The Forest Bank: A Market-Based Tool for Protecting Our Working Forestland

Conservation of Functional Forest Landscapes
(September 6, 1999)

Background

The Nature Conservancy

Since 1951, The Nature Conservancy has pursued a mission of preserving the plants, animals, and natural communities that represent the biological diversity of life on earth by protecting the lands and waters they need to survive. We have pursued this mission through a range of protection strategies—ownership, conservation easements, and related management agreements among others—that ensure conservation-oriented stewardship of ecologically sensitive places.

In 1999, the Conservancy surpassed a major milestone—successful protection of over 11 million acres of important natural habitat in the U.S. Internationally, we have helped secure another 60 million acres. Our success has been built on innovation, a commitment to action driven by sound science, and a record of strong and effective partnerships.

In spite of our accomplishments, we know that to achieve mission success in the decades ahead, we must become even more strategic and creative in developing effective conservation tools. We know that land acquisition at the scale we have practiced will not suffice. Indeed, the task of developing innovative, market-based, replicable strategies for conservation will be the primary challenge in the coming years.

The Center for Compatible Economic Development

In 1995, the Conservancy created a special operating unit called the Center for Compatible Economic Development (CCED) to develop and implement new businesses, land uses, and products that would help achieve conservation goals.

CCED grew from the realization that to achieve conservation success, we must positively engage people and communities where we work. Rural communities, however, usually value economic well-being and job creation above conservation. Long-term conservation success, therefore, must promote economic development and improvement in the quality of life for target rural communities while maintaining or enhancing the environment in surrounding
landscapes. One of the promising business concepts developed by CCED is The Forest Bank.

**Overview of The Forest Bank**

*An Old Problem*

Forested land often provides the ecological matrix surrounding and supporting critically threatened species and habitats. As the intensity of human use of the forest increases, the conservation buffer provided by the forest decreases. Threats such as fragmentation, erosion, sedimentation, and unsound harvest practice can affect many aspects of a forest, from its viability for forest species to the direct impacts on watersheds and aquatic health.

The intensity of forest use is increasing. As a brief example, a recent Department of Forestry study in Virginia looked at removals versus growth for all timberland in different regions of the state. After filtering out land that was inoperable (due to slopes, parcel sizes, or configurations) and land that was unlikely to remain in timber production (as measured by population density), the data showed that removals of hardwood exceed growth on suitable timberland in the mountains of southwest Virginia—home to the Clinch Valley, a critical area for biodiversity conservation in the U.S.—by upwards of 34%. This same courageous report states that across Virginia, hardwood removals exceed growth by 19%. Our experience in analyzing potential Forest Bank sites in Wisconsin, Michigan, Missouri, and Indiana confirms this unsustainable trend.

Private land bears an inordinate share of this burden, with recent changes in wood supply trends having intensified the demand from privately owned forests domestically. One cause may be that production in the national forests has dropped to nearly a third of peak levels in the 1980s. Areas like...
central Appalachia and the Lake States are seeing the pressure on non-industrial private forestland (NIPF) increase dramatically.

Looking more closely at the NIPF ownership, a 1994 Forest Service survey reports that 90 percent of NIPF owners nationwide have holdings of 100 acres or less. This group represents a total of 118 million acres nationwide, or about 30% of the nation’s private forest land. As the report’s author states: “It is this portion of the resource where concern about fragmentation and rapid turnover is concentrated.”

The nature of harvesting practices on private lands has significant implications for the health of our nation’s forests and, hence, for the conservation of biodiversity. According to FIA data, about 49% of all timber harvested comes from private, non-industrial land. Yet, only 5% of NIPF owners have a management plan for their woods, and this number is much lower for parcels under 100 acres. Furthermore, land in this group turns over on average every seven years, an event that often drives decisions to harvest timber.

These NIPF owners often make choices regarding harvest and development for reasons unconnected to ecological concerns and without professional advice or support. The need for cash to meet estate, education, or medical needs may force a landowner to liquidate his/her forest asset. If the landowner does not have the knowledge or time to ensure good forest management and silviculture, the resource is often degraded and conservation values are compromised.

NIPF ownership is vulnerable to significant external pressure, beginning with the short-term, economic needs of the landowners themselves. These can be exacerbated by loggers and mills whose incentives and volume requirements favor a quick conversion to cash. Simply stated, a consulting forester who earns a living on 8% of the harvest has an incentive to overcut.
Similarly, a logger who has bought a 100 acre boundary on a sealed bid often has little incentive to construct a skid trail that minimizes erosion if he can drag the timber out through a stream bed more easily.

In order to protect the conservation values of any given site, The Nature Conservancy needs to direct the management and harvesting decisions of the forest that surround and compose that site. At the same time, the landowners need liquidity for their forest asset to meet urgent financial needs when they arise.

While the landowner’s need for liquidity creates an ecological threat, it also represents a business opportunity. The Forest Bank is designed to offer landowners a new option that gives them the financial liquidity they need in the short-term while managing the resource sustainably over the long-term.

