



Environment and Natural Resources Trust Fund

2027 Request for Proposal

General Information

Proposal ID: 2027-431

Proposal Title: NW Regional 9 County Biochar Initiative

Project Manager Information

Name: Brian Olson

Organization: Beltrami County

Office Telephone: (218) 333-8278

Email: brian.olson@co.beltrami.mn.us

Project Basic Information

Project Summary: The project consists of purchasing a Biochar unit, processing equipment, constructing 4 hoop buildings for storage, purchasing bagging equipment, processing wood into biochar, and testing quality.

ENRTF Funds Requested: \$3,160,000

Proposed Project Completion: June 30, 2030

LCCMR Funding Category: Land (F)

Project Location

What is the best scale for describing where your work will take place?

Region(s): NW

What is the best scale to describe the area impacted by your work?

Region(s): NW

When will the work impact occur?

During the Project and In the Future

Narrative

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

This much needed project would address multiple issues of regional concern. The first one which is related to the Minnesota's Pollution Control Agency's (MPCA's) proposal to close all local unlined Construction and Demolition (C&D) Landfills. The other is to manage the clean-up of storm debris resulting from more frequent and intense storms and disasters associated with climate change. The Northwest Minnesota 9 County Regional Hub and Spoke System grant funded study identified this project as one of the significant components to turning "Woody Waste" either storm debris or clean C&D woody material into a beneficially reusable material. This project then has the potential to: Sequestration of carbon by converting wood waste into biochar; filtering out pollutants from stormwater, restoring soil health to reduce fertilizer use; reducing the amount of woody material that enters a landfill; reducing wildfire risk due to storm debris; and the ability to extend nutrient retention long-term in compost. The Minnesota Pollution Control Agency (MPCA) has provided a letter of support, and believes in our group and the well-researched benefits of biochar.

What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.

The proposed solution is to purchase a biochar unit, with all processing equipment. Geographically position and construct the storage buildings in locations to allow easy access for to deliver storm debris, and clean C&D material. Build storage buildings (Hoop Buildings) for the storage of Biochar and equipment with not in use. Simultaneously obtain the necessary permits through the state of Minnesota to conduct this activity at the selected sites, this is fairly new to the state of Minnesota which is why the Minnesota Pollution Control Agency (MPCA) just published a new Biochar Production webpage to help provide a more defined set of requirements in March 2026. The next step would be processing woody material to make Biochar. We will then introduce the biochar to compost and conducting testing to confirm we are achieving desired results, mixture. Use the biochar (Sock) that is produced to filter storm water and conducting testing to see if we are achieving the desired results. This testing will need to be done several times throughout the project due to the fact not all biochar is created equal.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

1. Climate change mitigation
2. Carbon sequestration
3. Improve Water quality
4. Local and sustainable solutions to climate change
5. Local foods preservation (wild rice/Manoomin)
6. Assist in Storm cleanup (due to no federal assistance), - Beltrami County suffered a significant "Derecho storm event" on June 21, 2025 that took down approximately 9 million trees.
7. Wood waste utilization from annual county tree debris sites, and clean/sorted C&D material.
8. Minimize potential risk from wild fires from natural disasters because there would be an outlet for the unwanted tree debris.

Activities and Milestones

Activity 1: Build Biochar Storage Buildings (Hoop Buildings), Purchase Biochar unit, and start Permit Process with the MPCA

Activity Budget: \$1,485,000

Activity Description:

Hubbard, Clearwater, and Beltrami County contract to build Hoop Storage buildings to store the biochar, and equipment. Purchase the Biochar Unit, lead time can take up to 9 plus months to receive, at the same time start the permit process with the MPCA and Braun Intertec.

Activity Milestones:

Description	Approximate Completion Date
4 Storage Building Built (53' x 144")	August 31, 2028
Recieve Biochar Unit	December 31, 2028
Receive MPCA Permit	December 31, 2028

Activity 2: Purchase support processing equipment

Activity Budget: \$1,640,000

Activity Description:

Hubbard, Clearwater, and Beltrami Counties order and receive the necessary processing equipment. Some the equipment will be shared. Sites will need to have equipment on site to store enough material until the Biochar Unit is deployed to the site.

Activity Milestones:

Description	Approximate Completion Date
Purchase equipment	September 30, 2027
Receive Equipment	December 31, 2028

Activity 3: Produce biochar

Activity Budget: \$35,000

Activity Description:

Process woody material to make biochar: Use clean C&D woody material (Pallets, Di amental white wood (tracking quantities to see how much we are diverting from waste stream), and Tree Debris. Introduce biochar to compost, stormwater and test to see how it performs.

Activity Milestones:

Description	Approximate Completion Date
Produce biochar	June 30, 2030
Haul Biochar to Polk County Compost Facility and Mix and test	June 30, 2030
Use Biochar to filter Stormwater and test	June 30, 2030

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Josh Holte	Hubbard County Solid Waste	Solid Waste Administrator	Yes
Dan Hecht	Clearwater County	Solid Waste Administrator	Yes

Dissemination

Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.

Dissemination of the project results would be done through: Collaboration with MPCA, all 9 County Websites, and MN Solid Waste Administrator's Association.

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?

This project is part of the bigger NW MN 9 County Hub & Spoke System and due to the new rules that the MPCA plans to adopt in the near future we will have no other alternative other than the Hub and Spoke System. Ongoing funding will be done through local means and potential sale of compost, and biochar. This project also has potential for the sale of Carbon Credits.

