

NRCS BIOCHAR FUNDING QUICK GUIDE FOR US PRODUCERS



Photo: Josiah Hunt

NRCS BIOCHAR FUNDING FOR US PRODUCERS – A QUICK GUIDE

The newly developed Conservation Practice Standard Soil Carbon Amendment (336) can be used by growers to offset the costs of applying biochar to improve soil health and build soil carbon. This FAQ identifies practical information on what the practice standard is, how it works, and important details to consider when applying for the funding.

WHAT IS THE NRCS SOIL CARBON AMENDMENT PRACTICE?

The Soil Carbon Amendment practice is used by the USDA Natural Resources Conservation Service (NRCS) to help agricultural producers (farmers, ranchers, and forestland owners) improve soil health and store carbon by providing financial assistance to offset the costs of biochar and/or compost amendment to soil. Financial assistance is available for producers through the Environmental Quality Incentives Program (EQIP), to add biochar mixed with compost, manure, or other inoculants to the soil. In addition to EQIP, the Regional Conservation Partnership Program (RCPP) may also offer financial assistance for 336, but in order to receive financial assistance through RCPP the practice must be available in an active project in your region.

WHAT IS A PRACTICE STANDARD?

A practice standard provides guidelines to effectively use a practice within NRCS' financial assistance programs. The standard outlines the "why" and "where" the practice is applied and sets forth other criteria to implement the practice. In the standard all "criteria" must be met, but "considerations" are optional. The standard also lists the key components required to plan or "design" the practice.

WHAT ARE THE CRITERIA IN PRACTICE STANDARD 336 APPLICABLE TO BIOCHAR?

There are many criteria, so it is important to read the entire standard carefully. The national standard can be found here: <https://www.nrcs.usda.gov/resources/guides-and-instructions/soil-carbon-amendment-ac-336-conservation-practice-standard>. Some of the criteria include:

- Using biochar that is produced by heating biomass to a temperature in excess of 350 °C under conditions of controlled and limited oxygen concentrations to prevent combustion (i.e., pyrolysis or gasification).
- Using biochar with the International Biochar Initiative (IBI) [Certified biochar](#) seal or ensuring that biochar meets IBI certification criteria using approved laboratory analytical methods in IBI Standards (version 2.1).
- Documenting origin of biochar, production method, moisture, particle size, pH, electrical conductivity, ash, liming equivalent, and nutrients (N, P, K, Ca, and Mg).
- Ensuring that heavy or trace metals are within acceptable ranges established by the EPA, and that Organic Carbon is >10%, and the Hydrogen to Organic Carbon ratio is <0.7.

For more information, review Day 1 of the USBI webinar on criteria as presented by NRCS staff found here: <https://www.youtube.com/@USBiocharInitiative>



WHERE CAN I FIND MORE INFORMATION SPECIFIC TO MY STATE?

Each state keeps practice standard information in the “Field Office Technical Guide” (FOTG). National practice standards are typically written very broadly from a national perspective, and state NRCS offices sometimes modify or revise national practice standards to fit state-specific conditions, so applicants should always review the FOTG. You can find your state’s FOTG here: <https://efotg.sc.egov.usda.gov/#/>

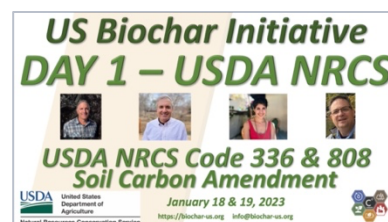
Practice standards are kept in Section IV of the FOTG. You can navigate to Section IV and find the standard alphabetically or do a keyword search. In the practice folder you should also find a practice overview, which is a brief description of the intent of the practice and implementation requirements. Implementation requirements typically list what steps you need to take to install the practice and what documentation is needed.

WHO IS ELIGIBLE TO APPLY FOR FINANCIAL ASSISTANCE FOR NRCS 336?

Eligible applicants include agricultural producers, owners of non-industrial private forestland, Indian tribes, those with an interest in agricultural or forestry operations, or water management entities. Farm records must be established or updated with the Farm Service Agency for both the applicants and the land for your application to be eligible.

Applicants must meet adjusted gross income limitation and payment limitations and be in compliance with the highly erodible land and wetland conservation requirements. They must own or control the land (i.e. rent or lease) for the term of the proposed contract, agree to implement specific eligible conservation practices according to the contract schedule, and there must be an existing resource concern that can be addressed through an NRCS conservation practice. For more information visit:

<https://www.nrcs.usda.gov/apply-for-environmental-quality-incentives-program-eqip> or watch the USBI webinar on eligibility as presented by NRCS staff found here: <https://www.youtube.com/@USBiocharInitiative>



HOW DO I APPLY FOR THE PRACTICE?

