



# Request for Proposals

**PROJECT: WILDFIRE READY WATERSHED in Summit County, CO**

**PUBLISHED: 14 January 2025**

**RFP DUE: 2:00 PM (Mountain Time), 12 February 2025**

## Overview

Blue River Watershed Group (BRWG), in coordination with Summit County Wildfire Ready Watersheds Working Group (WORKING GROUP), is requesting Proposals from qualified Consultants to help conduct the Wildfire Ready Action Plan Framework Study and develop the Summit County Wildfire Ready Action Plan (Summit County WRAP), referred to as WILDFIRE READY WATERSHED PROJECT for the Summit County, Colorado region. The Summit County WRAP is funded by Colorado Water Conservation Board (CWCB) through their Wildfire Ready Watersheds (WRW) initiative. Cash match is provided by Summit County, Municipalities, Denver Water, and other WORKING GROUP members. In-kind matches are provided by members of the WORKING GROUP. The project duration is expected to be 16 months.

The goal of this project is to develop a WRAP to address the susceptibility of infrastructure and identified values at risk as identified by the WORKING GROUP, BRWG, and the Core Project Team to the threat of wildfire. The Colorado Water Conservation Board (CWCB) has outlined a six-step approach through the Wildfire Ready Watersheds (WRW) Program that the Consultant, in coordination with BRWG and the Core Project Team, will use to first evaluate the susceptibility of values at risk to post-fire hazards (WRW Framework Study) and then develop a WRAP that outlines actions that may be taken to reduce these impacts before and after a wildfire occurs.

Services shall be led by a primary CONSULTANT, whose team should include the appropriate expertise to deliver on the scope of work listed herein. The CONSULTANT will lead the technical aspects of the project and be actively involved in stakeholder decisions.

CONSULTANT selection will be made through a combination of qualifications, cost, and value added to scope of work. Please refer to the following sections for details on the project, conditions, schedule, proposal requirements, and selection process.

This Request for Proposal (RFP) process will be conducted via email utilizing google drive. All information about this PROJECT will come from either [projects@blueriverwatershed.org](mailto:projects@blueriverwatershed.org) or [director@blueriverwatershed.org](mailto:director@blueriverwatershed.org). ([LINK TO GOOGLE DRIVE](#)). Any information about this RFP received from any other source cannot be validated as accurate or complete.

All questions should be submitted, in writing via email to Project Director, at [projects@blueriverwatershed.org](mailto:projects@blueriverwatershed.org), no later than 3:00pm (MST) 24 January 2025, with answers and/ or an addendum published on 30 January 2025. Please format your e-mail to include RFP Wildfire Ready Action Plan in the subject line. Questions received after this deadline may not be answered. Responses to all questions submitted before the deadline will be addressed in an addendum and posted on GOOGLE DRIVE. ([LINK TO GOOGLE DRIVE](#))

Electronic Proposals for the WILDFIRE READY WATERSHED PROJECT will be received from interested CONSULTANTS via email to [projects@blueriverwatershed.org](mailto:projects@blueriverwatershed.org) and [director@blueriverwatershed.org](mailto:director@blueriverwatershed.org) before 2:00 PM (MST) on 12 February 2025, Tuesday. A confirmation of receipt will be via email before 5:00 PM (MST), same day.

Submit one, single electronic file (PDF) of the Proposal (not to exceed 30 pages, excluding individual resumes).

Please note late bids will not be accepted.

Virtual CONSULTANT interviews, if necessitated, will be scheduled 18-19 February 2025. It is strongly recommended that the CONSULTANT keep these days available for a possible interview. The CONSULTANT'S proposed Project Manager will be required to attend the interview.

Funding for this work is being secured through a Colorado Water Conservation Board Grant and associated matching funds. The schedule for this work is subject to modification pending the award of the grants. Should the grants or matching funds not be awarded or be partially awarded, Blue River Watershed Group reserves the right to reject all bids, or in the case of a partial grant award, renegotiate the scope accordingly.

## Introduction & Background

The Blue River watershed is a headwater to the Colorado River. The watershed boundaries closely match those of Summit County's borders. The Blue River drains from the continental divide, through two major impoundments, Dillon Reservoir and Green Mountain Reservoir. The watershed is a valuable shared resource between local municipalities, agriculture, environmental and recreational stakeholders.

