



FUNDING FOR FORESTS: THE POTENTIAL OF PUBLIC BALLOT MEASURES

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SUMMARY

- A variety of measures exist to prevent deforestation or forest conversion to other land uses. Some of these measures, such as purchasing land outright for conservation or purchasing conservation easements, are designed to permanently protect forests by precluding future residential or commercial development on the tract of land. But these approaches all require money.
- One approach to raising large-scale funding for conservation purposes is the conservation-related ballot measure. Citizens vote for such measures at the state, county, or municipal level to approve new public funding dedicated to conservation for a wide variety of purposes, including protection of natural landscapes, bodies of water, and/or farmland. Ballot measures are a means of securing citizen approval for raising public funds for conservation. The funds are then generated through various mechanisms, such as bonds, taxes, and lottery proceeds.
- Conservation-related ballot measures in the United States have a successful track record. Between 1988 and 2010, 76 percent of proposed measures passed, securing more than \$58 billion for conservation.
- During this same time period, conservation-related ballot measures raised approximately \$7.5 billion in the U.S. South. However, support for such measures varied greatly among southern states. For instance, to date, more than 80 measures passed at the municipal, county, and/or state level in Florida as well as in Texas, while no measures passed in either Mississippi or Kentucky.
- Conservation organizations, citizens, land-use decision makers, and others can take several steps to increase the utilization of this promising approach and ensure the funds raised are used most effectively, including:
 - introduce more conservation-related ballot measures;
 - leverage existing “best practice” guidance on how to design and successfully pass conservation-related ballot measures;
 - continue to utilize bonds but consider other financing mechanisms, too, where applicable;
 - include safeguards to ensure funds remain dedicated to conservation;
 - use funds to purchase conservation easements to help maximize cost-effectiveness;
 - use funds, where appropriate, to maintain working forests, not just create parks; and
 - target areas with high development pressure.

THE NEED FOR LARGE-SCALE FUNDING

The forests of the southern United States face a number of threats to their extent and health, including permanent conversion of forests to suburban development. For instance, the U.S. Forest Service estimates that between 1992 and 2040, 31 million acres of forest—an area the size of North Carolina—will be converted to development in the U.S. South (Hanson et al. 2010). These threats, in turn, impact the ability of southern

forests to provide a wide range of ecosystem services—such as water purification and recreation—and support the region’s biodiversity (Hanson et al. 2010).

A variety of measures exist to prevent forest conversion (Yonavjak et al. 2011). For example, purchasing land outright for conservation or utilizing conservation easements¹ is designed

to permanently conserve forests by precluding future residential or commercial development on a tract of land. However, approaches such as these all require funding, and a significant amount if a sizeable share of the 31 million acres under threat is going to be conserved. Large sums are required at the national level, too. Lerner, Mackey, and Casey (2007) estimate that the funding needed to secure a “strategic network of habitat conservation areas” (Shaffer, Scott, and Casey 2002) for the United States is \$5.4 billion to \$7.7 billion per year, increasing with 3 percent inflation per year over a 40-year period.² But how can such large-scale funding be generated?

Over the past decade, many conservation practitioners have held out hope for the potential of emerging markets for ecosystem services—such as payments for carbon sequestration and watershed protection—to generate funds at a scale commensurate with the conservation task. Although promising, these markets have yet to generate funds at sufficient scale, as discussed in other briefs in the *Southern Forests for the Future Incentives Series* (Box 1).³ This observation can lead one to ask: Are there approaches that are more traditional for generating conservation funds that could be ramped up while waiting for these new markets to materialize?

This issue brief explores one potential response to this question: the conservation-related ballot measure. In particular, this brief:

- defines conservation-related ballot measures;
- summarizes their nationwide track record;
- assesses their application in the South to date; and
- recommends resources and steps on how to increase their utilization in the South in the future.

This brief is designed to inform conservation organizations, community groups, land-use decision makers, and other stakeholders interested in conserving and sustainably managing forests and other ecosystems. 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.

THE CONSERVATION-RELATED BALLOT MEASURE

One approach to raising large-scale funding for conservation purposes is the conservation-related ballot measure, sometimes referred to as the “open-space ballot measure.” Citizens vote for such measures at the state, county, or municipal level to

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 select forest features and drivers of change, historic forest photos, and case studies of innovative approaches for sustaining forests in the region.

approve new public funding for a wide variety of conservation purposes, including protection of natural landscapes, bodies of water, and/or farmland.⁴ Measures can be initiated by a state or local legislature and then approved by citizens, or can be initiated by citizens outright in the form of a petition. Ballot measures are a means of securing citizen approval for raising public funds for conservation. The funds are generated through various mechanisms, such as bonds, taxes, and lottery proceeds.

