

REQUEST FOR PROPOSALS

Develop a Plan to Improve Estimates of Carbon Sequestration in Grasslands

Deadline Extended to: November 28, 2022 at 5 PM EST

OVERVIEW

The National Fish and Wildlife Foundation (NFWF) seeks a qualified Contractor to develop a plan to help verify and improve existing estimates of the carbon sequestered by its grantmaking investments in improved grazing management and grassland restoration (i.e., converting crops back into grasslands through planting). The plan should clearly describe the data needed, the means of acquiring those data, and how the plan could be implemented in NFWF's Northern Great Plains Landscape (see Figure 1). The plan is not meant to be a protocol for carbon crediting. One award will be made for this Contract. The Contract period of performance is estimated to last no longer than 6 months.



Figure 1. NFWF's Northern Great Plains Landscape.

BACKGROUND

Since its founding in 1984, NFWF has grown to become the nation's largest private conservation grant maker, supporting conservation efforts in all 50 states and U.S. territories. These efforts protect and restore imperiled species, promote healthy oceans and estuaries, improve working landscapes for wildlife, advance sustainable fisheries, and conserve water for wildlife and people.

Within the Northern Great Plains Landscape, NFWF invests in restoring grasslands and improving grazing management to benefit native grassland species, maintain rancher livelihoods, and support Tribal conservation efforts. Increasingly, NFWF seeks to understand the greenhouse gas (GHG) implications of this grantmaking. It is apparent that improved grazing management holds tremendous potential to sequester atmospheric CO₂e.

NFWF currently invests in grants that improve grazing management and restores grasslands. NFWF quantifies the atmospheric CO₂e sequestered by these investments using existing datasets for soil organic

carbon, change factors expected from different grazing intensities, and climatic zones. Note these estimates are not derived from sampled data (either in situ or from remote sources). Thus, NFWF produces what some have called “soft claims” (green box in Figure 2). An aim of this project is for NFWF to enter the “rigorous claims” category where carbon benefits are both quantified and verified (red box in Figure 2). Although there are established protocols from different registries for verifying the carbon sequestered, these protocols are designed for the scale of a single project site and for the rigor of a saleable credit (see “carbon credits” in Figure 2). NFWF has no interest in saleable credits or the development of a protocol for that purpose. NFWF is instead looking for a lower cost, yet reliable, way to estimate the CO₂e sequestered across landscape or even regional scales by a large number of grazing and restoration projects.

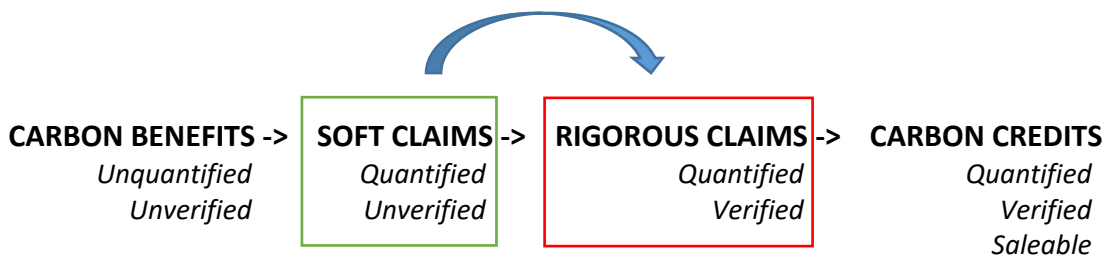


Figure 2. Levels of claims being made regarding carbon benefits. NFWF is currently in the “soft claims” category.

NFWF seeks a landscape- or even regional-scale sampling approach that leverages new technologies and does not rely solely on existing project-scale monitoring protocols. In addition to being lower in cost than a strictly site-based approach, a broadscale sampling approach that includes control sites can account for factors that are often not monitored at the site level—such as additionality and the influences of drought that can reverse gains. Because replanting grasslands and improving grazing management affects carbon in the soil, soil samples (a key component of most market-based protocols) should still be part of a broadscale approach. However, soil samples cannot be collected economically at sufficient sampling densities across broad spatial scales and therefore need to be supplemented with other data. Additional data may include remote-sensing data and inputs from biophysical models that improve understanding of how GHG concentrations change across the landscape in response to land use. A broadscale sampling approach will require the use of control sites to define a counterfactual condition where investment did not occur, thus elucidating the effects of NFWF investments. Applicants should feel free to suggest other approaches they believe would be more appropriate for better understanding how much carbon is being sequestered across broad spatial scales.