The primary objective of the WILDFIRE READY WATERSHED PROJECT (PROJECT) is to obtain a qualified CONSULTANT to help conduct the WRW Framework Study and develop the Wildfire Ready Action Plan (WRAP) for the Blue River Watershed. The CONSULTANT will accomplish this work by successfully supporting and/or executing the following six tasks:

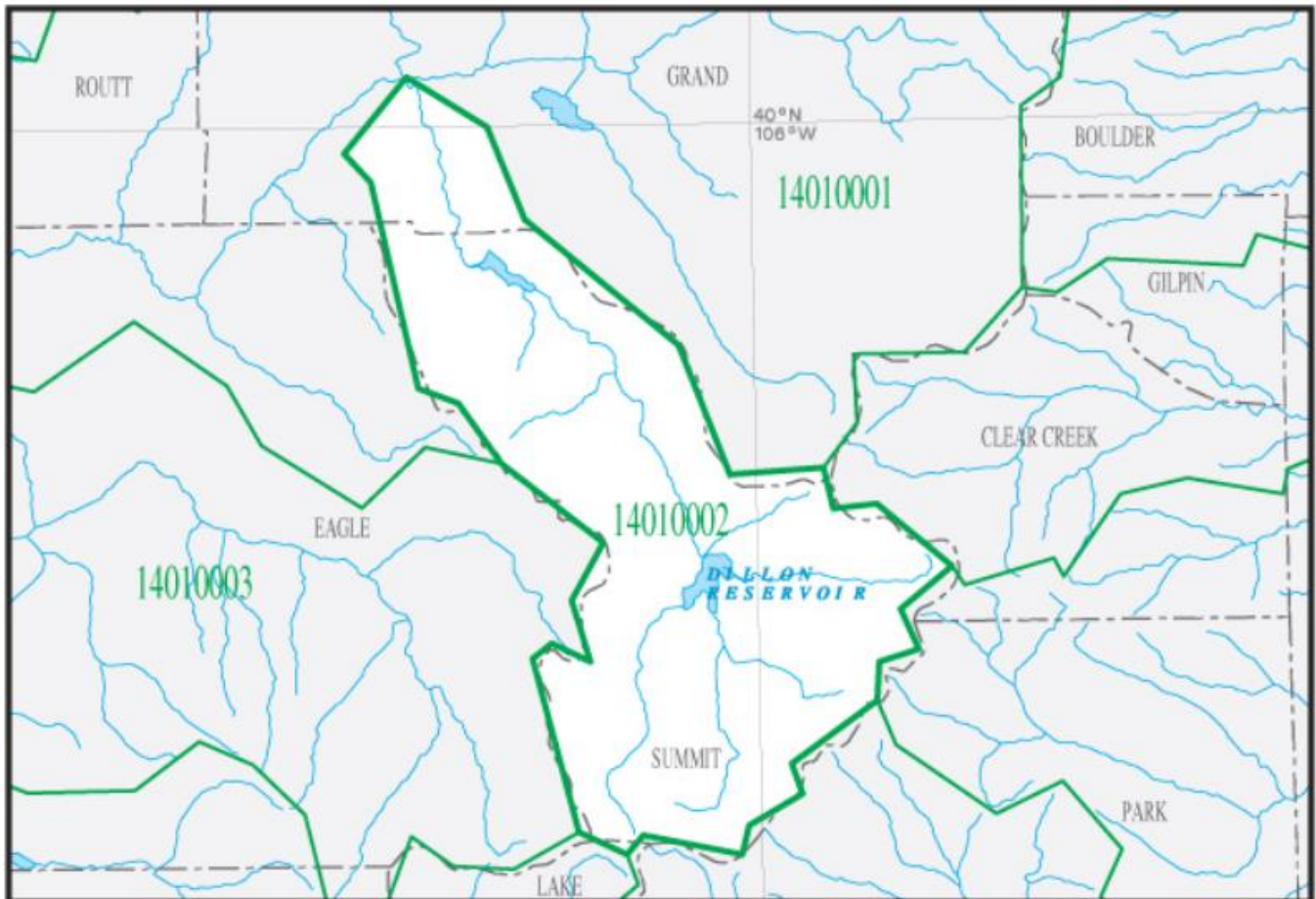
1. Vision and Establishment of Goals and Objectives
2. Stakeholder Collaboration, Community Outreach, and Public Meetings
3. Data Collection, Research, Review, and Gap Analysis
4. Post-Fire Hazard Analysis

5. Susceptibility Analysis
6. Pre- and Post-Disaster Planning and Mitigation Activities

Each task is intended to inform the subsequent task. The vision and goals/objectives established in Task 1 will guide the project. Stakeholder collaboration, community outreach, and public meetings (Task 2) will be held throughout the project. The culmination of information collected in the WRW Framework Study (Task 3 – 5) will be used to develop a WRAP in Task 6. These tasks are outlined in more detail by the CWCB's provided scope of work.