Examples of conservation-related ballot measures abound throughout the United States, and include the following:

- Citizens of Arkansas approved a Constitutional Amendment in 1996 that increased their state sales tax by one eighth of a cent to fund land conservation (The Trust for Public Land Conservation Almanac 2011).
- In 1992, Colorado voters approved the “Great Outdoors Colorado” (GOCO) Amendment to the State Constitution, which created the GOCO Trust Fund. This fund earmarks a portion of the state’s lottery proceeds for land conservation in the form of matching grants for parks, wildlife conservation, outdoor recreation sites, trails, and open space (The Trust for Public Land Conservation Almanac 2011). Since its creation, the fund has distributed almost \$290 million for 1,700 projects. Almost 390,000 acres are being preserved in perpetuity; 47,401 acres have been acquired for future state parks and a state wildlife area (Natureserve’s Landscape America 2011).
- Maine voters have passed five bonds to fund the “Land for Maine’s Future” program, which has invested over \$57 million dollars in the protection of more than 504,000 acres of land between 1998 and 2008. This acreage is more than threefold the amount acquired by funds approved by the state legislature (The Trust for Public Land Conservation Almanac 2011).

Voter-approved ballot measures put power into the hands of citizens to determine funding for conservation. One of the attractive features of this is that funds raised by such ballot measures can be more secure than funds appropriated annually by county or state governments. Because ballot measures typically authorize a specific amount of money and/or a specific method of raising conservation dollars, the resulting funds are not subject to the vagaries of the budgeting process and can be immune to the ups and downs of government coffers.

NATIONWIDE TRACK RECORD

Conservation-related ballot measures in the United States have a track record of success for more than two decades. For instance, from 1988 through 2010 (The Trust for Public Land Landvote® Database 2011):

- A total of 2,298 ballot measures were proposed, of which 1,739 passed, yielding an approval rate of 76 percent.
- Ballot measures raised more than \$58 billion for conservation.
- The average amount of conservation funds approved per ballot measure was \$33 million. The amount varied greatly among measures, from a few million in Oklahoma to Minnesota’s \$5.5 billion “Clean Water, Land & Legacy” program.
- The average amount of conservation funds approved per year was approximately \$2.5 billion. The amount varied greatly between years, with \$168 million as the lowest amount approved in a single year, in 1991, and \$8 billion as the highest, in 2008.
- Between 1988 and 2008, amounts mostly stayed below \$1 billion per year; between 1998 and 2008, the amount of conservation funds approved consistently remained above \$1 billion per year.
- Ballot measures consistently receive public support, even during periods of economic recession, such as 1990-91 and 2008-09.

Many states have experience with conservation-related ballot measures. However, such measures appear to be more prevalent in states, counties, and municipalities with large population centers (Figure 1). This pattern may be because these areas have greater concentrations of wealth and thus voters feel they can “afford” to dedicate public funds to conservation and/or because these areas face more immediate development pressure, to which concerned voters are responding.

