

## Increasing the Engagement of Large Private Forestland Owners in Conservation Management

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### Review

This working paper has not undergone a formal review process, but it has been reviewed by multiple experts. It is intended to stimulate discussion and inform debate on emerging issues.

### SUMMARY

The involvement of large private and institutional forestland owners in conservation has been recognized as increasingly important for the successful implementation of landscape-scale conservation. However, public and non-governmental organization partners have found engagement of these landowners in conservation planning, management, and implementation to be a significant challenge to overcome. The Nicholas Institute for Policy Solutions at Duke University, the Sustainable Forestry Initiative, Inc., and the U.S. Forest Service hosted three meetings in April, September, and October 2016 to bring together leaders from each of these sectors to brainstorm approaches that could help increase the engagement of large private landowners in conservation. This paper summarizes ideas generated at these "all lands" meetings and provides a few concrete examples of conservation solutions across local and regional scales that could potentially be replicated to encourage large private landowner engagement.

## INTRODUCTION

It has long been recognized that governance and ownership boundaries rarely align with natural ecosystem boundaries. With increased development and fragmentation of the landscape threatening wildlife, biodiversity, and the provisioning of vital ecosystem services, land managers have started making a necessary shift in thinking about conservation at a larger, landscape scale. Efforts to address fragmentation are increasingly important to help habitats and species to adapt and be able to move throughout the landscape as climate change impacts increase. To have positive and meaningful impacts, conservation actions must extend beyond individual land parcels and ownerships. The U.S. Department of Agriculture Forest Service, along with several other federal agencies and conservation groups, has coined the term *all lands conservation* to describe this approach to land management, which it has helped champion (Tidwell 2010; USDA 2007).

A key piece of the all lands conservation initiative is the involvement of large institutional and private forest owners.<sup>1</sup> These owners, many of which are timber investment management organizations (TIMOs) or real estate investment trusts (REITs), represent less than 1% of private landowners, but they hold an estimated 22% of private forestland (Smith et al. 2016). TIMOs and REITs purchase forested land and manage it for a set period before selling it at a net profit.<sup>2</sup> For both TIMOs and REITs, timber value and land appreciation drive profits and investment. The future of TIMO and REIT lands, which are beginning to be sold more frequently than in the past, makes all lands conservation particularly salient. These lands represent the low-hanging fruit because they provide large-scale opportunities for landscape conservation. A successful conservation partnership with a TIMO might result in the conservation engagement of tens or hundreds of thousands of acres, a feat that would require dozens if not hundreds of small private landowners to accomplish on a similar scale (Smith et al. 2016).

TIMOs and REITS, which have evolved over the last 30 years following the breakup of vertically integrated forest product companies, have been largely excluded from discussion about forest conservation. For these for-profit organizations with a fiduciary responsibility to maximize financial returns to investors, traditional conservation tools, such as conservation easements, are often not viable.<sup>3</sup> New strategies and incentives are needed to help these large landowners engage in conservation practices and thus to realize the significant benefits and economies of scale that their participation will provide to forest conservation.<sup>4</sup>

In 2016, three meetings brought institutional landowners together with academics and representatives of leading conservation groups and public agencies to discuss land conservation.<sup>5</sup> The discussions converged

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<sup>1</sup> By “large,” this paper refers generally to owners of more than 10,000 acres of land.

<sup>2</sup> Unlike TIMOS, REITS can retain ownership of properties for decades. As part of their investment model, TIMOs generally operate on a shorter management timeframe of between 10 and 15 years before being obligated to return money to investors.

<sup>3</sup> As a conservation tool, easements would work if agencies and NGOs had sufficient capital to secure them.

<sup>4</sup> Conservation practices are defined broadly here. They include prevention of commercial development as well as particular management objectives.

<sup>5</sup> The first meeting, in Washington, D.C., was co-hosted by the Sustainable Forestry Initiative (SFI), the Nicholas Institute for Environmental Policy solutions at Duke University, and the U.S. Forest Service. The second, in Clearwater Beach, Florida, was co-hosted by SFI and the U.S. Forest Service. The third, in Durham at Duke University, was hosted by the Nicholas Institute and

on two primary suggestions addressed here: (1) the potential for alternative conservation models to incentivize large landowners in landscape-scale conservation and (2) the need to expand federal, state, and local incentive programs to favor conservation of forestland and to allow large landowners to participate in that conservation.<sup>6</sup>

Some of the ideas discussed here have already been implemented on a small scale and may be ripe for scaling up. Other ideas proposed by experts during our meetings have not yet been attempted and may be worth further exploration.