### Project Location

The WILDFIRE READY WATERSHED PROJECT (PROJECT) shall be located primarily in Summit County, Colorado with small portions of the watershed falling within Grand and Eagle counties. For more detailed project location reference the HUC 8 watershed delineation #14010002



## List of Relevant Files

All documents for this Request for Proposals can be found in this public google folder:

[https://drive.google.com/drive/folders/1iwwHsMUitlp8HSJv-mWlgxMMSHCxdp3y?usp=drive\\_link](https://drive.google.com/drive/folders/1iwwHsMUitlp8HSJv-mWlgxMMSHCxdp3y?usp=drive_link)

- Bid Schedule Template ([LINK](#))
- Proposed Project Schedule Template ([LINK](#))
- BRWG initial edited draft of Scope of Work ([LINK](#))
- BRWG Contract Terms and Agreement ([LINK](#))
- Q&A Regarding the Wildfire Ready Watershed RFP ([LINK](#))

Additional resources that may be referenced in this RFP can be found at:

<https://www.wildfirereadywatersheds.com/resources> or in the links below

- CWCB DRAFT Scope of Work ([LINK](#))
- Summit County Community Wildfire Protection Plan (CWPP) ([LINK](#))
- WRW GIS Preparedness for Wildfire Planning and Recovery ([LINK](#))
- Fluvial Hazard Zone example ordinance ([LINK](#))
- Planning for Hazards website ([LINK](#))
- Project Data Sheets ([LINK](#))
- Resilient Crossings Handbook ([LINK](#))

## Scope of Work

The overall goals for the PROJECT shall be defined during the initial tasks of the PROJECT and therefore it is imperative that the CONSULTANT clearly understand that the stakeholder decision-making process is a large component of the PROJECT. The CONSULTANT will work with BRWG and its stakeholders to refine the BRWG Draft scope of work throughout the project, and particularly as outlined in the Tasks 1 and 2 .

The CONSULTANT team will coordinate directly with the BRWG Project Manager (BRWG PM), and a third-party facilitator, who will coordinate with and organize public engagement, Technical Advisors, a Core Project Team, and the Stakeholder Working Group for the purposes of reviewing the PROJECT and providing comment and steering the project goals.

The PROJECT shall take particular consideration to identify and take advantage of opportunities to support and coordinate with the Summit County Community Wildfire Protection Plan (CWPP), [link to more information here](#), and the Wildfire Council. The CONSULTANT shall offer additional collaborative advantages wherever possible.

The project scope of work will require public outreach and stakeholder involvement, approvals from agencies and municipalities, planning for permitting, and implementation cost estimates. The final Scope of Services may incorporate additional details, services, or deliverables proposed by CONSULTANT teams, but will at a minimum include the following:

- **Task 1: Vision and Establishment of Goals and Objectives.** BRWG, in partnership with watershed stakeholders and CONSULTANT, will establish an overall vision with supporting goals and objectives for the WRW Framework Study.

- **Task 2: Stakeholder Collaboration, Community Outreach, and Public Meetings.** BRWG and the CONSULTANT will communicate with watershed residents, landowners, water users, and stakeholders during the planning process to provide planning updates, solicit feedback, discuss study findings and priorities, obtain access agreements (if needed), and keep stakeholders fully informed throughout the project.
- **Task 3: Data Collection, Research, Review, and Gap Analysis.** In support of the development of the WRAP, the CONSULTANT and BRWG in coordination with stakeholders and partners will obtain, compile, and organize available data. This effort includes a gap analysis to determine additional data that is critical to the completion of the WRAP.
- **Task 4: Post-Fire Hazard Analysis.** To understand post-fire hazards within the study area, BRWG and the CONSULTANT will work with partners, the Core Project Team, Technical Advisors and others to develop post-fire hazard evaluations. The desired geographic scope of each type of post-fire hazard analysis may be determined based on values and assets at risk, expected post-fire hazard types, and the data necessary for pre-disaster mitigation planning and design.
- **Task 5: Susceptibility Analysis.** Using the collected GIS data, relevant information and reports, and the post-fire hazard analyses, the CONSULTANT will perform a susceptibility analysis that evaluates risk to water infrastructure, transportation, utility infrastructure, life safety, and property. This assessment will identify critical values at risk throughout the study area.
- **Task 6: Pre-Disaster Planning and Mitigation Activities.** Building on the susceptibility analysis and identified values-at-risk, a WRAP will be developed to identify both pre-fire and post-fire actions, management strategies, and mitigation projects that can be implemented before and after a wildfire to protect values-at-risk from post-fire hazards. Both a Pre-disaster Preparedness Plan and Post-disaster Preparedness Plan will be developed by BRWG and the CONSULTANT.