To apply for this practice, contact your local NRCS office in the county where your farm is headquartered. Use the field office locator found here: <https://www.nrcs.usda.gov/contact/find-a-service-center> After you reach out to your local office, a conservation planner will typically be assigned. They will walk the land with you to discuss and review any resource concerns. They will serve as your point of contact and help guide you through the process.

WHEN SHOULD I SUBMIT AN APPLICATION TO NRCS?

NRCS accepts applications on a continuous basis throughout the year. Filling out an application is the first step in the process. Some states have application deadlines for specific programs, and these dates may vary. Each state has their own website that provides key program deadlines. Find your state here: <https://www.nrcs.usda.gov/conservation-basics/conservation-by-state>. If you miss a deadline, submit your application anyway, it will be rolled over to the next funding opportunity automatically.

All states have “ranking”, “batching”, or “cutoff” dates. These are the deadlines that each state uses to gather up a “batch” of applications and rank them. Applications are ranked based on a complex, behind-the-scenes tool called CART (Conservation Assessment and Ranking Tool), that prioritizes funding decision based on the current condition of the land and the potential environmental impact of the practice(s). Ranking dates are found here: <https://www.nrcs.usda.gov/ranking-dates>

Be sure to submit your application well in advance of the ranking dates, ideally for both EQIP-classic and EQIP-IRA. By getting your application in early, you will give your planner time to develop your conservation plan. Late summer is usually a good time to submit an application in most states, because the new federal fiscal year begins on October 1st, and most ranking dates are set after the fiscal year begins. The application form is here:

<https://www.nrcs.usda.gov/sites/default/files/2022-09/CPA-1200%20EQIP%20Application%20Form.pdf>



Photo: Josiah Hunt

PRO TIP: Instead of regularly checking the website for your state, you can sign up for alerts through Farmers.gov. Once you choose email or text alerts, you can then navigate to a state and select the type of alert to receive. Although each state has different alert categories, selecting NRCS News Releases, NRCS EQIP, or NRCS Programs should get you the information you need. Subscribe to the alerts here:

<https://public.govdelivery.com/accounts/USDAFARMERS/subscriber/new>



WHAT IS A CONSERVATION PLAN?

A conservation plan is what NRCS will develop for each customer or producer that applies for a practice. The plans can be very simple or complex. At the basic level, a conservation plan outlines your goals and objectives, identifies any environmental limitations on your operation (called “resource concerns”), and then prescribes certain practices to help improve the situation. The 9-step planning process is outlined here: <https://www.nrcs.usda.gov/getting-assistance/conservation-technical-assistance/conservation-planning>

When approaching NRCS about assistance with biochar, be sure to articulate your reasons for wanting to use practice 336. For example, potential resource concerns you want to address may include building soil carbon and organic matter, improving soil health, reducing fertilizer use, or improving water infiltration or water storage. Pro tip: You commonly rank higher by applying for more than one practice, and a good strategy is combining Soil Carbon Amendment (336) with Cover Crop (340), Nutrient Management (590), and Soil Testing (216, 217, or 221).

A conservation plan will include the details of how the practice will be implemented on your operation. Conservation planners will provide technical assistance to help you decide how to best apply your biochar amendments on your soils for your purposes. Some of the tools available for decision support include the Web Soil Survey’s Dynamic Soil Properties Response to Biochar <https://websoilsurvey.nrcs.usda.gov/app/> and the PNW Biochar Atlas <http://www.pnwbiochar.org/>. USBI also has several resources available in their Education tab (see section “How much biochar should I apply?” below for application rate guidance).

HOW MUCH FUNDING WILL I RECEIVE?

NRCS generically calls this funding “financial assistance”, and the way the payments are constructed can be confusing, sometimes even to NRCS staff. Payments are structured based on average costs for a “typical scenario” to deploy a conservation practice. For Soil Carbon Amendment 336 there are different scenarios based on the percent of biochar in the mixture. For example, a typical scenario for 336 for fiscal year 2023 was a 60% biochar and 40% compost or manure blend. In this scenario, a payment rate of approximately \$160 per cubic yard was constructed for average costs for purchase of biochar and compost, shipping, loading, hauling, applying, and incorporating the amendments. These numbers do not change based on your local situation (e.g. your actual purchase or shipping costs), it is just a flat payment rate. These rates also vary by state.

