



## Biochar Basics: Current Status of NRCS Incentive Payments

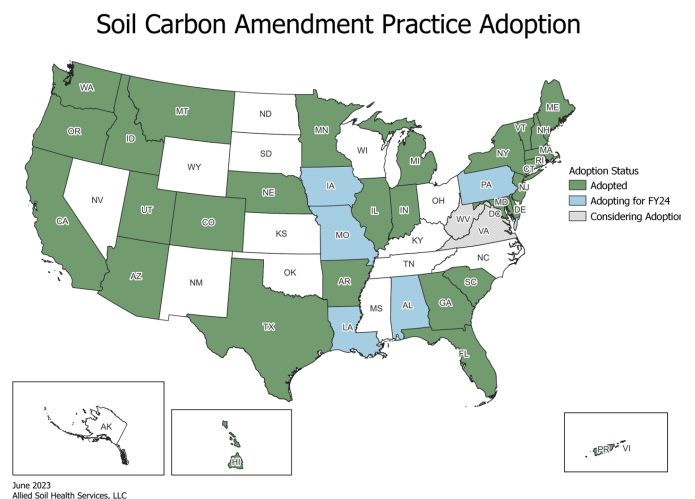
Biochar is an ancient technology that is gaining popularity. Biochar is a highly charged and very stable carbon amendment that is produced from many different sources or feedstocks. These feedstocks vary and can include hardwood, softwood, bagasse, manure, nut shells, crop residue, pallets, and pretty much any material that contains carbon. The feedstock is then heated in a limited oxygen environment, typically either through pyrolysis or gasification, to produce a high carbon material that can be used in a variety of applications.

Some of the primary benefits of biochar application to the soil include improved porosity and water holding capacity, reduced nitrogen leaching, better root growth, improved soil organism habitat, and ultimately higher crop yield. However, biochar must be carefully selected based on your objective. The feedstock, processing temperature, residence time (how long it is held at a particular temperature), and final particle size all play a role in determining the appropriateness of a biochar for any given situation.

## USDA-NRCS Provides Assistance for Biochar Application

The NRCS has a new conservation practice in the Environmental Quality Incentive Program (EQIP) called "Soil Carbon Amendment" that provides financial assistance to farmers, ranchers, and forestland owners to apply carbon amendments, such as biochar and compost, to their soil as a way to sequester carbon, improve soil health, and increase yield and productivity. The Soil Carbon Amendment standard exists in 2 forms – a temporary standard with the code 808 for use from Oct 1, 2022 – Sep 30, 2023, and a national standard with the code 336 that will begin use starting Oct 1, 2023.

There is also an enhancement in the Conservation Stewardship Program (CSP) called Biochar Production from Woody Residue (E384A) that offers support for making biochar on your land in an open kiln.



## How Do I Get Started?

First, visit the EQIP application page and begin the process. You can also contact the NRCS District Conservationist in the county where your operation is headquartered. NRCS staff will work with you directly through the whole process.

You can apply for assistance with the NRCS at any time during the year, but getting it done earlier is always better. After the application process, a conservation plan will be developed with you and NRCS staff, or a 3rd party conservation planner (such as those on AFT’s staff in select states) who does technical work on behalf of NRCS. Your application and conservation plan then moves through a ranking process with others that were submitted in the state. These ranking dates are critical deadlines for funding decisions, but they vary by state and by program. Getting your application and conservation plan done well in advance of the ranking date is critical.

During your application process, you will also work with NRCS and the Farm Service Agency (FSA) to ensure:

- You have “control” of the land (own, rent, lease) for the length of the contract.
- Your adjusted gross income is below \$900,000 and you have not received farm bill payments more than \$450,000 from 2018-2023.
- You are in compliance with highly erodible land and wetland conservation requirements

Learn more at  
[farmland.org/biochar](http://farmland.org/biochar)

## More Details on Soil Carbon Amendment (336)

The transition from 808 to 336 involved a number of changes, including the requirement for the biochar and compost to be tested and meet certain criteria. Toxic metals must fall below certain levels and a few other parameters need to be reported. The national 336 practice standard and associated documents outline the overall rules or guidelines for using the practice. For example, the standard allows biochar to be spread on areas of Crop, Pasture, Range, Forest, Associated Agriculture Lands, Developed Land, and Farmstead where organic carbon amendment applications will improve soil conditions.

Each NRCS state office can modify the standards and supporting materials to allow for stricter criteria and address state-specific situations. The modified materials are located in Section IV of the Field Office Technical Guide (FOTG) for your state. Additional available documents there will include an overview of the practice and “implementation requirements” or IR’s. The IR will inform what you need to do to implement and be reimbursed for the practice.

### How Does the Payment Process Work?

After your application is ranked, and if you are selected for funding, you will sign a contract that indicates how much biochar you will apply, when you will apply it, over how many acres, and how many years in a row (with NRCS financial assistance, you can apply biochar up to 3 years in a row if desired). The payment rates are set annually in each state and are calculated based on a “typical” cost to do all the steps in the process. That cost includes field preparation (if necessary), loading, spreading, biochar cost, and shipping. Each practice has payments for different scenarios – this year the scenarios were based on the percentage of biochar when mixed with compost or manure. Tiers were structured at 20, 40, 60, 80, or 100% biochar. Payment schedules for each state can be viewed here and may be modified annually.

Once you apply the biochar at the planned rate on the specified number of acres, you will meet with the conservation planner to certify your practice. You will go over the IR and the standard to make sure everything was done according to specifications. Be prepared to show an invoice (validating the amount of biochar purchased) and photos of you applying the material. Once certified, you are typically reimbursed within 5-7 business days. Most of the time, producers receive 75% reimbursement, but some Historically Underserved Producers (HUP’s) receive 90% reimbursement. HUP’s may also be eligible to receive funding up-front.

### How Much Biochar Should I Apply to Meet 336 Requirements?

There is no minimum or maximum amount listed in the national standard. Cost usually determines the maximum amount, whereas “effectiveness” determines the minimum amount. Depending on production systems, smaller amounts like 1-2 cubic yards (or ¼-½ ton) per acre may be applied multiple years in a row. Conversely, larger amounts like 4-12 cubic yards (or 1-3 tons) per acre may be applied just during a single year. The conservation plan will help guide the purpose, timing, and rate of application and the conservation planner will provide technical assistance to make those decisions.

### Where Can I Get Biochar?

The US Biochar Initiative specializes in providing biochar resources nationally and maintains a comprehensive list of biochar suppliers which can be found at [biochar-us.org/suppliers-and-manufacturers](http://biochar-us.org/suppliers-and-manufacturers). Keep in mind the industry is rapidly growing and there may be a few companies that are not on the list yet, so be sure to do a manual search in your local area. In addition, the Pacific Northwest Biochar Atlas, an application decision support tool, has a list of suppliers in the Northwest and is expanding coverage to the entire US soon.

### What Can I Do to Prepare?

1. Define and refine your objective(s). What are your top 3 reasons for wanting to use biochar? (The PNW Biochar Atlas can help)
2. Learn more about biochar. There is a lot to know.
3. Get in contact with your local NRCS Office, Conservation District or other conservation partner organization as soon as possible.
4. Determine where you want to apply biochar and get a soil test that includes pH and organic matter.
5. The process can take months to complete, so try to be patient as your application is developed and reviewed. Maintain good records and stay in contact with your NRCS office and conservation planner.



Photo: Dr. Brandon Smith, Allied Soil Health Services