# Forestry Source

# TNC's Working Woodlands Program Takes Conservation Easements to the Next Level

By Joseph M. Smith

That do you get when you take a working-forest conservation easement and mix it with Forest Stewardship Council (FSC) certification and access to certified forest product and carbon markets? If you're in Pennsylvania, you end up with something like The Nature Conservancy's (TNC) Working Woodlands program, an initiative that has helped TNC connect with landowners for whom more-traditional conservation easements are not enough.

"[This] package seems to be quite appealing to landowners," said Fran Price, TNC's director of certification programs and an SAF member. "It has opened doors to landowners where we have been trying to work with them to conserve their lands through a traditional easement for many years, but, for whatever reason, this particular package that includes revenues from forest carbon and the FSC management plan, plus any market benefits associated with FSC—that seems to be hitting a sweet spot."

TNC began developing the Working Woodlands program in 2006–2007, when the organization realized that some forest landowners required different incentives to manage their lands.

"The start of the Working Woodlands program was really around the concept of combining carbon finance—getting paid for sequestering carbon—with FSC certification," said Roger Williams, president of carbon offset developer and marketer Blue Source. "We thought this was a good one-two punch to have this dual revenue stream for landowners."

In addition, said Josh Parrish, TNC's director of land conservation and a developer of the Working Woodlands program, "It came about because of the need for new and better tools to engage private landowners who had little in the way of forest management tools and support."

Forest-management support is just one of several benefits available to landowners who enroll in Working Woodlands and enter into long-term nondevelopment agreements under the program. Other benefits include a full forest and carbon inventory, a 10-year Forest Stewardship Council—certified forest management plan, 100 percent of all FSC-certified timber and wood biomass revenues, access to carbon markets, and the majority share of forest carbon revenues.

Although TNC does not perform the certification audit, it does help landowners prepare for it, said Price.



Individuals involved in The Nature Conservancy's Working Woodlands program (from right to left: Mike Eckley, CF, Stephen Repasch, Josh Parrish, Mike Wolf, and Dan Meixel) discuss management strategies on a parcel of Bethlehem (Pennsylvania) Authority land.

"We do a site visit [wherein] we look at any past management that's indicative of any future management, look at any marked stands, and, depending on where [the landowners] are in their management planning process, review their management plan, and look for areas where they may need to add elements to meet FSC requirements," she said.

To qualify for the Working Woodlands program, which is currently limited to Pennsylvania, a landowner must have a minimum of 1,500 acres.

Parrish said TNC plans to expand the program to additional eastern states over the next several years and that it is working with the Pinchot Institute and other conservation partners on aggregating smaller landowners, which could potentially reduce that minimum acre number down for landowners with adjacent parcels of the same landscape type.

For Parrish, the key to selling the program is finding landowners whose objectives mesh with those of the program.

"The sell, really, is letting landowners know that we're here to help them manage their lands in a way that fits their goals and objectives and improves the underlying quality of the property, both from an ecological perspective and an economic perspective," he said. "The key is finding the landowners who have those types of goals."

To find them, Parrish and his TNC colleagues rely on their reputation and word of mouth.

"We've been working in Pennsylvania for 60 years plus, so having that kind of presence within the communities we work has been a big benefit," Parrish said. "Then, as one project is successful, landowners talk to other landowners [and say,] 'This is something you ought to look into.' That's the best way to do it, by word or mouth and peer-to-peer."

# The Landowner Perspective

Although TNC's preferred approach is to let the Working Woodlands program sell itself, the organization isn't averse to reaching out, in person, to larger landowners, such as the Bethlehem Authority, whose two forested parcels surrounding the Penn Forest and Wild Creek Reservoirs and portions of

Nevertheless, Repasch credits the authority's board for its willingness to participate, calling it a "leap of faith."

"The board would not have approved this agreement if there was no revenue associated with it, and while it wasn't the only deciding factor—we probably wouldn't have sold the property anyway—the revenue certainly played into the decision that was made," he said.

According to Repasch, Chevrolet, the current buyer of its carbon credits, pays the authority approximately \$120,000 a year (the price the company pays per ton is confidential). Chevrolet's agreement with the authority ends in 2015, at which time a new buyer, the Walt Disney Company, will purchase the authority's credits.

Although the total amount of income exceeds \$120,000, a portion of the revenue is applied to covering TNC's and Blue Source's costs.

