

# INNOVATION IN CONSERVATION: CARLTON SWCD BIOCHAR PROJECT



Carlton Soil and Water Conservation District (CSWCD) in Minnesota recently announced a new project trialing the application of biochar with a <u>USDA Forest Service Wood Innovation grant</u>. Brad Matlack, District Manager of CSWCD is a dedicated conservationist with over two decades of experience under his belt. Over the last several years, he's spearheaded a movement that's turning biomass waste into a valuable resource and improving soil health through biochar.

Biochar, a stable carbon-rich solid, is derived from organic waste material or biomass that undergoes partial combustion with limited oxygen. Biochar has served as a soil amendment for years and more recently, foresters and agricultural producers have taken an interest in its properties and potential benefits. The characteristics of biochar vary depending on its source material and the temperature at which it's produced. As a soil amendment, biochar can be utilized independently or mixed with other soil amendments to tackle a wide range of environmental, agricultural, and forestry challenges.

Carlton SWCD covers an area where more than 50% of the land base is forested, making forest conservation a top priority. Collaborating extensively with forest landowners, Brad noticed

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### Forestry News & Resources

Schuylkill Conservation District Recognizes Environmental Protection

Rhode Island's Forests at Risk: When Conservation Laws Are Ignored

Partnership introducing prairie grasses to Driesner

State grant aids Clark County landowners in repair of salmon habitat

Giving Power to Communities for Fire Resilience

### USDA Forest Service Report Highlights Threats to Forest, Rangeland over the next 50 years

The U.S. Department of Agriculture's Forest Service has published a report that provides a snapshot of current U.S. forest and rangeland conditions and projects conditions 50 years into the future. The Resources Planning Act Assessment report uses a mixture of scientific, climate and economic projections to identify drivers of change, resources and trends across all land ownerships, as well as summarize probable outcomes for nature-based economies.



a common challenge-the substantial amount of low-quality biomass left after conservation practices. This waste material posed a significant hurdle to effective land management. By utilizing that biomass to create biochar, a challenge becomes an opportunity to improve soil

health and repurpose biomass without simply burning it. To create high-quality biochar, the process demands heating at around 1,000 degrees Celsius. This approach allows for the utilization of pest-infested wood, invasive species like buckthorn, and even diseased trees transforming otherwise wasted biomass into a soil amendment.

Through the Wood Innovations grant with Dovetail Partners and Minnesota Power, the Northern Minnesota Closed Cycle Biochar Pilot will work to showcase the soil health benefits of biochar application. The project will compare biochar application methods while comparing biochar from commercial and smaller-scale production methods. The project's at-scale demonstration will lay the foundation for a circular economy in northern Minnesota which can create a sustainable, long-term outlet for wildfire fuels in the Superior National Forest region.

Brad's advice to other districts interested in similar work, "go for it!" He's convinced that the potential applications of biochar and other conservation practices are boundless. What lies ahead excites Brad the most. He aims to fill a gap in



the existing research—a scarcity of field-level demonstrations that showcase biochar's impact on a larger scale. Soil health benefits are well-documented on smaller plots, but there's less data on larger application. Though biochar amendments are not yet a paid practice in Minnesota through the Natural Resources Conservation Service (NRCS), they are gaining traction in the state. CSWCD's work paves the way for wider recognition and implementation of this innovative conservation tool and continues to position the district for partnership growth and landowner engagement.

To learn more about CSWCD's programming and access the variety of resources they've created (including a podcast!) please visit their <u>website</u>.

### AGROFORESTRY PROJECT AIMS FOR CLIMATE SOLUTIONS ON AG LANDS



The Nature Conservancy (TNC) and multiple partners are launching a 5-year project to catalyze significant private investments into the agroforestry industry while **increasing farmers' incomes and delivering environmental benefits** such as enhanced carbon sequestration, soil health, biodiversity and water quality.

The Expanding Agroforestry Production & Markets for Producer

The Resources Planning Act Assessment is published every decade with mid-decade updates and can be used to inform policies, management decisions and research efforts. Resources covered include forests, rangelands, urban forests, forest products, carbon, fish and wildlife, biodiversity, outdoor recreation, water, and the effects of socioeconomic and climate change. The Forest Service uses the assessment and other tools, to help inform efforts like land management plans, which set the long-term management direction and guidance for each national forest and grassland.