## Bid Items

Bid items are listed below. **The CONSULTANT shall provide a narrative on how they will approach each bid item and may offer expanded services or clarification on any or all bid items. The CONSULTANT shall explicitly explain their proposed level of facilitation for each bid item.**

**Please note, the contract SHALL be awarded on a Time and Materials, “NOT TO EXCEED” total contract amount of \$448,000.00.**

### **BID ITEM 1. Vision and Establishment of Goals and Objectives**

BRWG and the CONSULTANT, in partnership with watershed stakeholders, will establish an overall vision with supporting goals and objectives for the WRW Framework Study. This effort will identify interested and affected stakeholders, clarify roles and responsibilities of participants, identify available resources to support the study, and seek to understand stakeholder goals and objectives for the WRW Framework Study.

**Stakeholder Identification:** The Core Project Team will identify all relevant watershed stakeholders, government agencies, municipalities, districts, resource agency partners, non-governmental organizations, coalitions, community groups, and residents that have interest or might be affected by post-fire hazards.

**Goal Setting Workshop:** BRWG will lead (or participate in) a workshop(s) or other targeted outreach with all stakeholders and partners. While the WRAP Template Scope of Work will serve as the basis for the major study tasks, the goal setting workshop or targeted outreach will seek to:

- Identify Stakeholder concerns and priorities (areas of concern and specific assets) and set planning goals and objectives that address the full suite of post-fire hazards and potential assets at risk.
- Identify the geographic area(s) of concern that will become the focus for the study.
- Identify opportunities to leverage data, funding, or resources; define stakeholder roles and responsibilities, i.e., who is responsible for providing supporting asset data, who will be directly involved in the review of planning deliverables, and at what times and frequency stakeholder groups will be brought together for updates and discussions.
- Establish a vision and principles that will guide the study and inform outcomes.

**Agreements and Partnerships:** As needed, BRWG will develop agreements or Memorandums of Understanding (MOUs) with partners and stakeholders. These agreements may outline funding agreements, data sharing, resource support, or other resources that may be made available for the WRW study.

#### ITEM 1. Deliverable(s)

- List of key stakeholders and communication plan (when and how often stakeholders will be involved in the WRW planning process)
- Summary document presenting WRW vision for watershed stakeholders, specific goals, and objectives, and noted areas of concern to be addressed and followed by the study
- Summary of partnerships and associated agreements regarding leveraging of funding, data, or resources
- Long-term communication and collaboration strategy between the WRAP stakeholders

#### **BID ITEM 2. Stakeholder Collaboration, Community Outreach, and Public Meetings**

BRWG and the CONSULTANT will communicate with watershed residents, landowners, water users, and stakeholders during the planning process to provide planning updates, solicit feedback, discuss study findings and priorities, obtain access agreements (if needed), and keep stakeholders fully informed throughout the project. Additionally, BRWG and CONSULTANT will coordinate and participate in interagency planning team meetings, support community meetings related to post-fire hazard planning and preparedness, and complete community outreach tasks related to completing the planning effort.