Project Manager and Organization Qualifications

Project Manager Name: Brian Olson

Job Title: Beltrami County Solid Waste Director/Public Works Safety Coordinator

Provide description of the project manager's qualifications to manage the proposed project.

Brian Olson, holds a Bachelor of Science degree, and has 10 years of experience in the solid waste industry, and 35 years of experience managing employees and projects. Brian has managed several grants while being employed with Beltrami County that has improved facilities and infrastructure. During the past 10 years and most recent Derecho storm event of 2025 Brian can personally contest to the amount of tree debris that is delivered to County Tree Debris Sites. Brian has attended several Biochar related conferences, as well as the NW MN 9 County Regional Hub and Spoke System study, and strongly believes Bio Char is another outlet/tool for the Minnesota Waste Industry.

Organization: Beltrami County

Organization Description:

The NW MN 9 County Regional group (NW 9 Co's) is comprised of the Counties of Beltrami, Cass, Clearwater, Hubbard, Mahnomen, Marshall, Norman, Polk and Red Lake. Within the NW 9 Co's are the Tribal Nations of Leech Lake, Red Lake and White Earth. The NW 9 Co's makes up approximately 15% of the State of MN, contains nearly 50% of MN Lakes, and is home to approximately 25% of the Native American population in the entire State of MN. This group formed in 2023 when we conducted a study to identify a new system for managing Construction Debris (C&D) in the region due to new rules that are being drafted by the MPCA that will close all of our local unlined landfills. Since then this group's mission has been to educate the public, legislatures, and apply for state and federal grants to try and build an alternate C&D system for the NW Region. Biochar is part of this system.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
							Sub Total	-
Contracts and Services								
Braun Intertec	Service Contract	Select environmental testing				-		\$50,000
Contractor	Subaward	Construction of 4 Hoop Building				1		\$630,000
							Sub Total	\$680,000
Equipment, Tools, and Supplies								
							Sub Total	-
Capital Equipment								
		1 Each Biochar Unit	Produce Biochar from tree debris	X				\$840,000
		1 Each Compost//Biochar Bagging System	Bag product for end user	X				\$840,000
		Support Equipment (4 ea. Skid steers/loaders, 2 ea. water tankers, 2-4 grapples, etc.)	Support processing sites (move trees, biochar, supply water)	X				\$800,000
							Sub Total	\$2,480,000
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
							Sub Total	-
Travel Outside Minnesota								

							Sub Total	-
Printing and Publication								
							Sub Total	-
Other Expenses								
							Sub Total	-
							Grand Total	\$3,160,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Capital Equipment		1 Each Biochar Unit	N/A Additional Explanation : Once purchased this piece of equipment will be put into the Solid Waste Maintenance and Capital Improvement Plan which will insure it will be maintained and replaced once it has reached its life expectancy.
Capital Equipment		1 Each Compost//Biochar Bagging System	N/A Additional Explanation : Once purchased this piece of equipment will be put into the Solid Waste Maintenance and Capital Improvement Plan which will insure it will be maintained and replaced once it has reached its life expectancy.
Capital Equipment		Support Equipment (4 ea. Skid steers/loaders, 2 ea. water tankers, 2-4 grapples, etc.)	N/A Additional Explanation : Once purchased this piece of equipment will be put into the Solid Waste Maintenance and Capital Improvement Plan which will insure it will be maintained and replaced once it has reached its life expectancy.

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
Cash	Local Cash and In-Kind funds to construct Hoop Buildings	Biochar/Equipment Storage	Pending	\$210,000
			Non State Sub Total	\$210,000
			Funds Total	\$210,000

Total Project Cost: \$3,370,000

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: [ccbf3faa-588.pdf](#)

Alternate Text for Visual Component

Map of potential Biochar Production Sites and Hoop Buildings...

Financial Capacity

Title	File
Beltrami County Last Audit	b1c1c47c-6e6.pdf

Board Resolution or Letter

Title	File
Board Resolution	ff908d22-2d5.pdf

Supplemental Attachments

Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other

Title	File
Mahnomen County Support Letter	4a5d3871-d14.pdf
Norman County Support Letter	5ffa91bf-aa8.pdf
Marshall County Support Letter	2c154533-5e4.pdf
Polk County Support Letter	8c4336a1-bb9.pdf
Hubbard County Support Letter	175711fb-159.pdf
MPCA Support Letter	07e925cf-0eb.pdf
BSU Support Letter	efbd722d-157.pdf
Questionnaire	9e2c2c7e-998.pdf
Budget Addendum	35590b92-357.pdf
Lab Testing after processing Pallet Wood	9e2c9c26-a09.pdf
Biochar Unit	64421e11-010.pdf
Hoop Building Plan	4008b42a-782.pdf

Administrative Use

Does your project include restoration or acquisition of land rights?

No

Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?

N/A

Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?

Yes

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

Yes

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

No

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing \$10,000 or more or large-scale stream or wetland restoration?

Yes

Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care, treatment, education, training, instruction, or recreation to children")?

No

Provide the name(s) and organization(s) of additional individuals assisting in the completion of this proposal:

Brian Olson, Beltrami County Solid Waste Director

Do you understand that a named service contract does not constitute a funder-designated subrecipient or approval of a sole-source contract? In other words, a service contract entity is only approved if it has been selected according to the contracting rules identified in state law and policy for organizations that receive ENRTF funds through direct appropriations, or in the DNR's reimbursement manual for non-state organizations. These rules may include competitive bidding and prevailing wage requirements

Yes, I understand