You can read the full report here.

### California CWPP Toolkit Feedback Requested

A Community Wildfire
Protection Plan (CWPP) toolkit
for California is being created to
provide guidance, resources,
best practices, and other
materials that support plan
development and
implementation for communities
across the state. We are
requesting your input to help
guide development of the
toolkit!

CWPP Toolkit partners are CAL FIRE, Community Wildfire Planning Center, Fire Adapted Communities Network, and California Fire Safe Council. Funding for this project is provided by the California Department of Forestry and Fire Protection's Fire Prevention Program as part of the California Climate Investments Program.

The survey can be accessed here

### Where Sustaining the Forest Also Sustains a Tribal Economy

The 235,000-acre Menominee reservation is today 93% forested and famously visible from space as a dark-green block of maple and aspen, birch and hemlock, ash and basswood, red oak and white pine, surrounded by dairy

Profitability and Climate Stabilization project is funded through the USDA's Partnerships for Climate-Smart Commodities initiative.

This project aims to create **30,000** acres of new agroforestry plantings over the next five years, thereby creating a nationwide model to eventually spur the adoption of agroforestry practices on tens of millions of acres of U.S. farmlands. Such practices include alley cropping, windbreaks and silvopasture. The project partners intend to accomplish this goal by:

- Offering regionalized technical assistance and outreach to farmers;
- · Addressing the needs of underserved farmers;
- Providing \$36 million in direct incentive payments to farmers for tree planting;
- Creating a national network of demonstration farms for education and outreach activities
- Working with companies and retailers to expand markets for climate-smart agroforestry commodities, like nuts, fruits, timber, and livestock products produced in silvopasture settings

You can learn more about TNC's planned work <a href="here">here</a>. For more information about the project or to find out how you can enroll, please fill out and submit your information <a href="here">here</a>.

## FORESTRY FUNDING OPPORTUNITIES

### USDA Announces \$188M Investment in Forestry Legacy Program

The United States Department of Agriculture's (USDA) Forest Legacy Program (FLP)will invest \$188 million dollars towards conserving some of the nation's most economically and ecologically significant forestlands. The FLP, administered by the US Forest Service (USFS) in coordination with state forestry agencies, protects environmentally significant forest areas that are otherwise threatened by conversion to non-forest use. By helping to prevent the loss and fragmentation of working forests, the program encourages sustainable forest management and supports sustainable markets for forest products. The FLP has two funding sources, Land and Water Conservation Fund (LWCF) allocated by Congress and funding that has been made available through the passage of the Inflation Reduction Act (IRA). As a result, there are now two separate annual application cycles for LWCF and IRA funding. To learn more about the FLP program and access the funding announcements click here. For a complete list of fiscal year 2023 projects, or to learn how states can apply for fiscal year 2024 funding, click here.

### <u>Joint Chief's Landscape Restoration Proposal Solicitation</u> 2024

The Joint Chief's solicitation was released as a National Bulletin. Joint Chief projects are a great opportunity for NRCS, Forest Service National Forests, state forestry agencies, and conservation districts to collaborate at a landscape level, across public and private forests, to reduce wildfire risk, improve water quality, and/or wildlife habitat. Please, find attached the <a href="national bulletin">national bulletin</a>. Joint Chief proposals are due **September 5**. Programs will be hosting informational solicitation webinars in the coming weeks. Please reach out to <a href="Matthew Vandersande">Matthew Vandersande</a> with questions or to discuss potential projects.

### USFS Seeking Applications Under CWDG Program Second Round

The United States Forest Service (USFS) under the United States Department of Agriculture (USDA) is now accepting applications

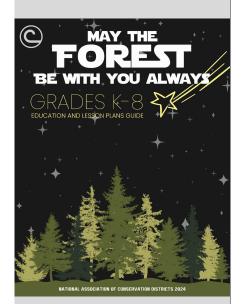
pastures long since cleared of trees by immigrant farmers. Some trees are more than 200 years old and more than 200 feet high. Around a quarter are left unharvested, mostly in swamp areas, at sacred sites, and in important wildlife refuges.