## **ALTERNATIVE CONSERVATION MODELS TO DRIVE VALUE FOR LANDOWNERS**

Although large landowners regularly engage in forest management certification programs, such as the Sustainable Forestry Initiative (SFI) and Forest Stewardship Council (FSC), which provide audited assurances of certain conservation practices, other traditional conservation tools have had limited success in engaging large landowners who manage for strict economic goals, who are bound by fiduciary responsibility, or both. Placing land under perpetual easement through an agreement between a land trust or the government is done legally through a process of covenants or restrictions tied to the property. This model has encouraged small private landowners to participate in conservation by offering tax incentives for placement of easements on their property. However, the traditional easement model can be challenging for institutional landowners for several reasons:

- Historically, many easements have taken the form of donations, a form not feasible for for-profit companies because the tax benefits are tailored to individual private ownerships, rather than to institutional ownerships.<sup>7</sup>
- A fundamental lack of capital is available to purchase easements from large landowners, especially in areas where both land value and development potential are high.
- Land trusts and other buyers of properties for conservation often move much slower than the “pace of business” and require matching grants or funding assistance from government programs. This mismatch increases the transaction costs of conservation deals and can discourage engagement of large private landowners looking to make quick deals at a minimal cost.
- All qualified conservation easements encumber land in perpetuity, limiting future actions of landowners and other possible future uses of the land, known or unknown, that might be associated with potentially greater financial returns. Oftentimes, institutional landowners are not convinced that selling their rights today is worth the opportunity cost of lost future endeavors.

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the Nicholas School for the Environment. The proceedings of the first meeting are published at <https://nicholasinstitute.duke.edu/focal-areas/ecosystem-services-and-private-land-management/engaging-large-private-forest-owners-all-lands>.

<sup>6</sup> A third suggestion not focused on in this paper is working to expanding markets for certified wood products—a strategy based on those products’ environmental benefit as compared with alternative materials like steel and concrete.

<sup>7</sup> In the last 10 years, the number of purchased conservation easements has surpassed the number donated (pers. comm., September 28, 2017).

### ***Traditional Easement Model Made Profitable for Landowners***

In the United States, conservation easements have been used for several decades to ensure the conservation of forest lands. They are an exceptional tool for protecting land in perpetuity from development. In a typical case, a conservation easement restricts changes to activities on the land, which often represent the land's "highest and best use." The difference between fair market value of the unencumbered property and the restricted value defines the value of the easement. Because conservation easements are valued through a fair market appraisal process, which compensates landowners for forgone rights, landowners who sell easements are essentially paid dollar for dollar for the acquired conservation rights. Like agricultural land easements, many forestland easements have, by and large, restricted development rights to keep the land base open and in forest or agricultural use, while timber operations continue unencumbered. Other conservation values, such as habitat protection, have relied on fee purchases or fully restricted timber management uses. Often, capital is insufficient to achieve both the financial goals for the property and the habitat or conservation goals, necessitating additional approaches.

A financially successful example of a conservation easement engaged in by a large industrial landowner is the one that the Columbia Land Trust in Vancouver, Washington, worked out with the publicly traded forest products company, Pope Resources, which owns approximately 113,000 acres of timberland across the Northwest. The parties negotiated a complicated deal that ended up placing 12,300 acres of land near Mount Saint Helens in an area called Pine Creek into conservation (an additional 7,000-acre sale is pending). The final deal represented a compromise in which key habitat was protected for endangered species and working forest easements were used to ensure that much of the forest would remain in timber production for the local economy. Under this deal, Pope Resources retains limited development rights. Importantly, the conservation of Pine Creek and surrounding areas was directly enabled by federal funds through the Forest Legacy Program and the Cooperative Endangered Species Conservation Fund and by the Washington Wildlife and Recreation Program, which allowed the land trust to purchase the land rights. This deal was successful despite high transaction costs because both the buyer and seller mutually recognized the important role these lands had for the community. All stakeholders recognized not only the financial value that Pope Resources stood to obtain from revenue for the sale of some of its development rights, but also the values associated with maintaining both timber harvest rights and ecosystem services. In this case, the landowner cooperated with the Columbia Land Trust to receive grants and to negotiate transactions allowing the conservation deal to be made (pers. comm., Cherie Kearney, December 21, 2016).

