



# Request for Proposals

## Biochar Atlas Biochar Suitability Tool

Design, Development, Launch, and Initial Support

Issued by	Issue Date	Primary Email Contact
American Biochar Institute (ABI)	April 28, 2026	<a href="mailto:proposals@biochar-us.org">proposals@biochar-us.org</a>

Proposal Due Date	Interviews	Anticipated Contract Start	Funding Ceiling
May 22, 2026	Week of June 1	July 2026	\$150,000 for Phase 1 \$175,000+ anticipated for future phases as part of full Biochar Atlas build out, subject to funding availability.

American Biochar Institute seeks proposals to design, develop, launch, and provide initial support for a Biochar Suitability Tool as Phase 1 of the development of the Biochar Atlas digital platform. Future phases are anticipated related to additional Biochar Atlas modules including a Biochar Learning Center, a Biochar Sourcing Tool, an NRCS Implementation Module, and a Biochar Deployment Database. This RFP will consider the capabilities of a technology contractor to deliver all five modules, however, initially ABI will contract only for Phase 1 pending availability of additional funding.

This RFP is intentionally lean and is designed to help ABI identify the right development partner and communicate the general boundaries of the engagement. We intend to engage in more detailed legal and contracting negotiations with a selected firm following interviews.

### 1. Organization Background

The American Biochar Institute is a 501(c)(3) non-profit organization with a mission to deliver independent, science-based information, technical assistance, and standards on biochar to support broader adoption in the agricultural, industrial, and built environment sectors.

### 2. Project Background and Intent

ABI is developing the Biochar Atlas as a national digital platform intended to support the effective use of biochar as a soil amendment. The broader vision for the Atlas includes a Biochar Suitability Tool, Biochar Sourcing Module, Learning Center, NRCS Implementation Module, and Biochar Deployment Database. The platform is intended to be public-facing, practical, scientifically grounded, and useful to agricultural professionals and farmers.

This RFP will be used to select a firm capable of developing all modules for the full Biochar Atlas, however, the initial contract with the selected firm will cover only Phase 1 of the project consisting of the



development of the Biochar Suitability Tool. Additional project phases will be contracted with the selected firm upon funding availability which is anticipated in Q4 2026. ABI reserves the right to conduct a separate procurement for subsequent phases or to issue a sole-source justification for continuation with the selected firm, consistent with applicable federal procurement requirements. Selection under this RFP does not guarantee award of any subsequent phase.

ABI is developing the Biochar Atlas in collaboration with the USDA Agricultural Research Service (ARS) based on research by ARS. The national Biochar Atlas will be modeled on the existing Pacific Northwest Biochar Atlas which was developed by ARS. ARS and ABI staff aim to develop the national Biochar Atlas in a collaborative manner with the selected firm. Specifically, ARS and ABI will lead on the scientific aspects of the project including providing all biochar suitability algorithms for the suitability tool.

### **3. Biochar Atlas Full Project Concept**

Upon full build out, the Biochar Atlas is intended to consist of the following components:

Biochar Atlas Digital Platform Umbrella: The Biochar Atlas is envisioned as a national digital platform that helps farmers and agricultural professionals learn about, evaluate, source, implement, and track biochar as a soil amendment. The platform would be developed in phases, starting with the Biochar Suitability Tool as the initial minimum viable product and expanding over time to include additional modules. ABI expects the platform to provide a consistent user experience across modules and to support future integrations, data workflows, and shared maintenance.

Biochar Suitability Tool: The Biochar Suitability Tool would help users evaluate the suitability of biochar in general, and specific biochars in particular, based on soil conditions, biochar properties, and site management goals. The tool would build on the existing PNW Biochar Atlas and the NRCS Dynamic Soil Properties Response to Biochar approach while expanding the tool for national use. It would use a GIS-based interface tied to SSURGO soil data and would also allow users to upload site-specific soil test data where available. Over time, the tool may also connect with the sourcing module so users can identify suppliers offering suitable materials.

Biochar Sourcing Module: The Biochar Sourcing Module would help users identify compatible biochar suppliers and compare materials based on location, feedstock, production conditions, analytical data, and shipping or packaging details. The base version would be free to users and would provide supplier information, product details, and contact information for purchasing. ABI expects supplier data to be reviewed and validated before publication, and suppliers may pay a nominal annual fee to be included in the tool. A future paid marketplace layer could also be considered to streamline quote requests or purchasing, but that would sit on top of the free core sourcing functionality.

Biochar Learning Center: The Biochar Learning Center would serve as the main educational and training hub within the Biochar Atlas. It would include fact sheets, longer publications, videos, and structured training content focused on biochar basics, soil impacts, and best management practices for sourcing, handling, and application. ABI expects this section to support both ungated public content and gated learning experiences for professionals seeking Continuing Education Units. The Learning Center would



be free to users in its base form and would be designed to make ABI's educational content easy to find, use, and update over time.