The Menominee forest was among the first to be certified by the Forest Stewardship Council (FSC), after its formation in 1993. That recognition of sustainability was a no-brainer, say FSC insiders. The Menominee's crews currently cut only around a third as much timber as the forest grows each year—8 or 9 million board-feet each year, compared to growth of around 24 million acre-feet.

For the Menominee, says head silviculturist Tony Waupochick, it is not just a matter of maintaining the volume of timber. "We are also managing the forest to maintain its diversity and integrity, and to keep it healthy for wildlife."

The full article can be read here.

NACD 2024 Stewardship Week Forestry Education Materials Available



NACD is excited to share that the 2024 NACD Stewardship Week materials are now available for free download on NACD's Marketplace. The 2024 topic is forestry, and the theme is May The Forest Be With You Always.

for funding through Community Wildfire Defense Grant (CWDG) program (second round) from the units of local governments, Native tribes, non-profit organizations, state forestry agencies, and Alaska native corporations. The program is authorized by the Bipartisan Infrastructure Law and prioritizes at-risk communities in an area identified as having high or very high wildfire hazard potential, are low-income or have been impacted by a severe disaster that affects the risk of wildfire. The program provides funding to communities for two primary purposes: to develop and revise Community Wildfire Protection Plans (CWPP) and implement projects described in a CWPP that is less than ten years old. To apply, follow the instructions in the Notices of Funding Opportunity (NOFO) and use the grant opportunity number specific to your notice by finding the specific NOFO here. The interested parties are encouraged to visit the CWDG Dashboard for more information and links on the datasets used to determine whether the community is eligible or gets priority for this funding. Applicants must register on the System for Award Management which will generate a Unique Entity Identifier (UEI). Creating a SAM registration may take several weeks or more to complete. Therefore, ensure application for SAM registration is done promptly. There are several webinars to assist the application process. Register for the relevant webinar by visiting the CWDG program at the USDA website. Webinar recordings will be made available soon after the webinars for those unable to attend one of the live offerings, check back on this website for more information. Applications will be accepted until 11:59 pm Eastern time on October 31, 2023. To learn more about this funding opportunity, click here.

#### **NIHHIS FY2024 Funding Opportunity**

The Climate Program Office (CPO) of the National Oceanic and Atmospheric Administration (NOAA) in partnership with the Office of Oceanic and Atmospheric Research (OAR) and the Department of Commerce is seeking applications for two individual competitions in FY24 to set up two new National Integrated Heat Health Information System (NIHHIS) Centers of Excellence. Letters of intent are due on Monday, August 14 at 5 p.m. ET. Full applications are due on October 16 at 5 p.m. ET. To learn more about this funding opportunity, and application procedure, click here.

### <u>USDA Forest Service Landscape Scale Restoration (LSR)</u> <u>Grant Program</u>

The USDA Forest Service is now accepting applications for  $\ensuremath{\mathsf{FY2024}}\xspace\,\mathsf{LSR}$  grant program.

Landscape Scale Restoration proposal submissions are administered by three regional processes. Please visit the following websites for specific regional information about the application process, including the annual request for applications:

- Northeast/Midwest
- West
- South

**October 5, 2023:** Applicants submit draft project narrative and budget spreadsheet to relevant State Forester(s) for sponsorship consideration.

**By 6 p.m. ET, November 30, 2023:** Applicants submit applications, including State Forester sponsor letter(s), to grants.gov.

#### <u>USDA Forest Service Great Lakes Restoration Initiative</u> (GLRI) Grant Program

The USDA Forest Service is now requesting applications for the Fiscal Year 2023 <u>Great Lakes Restoration Initiative (GLRI) Grant Program</u>. This program will support reforestation, ecosystem restoration and forest health improvement in the Great Lakes Basin through an agreement with the U.S. Environmental

These materials are a giant step forward in educational content and lesson planning for NACD. The 2024 Stewardship Week materials have hands-onlearning and experience-based activities for K-8 grades all in a single guide with comprehensive background material, easy instructional resources, and suggestions for modification to include all students. There are also accompanying student journal resources for extending the learning experience.

The materials can be accessed here.

