

REQUEST FOR PROPOSALS (RFP)

Castroville Constructed Wetland Design Project

Issued by: Greater Edwards Aquifer Alliance (GEAA), Friends of Castroville Regional Park (FCRP), and the City of Castroville (Project Team)

Project Location: Castroville Regional Park- 816 Alsace Ave, Castroville, TX 78009

RFP Issue Date: June 22, 2026

Proposal Due Date: September 18, 2026

RFP Contact Person: Annalisa Peace, annalisa@aquiferalliance.org

1. Introduction

The Greater Edwards Aquifer Alliance (GEAA), in partnership with the Friends of Castroville Regional Park (FCRP) and the City of Castroville (Project Team), is soliciting proposals from qualified engineering and environmental consulting firms to provide professional services for the design of a nature-based water quality improvement project.

The selected business will support the evaluation, selection, and conceptual-to-final design of a treatment system to improve water quality and reduce sediment transport within an unnamed tributary that conveys treated wastewater effluent and stormwater runoff to the Medina River. Treated wastewater effluent is generated from the City of Castroville's wastewater treatment plant, Texas Commission on Environmental Quality Permit No. WQ0010952001.

2. Project Background

The project area includes an approximately 1,500-foot-long unnamed tributary that conveys treated wastewater effluent and stormwater runoff to the Medina River. The contributing watershed is approximately 204 acres.

Key Challenges include:

- Significant sediment loading from steep upstream slopes
- Reduced channel conveyance capacity
- Ongoing maintenance needs
- Elevated nutrient concerns, notably phosphorus exceedances

The project seeks to implement nature-based solutions, focusing on constructed wetlands, that improve water quality while enhancing the park's functionality and ecological value.

3. Project Goals

The selected business will develop a design that achieves the following:

Goal 1: Water Quality Improvement

- Treat approximately 162–315 million gallons annually
- Reduce total suspended solids (TSS), nutrients, and sediment loads

Goal 2: Sediment Management

- Reduce, capture, and manage sediment loads

- Incorporate design elements that provide long-term maintenance access

Goal 3: Hydraulic & Engineering Performance

- Maintain stable conveyance under baseflow and storm conditions
- Minimize floodplain impacts (FEMA Flood Zone compliance)
- Reduce long-term maintenance needs

Goal 4: Ecological & Community Integration

- Enhance habitat for native species
- Integrate with park trails and public access
- Support environmental education and interpretive signage

4. Scope of Services

The scope of work is intended to support alternatives evaluation and conceptual-to-final-design, aligned with available funding. Businesses are encouraged to propose scalable approaches.

Task 1 – Site Assessment & Existing Conditions

- Topographic, boundary, and channel survey
- Watershed and drainage area assessment
- Soil and vegetation characterization analysis
- Existing conditions memorandum

Task 2 – Hydrology & Hydraulics

- Baseflow and storm modeling (10, 25, and 100-year)
- Evaluation of channel capacity and floodplain impacts
- Sediment transport considerations

Task 3 – Alternatives Analysis

Consultants must evaluate multiple treatment approaches, including:

- Five(5) Constructed Wetland Cells with Sediment traps/forebays
- Five (5) Vegetated systems upstream from Constructed Wetland Cells
- Hybrid approaches to Constructed Wetland Cells
- High Density Polyethylene (HDPE) Pipeline from Outfall #2 to the confluence of Medina River

Each alternative must include:

- Pollutant removal performance
- Sediment capture effectiveness
- Footprint and constructability
- Maintenance requirements
- Planning-level cost estimates

The Alternatives Analysis shall be a formal deliverable and decision point for the project team. The selected business shall not advance to design without the project team's approval of the preferred alternative.