**Genesis of The Forest Bank Concept**

*A Case Study: The Clinch Valley, Southwest Virginia*

Extending more than 2,200 square miles across the mountains of Southwest Virginia and Northeast Tennessee – the Clinch Valley is home to one of the highest concentrations of rare and endangered species in the United States. Part of the Cumberland and Southern Ridge and Valley ecoregion, the site includes the headwaters of the Clinch, Powell and Holston rivers, the former two being the only remaining free-flowing tributaries of the Tennessee River system.

These rivers are the sole remaining habitat left on earth for several species of freshwater mussels. All told, there are 30 federally listed species in the Clinch Valley, including 18 mussels and 4 fish. The Nature Conservancy recently ranked the Clinch and Powell watersheds first and third in a scientific evaluation of the biodiversity in all watersheds across the United States.

Like much of Appalachia, the Clinch Valley has a vibrant forest ecosystem, with a wide assortment of hardwoods. The region is 75 percent forested, including over 670,000 acres of oak-hickory-type timber stands. And like other rural areas rich in timber resources but comparatively poor economically, the Clinch Valley is vulnerable to reckless or unsustainable harvesting of its timber resources. Indeed, inappropriate logging practices represent a critical threat to the health of the watershed—with sediment run-off projected to persist in suspension or as bedload for as long as 150 years.

As the coal mining that has driven the economy of the region recedes in importance, the absence of other obvious economic development alternatives has begun to focus attention on the forest as a source of income generating activity. Landowners, in turn, are feeling new pressure to cut and sell timber that would
otherwise be conserved, increasingly so as the market prices for timber continue to rise. Since 1986, the amount of hardwood cut annually in the region has more than doubled, while the amount of softwood cutting has increased sevenfold. The state of Virginia has recognized the ecological importance of promoting responsible logging by recommending that all operations follow best management practices. Unfortunately, a 1997 field audit found that 92% of all logging sites studied were not in compliance with state-recommended BMPs.

Protection of the entire watershed through traditional acquisition measures is not financially feasible. Instead, the Conservancy began looking for a solution that would:

- allow us to direct the harvesting operations on significant forest acreage while keeping the land in private ownership;
- provide liquidity to landowners to meet urgent financial needs;
- use the resource, inasmuch as possible, to pay for itself.

The Forest Bank Solution

A Simple Concept

The Forest Bank is an idea developed for and marketed primarily to private, non-industrial landowners. These landowners can make a deposit—or a transfer of the perpetual right to grow, manage and harvest trees—to The Forest Bank, while retaining fee simple ownership of the underlying land. In structure, the deposit is designed to resemble the familiar CD used by savings banks.

In exchange for their deposit, the landowner will receive:

- An ironclad promise from The Nature Conservancy that the deposited forest will remain a working forest, and will henceforth be managed sustainably to support the ecosystem of which it is a part;
- A modest, regular financial return, or “dividend payment,” calculated on the basis of the deposited timber’s appraised value;
- The option to withdraw the cash value of the deposit at the landowner’s request (subject to certain penalties similar to a CD);

In contrast to virtually every other effort to promote sustainable forestry on private lands, The Forest Bank strategy guarantees permanent working forests—and permanent control of forest management decisions—through the irrevocable acquisition of timber rights. It does so by providing landowners with an economic option that meets their financial needs.
Target Market

The Forest Bank is designed for private landowners with a desire to maintain and preserve their forests, on the one hand, and a need for access to its financial value, on the other hand. The following are just a few indicators underscoring the appeal that the Forest Bank is likely to have:

- In an effort to understand the motivation behind forest ownership, the U.S. Forest Service recently conducted a survey of non-industrial private landowners. It found more than a quarter of the respondents owned forestland because it is part of a residence; and those listing recreation or aesthetic enjoyment as a primary objective accounted for another 20 percent. Only 9 percent own the asset as a land investment, and a mere 3 percent list timber management as the primary purpose.

- In the course of completing Forest Bank feasibility analyses, we conducted one-on-one interviews with private landowners in the Clinch Valley. These landowners controlled about 4,500 acres—less than 0.6% of the forested watershed but fairly typical landowners otherwise. About 70% expressed a direct personal interest in the Forest Bank, and nearly all believed the idea would appeal to other landowners in the region.

- In the Blue River region of southern Indiana, we identified a sample set of landowners from one subwatershed called Twin Creek and appraised the timber for each of them. With actual forest values in hand, we met landowners to test their interest. Over 35% of the landowners indicated they would deposit their land, and another 25% said they wanted more information.

Business Goals

We intend to develop The Forest Bank as a business for forest conservation that complements the mission and activities of The Nature Conservancy. Our plan is to prove the concept at a small handful of sites in our first 2-3 years. If the pilot projects are successful, we are able to meet our economic and conservation objectives, and we can raise the capital to expand, we intend to build this into a national program that could protect hundreds of thousands of acres of working forests at multiple sites.

We foresee four potential business lines within The Forest Bank. These are:

- **Small Landowner Deposits**—aggressively secure timber rights from NIPF owners and manage collectively to achieve economies of scale and a fair return for landowners.
• **“Anchor Tenant” Acquisitions**—identify larger acquisitions (>10,000 acres), either through creative deposit options with large landholders or through direct purchase of fee simple rights.

