Online at: <<htp://www.privatelandownernetwork.org/plnlo/conservation%20easementssupplyagreementsgreencertification.pdf>>.
- Merenlender, A. M., D. Newburn, S. E. Reed, and A. R. Rissman. 2009. The importance of incorporating threat for efficient targeting and evaluation of conservation easements. *Conservation Letters* 2: 240–241.

- Miller, A. D., C. T. Bastian, D. M. McLeod, C.M. Keske, and D. L. Hoag. 2011. Factors impacting agricultural landowners' willingness to enter into conservation easements: A case study. *Society* and Natural Resources: An International Journal 24: 65–74.
- The Conservation Registry. National conservation easement database. 2011. Online at: <<hr/>http://www.conservationeasement.us>>.
- Parker, D. P. 2002. Cost-Effective Strategies for Conserving Private Land: An Economic Analysis for Land Trusts and Policy Makers. Bozeman, MT: Property and Environment Research Center.
- Parrish, J. 2011. Personal communication with Logan Yonavjak. July 15, 2011.
- Pentz, D. 2007. *State conservation tax credits: Impact and analysis.* Conservation Resource Center.
- Robinson, J. R. 2004. Land use behavior of private landowners at the urban/rural fringe. Columbus, OH: The Ohio State University.
- Robinson, S. and R. Shay. 2009. "Tax Incentive Impact Survey Results. Easement Incentive Works; Conservation Boosted by 535,000 Acres." Washington, DC: Land Trust Alliance. Online at: <<htp://www.landtrustalliance.org/policy/tax-matters/campaigns/ survey>>. Accessed October 15, 2010.
- Ross, B., and P. Holmes. 2010. *Colorado Conservation Trust's Transaction Cost Loan Program: A five-year review prepared for the Gates Family Foundation*. Denver, CO: Colorado Conservation Trust.
- Ryan, R. L., D. L. Erickson, and R. deYoung. 2003. Farmers' motivations for adopting conservation practices along riparian zones in a Midwestern agricultural watershed. *Journal of Environmental Planning and Management* 46: 19–37.
- Sobel, A. 2002. The value of conservation easements: The importance of protecting nature and open space. World Resources Institute discussion paper: Washington, DC. Presented by the West Hill Foundation for Nature, Inc. Online at: <<htp://www.landscope. org/rhythmyx/action/conserve/easements/item20493.pdf>>.
- Stanton, T., M. Echavarria, K. Hamilton, and C. Ott. 2010. State of watershed payments: An emerging marketplace. Ecosystem Marketplace. Online at: <<http://www.foresttrends.org/documents/ files/doc_2438.pdf>>.
- Talberth, J., and L. Yonavjak. 2011a. Current use valuation programs: Property tax incentives for preserving local benefits of forests. Washington, DC: World Resources Institute. Online at: <<htp:// www.SeeSouthernForests.org/issue-brief>>.
- Talberth, J., and L. Yonavjak, 2011b. Forests at work: A new model for local land protection. Washington, DC: World Resources Institute. Online at: <<http://www.SeeSouthernForests.org/issue-brief>>.
- 2020 Southeastern U.S. Land Trusts Survey Report. April 2010. Raleigh, NC: Land Trust Alliance Southeast Regional Program. Online at: <<http://atlanticcoastconservancy.org/Documents/2010%20Southeastern%20U.S.%20Land%20Trusts%20 Survey%20Report.pdf>>.

- U.S. Geological Survey National Gap Analysis Program. 2009. Protected Areas Database of the United States. Computer file. U.S. Geological Survey National Gap Analysis Program.
- Wear, D. N., and J. G. Greis. 2011. (under public review) The southern forest futures project: Summary report. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. Online at: <<http://www.srs.fs.usda.gov/futures/reports/ draft/summary_report.pdf>>.
- Wright, J. B. 1998. The role of conservation easement sites in biogeographic and biological research in the USA. *Environmental Conservation* 25: 95–98
- Yonavjak, L., C. Hanson, J. Talberth, and T. Gartner. 2011. An Overview of Measures to Conserve and Sustainably Manage Southern Forests. Southern Forests for the Future Incentives Series. Washington, DC: World Resources Institute.