Task 4 – Permitting & Environmental Compliance

- Waters of the U.S. delineation
- Coordination with appropriate state and local agencies when deemed necessary, such as the United States Army Corps of Engineers (USACE), Texas Commission on Environmental Quality (TCEQ), Texas Parks & Wildlife Department (TPWD), and Texas Historical Commission (THC).
- Floodplain permitting considerations
- Environmental and cultural assessments (as required)

Task 5 – Design Development

- Stream Enhancement / Best Management Practices (BMP) Alternatives Analysis to include:
 - Scour/stability analysis
 - BMP / pond design
 - Maintenance / Dewatering Plan
 - Integration with ADA trail and park constraints
 - Vegetation plan
- Pipeline design
- 30% (concept), 60%, 90% and 100 % construction plan development
- Stormwater Pollution Prevention Plan (SWPP), technical specifications, and construction estimate preparation
- Design Report Structural Designs of:
 - Five (5) Concrete weirs 1@ for Forebays the Constructed Wetland Cells
 - Five(5) Drop structures 1@ for the Constructed Wetland Cells
 - Vehicle structural crossing (1) over Unidentified Tributary
 - High Density Polyethylene (HDPE) Pipeline from Outfall #2 to confluency of the Medina River
 - Velocity Reduction Structure at confluence of Unnamed Tributary & Medina River
- Construction cost estimate (Opinion of Probable Construction Cost)
- Operations and maintenance (O&M) plan

Task 6 – Project Management & Coordination

- Coordination with GEAA, FCRP, City of Castroville, and other relevant agencies and stakeholders
- QA/QC procedures
- Project scheduling and reporting

Optional Task (if proposed)

- Ecosystem services or benefits modeling to support funding and reporting.

5. Key Technical Considerations

All submitted proposals must address:

- Continuous low-flow effluent combined with episodic storm events
- High sediment loads from steep terrain
- Methods for estimating, intercepting, and managing sediment transport
- Wetland clogging and hydraulic short-circuiting risks
- Maintenance access and sediment removal strategy

- Integration with public park use and safety
- Nutrient reduction strategies, particularly phosphorus

6. Deliverables

It is expected that the chosen business will produce and deliver the following items:

- Existing Conditions Report
- Alternatives Analysis Report (required milestones)
- List of all Required Permits and Details to obtain those, and estimated costs
- Hydrology & Hydraulics (H&H) Technical Memorandum
- 30% Design Plans (concept layout, grading, flow paths)
- 60% Design Plans (refined geometry and preliminary details)
- 90% and 100 % construction plan development, SWPPP, Technical specifications, construction estimate preparation
- Structural design for: Constructed Wetland Cells, Concrete weirs, Drop structures, Vehicle Structural Crossing over Unnamed Tributary (1)
- High-Density Polyethylene (HDPE) Pipeline from Outfall #2 to the confluency of the Medina River
- Draft and Final Design Report
- Total Project Opinion of Probable Construction Cost (OPCC)
- Permit documentation
- Estimate and predict uplift and changes that are achieved by implementing nature-based solutions.
- Operations & Maintenance Plan

7. Project Schedule

- RFP Issued: Project Month 1
- Consultant Selection: By Project Month 3
- Design Completion: Target Project Month 4-6

Please note: Actual Project Months will be determined once project funds are available for use.

8. Budget

Respondents shall provide a detailed cost proposal for the services described in this RFP. The cost proposal should be organized by task and should clearly identify staff time, hourly rates, anticipated subconsultant costs, reimbursable expenses, and any assumptions or exclusions.

The project team reserves the right to negotiate the final scope of work, schedule, and fee with the selected respondent. Based on available funding and project needs, GEAA may prioritize certain tasks, phase portions of the work, or defer selected services to a future phase.

Respondents are encouraged to propose a cost-effective approach that addresses the project's highest-priority design needs while maintaining flexibility for future design, permitting, or construction-related services.

9. Mandatory On-Site Meeting and Inspection

All interested businesses are required to attend a mandatory on-site meeting and inspection at Castroville Regional Park (816 Alsace Avenue, Castroville, Texas 78009) before submitting a proposal for consideration. The purpose of the meeting is to provide respondents with an opportunity to review existing site conditions, discuss project goals, ask questions, and receive clarification regarding the project scope and requirements.

The project team will hold the mandatory on-site meeting and inspection for all interested respondents on Tuesday, July 28, at 10:00 AM. Failure to participate in the mandatory on-site meeting and inspection may result in disqualification from further consideration.