**Stakeholder Regular Communication:** BRWG will provide regular communication to watershed stakeholders. This includes important communications activities using various methods such as telephone calls, emails, and virtual and in-person meetings. This effort will include:

- Identification of key coordination needs and opportunities to improve outreach and delivery of information during the development of the WRAP
- Development of communication strategies for bridging gaps between local governments, stakeholders, and residents

**Community Outreach Activities.** BRWG will lead and participate in outreach activities with landowners and local stakeholders. Activities may include, but will not be limited to:

- WRAP work group facilitation and coordination
- Developing and implementing planning workshops or other targeted outreach to improve education, awareness, and solicit stakeholder and community input
- Planning and conducting public meetings to provide study updates and findings and solicit input and ideas from community stakeholders
- Development of communications and outreach support materials related to the WRAP
- Conducting outreach to stakeholders and underserved populations
- Coordinating with state and local agencies and planning and conducting partner coordination meetings
- Publicizing the WRAP, creating news releases, and developing other outreach products

**Wildfire Recovery Fact Sheet:** As part of the WRAP, a fact sheet will be developed to provide a common language for communicating with the public. This fact sheet might entail multiple separate documents or at a minimum, may provide an overview of both pre-fire mitigation activities and post-fire recovery efforts. These should include:

- Renderings developed by a landscape artist or graphic designer to develop conceptual visualizations of the project to supplement project plans.
- Example photos of the proposed features, both in construction and completed, to explain techniques and outcomes.

**Project Priority and Mitigation Funding Workshop.** During execution of the Pre-Disaster Planning and Mitigation Activities (Task 6) , BRWG will lead (or participate in) a workshop(s) or other targeted outreach with all stakeholders to discuss project prioritization and potential funding mechanisms. At this meeting, watershed priorities (projects, stream corridors, or specific watersheds) will be discussed before being finalized within the WRAP. BRWG will invite potential funding partners to discuss available recovery funding, how funding can be used (rules and restrictions), and how the Watershed Stakeholder Group and others may fully leverage funding to maximize recovery outcomes and expedite timelines.

**Website Creation and Maintenance:** BRWG will support the creation, maintenance, and hosting for a local WRW specific website, or information page on BRWG's existing website, or

Summit County Outdoor Coalition’s website, for the purposes of sharing information related to study activities, for internal and public use. Information on this website should be coordinated with other interested parties, including but not limited to CWCB, the Colorado Recovery and Resiliency Office, local governments, and stakeholders. The website will be updated and maintained on a regular basis with sufficient information to describe the study, the vision, goals and objectives, study updates, and associated mapping and fact sheets.

#### ITEM 2. Deliverable(s)

- Fact sheet and program handout language and/or graphics
- Meeting presentation language and/or graphics
- Meeting notes identifying major decisions, study needs, action items, and responsibilities
- Routine website content for updates and maintenance

### **BID ITEM 3. Data Collection, Research, Review, and Gap Analysis**

In support of the development of the WRAP, BRWG and CONSULTANT in coordination with stakeholders and partners will obtain, compile, and organize available data. The [WRW GIS Preparedness for Wildfire Planning and Recovery](#) will be used as a foundational guidance for this data collection effort. Additionally, relevant reports, studies, or research related to the study area will be collected and reviewed. The purpose of these reviews is to understand previous analyses, evaluations, and plans, their limitations, and how they relate to the WRAP.

This effort includes a gap analysis to determine additional data that is critical to the completion of the WRAP. Identified data gaps will indicate what the data would be used for and provide possible alternatives for obtaining the identified information and estimated costs.

**GIS Data Collection:** BRWG and CONSULTANT will coordinate with all stakeholders and partners to identify and obtain relevant GIS data related to watershed features and characteristics, hazards, and assets and values, and basemap and supporting data that may be used to support development of a WRW Framework Study evaluating post-fire susceptibility and to guide creation of a watershed scale framework for local hazard planning. Data will be collected for the following:

- Watershed Features and Characteristics including, but not limited to, topography and terrain, land cover, land use, geology, hydrologic features, existing stream centerlines and/or stream corridors.
- Hazards including available information regarding floodplains, fluvial hazards, debris flows, contamination (mine waste), and other hazard data as available.
- Values at Risk including water resources infrastructure, building structures, critical facilities, roads and bridges, oil and gas, power, water and wastewater facilities, and all infrastructure that may be at risk from post-fire hazards.
- Basemap and Supporting Data such as cadastral information related to municipal boundaries, parcels, property ownership, other jurisdictional boundaries, and supporting information.



All collected data will be summarized in a spreadsheet indicating the data name, description, where the data came from, the data format, link to websites where the data can be obtained, and a summary of the data's intended use. The data summary directly reflects the WRW GIS Data Matrix.

**Reports, Studies, Research:** BRWG and CONSULTANT will research previous planning studies, analyses, reports, and research within the study area and provide a review of each including a short summary memorandum of the study contents and relevant information that could be used as part of the WRW study. An annotated bibliography of relevant curated materials will be prepared.