SCOPE OF WORK

The Scope of Work under this Contract is for the development of a plan that, when implemented, will help NFWF verify and improve its methods for estimating and measuring the carbon sequestered by its investments in the grassland ecosystems of the Northern Great Plains Landscape. The plan must be grounded in scientifically defensible methods. The plan is expected to outline a hybrid approach whereby in situ soil sampling will be used in combination with process-based biophysical models, remote sensing, and/or other technologies.

Plan attributes should include:

- Being specific to, and commensurate with, NFWF investments across the landscape. NFWF invests in several practices, at a large scale, and with grant agreements that are 2–3 years on average.
- A logical framework that links soil sampling with other sources of information that the Contractor recommends to estimate the net GHG sequestration of projects (including CO₂ and any other relevant gases, such as N₂O or CH₄). These other sources of information might include biophysical models, remote sensing, flux towers, or water quality measurements.
- Information about the field sampling at sites and within sites. Key information will include the overall number of sites, sampling design, timing and frequency of data collection, detailed methods for collecting samples, and data analysis. NFWF anticipates the field sampling of soil organic carbon, but other localized data might be required as well (e.g., drone data, flux tower data, analysis of water run off).
- NFWF anticipates control sites will be part of the plan; therefore, a detailed approach to how these sites should be selected, the number of sites needed, and the degree to which such sites should or should not be continuously monitored for long periods is likely needed. The ability to leverage any existing soil sampling time-series as control sites would be ideal.
- If non-field data are used (satellite data, literature values for GHG release from cattle and bison, or biophysical modeling), the plan should describe the process/protocol(s) for acquiring or producing such data (how and when).
- Detailed estimates for the annual expense and time required to fully implement the plan across the Northern Great Plains Landscape for a justifiable number of project sites (including control sites, possible data subscriptions, data/lab analyses, and any other costs). If more than one estimate is given for annual expenses (either for certain components or as a whole) the trade-offs between high and low estimates should be fully explained.

The following tasks constitute the Scope of Work for this Request for Proposals (RFP). The initial two tasks allow the Contractor and NFWF staff to identify NFWF's needs and advance the Contractor's understanding of NFWF projects. The third task is at the heart of the RFP. The schematic described should be a conceptualization of the final product at a high level—more than an outline for the plan, it should provide the technical foundation for how various data will interact in a complementary fashion. The remaining task is contingent on NFWF approval to move forward from task 3. One or more tasks may be added or removed from the Contract Scope of Work at NFWF's discretion based on the results of the initial tasks. Please provide time and cost quotes for each task using the [Contractor Budget template](#).

The Contractor should anticipate check-in calls with NFWF approximately every two weeks throughout the duration of the project.

Task 1: Kick-off meeting and introduction to NFWF-funded improved grazing management and grassland restoration

- Kick-off meeting to discuss NFWF needs (described under the Scope of Work) for the plan.
- Discussion with program staff about the types of practices that NFWF considers to be improved grazing management and grassland restoration. Program staff will also describe the process and timing by which Northern Great Plains' grants are selected and implemented.

Deliverables: Notes from kick-off meeting with summary of NFWF needs for the plan.

Schedule: Within 2 weeks of Contract start date.

Task 2: Assessment of NFWF improved grazing management and grassland restoration practices

- Review NFWF's portfolio of improved grazing management and grassland restoration projects.
- Recommend which grazing and restoration practices should be the focus of the plan.

Deliverables: Memo with recommendations on the range of improved grazing and restoration practices to be included in the plan. It is likely that not every practice, or possibly every portion of the Northern Great Plains, will be included but the major practices should be.

Schedule: Within 2 months of Contract start date.

Task 3: Development of framework for how different components of the plan work together

- Through review of the literature, Contractor expertise, and discussion with NFWF staff, draft a framework that lays out the different types of data to be acquired, the process of acquisition (e.g., sampling design), and the how these types of data will work together to estimate the net GHG sequestration of projects.
- These data types should include soil organic carbon at project and control sites, as well as other data sources recommended by the Contractor (e.g., biophysical models, remote sensing, flux towers, water quality measurements).

Deliverables: A schematic depiction of the various data components and their relationship to each other. Succinct text about each data stream and how they come together to produce reliable estimates of net CO₂e sequestered by NFWF projects within the Northern Great Plains Landscape.