NRCS Practice Implementation Module: The NRCS Practice Implementation Module would help farmers and agricultural professionals plan and implement biochar applications according to NRCS Conservation Practice Standard 336. It would provide practical guidance on what, where, how, and when to install the practice, along with risk management and monitoring guidance. The module would also estimate implementation costs so users can compare expected costs with available NRCS incentive payment rates. The goal is to make participation in programs such as EQIP, CSP, and RCPP easier and more consistent for both producers and NRCS field staff.

Biochar Deployment Database: The Biochar Deployment Database would support long-term tracking of biochar field trials and demonstration projects and help connect future research with real farm data. The database is envisioned as containing trial metadata, biochar analytical properties, soil and cropping information, GIS data, and baseline or outcomes data where available. Public-facing content may be available through the platform, but detailed farm data, locations, and contact information would be maintained in a secure system with controlled access. ABI expects this module to support future learning, research, and continued improvement of other Biochar Atlas tools over time.

## 4. Phase 1 Project Objectives

The purpose of the Phase 1 tool is to help users assess the suitability of specific biochars for specific soil conditions and management goals using existing Biochar Atlas algorithms and related NRCS soil-response logic.

The primary launch audience is expected to include NRCS staff, conservation district staff, extension professionals, agronomists, and farmers, with NRCS staff being the most important initial user group.

ABI and USDA ARS will provide the scientific logic, core scoping input, and technical oversight. The selected firm is not being asked to create new science but may propose additional tool functionality and inputs. The selected firm is being asked to translate existing science and scoping into a high-quality, maintainable public tool.

## 5. Phase 1 Scope of Work

The selected firm will be expected to collaborate with ABI and USDA ARS to complete Phase 1 of the Biochar Atlas. The required scope of work is expected to include, at a minimum:

- Project kickoff, discovery, and a concise project work plan aligned with ABI and USDA ARS scoping.
- Information architecture and UX / UI design for the initial Biochar Atlas presence, including a Biochar Atlas home page and limited methodology / resource pages related to the tool.
- A desktop-first, public-facing Biochar Suitability Tool that uses both map-based and form-based workflows.



- Integration of ABI / USDA ARS-provided data, including relevant soil data (such as SSURGO), biochar materials data from previously analyzed biochars, and other ABI-provided datasets, plus implementation of ABI / USDA ARS-provided suitability logic.
- Core user inputs expected to include location and biochar application goals, with optional inputs such as site-specific soil sample data and biochar analytical data.
- Outputs that help users assess suitability across one or more algorithms and management goals, including appropriate limitations, disclaimers, and printable or downloadable results suitable for field use and NRCS-related workflows.
- Reasonable scenario evaluation features, such as comparing different biochar options, application-rate assumptions, and/or biochar applications combined with compost.
- A staging / beta environment, beta testing process, launch support, analytics, user / admin documentation, a basic admin workflow for data refreshes, training for ABI staff, and an initial post-launch maintenance / bug-fix period.
- Hosting and deployment support for a production version of the Phase 1 tool.

## 6. Technical and Delivery Expectations

The following technical and delivery expectations are provided for Phase 1 and for all future project phases:

- The selected firm should propose a maintainable modern web architecture. ABI does not require a specific technology stack, but the solution should be well documented, portable, and practical for long-term maintenance.
- The user experience should be informed by the existing Pacific Northwest Biochar Atlas concept while substantially improving usability, clarity, and overall product quality.
- The tool should be designed primarily for desktop browser use. Responsive design is welcome, but desktop performance and usability are the priority for all project phases.
- The solution should support future APIs, exports, integrations, and phased module expansion.
- The selected firm should propose a clear QA / testing approach, including staging, beta review, and launch readiness.
- ABI expects the selected firm to work with an ABI project lead and USDA ARS technical staff serving in an owner's engineer role.

## 7. Ownership, Hosting, and Commercial Boundaries

ABI expects the funded core deliverables for all Biochar Atlas components to be owned by ABI. This is expected to include custom source code for the Phase 1 core, implementations of ABI / USDA-provided algorithms developed under the contract, infrastructure configuration for the funded core, designs, documentation, and other contract-funded deliverables. Proposers should clearly identify any pre-existing proprietary components they would rely on and how those components would be made available for ABI to use in the Biochar Atlas.



ABI's preference is for the production version of the Biochar Atlas to be hosted on biochar.org, biocharatlas.com, or another ABI-controlled domain and environment. Vendor-managed development and staging environments are acceptable if the production handoff and long-term control of the funded core are clear.

The core functionality of the Biochar Atlas, as detailed above, is intended to be free of charge for all users. However, to support incentive alignment and to help ensure long term maintenance of all tools, the selected firm may propose add-on tools and modules with paid tiers. Such paid tools could include a biochar purchase marketplace built atop the Biochar Sourcing Module, enhanced decision-support tools, or NRCS proposal development tools. Any such tools would be hosted on a separate domain from the core Biochar Atlas modules, but they could be linked from the Biochar Atlas site.