### ***Ecosystem Markets***

The challenges imposed by traditional conservation easements have helped encourage alternative ways to promote conservation through ecosystem services markets. These markets include markets for wetland and stream mitigation, habitat preservation, and carbon sequestration. Compliance-based and voluntary carbon offset programs can provide value to landowners when they allow for continued revenue from timber, or other uses like hunting, while also providing a revenue stream from carbon credits. Currently, market-based approaches for ecosystem services tend to be location-specific and will not always be profitable relative to other uses of the land. However, the carbon market regulated through California's Air Resources Board has proven to be profitable for many landowners, and others have been successful in taking advantage of emerging ecosystem services markets to help meet the cost of conservation.

### The Forestland Group

California's carbon market has provided an opportunity for institutional forestland owners like The Forestland Group to make investments in carbon sequestration and forest conservation. Since 2014, The Forestland Group's revenue from forest carbon offset projects has been comparable to, and has even exceeded, revenue from timber sales. These projects require a 100-year monitoring commitment, but they do not necessarily exclude timber harvesting, which can be pursued as long as carbon stocks are maintained above regional baseline levels (The Forestland Group 2017; California Environmental Protection Agency Air Resources Board 2014).<sup>8</sup>

### Lyme Timber Company

The Lyme Timber Company, which manages 650,000 acres of forestland across the United States, provides another example of how market-based conservation can be achieved by institutional forestland owners. Lyme accomplishes this through a mixed portfolio of revenues coming from conservation instruments, timber harvests, carbon credits, wetland mitigation credits, and endangered species credits. Lyme is a unique case because it actively targets lands of high conservation value rather than purchasing land primarily for its timber revenue potential. By focusing on conservation properties, Lyme has placed in conservation more than 700,000 acres of forestland (Lyme Timber 2017).

### *Investing in Natural Infrastructure*

In the last two decades, conservation models that focus on the use of natural infrastructure to maintain ecosystem services, particularly for freshwater water quality, have been shown to be effective at incentivizing conservation by avoiding expensive investments in engineered infrastructure (WRI 2016; PFT 2016; USDA 2017a).<sup>9</sup> Investing in natural infrastructure projects funnels money to landowners so that they can financially justify practices that promote conservation, such as increased riparian buffering or low impact logging. Payments typically come from the utility or municipality that benefits from improvements in ecosystem services provision. From the perspective of the utility or municipality, it is easier to deal with one or two large landowners than with dozens of small private landholders in scaling conservation efforts. Additionally, natural infrastructure projects can unite the interests of a wide range of stakeholders, including rural landowners, utilities, local governments, and urban communities (WRI 2016).

### California's State Measures

California is blazing new ground in the development of collaborative conservation planning that sets performance goals for forest management to support adaptation and habitat restoration as well as to promote climate resilience. This approach guides better forest management practices as well as keeps the land in forest production by stripping off competing uses such as development. It keeps forests in production and on the tax rolls, while compensating landowners for managing for habitat or other

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<sup>8</sup> In many cases, third-party environmental service organizations are needed to help evaluate properties' carbon offset potential to generate carbon credits and revenues in accordance with the California Air Resource Board's Offset Protocol for U.S. Forest Projects.

<sup>9</sup> Watershed integrity and resultant water quality are substantially reduced if the watershed area is less than 85% forested (Wayburn and Chiono 2011). Additionally, for every 10% increase in forest cover in a municipal system's watershed, the cost of water treatment decreases by 20% (Ernst 2004).

ecosystem services. One source of funding used to engage private landowners in these conservation activities is the Integrated Regional Water Management (IRWM) program funded through Proposition 84 (State of California 2015). The IRWM program has been particularly successful in improving water resource planning, an issue of major significance in drought-prone California. Money for the program was tied to the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006, which authorized \$5.4 billion in bonds across the state. Land trusts operating in California, such as the Pacific Forest Trust (PFT), have used this grant money to target large private owners whose lands make up watersheds crucial to Californians' water supply. For example, PFT placed a working forest conservation easement on a 13,000-acre tract owned by Hancock Timber Resources Group in 2016 (PFT 2017).

Another potential source of funding for natural infrastructure is California's Assembly Bill 2480 of 2016, which declares source watersheds, defined as the forests, meadows, and streams that supply water to California's reservoirs, to be integral components to the state's water infrastructure. This bill makes the maintenance and repair of source watersheds eligible for the same forms of financing as other water collection and treatment infrastructure. Maintenance and repair activities that are eligible for funds are limited to specified forest ecosystem restoration and conservation activities (PFT 2016). Additionally, State Bond 862 has authorized \$42 million, allocated through California's Greenhouse Gas Reduction Fund, for forestry projects that reduce or avoid greenhouse gas emissions (CalFire 2017). These funds are granted to projects through CalFire that improve forest health, reforest degraded land, or conserve forestland by avoiding conversion to other uses among other qualifications.