Schedule: Within 3-4 months of Contract start date.

The following tasks are contingent upon NFWF approval of the framework identified as part of Task 3.

Task 4: Plan Completion

- A plan that includes all procedures and protocols for gathering and analyzing data to estimate the CO₂e sequestration of NFWF improved grazing management and grassland restoration projects.
- The plan should include all elements described under the plan attributes above, including a proposed sampling design and detailed estimates for the annual expense and time required to fully implement the plan across the Northern Great Plains Landscape.

Deliverables: The plan.

Schedule: Within 6 months of Contract start date.



MISCELLANEOUS

- NFWF staff will provide Contractor with access to Excel spreadsheets with data on NFWF grant projects (e.g., budget, location, description of activities), grantee proposals, and other relevant information, as available.
- Contractor shall treat all such information as CONFIDENTIAL without express written permission from NFWF to share, disclose, or otherwise utilize that information for purposes beyond this project.
- All data, code, models, and other information developed during this project shall be the property of NFWF at the conclusion of this project unless express written communication from NFWF to the Contractor indicates otherwise.

REQUIRED EXPERTISE

The successful Applicant will have significant expertise in the following areas:

- Soil organic carbon measurement practices (soil samples and analyses)
- Experimental design and statistical analyses
- Emerging techniques to estimate carbon sequestration in grassland environments
- Non-carbon GHG fluxes from grazing lands and grassland restoration
- Adhering to Contract timelines and budgets

CRITERIA FOR COMPETITIVE APPLICATIONS

Proposals will be evaluated and scored on the following criteria. Applicants should organize their Work Plan Narratives (as part of the Technical Proposal, see below) based on these sections:

1. **Understanding of the Scope of Work.** This section must demonstrate an understanding of the goals of the activities involved under this Contract. It should describe an approach for communicating with NFWF and reporting on progress, results, and deliverables. Weight: 10%
2. **Technical Approach.** The proposed technical approach for: 1) understanding NFWF's needs for the plan, 2) assessing NFWF improved grazing management and grassland restoration practices, 3) drafting the framework for how different components of the plan work together, and 4) completing the plan. This section should clearly describe the proposed methods and demonstrate that they are robust and appropriate for conducting the project and address any areas of complexity or uncertainty. Weight: 25%
3. **Qualifications of Proposed Personnel.** This section should clearly describe which tasks each member of the team will conduct and how their training and experience provide the requisite skills to do so successfully. Weight: 25%
4. **Applicant's Past Performance.** The proposal should include information on the primary investigator(s)'s past performance experience, particularly any associated with GHG accounting in relation to nature-based solutions. List recent (last 2–5 years) accomplishments and previous services related to the technical expertise offered. If subcontractors are to be used, information should be provided that demonstrates their past performance as well. Describe how that past performance is applicable to this evaluation. Weight: 20%



5. **Budget.** The proposed budget should itemize work in sufficient detail to enable reviewers to evaluate the appropriateness of the entire funding request. Applicants must use the [Contractor Budget template](#). Applicants may add columns to the template for additional tasks if needed but should not make any other changes. Weight: 20%

ELIGIBLE APPLICANTS & CONFLICT OF INTEREST STATEMENT

Eligible applicants include institutions of higher education, other nonprofits, commercial organizations, international organizations, local and state governments, and Tribal Nations. Small and minority businesses, and women's business enterprises are strongly encouraged to apply.

By submitting a proposal in response to this solicitation, the Applicant warrants and represents that it does not currently have any apparent or actual conflict of interest, as described herein. In the event an Applicant currently has, will have during the life of the contemplated Contract, or becomes aware of an apparent or actual conflict of interest, in the event an award is made, the Applicant must notify NFWF in writing in the Proposal or in subsequent correspondence (if the issue becomes known after the submission of the Proposal) of such apparent or actual conflicts of interest, including organizational conflicts of interest. Conflicts of interest include any relationship or matter which might place the Contractor, the Contractor's employees, or the Contractor's subcontractors in a position of conflict, real or apparent, between their responsibilities under the award and any other outside interests, or otherwise. Conflicts of interest may also include, but are not limited to, direct or indirect financial interests, close personal relationships, positions of trust in outside organizations, consideration of future employment arrangements with a different organization, or decision-making affecting the award that would cause a reasonable person with knowledge of the relevant facts to question the impartiality of the Applicant, the Applicant's employees, or the Applicant's future subcontractors in the matter. Upon receipt of such a notice, the NFWF Contracting Officer will determine if a conflict of interest exists and, if so, if there are any possible actions to be taken by the Applicant to reduce or resolve the conflict. Failure to resolve conflicts of interest in a manner that satisfies NFWF may result in the proposal not being selected for award.