### Wildfires Could Damage \$11 Billion Worth Of Properties In Coming Decades

Wildfires are predicted to damage upwards of \$22 billion worth of property by 2049 – especially in the western United States—should climate action and policy not be implemented, a study published in Environmental Research Letters found.

The scientists found that \$11 billion worth of properties are predicted to be exposed to wildfires between 2020-2049, up from \$4 billion worth of properties which were exposed to wildfires in 2000-2018, which they concluded by analyzing fire data from 1984-2018 from the Monitoring Trends in Burn Severity (MTBS) tool from the United States Geological Survey.

The full study can be read here, https://iopscience.iop.org/article /10.1088/1748-9326/ace639

#### **CALENDAR**

Sept. 18-21, 2023 National Association of State Foresters 2023 Annual Meeting | Baton Rouge, LA

October 16-20 2023 World Forum on Urban Forests | Washington, DC

Oct. 25-28, 2023 National Association of American Foresters Convention | Sacramento, CA Protection Agency. This year, we are announcing and awarding funding through two grant opportunities at the same time: (1) Cooperative Weed Management Areas (CWMA); and (2) Forest Restoration (FR). We anticipate that up to \$1.25 million in new funds will be available for the CWMA grant, and up to \$5.3 million for the FR grant.

Submit applications by 6 p.m. ET on October 23rd in Grants.gov through two separate Requests for Applications:

- 1) The <u>Cooperative Weed Management Areas</u> (CWMA) Request for Applications funds partnership work to address invasive plant species that pose significant ecological threats in the Great Lakes Basin.
- 2) The <u>Forest Restoration</u> (FR) Request for Applications funds projects that
  - Mitigate Forest Insect and Disease Impacts through targeted reforestation and forest protection
  - Reduce Runoff from Degraded Sites through Green Infrastructure that includes trees, or
  - Restore and Connect Coastal and Riparian Forest Habitats.

Applicants can be State agencies, sovereign Tribal Nations, nonprofit organizations, educational institutions, and local governments that work within the U.S. portion of the Great Lakes Basin. Cooperative Weed Management Area (CWMA) funding requests must be submitted through a CWMA or similar organized partnership that manages invasive plants across jurisdictional and land ownership boundaries in a defined area.

Full instructions and all other application materials are available through <u>Grants.gov</u> by searching opportunity number USDA-FS-GLRI-CWMA23 (for CWMA) or USDA-FS-GLRI-FR23 (for Forest Restoration).

### \$150 million available USDA Forest Service Inflation Reduction Act Forest Landowner Support

Agriculture Secretary Tom Vilsack announced that the Forest Service is making \$150 million from the IRA available to support participation of underserved and small acreage forest landowners in emerging markets for climate mitigation and forest resilience. The application package has been <u>published on Grants.gov</u> (Opportunity #USDA-FS-2023-IRA-FLS-01).

To access this funding opportunity, visit <u>Grants.gov</u>. For more information, including a Frequently Asked Questions (FAQs) document that will be updated regularly, <u>please visit the Forest Service website</u>.

The Forest Service will host application assistance webinars to discuss this specific funding opportunity and answer questions from eligible entities.

- Tracks A & B Application Assistance Webinar: Wednesday, September 6, 3-4pm EDT. Register here for 9/6 Webinar on Tracks A and B
- Tribal Application Assistance Webinar: Thursday, September 7, 3-4pm EDT. Invited participants: Tribes and Tribal organizations. Register here for 9/7 Tribal Webinar
- FAQ and Track C Application Assistance Webinar: Friday, September 8, 3-4pm EDT. Register here for 9/8 FAQ/Track C Webinar

#### **Arbor Day Foundation: Reforestation Request for Proposals**

The Arbor Day Foundation is currently accepting proposals for large-scale planting projects within the United States and its territories taking place in 2023 and 2024 that focus on improving the environment, wildlife habitat, watershed restoration, carbon sequestration, and other benefits.

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Submit proposals at this link by Friday, September 29 to be considered.



#### Submit an event

Add your conservation district's tree sale, state association meeting, field day or celebration to NACD's calendar!

Click the button above to submit an event. Events will be reviewed by the website administrator and published to <a href="NACD">NACD's online</a> calendar when approved.







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