#### Rocky Mountain Water and Energy Partnership

Watershed infrastructure projects that direct investments into forest management have also been championed by federal agencies such as the U.S. Forest Service (USFS) and U.S. Fish and Wildlife Service. These "forest to faucet" projects can benefit private landowners. For example, the Rocky Mountain Water and Energy Partnership has the USFS working with different municipal water providers, energy utilities, and corporate partners in Colorado to reduce the threats from wildfire-caused sedimentation overloading of Denver's water supply reservoirs and to bolster the surrounding area's water quality. Residents in Denver are paying \$0.14 per month more on water bills for forest management that will reduce fire severity, saving millions of wildfire-related dollars in the long run. The Nature Conservancy and the National Forest Foundation are brokering the deal between the USFS and multiple partners, whose contribution is expected to total \$38 million. An additional \$30 million are expected from USFS appropriations between 2009 and 2018. As a result of this project, forest restoration and management has occurred on private as well as federal lands (Denver Water 2017; USDA 2017a).

In addition to utilities and municipal governments, private industry can invest in natural infrastructure projects to maintain forest derived ecosystem services like clean water. For example, breweries that rely on large volumes of clean water could help pay for improved forest management upstream in the watershed in which they operate. These types of private investments are already being made by companies such as Coca-Cola and MillerCoors, both of which have voluntarily invested hundreds of thousands of dollars in watershed improvement projects within Colorado to reduce risks to their water supply (Kennedy 2012; MillerCoors 2017). For private industry, such investments not only build

resiliency but also can be the basis for “green” branding by demonstrating to consumers a commitment to corporate responsibility and sustainable practices.

## **FEDERAL SUBSIDIES AND INCENTIVES TO PROMOTE CONSERVATION**

The costs associated with placing land in conservation tend to be large and often dissuade landowners from participating in conservation programs. In the all lands discussions, two policy changes were identified to alleviate this problem. First, cost-share programs like those funded for agriculture through the Farm Bill could be created; these programs often employ temporary contracts rather than permanent ones. Second, programs could be created to help conservation buyers pay market value for high-value conservation property and to help landowners forgo development or other higher-yielding ventures.

### ***Expand Farm Bill Conservation Incentives to Include Institutional Forestland Owners***

Through the Environmental Quality Incentive Program (EQIP), the 2014 Farm Bill includes conservation incentives that help to cost share conservation improvements for non-industrial forestland landowners and agricultural producers (USDA 2017b).<sup>10</sup> Two restrictions currently disqualify large private landowners from receiving financial assistance: (1) gross annual income eligibility for these programs is capped at \$900,000, and (2) payments for all EQIP contracts cannot exceed \$450,000 from 2014 to 2018. Given that funds from EQIP are being used to help the USDA’s Natural Resource Conservation Service achieve its landscape initiatives, which could benefit from large landowner engagement, there may be a willingness to revise restrictions to allow large private forest landowners to be eligible for conservation funding in some cases (USDA 2017b). The costs and benefits of expanding EQIP to include these forestland owners need fuller exploration.

### ***Modify “Yellow Book” Appraisal Method to Benefit Conservation Buyers***

A key challenge faced by conservation buyers of property is motivating large-private landowners to sell land at a “Yellow Book,” appraisal price. This is frequently because institutional landowners are looking to maximize returns at fair market value to satisfy a fiduciary responsibility to their investors. The Yellow Book appraisal of property was developed by the federal government to compensate landowners in cases of eminent domain. Conservation buyers using federal funding to help finance the purchase of land through programs like the Forest Legacy Program or Endangered Species Conservation Program are also required to use this method for valuing the properties they intend to purchase. Because this method was designed to steward taxpayer dollars for the compensation of lands taken through eminent domain, it is known for undervaluing properties on the open market. Consequently, the Yellow Book value is frequently less than the price that a for-profit organization would be willing to accept for its land (Cherie Kearney, Columbia Land Trust, and Roger Lord, Mason, Bruce & Girard, Inc., pers. comm.).