ENDNOTES

- 1. The charitable trust framework gives holders of perpetual easements (see note 3 for definition of an easement holder) a certain degree of flexibility to change the terms of the contract. For example, an easement grantor (landowner) can grant the holder the discretion to simply agree to amendments that are consistent with the stated purpose of the easement, thereby avoiding the inefficiencies that would arise from intrusive public oversight of the holder's day-to-day management of the easement. However, easement terminations, as well as amendments that are inconsistent with the stated purpose of the easement, require court approval in a certain type of court (*cy pres*) proceeding, where consideration must be given to the interests of the public and the intent of the easement grantor (McLaughlin 2006). For a more in-depth analysis of the issue of amending perpetual easements, refer to McLaughlin (2006).
- 2. Eminent domain is when a state seizes a citizen's private property, expropriates a citizen's property, or seizes a citizen's property rights with due monetary compensation but without the owner's consent. Usually the property is taken for government use or transferred by delegation to third parties who will devote it to public or civic use (i.e., public utilities, highways, and railroads) or economic development. Sometimes it can be taken for reasons of public safety.
- 3. Within holding organizations, there are a variety of partnership structures that work with conservation easements. Land trusts and nonprofits will often "hold" an easement before transferring it to state or federal ownership. Sometimes organizations will help other groups structure land transactions involving a conservation easement but do not actually act as the party holding the easements. In addition, land trusts often collaborate with real estate buyers or "conservation buyers" who are willing to purchase conservation land and donate a conservation easement on it to the land trust. Gifts and bargain sales allow landowners to make a charitable donation and receive a tax credit.
- 4. "When a land trust accepts a conservation easement from a landowner on the landowner's property, the land trust becomes responsible for enforcing the terms of the easement. To enforce the terms of the easement, the land trust must monitor the eased property on a regular basis by visiting the property, and must maintain written records of the monitoring visits. If the land trust learns that the terms of the conservation easement have been violated by the landowner, the land trust has a duty to require the owner to correct the violation and restore the property to its prior condition." (Jay 2000). The agency or organization that holds the easement is responsible for making sure that the terms are complied with and must be willing to monitor and defend the easement legally if the terms are ever breached.
- 5. Conservation easements usually include declarations of general purpose, restricted rights (what the underlying fee owner may not do), reserved rights (what the underlying fee owner may do), and affirmative rights (rights conveyed to the easement holder, such as a land trust or the public).

- 6. The probability that the mineral owner would engage in surface mining must be nearly nil in order for the conservation easement donation to qualify for a federal tax deduction. In addition, surface mining has to be prohibited in the conservation easement agreement if the landowner owns the mineral rights. Source: U.S. Treasury Regulations 1.170 A-14(g)(4).
- 7. A 40–60 percent figure was originally provided through personal communication with Ryan Elting at The Nature Conservancy (2010); this figure has also been verified by several conservation professionals. In addition, D'Amato et al. (2010) collected data from appraisals for 44 conservation easement transactions in 11 towns within the Massachusetts section of the Deerfield River Watershed in 2007. Data included the assessed value before application of the conservation easement, the value of the easement, and the remainder value. The average value of the conservation easement was found to be 71 percent of the land value estimate.
- 8. The purpose of a green versus gray assessment is to analyze the financial costs and benefits associated with investing in natural ecosystems (i.e., forests) instead of human-engineered solutions (i.e., concrete and other technologies) to maintain the ongoing provision of various services, like watershed services, over time (Hanson et al. 2011).
- 9. The \$600 million figure is based on estimates by hydrologists, given that the forest filters 25 percent of the drinking water for New Jersey (Sobel 2002).
- 10. For a full net present value analysis of contributions of property taxes and various conservation tools (including conservation easements) over a 30-year period for different ownership sizes (ranging from 15–150 acres), see D'Amato et al. 2010.
- 11. Landowners receive the full suite of tax benefits for the charitable donation portion of the bargain sale. An onsite appraisal of the property determines the fair market value. The value of the easement is then assessed. A portion of the easement is purchased through federal, state, local or private grants (typically a mixture of several of these entities since most have matching requirements), and then the remainder of the fair market value is considered donated value. Negotiation between the landowner and the easement holder determines how much is payment and how much is donation, in addition to the particular tax and property ownership circumstances of the landowner.
- 12. Tax benefits are often subject to unique requirements. For example, to qualify for a federal income tax deduction, an easement must be donated to a qualified organization for a qualified conservation purpose. For more information, visit http://www.timbertax.org/getstarted/easements/. State tax breaks vary greatly by state.
- Land that is already enrolled in current use or a special farm or forest tax classification rarely realizes a reduction in taxes after an easement agreement is in place (Fernholz 2006).