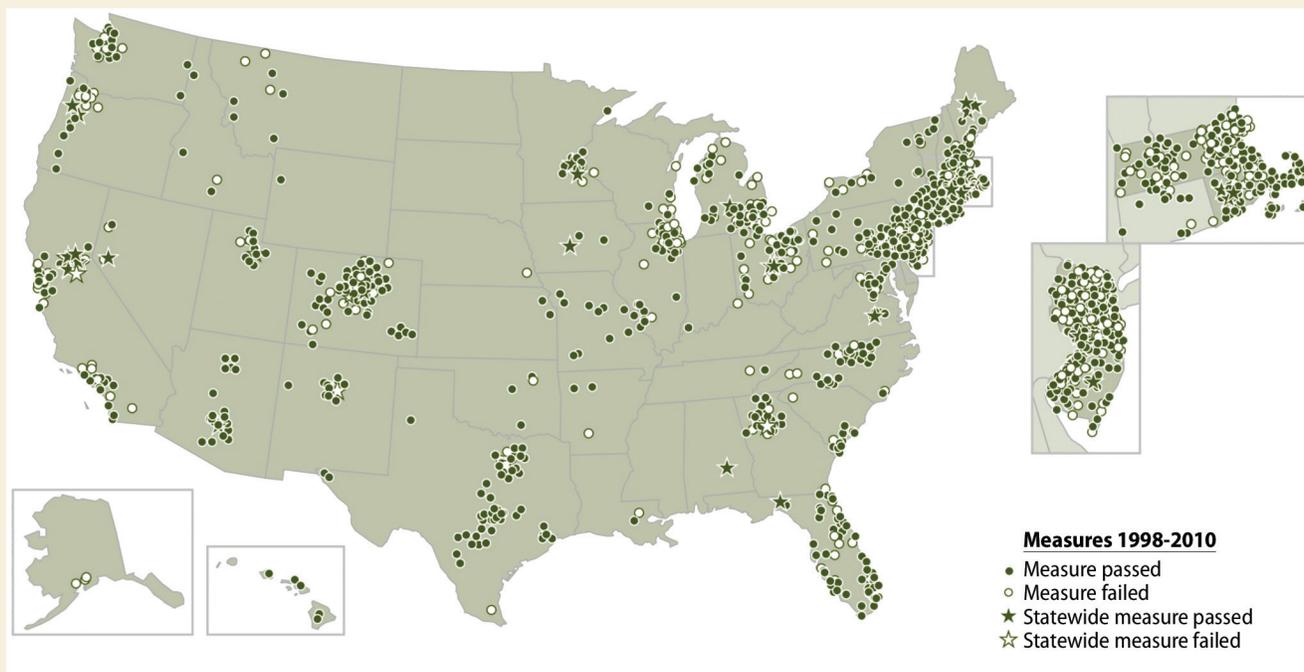
USE IN THE SOUTH

From 1988 through 2010, 354 measures were proposed across the 13 states of the U.S. South. As Table 1 summarizes, these measures:

- experienced a high passage rate of 82 percent;
- raised approximately \$7.5 billion for conservation;
- tended to be quite local in nature, with the vast majority being at the municipal and county level while only seven

FIGURE 1

Conservation-Related Ballot Measures in the United States (1998–2010)



Notes: each individual dot on the map above represents a single ballot measure; dots are geographically dispersed according to where the passed or failed (i.e. which locale).

Twenty-seven of these ballot measures have funds dedicated solely to the protection of farmland. The rest of the ballot measures were authorized for a variety of open-space protection purposes, including forestland and farmland protection. Over this twelve year period, state measures were initiated in 36 states and passed in 31 states.

Source: DuMoulin, Andrew. 2011. Winning Open Space Ballot Measures. The Trust for Public Land LandVote® Database. The Trust for Public Land. Online at: <<www.landvote.org>>.

state measures were passed by a total of five southern states; and

- predominately authorized bonds as the source of funding.

Utilization of conservation-related ballot measures across the South was mixed among states. Florida and Texas led in the passage of these measures, with 80 or more from 1988 through 2010, or nearly four per year on average. Regions around Atlanta (Georgia), Research Triangle (North Carolina), and the Richmond-Arlington corridor (Virginia) had a relatively large number of measures, too (Figure 1). Six states—Alabama, Arkansas, Louisiana, Oklahoma, South Carolina, and Tennessee—had less than one measure pass per year on average. Two states, Kentucky and Mississippi, did not pass a single measure during the time period.

Several factors may have contributed to the wide differences among southern states in the introduction and passage of

measures. Some states and counties experienced greater rates of population growth, and thus development pressure, during the time period. For instance, while Florida grew by approximately 52 percent between 1988 and 2010, Mississippi grew by only approximately 15 percent (U.S. Census 1992 and 2011). In some states, other uses of publicly raised funds may out-compete land conservation. For instance, counties in Tennessee often use up their capacity to fund bonds for educational purposes, leaving little room for funding conservation.⁵

HOW TO INCREASE USE

The conservation-related ballot measure, therefore, has a track record of use in the South. It has proven effective in raising large amounts of funds, where applied, and appears to enjoy strong public support. What, then, can be done to ramp up utilization of this promising approach? And how

Table 1 Conservation-Related Ballot Measures in the Southern United States (1988–2010)