As for timber revenues, Repasch said that, for the past three years (including 2014), the authority has received an average of





(Left:) A permanent carbon plot on the Bethlehem Authority's Wild Creek property. (Above:) The pin marking the location of the plot.

Tunkhannock Creek were the first to be enrolled under the Working Woodlands program.

"Dylan Jenkins, who was working for TNC at the time, came to us with this new Working Woodlands program, so we started talking, and went down this road developing a conservation easement, which was difficult to get our board to commit to," said Stephen Repasch, executive director of the Bethlehem Authority.

At more than 22,000 acres combined, the Bethlehem property is the largest acreage enrolled in Working Woodlands to date, with the Lock Haven City Authority's nearly 5,000 acres a distant second.

Repasch said the authority has a 60-year conservation easement on its property, adding that "the conservancy would rather have a 100-year or in-perpetuity easement, but [our] board wasn't willing to do that."

\$100,000 annually. Before that, the authority's timber income was in the \$50,000/year range, and he expects revenues to return to that level in the future.

The authority has yet to see any benefits from having FSC-certified timber, but Repasch expects that to change.

"There is supposed to be and likely will be a marginal value to our timber through FSC certification. We haven't realized any of that yet, it just seems to be reaching our [region]," he said. "I suspect that within the near future, based on what I've heard, we will be getting a small premium for our timber, depending on grade and type of tree."

However, Repasch says the revenues aren't the authority's main reason for enrolling in the Working Woodlands program.

"The revenue is secondary. We're doing this for all the right reasons: to preserve our watershed property and to preserve water quality. The primary objective is to provide the highest-quality water we possibly can to our customers."

# **Accounting for Carbon**

Although the revenues may be secondary to the Bethlehem Authority, the forest product and carbon components of Working Woodlands are central to the program.

"A lot of people think, 'Oh, if you're going to enroll in carbon, you're not going to be able to manage actively," said TNC forester and SAF member Mike Eckley, CF. "Trying to find that sweet spot to optimize and generate revenues and sustain revenues, for both traditional forestry and for carbon—that's what we're hoping can be done."

The Bethlehem Authority's experience with the program suggests it can; however, Repasch expressed concern that, somewhere down the line, something may change, which could make staying on that "sweet spot" more difficult.

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"We want to do active timber management, we want to do prescribed-fire programs—we want to do this stuff. Right now, it's consistent. It's consistent with FSC, it's consistent with the carbon standard, but the carbon standard doesn't appear to be as flexible as we'd like it to be, and I'm not sure that, somewhere along the road, something is going to change and inhibit our ability to manage our forests the way we want to manage them."

For Repasch, the possibility of changes in the carbon standard is not merely hypothetical.

"The first year when we got into this, we had to do an inventory, and we did it with temporary plots. We had over 2,000 that were measured, and we based our first-year revenues from the sale of carbon on them," he said. "The following year [the third-party auditor for the] VCS (Verified Carbon Standard), which is the [carbon registry] we're selling through, said we needed to move to a permanent plot system of measuring the forest. So, last year we had to develop more than 200 permanent plots, and that resulted in a net loss of about 9,000 tons of carbon. The auditors and VCS ultimately have the final say. Going forward,

hopefully, they don't change course in how we measure the forest."

Blue Source's Roger Williams referred to such changes as "growing pains" within VCS.

"For the VCS program, there are dozens of methodologies across multiple sectors. The Bethlehem project that we have undertaken with TNC was the first domestic VCS improved forest—management project ever in the US, and so it's under a methodology that no one had previously used to develop a project. We really are on the leading edge," he said. "I think what you're seeing is a little bit of growing pains around the understanding of how to use these methodologies."

However they're characterized, Parrish referred to the immaturity and complexity of the carbon market as "probably the biggest risk" to the program.

"Carbon is a new arena, it's been around 15 years, and when you're talking timber markets—mature markets, readily identifiable things—carbon is the exact opposite," he said. "Our program is not solely a forest carbon program, it's built around forest health and sustainability."

During my visit to the Bethlehem property, our first stop was a permanent plot in the Wild Creek area. Just off the road, the plot consisted of about 12–15 marked trees surrounding a piece of rebar pounded into the ground—the plot center.

"Every tree that has been painted has been tallied and measured for long-term growth and monitoring," said TNC's Eckley. "Hopefully, [the plot] can be monitored for a long time."

