



Bringing back the birds

Seeking Contractors for Terlingua Creek Riparian Habitat Rehabilitation, Brewster County, Texas

REQUEST FOR PROPOSALS

Statement of Purpose:

Proposals will be considered by the American Bird Conservancy (ABC), the Río Grande Joint Venture (Rio Grande JV), and partners for rehabilitation of riparian vegetation along Terlingua Creek in Brewster County, Texas, upstream of Big Bend National Park.

Terlingua Creek and other tributaries are the dominant hydrologic features of the arid Chihuahuan Desert landscape and serve the vital function of moving water, nutrients, and sediment throughout the watershed. Protecting and maintaining these natural resources through restoration will make them more resilient to the negative consequences of climate change by promoting channel aggradation and increasing the depth and extent of the riparian aquifer. The work solicited in this request for proposals will contribute to enhancing riparian and aquatic habitat health, diversity, and resilience and ensure that the ecosystem services human and wildlife communities depend upon are sustained.

Background Information:

On behalf of the Rio Grande JV, ABC is soliciting proposals for riparian habitat rehabilitation along Terlingua Creek in Brewster County, Texas, as described below. ABC is a non-profit 501c3 that conserves native birds and their habitats throughout the Americas. This is done by safeguarding the rarest species, conserving and restoring habitats, and reducing threats while building capacity in the bird conservation movement.

The Rio Grande JV is a binational conservation partnership that supports the strategic, science-based conservation of birds and other wildlife, their habitats, and the ecosystems upon which they and we depend on the Chihuahuan Desert, Tamaulipan Brushlands, and Gulf Coast Prairie Bird Conservation Regions in Texas and northern Mexico. Through collaborative partnerships, the Rio Grande JV seeks to provide scientific and technical support, coordination, and communication to natural resource managers and the broader Rio Grande JV community to conserve birds and address ecosystem threats and stressors. For a map of the Rio Grande JV geographic area, visit: <http://www.rgjv.org/aboutus.html>.

Rehabilitation of riparian habitat along Terlingua Creek is a priority of the Rio Grande JV. This project is part of larger effort being led by the Rio Grande JV and our partners to rehabilitate the health and functioning of the Terlingua Creek watershed for wildlife and people, including several completed, on-going, and planned riparian and grassland improvement projects on public and private lands.

Terlingua Creek is a perennial stream that is a tributary to the Río Grande in Texas, flowing from its headwaters on private land across Big Bend National Park. Historical accounts of perennial and intermittent streams within the Big Bend region indicate many were lined with large stands of cottonwood and willow. Prior to widespread mining and agricultural activities in the area, Terlingua Creek was described as a “bold running stream, studded with cottonwood timber and...alive with beaver.” The work solicited in this request for proposals is desperately needed in this region as the riparian forest has not regenerated after mining and agricultural activities during the late 19th and early 20th centuries required harvest of timber for fuel and structural material. We hypothesize that the old riparian forest provided the nursery conditions necessary for cottonwood and willow recruitment by reducing hydrologic forces during high flows. Once the forest was gone, normal annual flows were sufficient to scour young plants and prevent recolonization. Terlingua Creek has been slow to recover as it is now characterized by little evidence of beavers, few cottonwoods, alkali sacaton, and abundant salt cedar. We are changing that with funding and expertise from the National Park Service’s Southwest Border Resource Protection Program and the U.S. Fish and Wildlife Service’s Partners for Fish and Wildlife program and other partners.