State	No. of measures proposed	No. of measures passed	Passage rate (percent)	Amount raised (\$ million)	Jurisdiction type (of those that passed)	Source of funds (of those that passed)
Alabama	2	2	100	310	state (2)	bond (1), other (1)
Arkansas	4	2	50	5	municipal (1), state (1)	bond (1), sales tax (1)
Florida	99	80	81	3,568	municipal (27), state (1), county (52)	bond (58), sales tax (11), property tax (9), other (2)
Georgia	34	26	76	735	municipal (9), county (17)	bond (16), sales tax (10)
Kentucky	1	0	0	0	n/a	n/a
Louisiana	3	1	33	45	county (1)	property tax (1)
Mississippi	2	0	0	0	n/a	n/a
North Carolina	59	48	81	697	municipal (29), state (1), county (18)	bond (48)
Oklahoma	9	7	78	17	municipal (7)	bond (6), sales tax (1)
South Carolina	13	10*	77	370	municipal (4), county (6)	bond (8), sales tax (2)
Tennessee	2	1	50	5	municipal (1)	sales tax (1)
Texas	95	85	89	1,308	municipal (70), county (15)	bond (78), sales tax (7)
Virginia	31	27	87	465	municipal (1), state (2), county (24)	bond (27)
Total	354	289	82	7,525	municipal (149), state (7), county (133)	bond (243), sales tax (33), property tax (10), other (3)

* One of the sales tax approvals was overturned by a court ruling.

Note: The average approval rate (percent of people who vote yes for the ballot measure) for all 13 southern states was 62 percent. Over two thirds of the ballot measures have passed by approval rates of 60 percent or more.

Source: The Trust for Public Land LandVote® Database. <<www.landvote.org>> (Accessed March 22, 2011).

could the funds raised be used most effectively? Several actions for achieving these objectives include the following:

- *Introduce more conservation-related ballot measures.* It is unlikely that the potential of ballot measures has been fully tapped in the South. Since 1988, only five of the region's 13 states (38 percent) and 57 of the region's 1,303 counties (4 percent) have passed statewide conservation-related ballot measures.⁶ In other words, there is significant room for growth in states and counties throughout the region (The Trust for Public Land 2011). A further indication of growth potential is that, proportional to the rest of the country, the South lags in its use of conservation-related ballot measures. Only approximately 15 percent of the measures introduced and approximately 17 percent of measures passed between 1988 and 2010 were in southern states, although the region comprises approximately 24 percent of the nation's total land area (including Alaska and Hawaii), over one third of the nation's population, and approximately 31 percent of the nation's economic output (The Trust for Public Land Landvote® Database 2011; ESRI 2008; U.S. Census Bureau 2005; Bureau of Economic Analysis 2009).
- *Leverage existing "best practice" guidance on how to design and successfully pass conservation-related ballot measures.* A number of guides are available to help members of state, county, or municipal governments, citizens, conservation organizations, and other stakeholders successfully introduce conservation-related ballot measures. These include the Conservation Campaign Toolkit (www.conservationcampaign.org), the *Conservation Finance Handbook: How Communities are Paying for Parks and Land Conservation* (Hopper and Cook 2004), and *The Conservation Program Handbook: A Guide to Local Government Land Acquisition* (Tassel 2009). Other resources include: The Trust for Public Land's Conservation Almanac (www.conservationmanac.org), which

Table 2

Funding Sources Approved by Conservation-Related Ballot Measures in the United States (1988–2010)*

How funds raised	Number of ballot measures passed	Total amount raised (\$ million)	Average amount raised (\$ million)	Number of states in which measure was used**	Description
Bonds	815	26,050	32	42	Voter-approved limited tax bonds
Portion of sales tax	139	17,240	124	22	Dedicated portion or increase in sales tax
Property tax	694	7,920	11	22	Dedicated portion or increase in property tax
Lottery proceeds	6	3,753	626	4	Portion of proceeds from a state lottery
Real estate transfer tax	23	1,198	52	8	A tax on new development
Benefit assessment	11	754	69	1	Assessment on real property for conservation purposes (can be an annual fee)
Oil and gas drilling revenues	1	400	400	1	Revenue from the sale of oil and gas
Income tax	56	367	7	2	Dedicated portion or increase in citizen income tax
Appropriation	2	221	111	2	State, municipal, or county appropriations for already approved funds for conservation
Interest from oil and gas royalties	1	200	200	1	Tax on portion of proceeds individuals receive from investments in oil and gas extraction
Charter Amendment	3	185	62	1	Fee on annual assessments on properties within a certain county or municipality
Funding cap increase	1	123	123	1	Extending financial cap of existing ballot measure initiative (i.e. sales tax or property tax)

summarizes conservation activity around the United States; The Trust for Public Land's LandVote® Database (www.landvote.org), which provides a comprehensive history of state and local finance measures that have been placed on ballots; and the National Conservation Easement Database (www.conservationeasement.us), which provides up-to-date information about conservation easements.

