



Request for Proposals

Feasibility Study, Modeling, and Planning for Yampa River Habitat Connectivity in Morgan Bottom: Environmental Engineering Services

Release Date: October 4, 2024

Proposals Due: November 3, 2024

Project Description:

The overarching goals of this project are to enhance understanding about how to reconnect the Yampa River with its floodplain and to improve both terrestrial and aquatic habitat quality within the Morgan Bottom reach. As a first step in achieving this goal, Friends of the Yampa (FOTY), along with our partners at The Nature Conservancy (TNC), plan to hire an engineering firm to conduct a feasibility study, perform hydraulic modeling, and develop a conceptual floodplain connectivity and habitat improvement design.

This project is a companion of ongoing outreach (performed by FOTY, TNC, and others) including engaging adjacent property owners and water users before, during, and after the feasibility study, modeling, and conceptual design phase. We are committed to including stakeholders in decision-making about community-driven projects that originated during the Yampa Integrated Water Management Planning process. This project is intended to be multi-phased and multi-year, with the scope of the current Request for Proposals comprising Phase I: Feasibility, Modeling, and Planning. Future phases will include permitting, final design, additional outreach, and implementation.

The Morgan Bottom reach of the Yampa River is characterized as a broad floodplain with a biodiverse riparian corridor that has abundant potential for floodplain connection. Infrastructure and past land uses – such as berms, levies, and push-up dams – restrict riparian habitat quality in some sections, disconnect the river from its floodplain, and impede aquatic species and recreational boater passage. The potential habitat value of the reach could be improved, for example, with tapered banks and floodplain reconnection methods, combined with a better understanding of landowner goals and challenges. We intend for this project to demonstrate process-based restoration techniques, expand projects and partnerships with an agricultural-riparian nexus, and encourage more

widespread implementation of these techniques. Initial restoration planning will occur on the Yampavian Ranch and the assessed project reach will extend 1.5 miles downstream of the Shelton Ditch on the Yampa River. (See attached project map).

Scope of Work:

FOTY seeks an environmental engineering firm to perform technical analyses, develop a hydraulic model, and create a conceptual design for a potential floodplain reconnection and habitat improvement project in Morgan Bottom on the Yampa River. Specifically, the engineering firm will be responsible for:

1. **Technical analyses:** The selected firm will utilize available data from past efforts associated with the Yampa River Integrated Water Management Plan (IWMP) and other existing studies, including information on flow, morphology, riparian community, and other applicable datasets. The firm will then identify data gaps and suggest measures to utilize existing data collected as part of the Yampa River Scorecard Project, Yampa IWMP, and Yampa River Fluvial Hazard Zone analyses. Based on identified data gaps, the firm will conduct necessary surveying, which may include topographic survey, use of LiDAR, fluvial geomorphological assessment, and other studies. The firm will provide at least three options to deploy low-tech process-based restoration in the project reach and conduct a process with the project team to identify a preferred alternative.
2. **Hydraulic model:** The firm will combine all existing and collected data to utilize a hydraulic model to evaluate different river conditions and opportunities for floodplain connection and habitat improvement in this reach.
3. **Conceptual design:** The firm will develop a conceptual engineering design to improve floodplain connectivity and riparian habitat based on the preferred alternative identified through the hydraulic model and outreach process (conducted by FOTY, TNC, and others).

The deliverables for this project include:

1. At least two site visits with the project team
2. Technical memorandum describing the results of data analyses, assessments, or studies conducted and the results of the hydraulic model (using HEC-RAS or another professionally recommended system)
3. At least three riparian improvement options for the project team to consider and determine a “preferred” option

4. A conceptual design that offers opportunities for floodplain reconnection and deployment of process-based restoration techniques through Morgan Bottom, 1.5 miles downstream of the Shelton Ditch on the Yampa River.

Project Schedule:

RFP and Project Activities	Due Date
Distribute RFP	10/4/2024
Contractor Written Proposals Due	11/3/2024
Select Firm	Mid-November 2024
Execute Contract	Early December 2024
Begin Work	Early December 2024
Complete Work	Late July 2025

Budget:

The total budget for Phase 1 of the project (including any necessary sub-contracting or reimbursable expenses) is \$65,000.

How To Be Considered

FOTY will be the hiring entity. Please submit the following materials to Emily Burke, FOTY Conservation Program Manager, at emily@friendsoftheyampa.com by 11:59 pm on November 3, 2024.

- A Statement of Qualifications for the project (<5 pages), including:
 - Experience collecting and utilizing technical hydrology, geomorphology, and riparian/aquatic ecology data
 - Knowledge of and experience with hydraulic modeling as a component of holistic river restoration design and low-tech process-based restoration
 - Experience developing conceptual designs, particularly those focused on riparian habitat improvement and utilizing process-based restoration
- A (>3 pages) proposal and technical approach for completing all tasks described in this RFP
- Relevant team and subcontractor resumes
- Proposed budget, including timeline and task breakdown
- Descriptions of at least two projects completed by the firm that are similar in size and scope to the project described in this RFP. Provide contact name, email, and

phone numbers. References should be for projects conducted within the previous 5 years.

Selection criteria includes the qualifications of the contractor, the level of demonstrated expertise in designing technical and holistic aspects of low-tech process-based restoration, costs, and the quality of the proposal. FOTY will select the firm by mid-November 2024 with contracting expected to be complete by early December 2024.

Questions?

Please contact Emily Burke (contact information above) with any questions, and replies will be provided as promptly as possible.