**Infrastructure Operations:** Working with WRW local stakeholders and partners, information will be gathered related to infrastructure operations for water infrastructure, transportation, and other values at risk. This information will include data related to system redundancy, emergency operations, disaster response, and other operations and maintenance activities that may be relevant to post-fire susceptibility and mitigation.

**Stream Data Conditions Assessment.** For select reaches, as determined by the BRWG, CONSULTANT, and stakeholders, the Technical Advisors will assess existing physical conditions of stream reaches, including geomorphological and riparian conditions. The purpose of this assessment is to support the identification of reaches that may be suitable for pre-fire mitigation work and post-fire hazard mitigation. As part of this assessment, the Technical Advisors will determine what new information is needed and the best methods for obtaining that information (this should be addressed as part of the gap analysis). A simple technical memorandum will be developed identifying potential opportunities for mitigation that will be advanced during the Pre-Disaster Mitigation Planning task.

**Gap Analysis:** Once all available data has been collected and reviewed, CONSULTANT and the Core Project Team will perform a data gap analysis indicating data that was not available for the study in a usable GIS format. Any deficiencies in the data will be noted, e.g., if LiDAR coverage only captures a portion of the study area this will be noted as part of the gap analysis. Additionally, any missing asset data will be noted as to whether the information is:

- Only available via local institutional knowledge
- Unavailable in a usable GIS format, or
- Unavailable due to sharing constraints, i.e., homeland security or public safety

Where data is unavailable, the potential effect on the study outcomes will be identified. For example, a missing asset layer may mean that a risk analysis cannot be completed on that value at risk. Missing data will be categorized as:

- Low Importance: Minimal impact on study outcomes
- Moderate Importance: Missing data will impact the study outcomes, but will only affect the level of detail
- High importance: Missing data may significantly limit the outcome of the study

CONSULTANT will develop a Data Needs and Recommendations memorandum that will summarize a strategy to address data gaps for needs of the current assessment and for potential future recovery activities. If possible, estimated costs for developing and obtaining the missing data will be provided as part of the memorandum with potential strategies to obtain the data such as partnerships or grant programs. Where post-fire hazard data does not exist, these analyses and evaluations will be performed under the Post-Fire Hazard Analysis task.

This task will also indicate the quality of both the underlying hazard modeling as follows (this information should be input into the Framework Risk Matrix):

#### *Asset Data Quality*

1. National Data Sets (NDS). National data sets of infrastructure or water resources data. This level of data is not recommended for framework studies, but it is understood that in some cases this may be all a community has available. The CWCB State TA team has provided statewide asset data for most infrastructure classes, but in those cases where a community might want to analyze values-at-risk not included in the WRW Statewide study, national data sets may be necessary.
2. State Data Sets (SDS). Statewide data sets of infrastructure or water resources data prepared by or maintained by state agencies. CDOT roads and crossing structures would be a relevant example of this kind of data as would DWR dams and the Colorado's Decision Support System (CDSS) data.
3. Local Data Sets (LDS). These data sets are the most relevant to a framework study. Local data sets will come from local government agencies (counties and cities), community groups, water districts, water users, special districts, and other local partners.

#### *Hazard Data Quality*

1. Lower Quality Pre-Existing Hazard Data (LQ-Exist). This data generally represents lower precision, lower resolution and lower accuracy pre-existing hazard data. Examples of this might be FEMA flood mapping data that provides approximate flood boundaries, or statewide data such as the information from the WRW Statewide Susceptibility Study.
2. Medium Quality Pre-Existing Hazard Data (MQ-Exist). This data represents moderate precision, resolution, and accuracy of pre-existing hazard data. Examples of this would be FirstStreet Foundation flood data or FEMA detailed flood mapping.
3. Medium Quality WRW Developed Hazard Data (MQ-WRW). This data is represented by moderate precision, resolution, and accuracy developed as part of a WRW Framework Study. An example of this would be a watershed hydrologic model with 2D hydraulic modeling without detailed crossing structures included. Most hazard analysis for a WRW Framework study would fall under this quality level.
4. High Quality WRW Developed Hazard Data (HQ-WRW). This data type represents hazard data having a high precision, resolution, and accuracy developed as part of a WRW Framework Study. This is data generated via a hazard analysis under a WRW Framework study. This level of detail isn't necessarily expected as part of a WRW study, however if more detail is needed, this

type of analysis would be more granular (higher resolution) and include more details within the modeling and evaluation. An example might be a 2D hydraulic model with crossing structures modeled.