- *Continue to utilize bonds.* Among funding sources approved by conservation-related ballot measures across the United States, bonds were the most widely approved mechanism and raised the most overall funds between 1988 and 2010, accounting for approximately 44 percent of all funds raised (The Trust for Public Land 2011). As Table 1 highlights, bonds have been the most common source of funds ap-

proved by ballot measures in the South, as well. This track record suggests that bonds continue to be a good cornerstone for conservation-related ballot measures in the region, and bonds are expected to be successful going forward. Bonds appear to be popular for at least three reasons. First, they allow public entities to purchase land quickly, as opposed to waiting for a fund to accumulate dollars or for a grant to come through.⁷ This feature is ideal given the frequently short time horizon for purchasing land or conservation easements when land comes on the market. Second, the payback period of a bond occurs over a long time horizon, so its impact is spread out over time.⁸ Third, many states already have the authority under existing policies to authorize bonds and give authority to counties and

Table 2		<i>continued</i>			
How funds raised	Number of ballot measures passed	Total amount raised (\$ million)	Average amount raised (\$ million)	Number of states in which measure was used**	Description
Utility tax	7	97	14	3	A tax on public service businesses that engage in transportation, communications, and the supply of energy, natural gas, and water
Budget appropriation	1	74	74	1	Continuation of a property tax for land acquisition, development, and maintenance of parkland
Parcel tax	6	47	8	1	Type of excise tax that is based on either flat parcel rate or the use, size, and/or number of units on each parcel
Budget allocation	4	22	6	2	Authority to spend excess tax revenue for open space
Meals tax	2	11	6	1	A local sales tax on restaurant meals served by a vendor in a city or town
Occupational privilege tax	1	9	9	1	State and/or local tax that requires an employer or employee to withhold and remit a tax on the wages paid to the employee
Lodging tax	4	3	1	1	A sales tax paid by visitors on hotels and other temporary lodging
Total***	1,777	58,674	33	n/a	

Source: The Trust for Public Land LandVote® Database. <<www.landvote.org>> (Accessed March 22, 2011).

Notes

° Data on number of acres conserved per measure is not available for all states and for the entirety of the 1988 -- 2010 time period, as it can take several years for the funds raised to be spent on land conservation.

** Measure may have been passed at either the state, county, or municipal level.

*** Total figure in “Number of ballot measures passed” is larger than reported elsewhere in this brief because some ballot measures approve more than one type of funding mechanism.

municipalities to do the same (The Trust for Public Land 2011). Bonds, however, do have drawbacks. They accrue financing charges and require convincing voters of the merits of incurring debt (The Trust for Public Land 2006). Furthermore, bonds may face debt limits. For instance, although voters approved bonds totaling \$50 million in Wake County, North Carolina in 2007, not all of the bonds have been issued to date because of limits to the county’s debt capacity.⁹

- Consider other funding mechanisms, too, where applicable. Across the country, ballot measures have been used to generate conservation funds from a variety of sources besides bonds (Table 2). Depending on what enabling authority is allowed, southern states and jurisdictions could consider
- more aggressively pursuing some of these other funding mechanisms to diversify potential revenue sources. Of particular interest may be those funding mechanisms that raise more money on average per ballot measure than bonds. For example, on a per-measure basis, lottery proceeds raised \$626 million, oil and gas revenues raised \$400 million, and dedicated portions of sales taxes raised \$124 million, while bonds raised \$32 million. It is important to assess, however, the local political feasibility of each candidate mechanism.
- Include safeguards to ensure funds remain dedicated to conservation. For any type of funding source, designers should put in place—ideally in the ballot measure language itself—safeguards that prevent government bodies from using the raised funds for other, non-conservation purposes.

Otherwise the funds could be a tempting target during years of budget shortfalls.