One idea proposed at the all lands workshop to address the difference between the Yellow Book value of land and the sale price acceptable to for-profit landowners is to develop an alternative valuation method

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<sup>10</sup> The USDA’s EQIP provides financial and technical assistance to agricultural producers to address natural resource concerns and to deliver environmental benefits such as improved water and air quality, conserved ground and surface water, reduced soil erosion and sedimentation, and improved or created wildlife habitat (USDA 2017b).

that would be used specifically for conservation transactions. A “Green Book” valuation of the property could consider the uniqueness of the conservation sale by factoring in values such as ecosystem services, including recreational opportunities. If the government were to factor these benefits into the appraised value, more funds could be distributed to conservation buyers, allowing them to motivate reluctant sellers (Cherie Kearney and Roger Lord, pers. comm.). More work is necessary to assess the viability of such an approach.

## CONCLUSIONS

This paper identifies alternative conservation models for incentivizing large forestland owners to participate in conservation actions and expansions of federal incentive and subsidy programs that could allow more large landowners to participate. As discussed in the all lands meetings, large forestland owners can be engaged in conservation by augmenting the traditional conservation easement model, such as through working forest easements or ecosystem service values, to allow expanded economic uses of the encumbered property. Furthermore, there is also room for federal programs such as EQIP to be expanded to include large landowners that are currently ineligible for cost-sharing or incentive programs.

But there remain the problems of minimizing transaction costs and facilitating communication between conservation organizations and forest owners that impede effective engagement of this ownership class in conservation. One way to address these problems is to teach people to structure conservation deals to be efficient and aligned with the interests of both groups. Organizations that offer third-party, non-partisan technical assistance, such as the USDA Natural Resource Conservation Service, the Sustainable Forestry Initiative, and academic institutions, could provide such training.<sup>11</sup> Many land trusts already employ conservation finance specialists.

Finally, and perhaps most importantly, is the need to convey to broad audiences the public benefits of forests and good forest management. Purchasing sustainably sourced wood fiber supports more than the timber industry—it supports a multitude of critical ecosystem values, most especially watershed services that forests provide. Credible certification systems, such as SFI or FSC, help consumers to drive demand for well-managed forests and thus help to support forests’ ecosystem services. Inserting the broad benefits of forests into societal discussion of forest-related materials and products we use on an everyday basis, from our flooring to our toilet paper, can help advance conservation goals by supporting good forest management and forestry practices.

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<sup>11</sup> One example is the Conservation Finance Network’s conservation finance boot camp course offered for professionals interested in acquiring these skills. See <http://www.conservationfinancenetwork.org/boot-camps>.

## **APPENDIX: ALL LANDS MEETINGS**

### ***Washington, DC***

The first meeting, hosted by the Nicholas Institute, SFI, and the USFS, identified barriers to engagement of large forest landowners in conservation. Attending were representatives from institutional landowners, NGOs, and public agencies. Main barriers included “the absence of an inclusive vision for the future of forest management, insufficient leadership for building diverse coalitions to address forest threats, lack of alignment of existing federal programs with respect to large ownership structures, limited understanding of the public benefits provided by large privately owned forests, and lack of markets to sustain these benefits” (Smith et al 2016).

### ***Clearwater Beach, Florida***

The second meeting took place at the SFI annual conference. It explored potential solutions to the five barriers identified at the first meeting. As at the first meeting, attendees were representative of all major stakeholders discussed in this paper: institutional landowners, NGOs, and public agencies. The framework for this paper came from the proceedings of this meeting.

### ***Durham, North Carolina***

Duke University's Nicholas School of the Environment hosted a symposium highlighting case studies and other work in the area of landscape conservation and public-private partnerships. The presentations offered policy and other solutions to help address barriers to large-landowner conservation. Many of the speakers and conversations at this symposium offered insights and examples to build on at the second meeting and to help to construct this paper.

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## **Nicholas Institute for Environmental Policy Solutions**

The Nicholas Institute for Environmental Policy Solutions at Duke University is a nonpartisan institute founded in 2005 to help decision makers in government, the private sector, and the nonprofit community address critical environmental challenges. The Nicholas Institute responds to the demand for high-quality and timely data and acts as an “honest broker” in policy debates by convening and fostering open, ongoing dialogue between stakeholders on all sides of the issues and providing policy-relevant analysis based on academic research. The Nicholas Institute’s leadership and staff leverage the broad expertise of Duke University as well as public and private partners worldwide. Since its inception, the Nicholas Institute has earned a distinguished reputation for its innovative approach to developing multilateral, nonpartisan, and economically viable solutions to pressing environmental challenges.

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