### ITEM 3. Deliverable(s)

- Data gap summary. WRW GIS Folder Package along with associated metadata.
- Stream Assessment Technical Memorandum
- Annotated bibliography of all relevant reports, research, and studies
- Literature review summaries
- Tabulation summary of infrastructure operations that should be considered as part of the WRW study
- Data Needs and Recommendations memorandum (data gap analysis)

### BID ITEM 4. Post-Fire Hazard Analysis

To understand post-fire hazards within the study area, the CONSULTANT will work with the Core Project Team and Technical Advisors to develop post-fire hazard evaluations. The desired geographic scope of each type of post-fire hazard analysis may be determined based on values and assets at risk, expected post-fire hazard types, and the data needs for pre-disaster mitigation planning and design. It is noted here that hazard analyses may not be needed in all locations, i.e. analysis coverage may be limited to specific corridors or sub watersheds based on the presence of values at risk or in locations where only specific hazards exist. In some cases, these hazard evaluations may already be available via federal, state, or local agencies. Existing post-fire hazard data will be identified as part of the Data Collection Task.

Post-fire hazard evaluations may include, but will not be limited to:

- Hydrologic response (hydrologic modeling)
- Floods after fire (hydraulic modeling)
- Fluvial (erosion and deposition – fluvial hazard zones)
- Debris flows (including mud)
- Hillslope and gully erosion (sediment yield)
- Water quality and drinking water
- Other related hazards as identified by the local stakeholders

*note: some example scopes are provided by CWCB as [resources](#)*

**Pre-Hazard-Modeling Risk Assessment:** Prior to the development of hazard modeling or hazard analysis, WRW TA Team will provide a high-level assessment of the study area to determine where fire hazards likely exist and where they may be a threat to values at risk. The purpose of this assessment is to determine both the need for, and level of associated detail, appropriate for each hazard type. In some cases, the planned modeling may be watershed-wide, such as hydrologic modeling, but in other cases the analysis might be limited to specific corridors, i.e. fluvial hazard zones. Additionally, this evaluation may determine where more detail is needed or desired. For example, a hydraulic rain-on-grid model might be performed for the entire watershed using a large grid and more detail may be desired in a specific reach or location to

better understand hazard risk. This assessment is meant to guide the WRW TA Team to refine hazard assessments and reduce costs associated with analysis where no significant risk exists.

**Pre- and Post-Fire Hydrology:** To support an understanding of increases in runoff from burned watersheds, both a pre- and post-fire hydrologic evaluation will be developed for the study watershed.

This analysis can be used to identify watersheds in which post-fire runoff volume and/or peak discharge is expected to increase more relative to other watersheds as well as for inputs in post-fire floodplain inundation modeling. The *WRW Flood After Fire Fact Sheet* (CWCB Resource) provides additional background about watershed change and hydrologic change after wildfires.

To perform this evaluation, it is recommended that either a HEC-HMS or 2D Rain-on-Mesh (RoM) analysis be performed using the NRCS SCS method to estimate initial losses and runoff. A detailed description of this methodology can be found in the *NRCS Hydrology Technical Note No. 4, Hydrologic Analyses of Post-Wildfire Conditions* (NRCS, 2016). The pre-fire hydrologic evaluation will be calibrated to local gage data or USGS StreamStats data as appropriate. Calibration is an opportunity to improve the output from this data set. Post-fire hydrology will use estimated burn severity as low, moderate, and high to simulate post-burn conditions and make adjustments to infiltration and runoff estimates. Runoff estimates will be estimated for the 2-, 5-, 10-, 25-, 50-, and 100-year rainfall events with corresponding ratios indicating magnitude of increase in defined watersheds.

A hydrology technical memorandum will be developed summarizing the results of the hydrologic evaluation including comparisons of existing and post-fire peak flow rates at critical locations within the study area. GIS layers shall be produced for the following:

- Sub-basin polygons
- Flow paths
- Design points with flow rates incorporated for pre and post-fire conditions and associated multipliers, i.e., a change of 100 cfs to 500 cfs pre and post-fire would have a multiplier attribute of 5.