- *Use funds to purchase conservation easements to help maximize cost-effectiveness.* The cost to purchase a conservation easement is typically less than the cost to purchase outright the same tract of land, sometimes from 40 to 60 percent less.¹⁰ Therefore, purchasing easements may conserve more acres than fee simple or outright land acquisitions for a given amount of funds. In addition, conservation easements offer the important advantage of keeping land in private ownership while protecting it from development. This feature keeps land on local tax rolls; while the amount of property taxes paid may be diminished, the land is still contributing to local tax coffers. This feature may also reduce land management costs for state or local governments, because much of these expenses are usually borne by the private landowner.
- *Use funds, where appropriate, to maintain working forests, not just create parks.* “Working forests” are actively managed to generate revenue from multiple sources—including sustainably produced timber, watershed protection, and other ecosystem services—and are not converted to other land uses, such as residential development. Revenues from timber, recreation, and other ecosystem service payments, increases in tax revenue due to higher surrounding property values, and avoided development costs are among the economic benefits generated by working forests and can be used to offset some or all of the costs of acquiring the forest or of placing it under a conservation easement. Working forests may be an attractive option in areas where there is public or policymaker concern about loss of tax revenues associated with establishing protected areas or aversion to the idea of “locking up” land.¹¹
- *Target areas with high development pressure.* Areas with high residential and/or commercial development pressure are often in urgent need of conservation-oriented land acquisitions or easements. Counties, for instance, tend to initiate more conservation-related ballot measures when the population is above 100,000 (U.S. Census 1992 and 2011; The Trust for Public Land Landvote® Database 2011). However, the per-unit cost of land in these areas tends to be higher than in areas facing low development pressure, so conservation dollars raised may not cover as much acreage.

LOOKING AHEAD

Funding mechanisms authorized by conservation-related ballot measures have already unlocked billions of dollars for conservation nationwide. And such measures have potential for growth in the South, particularly because only 4 percent of the region’s counties, for instance, have passed such measures to date.

But more is needed. Over the past 22 years, ballot measures have secured approximately \$2.5 billion per year in the United States. This amount, however, falls short of the \$5.4 billion to \$7.7 billion per year recommended by Lerner, Mackey, and Casey (2007) if we are to achieve landscape-scale conservation across the country. Therefore, additional approaches for securing large-scale funding are required.

NOTES

1. A conservation easement is a legally enforceable land preservation agreement between a landowner and a government agency (municipal, county, state, or federal) or between a landowner and a qualified land protection organization (such as a land trust) for the purposes of conservation. It restricts certain activities on the property, such as real estate development and resource extraction, to a mutually agreed upon level. The decision to place a conservation easement on a property is voluntary and the property remains the private property of the landowner. Once set in place, the restrictions of the easement are binding on all future owners of the property. Landowners sometimes sell conservation easements to willing buyers or donate them.
2. All financial figures in this brief are nominal.
3. These issue briefs can be accessed at www.SeeSouthernForests.org/issue-brief.
4. With a ballot “initiative,” voters petition the government to place a measure on the ballot, usually by collecting signatures. With a “referendum,” a state legislature, county commission, or city council refers the measure to the ballot for voter approval. However, there are a plethora of legislatively initiated funding dedications that do not require voter approval. For instance, statewide programs in Florida, Maryland, North Carolina, Wisconsin, and Washington are some programs that are strictly legislatively approved. Note that this issue brief and the data herein only covers voter-approved funding for conservation; it does not cover strictly legislatively approved funding.
5. Will Abberger (The Trust for Public Land), personal communication with Logan Yonavjak, April 22, 2011.
6. The number 57 refers to individual counties that passed ballot measures; some counties passed more than one ballot measure. Also, Louisiana’s 64 parishes are treated as “counties” in this calculation.
7. Andrew duMoulin (The Trust for Public Land), personal communication with Logan Yonavjak, April 15, 2011.

8. Andrew duMoulin (The Trust for Public Land), personal communication with Logan Yonavjak, April 15, 2011.
9. Chris Snow (Wake County Parks, Recreation & Open Space), personal communication with Logan Yonavjak, April 22, 2011.
10. Ryan Elting (The Nature Conservancy), personal communication with Logan Yonavjak, September 22, 2010.
11. See *Forests at Work: A New Model for Local Land Protection*, the third brief in the *Southern Forests for the Future Incentives Series*, for more information about working forests and their application in the southern United States. Online at: <http://www.seesouthernforests.org/issue-brief/forests-work-new-model-local-land-protection>.

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