- 14. Most conservation easement agreements conveyed to date are intended to last forever or be "perpetual" (Byers and Ponte 2005). But only four states—California, Colorado, Florida, and Hawaii require that conservation easements be perpetual. See Todd D. Mayo, "A Holistic Examination of the Law of Conservation Easements" in Guistanski and Squires (2000).
- From 1987 to 1997, the unified federal tax credit shielded up to \$600,000 of estate value from the federal estate tax (Greene 2011).
- 16. According to a 2011 study on the federal, state, and local effects of taxes on family forest owners, property taxes are the taxes of greatest fiscal concern (Butler et al. 2010).
- 17. Fragmentation can have a variety of direct and indirect impacts at various scales, including changes in microclimate, pollution deposition, wildlife movement, habitat suitability, invasive species, and tree biomass (http://www.srs.fs.usda.gov/pubs/ja/ja_riitters002. pdf). For more information on the history and ecological impacts of forest fragmentation, visit http://www.epa.gov/mrlc/pdf/forestfactsheet.pdf.
- 18. Acres from 1990 only include data from local, state, and regional land trusts.
- 19. The 2011 data includes land protected by local, state, and regional land trusts as well as the largest national land conservation groups, including The Nature Conservancy, Ducks Unlimited, The Conservation Fund, and The Trust for Public Land. Digitized data came from the Conservation Registry's National Conservation Easement Database and non-digitized and withheld easement figures came from Robb Macleod, GIS Manager, Ducks Unlimited, August 30, 2011. As of the 2005 Land Trust Census, there are 1,667 private land trusts operating in every state in the United States, a 32 percent increase from 2000 to 2005. In 1950, 53 land trusts existed. (Land Trust Alliance Census 2006).
- 20. Figure calculated by dividing the total number of conservation easements in the United States in 2011 by the total number of acres of private land in the United States. Sources: 2011 conservation easement data provided by The Conservation Registry's National Conservation Easement Database and Macleod 2011. Sources for private land in the continental U.S. (ESRI 2008; U.S. Geological Survey 2009).
- 21. Digitized data came from the Conservation Registry's National Conservation Easement Database. Non-digitized easement data and withheld data were provided by Robb Macleod, GIS Manager, Ducks Unlimited, August 30, 2011.
- 22. Data from the National Conservation Easement database only includes digitized easement data. Non-digitized easement data and withheld data were provided by Robb Macleod, GIS Manager, Ducks Unlimited, August 30, 2011.
- For more information on existing and emerging ecosystem service markets, see Hanson et al. 2010 and Yonavjak et al. 2011.
- Information comes from personal communication with Dan Dumont, Executive Director, Alabama Forest Resources Center, October 18, 2010.