Purpose and Objectives:

Small areas of restoration can have a large impact both upstream and downstream by creating a protected, nursery environment that will allow natural regeneration of riparian forest to occur. We are requesting proposals to reforest approximately 6 acres in Terlingua Creek upstream of Big Bend National Park on private land (see Figure 2). Despite the degraded condition of the riparian zone along the creek, it is still considered an area of great significance as its remaining intact riparian forests provide important ecosystem services for people and habitat for many aquatic and riparian species. The cumulative effects of this project and similar projects on-going and planned for this watershed will create and enhance riparian and aquatic habitat for rare and declining species, such as nesting yellow-billed cuckoos (*Coccyzus americanus*; Federally listed, threatened), common black hawks (*Buteogallus anthracinus*), gray hawks (*Buteo plagiatus*), Mexican stonerollers (*Campostoma ornatum*), and roundnose minnow (*Dionda episcopa*). In addition, by reducing sediment transport to the Río Grande, riparian reforestation along Terlingua Creek will improve habitat of the Federally listed, endangered Río Grande silvery minnow (*Hybognathus amarus*) by decreasing the sediment surplus that, together with invasive plant species, leads to increased channelization of the mainstem of the Río Grande.

This project recognizes the critical resource value of riparian forests and has two primary objectives:

1. Establish willows (*Salix spp.*) in areas where conditions are favorable;
2. Where riparian vegetation already exists, plant larger native tree species of willow and cottonwood to improve wildlife habitat and increase the deposition of gravel and the storage capacity of the riparian aquifer.

Project Performance Period:

The period of performance will be from the date of the contract (estimated late November) through April 30, 2018, when the final report is due. Planting of riparian vegetation is most effective when done at the lowest water levels of the year. In the project area, this is usually

January and February when precipitation is lowest. *Field work associated with this project will be implemented between January 2, 2018 and March 15, 2018.*

Project Coordination:

Throughout the project, the contractor will work in close collaboration with the Rio Grande JV Coordinator and the Project Team including the landowner, the National Park Service, the U.S. Fish and Wildlife Service, and Texas Parks and Wildlife Department, to gather information to support delivery of the work and make decisions about project site use and planting methodologies and design. The contractor may consult directly with government officials and other experts, as needed. However, the contractor shall report to and receive direction from the Rio Grande Joint Venture Coordinator (or designate).

The Rio Grande JV Coordinator will forward draft deliverables to the project team and (possibly) other experts, for their review and comment. The Rio Grande JV Coordinator will arrange teleconferences with the contractor and the project team, and other experts on an as-needed basis at mutually agreeable times. The goal of these meetings will be to kick off the project, present the products, and assess progress on the project.

Scope of Work:

The methodology to be used for harvesting and planting riparian vegetation was developed by conservation partners at Big Bend National Park and was tested and refined after lessons learned on similar projects. Work will complement and resemble riparian restoration work that has been completed in the upper and lower reaches of Terlingua Creek, to include:

1. Site reconnaissance and use plan;
2. Planting methodology and design;
3. Harvesting and plant material preparation;
4. Planting of riparian vegetation; and
5. Project reporting.

Site Reconnaissance and Use Plan

Prior to commencement of work activities, site visits to all project locations will be made by the contractor and the Project Team. Project locations include:

- plant material harvesting, soaking, and storage sites;
- planting site and associated access points; and
- camping areas and equipment storage areas.

Plant material harvesting plan, site use schematics for project locations, and final planting methodologies and design will be developed by the contractor based on the results of these site visits and approved by the Project Team prior to implementation.

Site access will be through developed roads and a road corridor to be established by the land owner at the riparian rehabilitation site. All site use activities (e.g., parking, placement of chemical toilets, etc.) will be cleared with the landowners. A campsite for contractor personnel will be permitted by the landowner in a designated location. Campsite facilities at the riparian rehabilitation site will be primitive without water or electricity. Contractor will need to provide a

portable latrine and service of this unit for contractor personnel. All trash and garbage generated at the campsite is required to be removed. Contractor personnel will not disturb historic sites or cultural resources in the campsite area or the work sites. Only dead and down wood may be collected for campfires.

Planting Methodology and Design

The contractor will coordinate with the Rio Grande JV and Project Team to set up and conduct a rapid site assessment of the planting area, including digging test holes, and identifying and geo-referencing planting areas. The contractor will develop final planting methodology and design based on the assessment and in collaboration with the Rio Grande Joint Venture Coordinator and the Project Team. The methodology and design must be approved by the Rio Grande Joint Venture Coordinator prior to implementation.