To ensure a fair and transparent process, any questions and responses that materially affect the scope of work or proposal preparation may be documented and shared with all prospective respondents through a written addendum or question-and-answer document.

Please contact Nathan Glavy at nathan@aquiferalliance.org to confirm attendance or ask questions regarding this requirement.

10. Proposal Requirements

All proposal submissions must include the following items:

1. Business overview and relevant experience
2. Project understanding and technical approach
3. Experience with similar projects (constructed wetlands, stream restoration, WWTP polishing systems)
4. Proposed project team and roles
5. Approach to alternatives analysis and sediment management
6. Project schedule
7. Detailed cost proposal (by task)
8. References (3–5 projects)
9. Acknowledgement of attending the mandatory on-site meeting and inspection **before** the proposal due date.
 - a. Failure of a business to participate in the required on-site meeting and inspection will result in disqualification from further consideration

Additionally, interested businesses must demonstrate experience with at least two (2) projects involving constructed wetlands, stream restoration, or nature-based water treatment systems.

11. Proposal Evaluation Criteria

The project team will utilize the following criteria when evaluating all submitted proposals:

Criteria	Weight
Technical approach and understanding	30%

Relevant experience	25%
Project team qualifications	15%
Proposed Budget & Value	15%
Project Schedule	15%

12. Finalists Selection Process & Proposal Awarding

Following the proposal submission deadline, the project team will review and evaluate all proposals based on the criteria outlined in this RFP. Based on the results of the evaluation, the project team may identify a shortlist of the most qualified respondents ("Finalists") for further consideration. Selection as a Finalist does not guarantee contract award.

At the discretion of the project team, interviews may be conducted with one or more respondents to further evaluate qualifications, project understanding, and proposed approach. The format, timing, and content of any interviews shall be determined by the project team.

Following completion of the evaluation process, including any interviews and required site visits, the project team will select the respondent determined to be the most qualified and best suited to perform the requested services. The project team reserves the right to negotiate the final scope of work, schedule, and fee with the selected respondent before contract award. If an agreement cannot be reached, the project team reserves the right to enter negotiations with another qualified respondent.

13. General Terms

- The project team reserves the right to reject any or all proposals
- The project team may negotiate scope, schedule, and fees
- The selected business will enter into a professional services agreement with the project team

14. Submission Instructions & Questions

The project team is not responsible for any costs incurred by respondents in preparing proposals. Proposals must be submitted electronically in PDF format to:

Annalisa Peace

annalisa@aquiferalliance.org

Subject Line: Castroville Constructed Wetland Design Proposal –(Business Name)

All questions regarding this RFP must be submitted via email to Annalisa Peace as well. Responses will be shared with all prospective respondents through a written addendum or question-and-answer (Q&A) document.

15. Standard Terms and Conditions

Contract Agreement

The selected consultant will be required to enter into a professional services agreement with the project

team. The project team reserves the right to incorporate additional terms and conditions during contract negotiation.

Insurance Requirements

The selected business shall maintain, at a minimum:

- General Liability Insurance
- Professional Liability (Errors & Omissions)
- Workers' Compensation (as required by Texas law)

Proof of insurance must be provided before contract execution.

Indemnification

The selected business shall agree to indemnify and hold harmless GEAA, Friends of Castroville Regional Park, the City of Castroville, and project partners from claims arising from the consultant's negligent acts, errors, or omissions.

Compliance with Laws

The consultant must comply with all applicable federal, state, and local laws, regulations, and permitting requirements, including those of TCEQ, USACE, TPWD, and FEMA.

Ownership of Work Products

All reports, data, plans, and deliverables produced under this contract shall become the property of the project team upon completion, unless otherwise agreed.

Right to Modify Scope

The project team reserves the right to modify the scope of work, schedule, or budget at any time based on project needs and funding availability.

Non-Discrimination

The consultant shall not discriminate against any employee or applicant based on race, color, religion, sex, national origin, age, disability, or any other protected status under applicable law.

Conflict of Interest

Respondents must disclose any potential conflicts of interest related to this project.

End of RFP