- Only four states—California, Colorado, Florida, and Hawaii require that conservation easements be perpetual. See Todd D. Mayo, "A Holistic Examination of the Law of Conservation Easements" in Guistanski and Squires (2000).
- 26. For the full net present value analysis of contributions of property taxes and various conservation tools (including conservation easements) over a 30-year period for different ownership sizes (ranging from 15–150 acres), please see D'Amato et al. 2010.
- 27. Average figures for the transaction costs associated with donated easements come from properties ranging in size from more than 100 acres to as large as 27,000 acres; the average property size is 1,700 acres for the data provided. Bargain sales tend to be larger parcels as a subset of the range presented (Holmes 2011).
- 28. 2009 Data for southern U.S. states (not including Texas and Oklahoma) were provided by the April 2010 Southeastern U.S. Land Trust Survey Report. Data for Texas and Oklahoma were provided separately through personal communication with Andrew Weaver at the Land Trust Alliance in January 2011.
- 29. 2009 Data for southern U.S. states (not including Texas and Oklahoma) were provided by the April 2010 Southeastern U.S. Land Trust Survey Report. Data for Texas and Oklahoma were provided separately through personal communication with Andrew Weaver at the Land Trust Alliance in January 2011.
- 30. The Land Trust Accreditation Commission was established as an independent program of the Land Trust Alliance in 2006. The goal of this voluntary accreditation program is to verify that land trusts are meeting established accreditation criteria. More information on the land trust accreditation program is available at www.landtrustaccreditation.org
- 31. A list of the 135 land trusts that have undergone accreditation can be found at http://www.landtrustalliance.org/land-trusts/accredited-land-trusts
- 32. Data from the National Conservation Easement Database can be found online at http://www.conservationeasement.us/
- 33. Miller et al. (2011) posited that the decision by landowners to adopt an easement is motivated by the desire to conserve the habitat of wild animals, open space, agricultural production, and the cultural and economic resources of their community. These conclusions are consistent with those of Kline and Wichelns' (1994), who found that landowners' depth of understanding of land conservation issues affects the conservation measures they adopt on their property (Farmer et al. 2011).
- 34. This information can be found by contacting each agency (U.S. Department of Agriculture Natural Resource Conservation Service, U.S. Fish and Wildlife Service, or state-level cost-share programs) and requesting recent data on landowners who have participated in various conservation programs.
- 35. For more information, see http://www.familybusinessonline.org/ index.php?option=com_content&view=article&id=51&Item id=52

- 36. In Massachusetts, when compared with timber management or enrollment in a current use program, revenues received and tax savings resulting from a sale of a conservation easement had the greatest overall impact on net present value over a 30-year period for 15–150 acres of land (D'Amato et al. 2010).
- 37. The renewal for the enhanced tax incentives for conservation easement donations runs through December 31, 2011 and is retroactive to January 1, 2010.
- 38. A "conservation credit" is an income tax credit available to landowners who voluntarily preserve their land through the donation of a conservation easement and/or fee title. The donation must protect conservation values (as defined by individual states) and must be made to an entity qualified to hold such property interest by the terms of the legislation creating the credit, such as state and local governments or 501(c)(3) land conservation organizations. Most states in the United States allow both individual and corporate taxpayers to claim tax credits (Pentz 2007).
- 39. North Carolina was the first state in the nation to enact a state credit program for land conservation donations. Since 1999, 11 other states in the United States have passed the tax credit legislation and a number of others are in the process of enacting such laws (Pentz 2007).
- 40. Georgia's tax credit will be transferable effective January 1, 2012, because of the passing of Georgia HB 346.



Each World Resources Institute brief represents a timely, scholarly treatment of a subject of public concern. WRI takes responsibility for choosing the study topics and guaranteeing its authors and researchers freedom of inquiry. It also solicits and responds to the guidance of advisory panels and expert reviewers. Unless otherwise stated, however, all the interpretation and findings set forth in WRI publications are those of the authors.

Copyright 2011 World Resources Institute.

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivative Works 3.0 License. To view a copy of the license, visit http://creativecommons.org/licenses/by-nc-nd/3.0/

ISBN: 978-1-56973-778-1

20

August 2011