Harvesting and Plant Material Preparation

The contractor will cut, transport, and soak (for at least one week) approximately 3,000-4,000 willow and cottonwood poles. For reference, a report on suitable willow harvest sites is available as part of this RFP package, including a PDF file, an Excel File, and a KML file.

Most of the plant materials will be harvested in neighboring Big Bend National Park. Harvesting of 2-3 meter poles will be done using hand tools or power tools. Power tools may be used after clearance with Big Bend National Park staff. In any given stand, no more than 20-25% of poles of suitable size and not more than a third of the canopy will be harvested. In previous experiences, healthy stands of willows were able to completely replace harvested poles within 2-3 years. Therefore, harvest of 25% of a stand is unlikely to negatively affect stand health or density over the long term. The poles will be stripped of leaves and branches on-site, bundled and soaked in water (e.g., bundles tied to anchor points and left soaking in the Rio Grande) for at least 7 days.

Planting of Riparian Vegetation

Planting will include approximately 3,000-4,000 willow and cottonwood poles within approximately 6 acres of land in the project area and in arrangements that mimic that of natural flood plain vegetation. We anticipate two primary types of planting.

In some areas, planting designs will include clustered arrangements of coyote or sandbar willows (*Salix spp.*). By arranging the planted material in bundles, the plant material forms a self-protecting mass. Willow poles will be planted in bundles of three to maximize rooting effectiveness and arranged with two stems facing upstream. Bundles should be tied with jute twine, or another natural fiber twine, at the top such that the three poles are held tightly together from at least 12 inches below ground level to the top of the bundle. Bundles should be topped with at least three nodes exposed. This arrangement of three poles tied together with two poles facing upstream will ensure that one pole is protected from abrasion by suspended sediment. Poles should be 2-3 meters long and no bigger than 5 centimeters in diameter. In some areas, bundles will be planted in a diamond shape pattern (Figures 1 and 2) because simulation of floodplain evolution provides evidence that a cluster of willows can increase sediment retention in the local area. In general, the group effects of vegetation clusters tend to be more significant than the isolated cluster effects (i.e., larger groups of clusters perform more effectively than isolated clusters).

In other more protected sites where riparian vegetation is already established, larger, single poles of species like Fremont Cottonwood (*Populus fremontii*) and Goodings willow (*Salix gooddingii*) will be planted to improve wildlife habitat and increase deposition of gravel.

Figure 1. Bundles planted in diamond shape mimic the arrangement of clumps of floodplain vegetation (Chen et al., 2012).