According to Eckley, there are 250 plots throughout the Bethlehem site. (The 5,000-acre Lock Haven City Authority site has more than 100.) Each one may take a half-hour to an hour to install, depending on where it's located.

Bethlehem's consulting forester, Robin Wildemuth of Woodland Management Services, and his crew installed the plots on its property in accordance with VCS specifications. Then the foresters measured the plots and, in association with TNC, sent the data to carbon offset developer and marketer Blue Source.

To determine the amount of carbon sequestered on the Bethlehem property, Blue Source performed the carbon modeling work (taking into account mortality, growth rates, harvest schedules, and so on) and, once carbon quantification was complete, drafted the necessary documentation. Then it guided the project through third-party verification and credit registration, and, ultimately, sold the carbon credits.

### **More Than Carbon**

Not all of the Bethlehem property is managed for carbon. In the Tunkhannock Creek area, there is a 1,400-acre parcel of scrub oak barrens on which the Bethlehem Authority, in concert with the Pennsylvania Game Commission, was able to perform habitat improvement projects, including prescribed burning.

"The Working Woodlands program provided enough process in terms of developing an FSC management plan that allowed us to insert in language defining what the game commission wanted to do on the property," said Eckley. "The authority relied upon the program to provide the accountability that 'yes, we can proceed with these activities knowing that they will be in compliance with certification and not compromise the carbon."

For Parrish, including the game commission's habitat goals into the authority's management plan proves that the Working Woodlands program is about more than carbon.

"The barrens are one of our highest priority areas in northeast Pennsylvania because of their biodiversity, and that all gets back to the primary goals of the program being conservation goals."

### **Enter the Forester**

Given TNC's focus on getting landowners on board with its conservation goals, the organization relies on a host of partners to help it accomplish the fieldwork at the heart of Working Woodlands, and chief among them are consulting foresters.

"The reason it makes all the sense in the world to engage the private forest community and forest consultants is that they bring the needed skills to the table—they have the capacity to get the job done, and they have relationships with landowners that we don't have," said Parrish. "They are an important part of the program."

Yet, given all the players involved, a forester may find the Working Woodlands program a little more complex than the traditional forester-landowner relationship, at least at first.

"When we first started learning how we were going to fit into this process, there was a degree of the unknown because it felt like too many people to please with somewhat different objectives. You have the landowner, you have TNC, you have Blue Source carbon, and, even though they all had a similar picture of where they wanted to go, there were differing objectives in some situations," said Michael Wolf of Appalachian Forest Consultants, who works on the Lock Haven City Authority property. "I've come to the conclusion that this isn't any different from any other project that we work on. I still see my role as a consulting forester as being employed to help the landowner meet his or her objectives."

Nevertheless, those differing objectives present their own

unique challenges.

"The hardest part of this was trying to find that sweet spot where we can make that carbon potential good enough and the forest management potential good enough so that the two can go side-by-side and [the landowner] can participate in both [the carbon and forest products] markets. That was, and still is, the most difficult part of trying to manage this project."

During the next decade, Wolf's management plan focuses on improving the health of the Lock Haven City Authority's forestland.

"Our main goal for the first 10 years of this particular plan, which is a 100-year management plan, is to improve forest health by way of thinning, invasive species control, and some small-scale regeneration harvests. Alongside that, the goal is to create a situation where the Lock Haven City Authority receives enough annual income from the carbon market and through forest-stand improvement to pay for any expenses and generate some revenue."

Unlike the Bethlehem Authority, Wolf said Lock Haven will see a financial benefit from its FSC-certified wood.

"Down in our neck of the woods, we can probably get at least double the price to the landowner for pulpwood that is certified, so that's a substantial financial premium. But sometimes, depending on market conditions, the local pulp mill has a lot of wood in the yard. Then the premium on certified wood is [that the mill will] take it and at least pay market value for it."

It's landowner benefits like this, coupled with forest management support, that have Wolf singing the program's praises.

"What TNC and the Working Woodlands program is selling is a wonderful thing. [Landowners] can get a certified, top-notch forest management plan for a property that maybe never had a plan or maybe was on the road to [becoming] a degraded forest. Through working woodlands, [landowners] can work with a forester, get access to all of the assets at TNC's fingertips as far as education and information and technology, and then they can get into these carbon markets that hopefully will supply a steady income."