Study Scope of Work Framework

Overview
Flooding and water management in the Silvies Drainage presents a series of challenges balancing how best to manage spring runoff events. Flooding in the communities of Burns and Hines during the spring requires a new flood control strategy. Flood control may be addressed by changing how and when runoff moves through the drainage. Upstream of the communities there are land and vegetation management practices which have the potential to impact timing and magnitude of flows. Downstream, the wet meadows and prairies of the Malheur system depend on water availability at the right time of year and with the correct quantity. Across these issues are also opportunities to understand how groundwater management may benefit from flood control measures. The Federal Emergency Management Agency (FEMA) is in the process of developing two phases of flood modeling and Flood Insurance Rate Map (FIRM) updates. These new maps will have broad impacts on the communities of Harney County with either new or increased insurance requirements or prohibitions on future development. The first phase of FIRM updates will exclude the City of Burns and the City of Hines and use existing mapping. However, the second phase of updates will produce new flood determinations for these two communities.

Project Goal
The project seeks to understand the flooding system and develop an integrated suite of mitigation approaches that balance flood abatement and maintains the ecological benefits of spring flooding on wet meadow pastures in the Silvies floodplain. Flood mitigation measures are to be used to inform the FEMA modeling and mapping with the goal of reducing the impact of new flood area determinations. To support this scope, the County has developed a stakeholder analysis document to assist the project team in identifying key flood hazard, economic, environmental and social benefits for any proposed mitigation activity or project (Attachment “A”). The final product will be the identification of two to three flood mitigation projects together with an analysis of the potential impact on the extent of flood designations for the communities of Burns and Hines, as well as adjacent unincorporated areas.

Scope of Work
This request for proposals seeks the following services:
1. Develop a Comprehensive understanding of the flood system of the Silvies River by:
   - Reviewing the current and ongoing flood model that can be used to evaluate the extent and duration of different flooding regimes.
   - Determining the potential effects of upstream land management changes.
   - Evaluation of the timing and duration of flooding that is beneficial for wet meadow maintenance.
• Evaluating the model for flood impacts to the Communities of Burns, Hines, the Burns Paiute reservation, and unincorporated portions of Harney County.

2. Identification of an initial list of candidate Silvies Drainage flood mitigation projects with the potential to affect FEMA FIRM updates in Harney County by:
   • Identifying alternative management approaches and reviewing them with an advisory committee appointed by the County Court.
   • Develop candidate projects for feasibility analysis of effect on flood hazard, wet meadow ecology. Evaluate economic costs and community benefits for each project.
   • Developing recommendations for two to three flood mitigation projects that best meet flood hazard, economic, ecological, and social goals established through the project.
   • Developing estimated flood extent changes based on recommended mitigation projects selected. The project will require coordination with FEMA Region X and it’s contractors.
   • Develop estimated costs and management requirements for recommended mitigation projects.

**Deliverables**
The project team will deliver a technical report documenting the following:
   • Documentation of Flood system understanding and assumptions used in modeling flooding.
   • Description of candidate projects selected.
   • Methodology for selecting the recommended projects, including criteria using hydrology, ecology, social impacts, finance, and construction considerations.
   • Estimated impact on FEMA FIRM maps.

The team will deliver GIS or CAD data that will be shared with the Harney County Court and FEMA Region X modelers to include in their next FIRM map study. Specifications to be reviewed by Harney GIS Coordinator).

All deliverables are to be completed by November 20th 2019.

**Schedule and Funding**
Proposals are due by March 19th (EOB) and must be submitted via email to Brandon.mcmullen@co.harney.or.us. Review will occur over the following two weeks, with selected proposer notified on April 3rd 2019. Project duration is anticipated to take 7 months with a beginning date of May 2019.

The total funding available for this project is $60,000.

**Eligibility**
This opportunity is open to for-profit organizations and consulting firms, academic institutions, non-profit organizations or other governmental entities including tribes.

**Proposal Requirements**
The proposal will include a cover letter, project narrative, team resumes, and proposed budget and schedule.

The cover letter will not exceed one page and must be signed by an authorized representative for the organization or team. The cover letter must at a minimum identify the participants in the project team (if there are other organizations or firms) and the total budget estimate.

The project narrative must not exceed 10 pages, double sided, single spaced on 8.5” by 11” paper. The narrative must address the following:

- **Project Understanding**: Describe the project team’s understanding of the issue presented in this RFP or from other experience in similar projects.
- **Approach**: Describe the methods to be used in assessing the flood mitigation projects. If these methods have been used on other projects, feel free to share examples. This can include both the scientific and outreach methods used, as well as costing methodologies for assessing project options.
- **Deliverables**: Briefly state how you will develop the final report and data products.
- **Roles and Experience**: Identify the project team, both individuals and organizations. Describe how the team has worked together in the past or how the team will be managed. Share past relevant experience of key personnel.

Include resumes for key personnel on the project, this is not part of the narrative page limit.

Provide a budget and schedule for the project. Budget and schedule can be detailed as you see fit.