

Forest Carbon Credit Programs in Mississippi

Natural Capital Exchange

Forests are useful in mitigating global temperature increases because they sequester carbon dioxide from the atmosphere and transform it into biomass through the photosynthetic process. This sequestration counteracts the warming effects of carbon dioxide in the atmosphere that, through the “greenhouse effect,” can negatively impact living creatures in water and on land.

This is a public benefit provided by private forest landowners, but, in the United States, there are no federal incentives (payment programs) to encourage forest carbon sequestration by forest landowners. However, there are several state and regional programs designed to mitigate carbon emissions, such as the Western Climate Initiative (WCI) and Regional Greenhouse Gas Initiative (RGGI). Qualifying for enrollment as of 2021 is difficult, so opportunities for forest owners to engage in these programs is limited. Eligibility requires a relatively large timberland base where qualifying management actions (afforestation, conservation, and limiting harvesting operations over specified periods and forests) are actively practiced.

Besides regulated markets, there are also voluntary carbon markets that seek to offset emissions. In a voluntary market, consumers (individuals, companies, or governments) that are not required to offset their carbon emissions buy carbon offsets to counteract carbon dioxide released by their activities. Programs like Finite Carbon, Blue Source, and Working Woodlands (The Nature Conservancy) focus on landowners who own more than 2,000 acres. However, there are other programs that focus on smaller forests. These include but are not limited to Finite Carbon’s Core Carbon Program, Cold Hollow Carbon Project, Green Trees Carbon Program (afforestation only), and Forest Carbon Works.

While these programs require longer time commitments from forest landowners (generally 20 years or more), Natural Capital Exchange (NCX) offers essentially a 1-year rental that can be renewed for successive years. This is attractive to some forest owners due to the limited time required to fulfill a contract. This publication focuses solely on NCX; as of November 2021, it is the only voluntary carbon program available to small Mississippi landowners, but that will likely change by mid-2022. We’ll have

additional information on subsequent programs as they become available.

Every program has unique features, and, depending on your objectives, another program may be more appropriate. Before signing up for any carbon program, be sure you evaluate the program to ensure that it lines up with your management goals and land ethic. It is also recommended that you consult with forestry and legal professionals to discuss the far-reaching forest-management implications of these programs.

Natural Capital Exchange Enrollment

NCX has a straightforward process for enrollment. You or a consultant working on your behalf can sign up at <https://landowners.ncx.com/sign-up>. Then, use NCX’s mapping system to submit information about your property. This will include shape files that illustrate the candidate property on the map. Hand-drawn or hard-copy maps are also accepted, but this delays the application process.

How Does It Work?

NCX remotely assesses the tract’s “harvest risk”—the possibility of harvest. If the property’s timber is not a likely candidate for harvesting, it does not qualify. Consider a pine stand that is 4 years old. Since there is no danger of harvesting non-merchantable timber, this property would be deemed ineligible. The more volume in a stand and the higher the “risk of harvest,” the more eligible carbon you have on the stand.

NCX conducts these calculations remotely through satellite imaging and growth and yield modeling to determine what is physically on the ground. NCX then returns an eligibility report that shows how many harvest deferral credits (HDCs) are on the property. These HDCs are not on a per-ton or per-acre basis. In the past, 1 HDC equaled roughly 25 green tons, but a recent NCX document for the 2022 winter cycle indicated that generating a verified carbon credit now requires a larger volume of harvest deferrals. This means, all things equal, your property will likely have fewer HDCs because of this change in the green tons to HDC ratio.

The landowner then determines how much harvest they are willing to defer to hold that eligible carbon (all or a portion of the total amount) for 1 year. The holding year begins at a designated quarterly start period, and the contract expires after 365 days of enrollment. The landowner determines their sale prices; some of the carbon units may be sold for one price and other units for a different price, or all the credits maybe sold for a single price.

Keep in mind, though, other landowners are selling, as well. NCX uses an auction process that is blind. All bids—from both buyers and sellers—determine what the market price for that quarter's auction will be. This is then applied to all participants who bid at or below the market price. If you bid above the market price for all your credits, you are not eligible to participate for that quarter, but you may bid in the following quarter.

This style of market tends to depress prices compared to alternative styles. Prices fluctuate from quarter to quarter and have ranged from \$8 to \$12 per credit, but that is not a guarantee of what prices may do in the future.

After the Contract Ends

Can you participate in other programs after your contract with NCX ends? While there is no option to enroll simultaneously, there has been confusion about subsequent participation in other programs. The short answer, for now, is assume that you cannot. Particularly with NCX, the ton-year methodology involves discounting carbon held in the future with carbon deferral credits assigned when you enroll in the program now. So you are being paid for the carbon the timber stand will sequester over the longer term despite the 1-year agreement. If you were to enroll in another program after your NCX contract ends, this would qualify as double-counting the carbon you are sequestering in separate programs (assuming you enrolled all your possible deferral units).

How long will you have to wait to enroll in another carbon offset program after your NCX contract ends? The answer is currently unknown. If you are interested in pursuing longer-term programs subsequent to your contract expiration with NCX, be sure to discuss the rules with an NCX representative. Alternatively, enrolling in NCX after being in one of the other programs is not subject to any limitations currently according to NCX representatives.

More Details

More information on the NCX program and process is available at https://www.facebook.com/MSUextforestry/videos/?ref=page_internal. In this video, MSU Extension experts discuss the program with NCX landowner key accounts manager Jeff Wright.

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