Proposers should assume that unpublished datasets, algorithm details, and related materials may be confidential until released by ABI and / or USDA ARS.

## 8. Proposal Requirements

Proposals should be concise and practical. ABI recommends a proposal narrative of no more than 10 pages, excluding resumes or short bios.

- Brief cover letter and firm overview.
- Relevant experience, including comparable examples of geospatial tools, decision-support tools, or other public-facing web tools.
- Proposed technical and product approach for Phase 1.
- Proposed UX / UI approach and view of the key user journeys for the Biochar Suitability Tool.
- High-level technical and product approach for future Biochar Atlas phases.
- Approach to hosting, deployment, maintenance, documentation, and handoff.
- Description of how the proposed architecture would scale into later Biochar Atlas phases.
- Identification of any pre-existing proprietary components the proposer expects to use.
- Project team, key personnel, and short resumes or bios.
- Proposed Phase 1 timeline and staffing plan.
- Fixed-fee price proposal for Phase 1, with a clear description of what is included.
- Optional: a concise description of any future commercialization concepts or paid-tier enhancements the proposer believes could support long-term platform sustainability while preserving the public free core.

## 9. Evaluation Criteria

ABI expects to evaluate proposals on a best-value basis rather than lowest price alone. Proposals will be evaluated against the following criteria:

- Technical approach and fit for Phase 1 and for future phases
- UX / UI quality and product design approach



- Maintainability, hosting approach, and future scalability
- Relevant experience and strength of project team
- Alignment with ABI ownership / public-core / commercialization boundaries
- Price and overall value

## 10. Procurement Schedule

We anticipate the following general procurement schedule.

Milestone	Suggested Date
RFP issued	April 28, 2026
Questions due	May 8, 2026
Proposals due	May 22, 2026
Interviews / follow-up discussions, if needed	Week of June 1, 2026
Selection notice	Week of June 8, 2026
Target contracting / project start	July 2026

ABI reserves the right to modify this schedule, request clarifications, conduct interviews, and reject any or all proposals.

## 11. Submission Instructions

Questions should be submitted electronically to [proposals@biochar-us.org](mailto:proposals@biochar-us.org) by 5 pm PDT on May 8, 2026. Proposals should be submitted electronically in PDF format to [proposals@biochar-us.org](mailto:proposals@biochar-us.org) by 5 pm PDT on May 22, 2026.

Questions regarding this RFP should be directed to [proposals@biochar-us.org](mailto:proposals@biochar-us.org). ABI may circulate clarifications to all invited proposers.

ABI anticipates awarding one contract. The resulting contract is expected to be structured as a fixed-fee agreement with milestone payments to be negotiated during contracting.

This procurement will be administered in accordance with ABI procurement procedures and applicable federal requirements associated with the funding source, including 2 CFR 200 Subpart D.

## 12. Federal Procurement Requirements

This procurement is funded in whole or in part through a federal award from the USDA Natural Resources Conservation Service (NRCS) and is being conducted as a small purchase under 2 CFR 200.320(a)(2). Proposers should be aware of the following federal requirements that will apply to the resulting contract.



**Open and Fair Competition.** This procurement is open to all qualified firms, consistent with 2 CFR 200.319. ABI does not impose geographic preferences. Proposers must be legally able to enter into a contract with a U.S. nonprofit organization and to perform work funded by a U.S. federal award.

**Small, Minority, and Women-Owned Business Participation.** Consistent with 2 CFR 200.321, ABI encourages proposals from small businesses, minority-owned businesses, women's business enterprises, and labor surplus area firms, including as subcontractors or team members.

**Conflict of Interest Disclosure.** Consistent with 2 CFR 200.318(c), proposers must disclose in their proposal any actual or potential organizational or personal conflicts of interest, including any current or recent business relationships with ABI, USDA ARS, or USDA NRCS that could affect the integrity of this procurement.

**Required Federal Certifications and Clauses.** The resulting contract will incorporate federal requirements that apply at this contract value, including: debarment and suspension certification (2 CFR Part 180); Byrd Anti-Lobbying certification (31 U.S.C. 1352); Equal Employment Opportunity (Executive Order 11246); and the prohibition on certain telecommunications and video surveillance equipment and services (2 CFR 200.216). The selected firm will be required to confirm it is not debarred, suspended, or otherwise excluded from federal awards.

**Records, Audit, and Acknowledgment.** The selected firm will be required to maintain records related to the contract for the period required by 2 CFR 200.334 and to provide ABI, USDA, and authorized federal auditors with reasonable access to those records. Deliverables and any related publications must acknowledge USDA NRCS funding support in a form to be agreed during contracting.