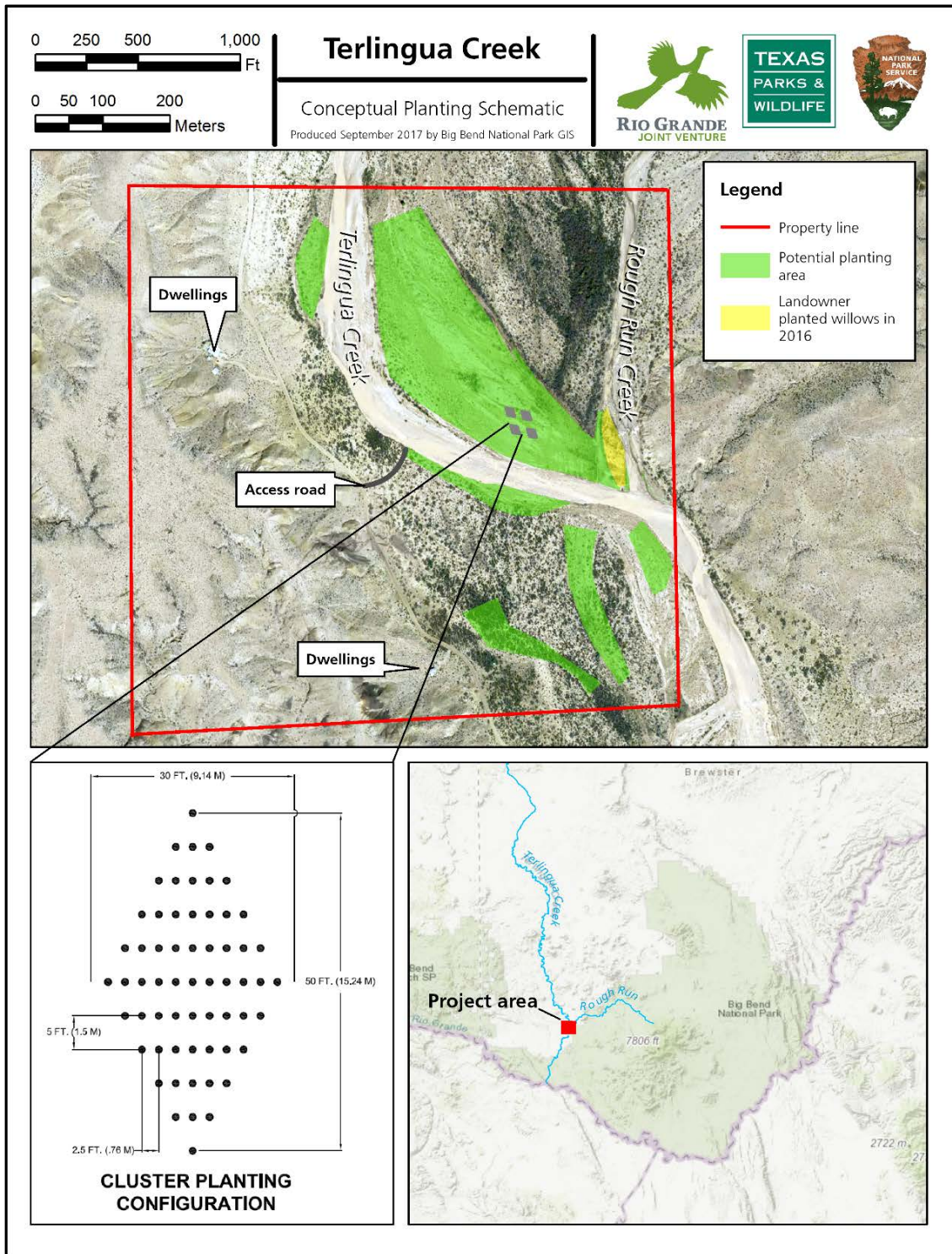


Final Project Reporting

The contractor will be responsible for providing a final report of publishable quality (i.e., copy-edited) in English by April 30, 2018. The cooperator will submit to the Rio Grande Joint Venture Coordinator all written material (including the project design and a draft and final project report) in Microsoft Word, including the following:

- Abstract
- Overview
- Riparian vegetation pole harvesting and planting, including “as built” planting specifications, pre- and post-planting georeferenced photo points, and maps of planting and harvest areas
- High-resolution photos with captions
- Project wrap up
- Photo point monitoring
- Field work photos
- Conclusion/Recommendations
- Bibliography

Figure 2: Project Area Map and Example Planting Schematic. The project area is near the confluence of Terlingua Creek and Rough Run Creek, upstream of Big Bend National Park. The green polygons in the top map cover approximately 22 acres of potential planting areas. Actual planting area should be approximately 6 acres to be determined as described in this request for proposals. In some areas, we expect willows to be planted in the diamond pattern “Cluster Planting Configuration” described above and depicted here. In other areas, existing vegetation would protect larger cottonwoods and willows. The yellow polygon covers the area where the private landowner planted coyote willow in 2016.



