



REQUEST FOR PROPOSALS

Drone-Based Monitoring of Low-Tech Process-Based Riparian and Wetland Restoration Projects in the Colorado River Basin

OVERVIEW

The National Fish and Wildlife Foundation (NFWF) seeks a qualified Contractor to assist in drone-based geomorphic and riparian/wetland habitat monitoring of low-tech process-based restoration projects in the Colorado River Basin funded in partnership with the Walton Family Foundation.

BACKGROUND

Within its portfolio of projects in its Southwest Rivers and Rocky Mountain Rangelands Programs, NFWF provides funding for low-tech process-based riparian and wetland habitat restoration within the Colorado River Basin. Funded projects provide financial assistance to local, state, federal and non-profit organizations implementing low-tech process-based restoration activities such as installation of beaver mimicry structures, livestock exclusion fencing and riparian vegetation planting, and removal of channel stabilizing structures.

The Walton Family Foundation partnered with NFWF to scale up implementation of low-tech process-based restoration across the Colorado River Basin, and the partners desire to understand the fluvial geomorphic and biological impact of this type of restoration on project sites.

This contract will support pre-implementation monitoring of up to three NFWF-funded project sites in the Colorado River Basin. The contract may be expanded to include post-implementation monitoring for sites or pre-implementation monitoring of additional sites in the future. Contractor will provide drone-based monitoring services that establish baseline data on site hydrology, geomorphology, and riparian/wetland habitat that can be used in concert with post-project monitoring to estimate changes in water retention, sediment retention, and habitat extent and quality that follow project implementation.

SCOPE OF WORK

NFWF seeks a qualified Contractor to refine and implement a consistent drone-based monitoring protocol to establish pre-implementation baseline conditions at up to three site where NFWF grantees will implement low-tech process-based riparian and wetland restoration. The three existing project sites are located on ranches near Monticello, UT, Grand Junction, CO, and De Beque, CO. The following tasks constitute the Scope of Work for this Request for Quotations. The contractor should anticipate check-in calls at least once a month with NFWF and other project partners throughout the duration of the project. 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 provided. A not-to-exceed cost will be negotiated upon award with the selected Contractor.

Task 1: NFWF coordination and project management

- Kick-off meeting to discuss the drone-based monitoring project and contract deliverables with NFWF, Walton Family Foundation, and other partners
- Monthly check-in calls with project partners for the duration of the contract. Additional check-in calls may be scheduled.



Deliverables: Notes from kick-off meeting with summary of needs for the drone-based pre-project monitoring effort

Schedule: Kick-off meeting within two weeks of Contract start date; check-in calls at least monthly thereafter

Task 2: Refinement of drone-based monitoring protocol

- Use past experience implementing drone-based monitoring of wetland and riparian sites to refine a time-efficient and cost-effective protocol for collecting pre-implementation baseline data for low-tech process-based restoration sites. The proposal should outline the offeror's past approach to drone-based monitoring of such sites and include a list of the types of data and parameters the offeror would capture, as well as the types of post-processed data (ex. DEM, wetted perimeter) that the offeror would provide to NFWF and how that data would be gathered.
- Incorporate feedback on protocol refinement from NFWF, the Walton Family Foundation, and other partners to create final protocol.

Deliverables: Pre-implementation drone-based monitoring protocol that can be applied to multiple project sites.

Schedule: Completed by February 2024

Task 3: Implementation of drone-based monitoring protocol on up to three NFWF-funded projects

- Apply approved drone-based monitoring protocol to three pre-implementation sites near Monticello, UT, Grand Junction, CO, and De Beque, CO.

Deliverables: Raw drone data.

Schedule: Completed by June 2024

Task 4: Baseline site analysis of drone-based monitoring data

- Analyze data and deliver raw data and data analyses to NFWF.

Deliverables: A written report of baseline conditions that includes key hydrologic, geomorphic, and habitat (extent and quality) metrics estimated from raw data. The report should include descriptions of the methods of analysis used to determine the baseline conditions from the raw data. Final, post-processed spatial data files are also required with the file type or format being determined during the performance period in cooperation with NFWF and Walton Family Foundation. Offeror should suggest potential spatial data formats for the post-processed data in the technical approach section.

Schedule: Completed by September 2024

These deliverables may be expanded or refined during the contract negotiation.

MISCELLANEOUS

- NFWF staff and project partners will provide Contractor with access to low-tech process-based restoration sites for data collection and other relevant information, as available.
- Contractor shall treat all such information as CONFIDENTIAL without express 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 and the Walton Family Foundation 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:

- Drone-based monitoring of hydrologic, geomorphic, and riparian and wetland habitat
- Analyzing drone-based data to infer hydrologic, geomorphic, and habitat conditions, including but not limited to sedimentation, water retention, and vegetation cover
- Analyzing hydrologic, geomorphic, and vegetative change over time using drone-based data collection
- Report writing for technical and public audiences
- Familiarity with low-tech process-based restoration techniques
- Familiarity with arid lands hydrology and riparian and wetland ecosystems
- Adhering to Contract timelines and budgets
- Ability to travel to NFWF-funded restoration sites near Monticello, UT, Grand Junction, CO, and De Beque, CO to conduct drone-based monitoring

CRITERIA FOR COMPETITIVE APPLICATIONS

Proposals will be evaluated and scored on the following criteria. Offerors 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 reports, 2) refining a drone-based monitoring protocol to establish baseline data and later analyze change in hydrologic, geomorphic, and habitat following restoration project implementation, 3) implementing the drone-based monitoring protocol, and 4) completing the analyses necessary to infer key hydrologic, geomorphic, and habitat data from drone-collected raw data. 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 experience 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. 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 OFFERORS & 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 offeror warrants and represents that it does not currently have any apparent or actual conflict of interest, as described herein. In the event an offeror 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 offeror 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 offeror, the offeror's employees, or the offeror'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 offeror 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 Offeror 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 an 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 (Gracie Broughton, grace.broughton@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. 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, DUNS number, and EIN/Taxpayer ID#.
 - Work Plan Narrative: Concise (**6-page limit**) description of the 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 clients 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 following NFWF [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 and Danone staff will review the proposals. Offerors 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



NFWF

- October 20, 2023** Deadline for receipt by NFWF of proposals.
Proposals must be sent electronically as **an email attachment to Gracie Broughton** (grace.broughton@nfwf.org) **by October 20, 2023, 5:00 PM ET.**
Proposals must be provided in Word format or searchable PDF.
- End of November 2023** Contract award to selected Offeror
- End of November 2024** Final deliverables due.
Interim deliverables are due at the times specified in the Scope of Work.