By submitting a proposal in response to this solicitation, the Applicant warrants and represents that it is eligible for award of a Contract resulting from this solicitation and that it is not subject to any of the below circumstances:

Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to a Contract with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless the agency has considered suspension or debarment of the corporation and made a determination that this further action is not necessary to protect the interests of the Government; or

Was convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal or State law within the preceding 24 months, where the awarding agency is aware of the conviction, unless the agency has considered suspension or debarment of the corporation and made a determination that this further action is not necessary to protect the interests of the Government; or



Is listed on the General Services Administration's, government-wide System for Award Management Exclusions (SAM Exclusions), in accordance with the OMB guidelines at 2 C.F.R Part 180 that implement E.O.s 12549 (3 C.F.R., 1986 Comp., p. 189) and 12689 (3 C.F.R., 1989 Comp., p. 235), "Debarment and Suspension," or intends to enter into any subaward, contract or other Contract using funds provided by NFWF with any party listed on the SAM Exclusions in accordance with Executive Orders 12549 and 12689. The SAM Exclusions instructions can be found here: <https://www.sam.gov/SAM/>

SUBMISSION REQUIREMENTS

Proposals must be submitted under the same cover at the same time, in three distinctly labeled and separate documents: 1) Technical Proposal, 2) Budget, and 3) Evidence of Financial Stability.

Interested parties should submit proposals electronically to NFWF (Ernest Newborn, ernest.newborn@nfwf.org) using the requirements below:

1. Technical Proposal

- **Format**: Proposals must be provided in Word format or searchable PDF with a font size no smaller than 11 pt. (Embedded tables can use a different font size from 11 pt; however, please ensure the size is sufficiently large for readability.) Note: The only section of the proposal that has a page limit is the work plan narrative (maximum of 6 pages).
- **Contact information**: Primary contact person, company name, address, phone, email, website, UEI number, and EIN/Taxpayer ID#.
- **Work Plan Narrative**: Concise (6-page limit) description of the proposed work plan.
- **Past Experience**: Summarize Applicant's expertise and experience. List recent (last 2–5 years) accomplishments and previous services related to the technical expertise offered.
- **Biographies**: Resumes and/or Vitae of key staff and their role in the proposed work area.
- **References**: List two references who have received services from the Applicant that is similar in nature to the proposed work; include names, phone numbers, and email address.
- **Example**: Provide a report on a similar topic, embedded in the technical proposal or attached separately.

2. **Budget**: The budget proposal must be submitted using the [Contractor Budget template](#).

3. **Evidence of Financial Stability**: The Applicant shall provide proof of financial stability in the form of financial statements, credit ratings, a line of credit, or other financial arrangements sufficient to demonstrate the Applicant's capability to meet the requirements of this solicitation.

SELECTION PROCEDURE

A panel of NFWF staff will review the proposals. Applicants may be asked to modify objectives, work plans, or budgets prior to final approval of the award. Only one award will be made for this project. If multiple institutions are involved, they should be handled through subcontracts.



SUBMISSION DEADLINES

- October 25, 2022** Deadline for questions about the solicitation to NFWF. Applicants should submit questions regarding this solicitation via email Ernest Newborn (ernest.newborn@nfwf.org). NFWF will post all the questions and responses to all questions so that all Applicants have access to them at the same time. To provide equitable responses, all questions must be sent to NFWF **no later than 8:00 PM EST on October 25, 2022.**
- October 28, 2022** NFWF will post the questions submitted regarding the solicitation and responses on the NFWF website [here](#).
- November 28, 2022** Deadline for receipt by NFWF of proposals. Proposals must be sent electronically as an email attachment to Ernest Newborn (ernest.newborn@nfwf.org) by **5:00 PM EST on November 28, 2022.** Proposals must be provided in Word format or searchable PDF.
- February 2023** Contract award to selected Applicant.
- August 2023** Final Deliverables Due.
Interim deliverables are due at the times specified in the Statement of Work.