• **Reforestation Program**—identify funding sources (e.g., carbon sequestration markets) and create a program to enroll low-value timberland or non-forested lands and plant with trees. This is particularly important in mixed-agriculture areas where aquatic diversity is a conservation goal.

• **Targeted product marketing**—use the TNC brand and core constituency of over one million members to market products using sustainably produced timber, particularly focusing on creating markets and/or adding value to secondary species and lower grade material from Forest Bank sites.

Although the Forest Bank concept was initially developed to address the first operation, recent developments within the Conservancy—in particular the acquisition of 185,000 acres of forestland from International Paper in Maine—have caused us to think about a role for The Forest Bank in coordinating and financing the large timber acquisitions that will undoubtedly be a part of The Nature Conservancy’s future.

**Current Development**

**Pilot Sites**

• The Forest Bank has successfully raised nearly $2 million in capital for a pilot site in the Clinch Valley;

• The Nature Conservancy has pledged up to $5 million of its assets to secure initial depositors in the Bank;

• The Clinch Valley Forest Bank recently hired an Operations Manager with over 12 years of experience in wood procurement with Georgia Pacific and others, and we are poised to accept our first deposits in escrow this fall;

• A second pilot site in southern Indiana is nearly ready to accept a handful of deposits and has pledged up to $225,000 of its own assets to secure the bank;

• We are completing analyses at potential pilot sites in the Lake States, Missouri, and Louisiana.

**Obstacles to Replicating The Forest Bank at a National Scale**

There are a number of issues which we must address if we are to build The Forest Bank into a national program for the protection of working forests.
First, to be successful we have to ensure a deposit transaction for landowners that does not trigger an immediate capital gains event. This has required an exhaustive and expensive request for an IRS private letter ruling. In addition, if and when we receive the letter ruling we will have to create a disclosure document and file with the SEC. We estimate the total cost of this process to be at least $250,000 just in outside legal expenses, and closer to a half-million dollars in total. Few NGOs have the financial wherewithal to replicate this kind of venture capital to create innovative programs.

Second, we need to develop access to substantial capital to operate the Bank. We estimate proof-of-concept capitalization for each of our pilot sites at $2-3 million. With four pilot sites, we must raise up to $12 million in operating capital.

Beyond the proof-of-concept phase, our ten-year target for the Clinch Valley Forest Bank is 60,000 acres in deposited, which creates a liability in potential withdrawals of $30 million. While the Conservancy may be able to finance one bank at this level, it is clear that to create a national impact, we must be able to access low-cost capital in the private markets.

One option for us is to pursue a clarification in the tax code regarding the use of tax-exempt bonds for the purchase of timber assets by a non-profit. The current law is unclear because it probably allows use of tax-exempt financing to purchase timberland for preservation but may not for working forests. We believe a non-profit with the clear purpose of forest conservation should qualify for tax-exempt financing to purchase working forestland.

Third, success in many of the Conservancy’s project sites will require the reforestation of land currently in agriculture or poorly-stocked forest. We know landowners with no current timber value will not be attracted to the Forest Bank, so we need to create alternative financing vehicles that will reward them for putting their land into timber. We would like to pursue carbon sequestration markets to fund this, but we believe direct government support through stewardship payments like CRP or WRP is one of the best ways to convince landowners to set aside unsuitable agricultural land.

One alternative is to offer a landowner a Forest Bank option coupled to a 15 or 20 year CRP or WRP. They might receive set aside payments for the designated period but must agree to reforest the land with suitable timber species. If they enroll simultaneously in the Forest Bank, they might be guaranteed that once the land comes out of WRP, their standing timber is valued and their deposit is initiated, thereby generating continuing payments and access to capital.
Conclusion

The Conservancy’s track record in protecting 11 million acres of land is estimable, and the expertise it has accumulated provides a good foundation from which to launch The Forest Bank. TNC already operates through 50 state offices and nearly 100 project offices based in local communities. Current plans call for the establishment of hundreds more local Conservancy offices during the coming decade.

The Forest Bank builds on this local connection and on the credibility of The Nature Conservancy itself. We will build local operations that help local people meet their goals while protecting local forests and functioning ecosystems. At the same time, we want to use the national scope and brand identity of The Nature Conservancy to grow a business that can be effective at protecting forest ecosystems throughout the United States.
Forest Bank Core Principles

- Maintain and enhance the health of the forest and the plants and animals that depend on it.
- Optimize the sustainable return to our depositors and manage each forest deposit in an exemplary way.
- Protect the forestland soil productivity and the water quality of the streams and rivers.
- Create economic value from the forest resources by pursuing premium markets for our products.
- Manage native forest systems to produce high quality timber over the long term.
- Emulate the natural processes and patterns of the forest and minimize the negative impacts of our harvests.
- Conduct The Forest Bank with integrity beyond reproach.
- Continually reassess our methods and operations and look for ways to improve The Forest Bank.

Mission Statement

The mission of The Forest Bank is to work in partnership with private landowners to promote the economic productivity of working forests while protecting the ecological health and natural diversity of the landscapes in which they occur.