The payment is not designed to cover the total cost of applying soil carbon amendments, but to help assist in the implementation of the practice based on average costs across the country. Usually, 75% of the average payment rate is reimbursed after the practice is completed, but Historically Underserved Producers can receive a 90% reimbursement. Some producers will be able to install the practice for less than the payment rate, while others may incur higher costs. Payment scenarios are reviewed annually. The payment scenarios can be found here: <https://www.nrcs.usda.gov/getting-assistance/payment-schedules>

Think about the application of biochar not just as a cost, but also as an investment in your soil health that will pay dividends over time. Though you may not see clear results in the first year, you are likely to get positive results as time progresses. Improvements to soil microbial activity and soil structure take time and the benefits of biochar can continue for many years.



HOW DO I RECEIVE THE FUNDING?

After your practice is successfully contracted with NRCS, you will be set to go ahead and implement the practice. NRCS financial assistance works on a reimbursement basis.

Keep in close contact with your assigned conservation planner when you select your biochar or compost. Inform your planner about the source of the product and share the test results to ensure that your amendment meets the practice criteria. It is the responsibility of the manufacturer to provide you with the test results.

Communicate with your planner when you are ready to apply your carbon amendment. Sometimes NRCS will want to visit you and witness that you are doing what NRCS is paying you to do. Called “practice certification”, this usually involves having all documentation in order to make sure the standard was followed. Be prepared to allow NRCS to obtain photo documentation, obtain GPS boundaries for the area of application, collect an invoice stating how much biochar was delivered, and request any other documentation needed. Once the practice is certified, NRCS will typically reimburse you within 3-5 business days.

CAN I QUALIFY FOR FUNDING MORE THAN ONCE?

Talk with your planner about this, as states handle situations differently. In general, 336 is called a management practice, which means it can be planned or contracted once a year for up to 3 years (on that footprint of land). If you are applying lower rates gradually then implementing the practice for 3 years would be beneficial, whereas some would prefer to apply a higher rate all at once.

HOW MUCH BIOCHAR SHOULD I APPLY?

Application rates depend on your objectives, soil, cropping system, and management. Considering the variability in biochar feedstock and production conditions, as well as a number of other environmental factors, providing an exact prescriptive rate is not possible at this time. However, there are general guidelines that can be used. If your goal is to sequester carbon and improve soil organic matter, more is usually better - this could mean rates up to 10 wet tons per acre or 40 cubic yards per acre. In general, the NRCS has promoted 1 wet ton (or 4 cubic yards) per acre to improve soil organism habitat and nutrient cycling, and 3 wet tons (or 12 cubic yards) per acre to improve soil organic matter and water infiltration/water holding capacity. A wet ton assumes 30% moisture. See the US Biochar Initiative (USBI) fact sheet <https://biochar-us.org/biochar-crop-application-guidelines> and their Code 336 webinar series on their YouTube channel: <https://www.youtube.com/@USBiocharInitiative>

PRO TIP:

Your local biochar producer is also typically a good source of information about how much biochar to apply. The US Biochar Initiative website provides a directory of biochar producers and suppliers in each state:

<https://biochar-us.org/directory>.

Note, some producers may not be listed on this directory.



DO I USE THE PRACTICE ON ALL MY FIELDS OR CAN I CHOOSE JUST A FEW?

It is wise to select some key fields to try out the practice. Avoid choosing your “worst” or poorest yielding fields, as you may have a number of confounding factors. Also avoid choosing your “best” yielding fields, as the benefits of biochar may not be apparent in excellent yielding fields. Instead, choose some of your “average” fields, especially those with sandier soils. Talk to your conservation planner about how to stagger applications over a couple of years.

CONCLUSION:

The science supporting the benefits of biochar applications to the soil is strong. Interest in using biochar in agricultural operations is rapidly increasing, and larger scale biochar producers are now able to provide the supply needed. Using the NRCS Soil Carbon Amendment (336) practice is a good way to offset some of the costs associated with biochar application. Contact your local NRCS office now to find out more details.

***Note:** NRCS program rules change often. Consult the NRCS for the most up-to-date information. USBI and their contractors are not responsible for errors or omissions.

Suggested Citation: Smith, B., Loll-Webster, J., Gray, M., Seman-Varner, R. 2023. NRCS Biochar Funding for US Producers – A Quick Guide. United States Biochar Initiative.



For more information, please visit the USBI Learning Center:

US Biochar Initiative: <https://biochar-us.org>

American Farmland Trust: <https://farmland.org>

AFT Biochar Basics: [Current Status of NRCS Incentive Payments](#)

Published by: USBI in partnership with American Farmland Trust

USBI thanks the USDA Forest Service, Wood Innovation Program for continued funding support of its activities and publications. This institution is an equal opportunity provider.