Outcomes, Performance Standards, and Deliverables:

Activity and Standards	Deliverable
<p>1) Site reconnaissance, site use plan, and planting methodology and design: Site visits to all project locations will be made by the selected contractor and the Project Team. Data collected during the planting site visit will include depth to groundwater measurements, soil texture analysis, and photo points.</p> <p>The Rio Grande Joint Venture Coordinator will provide a list of personnel from Big Bend National Park, U.S. Fish and Wildlife Department, Texas Parks and Wildlife Department, and the land owner who will make up the Project Team that the contractor will work with on the final project design.</p> <p>Final planting methodology, design, and schematic will be provided in report form to include polygons of areas to be planted, approved access roads, and staging areas.</p>	<p>Site visit Final planting design and methodologies approved by project team (to be included in final report)</p>
<p>2) Harvest and plant material preparation: Harvest from dormant, wild sources of sandbar willow (<i>Salix exigua</i>) and other species in Big Bend National Park of sufficient size and density to supply up to 4,000 poles, 2 meters in length, for revegetation along Terlingua Creek. The harvest location and intensity will be guided by the attached willow harvesting report.</p> <p>The contractor will transport harvested willow poles to a site near the planting area and submerged under water for 7 days prior to planting. Chain link fencing and cement blocks (or similar) will be used to keep the poles from floating. The poles will be marked with a date so that they are not soaked for more than seven days.</p>	<p>Field work and report</p>
<p>3) Planting of riparian vegetation: Plant up to 4,000 poles in clusters of 3 per planting hole within approximately 6 acres of the identified project area, to a depth sufficient so that 20% of the length of the pole is in contact with permanent water. Previous projects indicate that depth to subsurface water varies from 0.5 to 2.0 meters.</p> <p>The contractor will begin planting willow clusters approximately 7 days after the willow pole harvest to ensure an adequate amount of time soaking.</p>	<p>Field work and report</p>
<p>4) Final Project Report: The Final Project Report will be due <i>April 30, 2018</i>, and should include information about:</p> <ul style="list-style-type: none"> • Harvesting and soaking of plant materials; • Information gathered from the test holes, including depth to water and total planting depth; 	<p>Final Report</p>

<ul style="list-style-type: none"> • “As built” plans, maps, final planting design and methodologies; • Before and after photographs of planting areas with a minimum of 30 geo-referenced photo points. Metadata for each photo will include location (UTM), compass direction, date, and time. Each photo will have a scale in it of approximately 2 meters; and • At least 15 high resolution photos of field work being completed with captions and photo release forms. • Recommendations for future projects. <p>Supporting documents for tables, figures and maps will be submitted with the report in their original file format (e.g., Excel or ArcGIS).</p> <p>A draft Project Report will be submitted for review by the project team for review and comments to be incorporated prior to submitting the final report. See scope of work description above for additional details about the final report.</p>	
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Term of Contract:

The period of performance will be from the date of the contract through April 30, 2018, when the final report is due.

Payment:

Payment terms are a standard net 30 days upon approval of an invoice. Invoice approval is contingent upon receipt of deliverables or performance reports as stated in the fully-executed agreement. All U.S. awardees who are an individual or LLC will be provided a Form 1099 (for tax purposes) for payments made during a calendar year.

Contractual Terms and Conditions:

Terrorism Check and Risk Assessment. Prior to entering into any Federally-funded Cooperative Agreement or Contract with an awardee, American Bird Conservancy is required to conduct a terrorism check and risk assessment. A Partner Screening form will be requested to secure the relevant data used for both. All awardees must also comply with the same Federal requirements as ABC that are set forth in the Federal grant award. Details of that award will be provided within the fully-executed agreement between ABC and the awardee. Templates of the Partner Screening Form, Cooperative Agreement (used for businesses, NGOs, universities, etc.) and Contract (used for individuals) can be provided for review upon request.

Information Sharing and Intellectual Property Rights. Unless otherwise agreed by American Bird Conservancy, the copyright and other intellectual property rights in any documents, reports, studies, and maps using data produced or collected under this Contract will belong to American Bird Conservancy. The products’ authors will receive their authorial credits. Contractor will not publish any such products without both the previous consent of American Bird Conservancy and without crediting American Bird Conservancy and Rio Grande joint Venture in the publication.

Records. ABC shall receive ALL records and documentation for this project prior to completion.

Requirements for Proposal Preparation:

The contractor must possess competence and experience in:

- Proven experience in riparian habitat rehabilitation, including plant harvesting, project design, site preparation, and planting; and
- Expertise and access to equipment necessary to complete harvest and planting project in a remote environment.

Submission Procedures

- To be considered, in addition to the “Proposal Requirements and Submission Format” listed below, please submit a Cover Letter (1-2 pages), including: contact information, a summary of your approach to riparian habitat rehabilitation design and implementation and a description of how you meet the Required Qualifications of this project. Please provide examples of at least three similar projects you have worked on. Provide a list of project staff and a brief summary of their professional experience, training, and education.
- Proposals must be submitted by e-mail no later than **5:00 PM CDT on November 12, 2017**, addressed to Aimee Roberson, aroberson@abcbirds.org, with “Terlingua Creek Riparian Rehabilitation Proposal” in the subject line. Proposals submitted after this deadline will not be considered.
- Proposal must include all required forms and narrative sections described in this RFP. Incomplete applications will not be considered.
- Include copies of any licenses or certificates held to apply any of the practices in this Scope of Work.

Proposal Requirements and Submission Format

Applicants shall submit proposals in response to this solicitation in English. Each proposal should be submitted in a format that is representative of the items to be evaluated in the order that they are described below.

Before bidding on Federally-funded proposals, you need to **obtain** a Dun & Bradstreet, or **D-U-N-S, Number**, a unique nine-digit identification **number** for each physical location of your business. **D-U-N-S Number** assignment is free for all businesses required to register with the federal government for contracts or grants. Please visit <https://fedgov.dnb.com/webform> for more information.

Proposals should include the following:

- A brief statement of interest and intent. This statement should be based upon and serve to demonstrate the contractor’s experience and subject knowledge. The statement should address desired results; guidelines (parameters within which results are to be accomplished); resources (human, financial, technical, or organizational support available to help accomplish the results); and other aspects deemed applicable by the consultant.
- Proposed methodology;
- A general work plan for carrying out this project, including a proposed timeline;

- Resumes of the key personnel involved in the project;
- Total budget and a detailed cost breakdown, including number of person/days of key and other personnel, direct and indirect costs, travel costs (if applicable) and applicable taxes;
- Description of relevant experience and any other relevant information; and
- Current reference information (phone and email) for three former or current clients.

Applicants are encouraged to submit any additional information that they believe will assist ABC in the evaluation of their proposal.

Evaluation and Award Process:

Qualifications will be evaluated by Rio Grande JV staff and the Project Team described above. To determine the best value contractor, a selection process will be used that involves evaluation of five factors, as described below. The five evaluation factors are: (1) Management approach, including understanding of project requirements and adequacy of work plan; (2) Suitability of the proposed technical approach and methodology; (3) Contractor’s experience and qualifications and competency of key personnel; (4) Contractor’s past performance; and (5) Adequacy of budget and cost-effectiveness.

Award shall be made to the responsible offeror whose proposal is determined to be the most advantageous to ABC/Rio Grande JV, with appropriate consideration given to the evaluation factors. Implicit in this process is ABC/Rio Grande JV’s willingness to accept other than the lowest priced offer, if the added benefits of a higher priced offer outweigh the additional cost or price involved.

Notification will be provided to all applicants within 30 days of the submission deadline. Incomplete qualification packages will not be reviewed.

Application and Point of Contact:

To apply, please review the full request for proposals and submit the required application materials no later than 5:00 PM CDT on November 12, 2017, to: Aimee Roberson, Rio Grande JV Coordinator, at aroberson@abcbirds.org. The subject line should read: “Terlingua Creek Riparian Rehabilitation Proposal,” Proposals submitted after this deadline will not be considered. Questions about this solicitation may also be directed to Ms. Roberson at this email address.