**Post-Fire Hydraulics (Flood after Fire):** Using the completed post-fire hydrologic analysis, or as part of a complete ROG rainfall/runoff model, a hydraulic model will be developed using USACE HEC-RAS 2D to show both pre-fire and post-fire hydraulic conditions. Inundation limits for each modeled rainfall/runoff event will be developed and delivered in GIS to be used in the susceptibility analysis and for pre-disaster mitigation planning. Additional outputs are noted below as part of the hydraulic technical memorandum.

A hydraulic technical memorandum will be developed summarizing the results of the hydraulic evaluations and highlighting relevant findings and items to be considered as part of the susceptibility analysis. The technical memorandum should discuss the level of detail at which the modeling was completed with a location map where detail varies. Modeling discussion might include the size of the grid used for the model, whether crossing structures were modeled, if the DEM is hydro-reinforced, and if additional break lines were incorporated into the surface. GIS supporting data and layers shall be produced for the following:

- Pre- and post-fire hydraulic depth rasters for the selected rainfall/runoff events.
- Depth and velocity rasters for the selected rainfall/runoff post-fire (only) events.
- Shear stress rasters for the 10-year post-fire event along all study corridors.

**Fluvial Hazard Zones:** Following the “Colorado Fluvial Hazard Zone Delineation Protocol” (Colorado Water Conservation Board, 2020), the CONSULTANT, working with stakeholders, will create and provide the FHZ delineations for selected corridors of interest. The FHZ delineation will include an Active Stream Corridor and Fluvial Hazard Buffer. Where necessary, additional FHZ components may include Fans, Avulsion Hazard Zones, Geotechnical Flags and Disconnected Active Stream Corridors. A geospatial database containing the background data used to delineate the FHZ, including the relative elevation model, along with FHZ components will be delivered. The WRW TA Team will also provide metadata associated with the FHZ geospatial data.

An FHZ technical memorandum will be developed for the evaluation including reach information sheets for study reaches as well as narratives detailing the background information, data, and analyses conducted to inform and carry out the FHZ delineation. This memorandum will explain the geologic, hydrologic, and geomorphic contexts of the study area and link these to the FHZ process as well as the data, interpretations, and decisions used and made in the FHZ mapping. GIS supporting data and layers shall be produced including the following:

- FHZ geodatabase and supporting GIS data

**Debris Flow:** Debris flow hazards may be evaluated using a number of methods some of which estimate debris flow probability for small watersheds (Staley et al., 2016, 2018) and others which predict specific debris flow locations and runout footprints (i.e., Colorado Geologic Survey, 2018). Using these methodologies, probability estimates will be developed for sub-watersheds within the study area. For this evaluation, smaller watersheds are preferred to directly evaluate debris flow risk based on a watershed’s unique characteristics. However, the CONSULTANT will need to work with BRWG and stakeholders to determine the level of detail corresponding to the available budget.

A Debris Flow technical memorandum will be developed summarizing the methods of the evaluations highlighting relevant findings and items to be considered as part of the susceptibility analysis. GIS supporting data and layers shall be produced for the following depending on the analysis completed:

- Sub-basin polygons indicating debris probability
- Debris flow pathways, including runout zones (more detailed analysis)

**Hillslope and Gully Erosion (optional):** Using a standard method for estimating hillslope and rill erosion such as the Revised Universal Soil Loss Equation (RUSLE), an estimate of annual sediment yield for both pre-fire and post-fire conditions will be developed for the study area by watershed. Estimates of short-term and long-term sediment yields can be estimated as part of this evaluation and should be documented, however it should be understood that these are only estimates and actual yield may vary significantly.

A Sediment and Hillslope Erosion Technical Memorandum will be developed for the evaluation including modeling output and summaries of sediment yield and increases in hillslope erosion by watershed. GIS supporting data and layers shall be produced including the following:

- Sub-basin polygons used for analysis
- Outlet points indicating pre- and post-fire annual sediment yields
- Polylines of gully erosion ranked as low, moderate, or high potential for erosion and response (optional)

#### ITEM 4. Deliverable(s)

- Executive summary of post-fire hazard evaluations completed under the WRW Framework study including a discussion regarding the Pre-Hazard-Modeling Risk Assessment task and what areas or locations within the watershed were determined to need hazard evaluations.
- Hydrologic Technical Memorandum with all supporting documentation, model computer files, and associated GIS data.
- Hydraulic Technical Memorandum with all supporting documentation, model computer files, and associated GIS data.
- Fluvial Hazard Zone Technical Memorandum with all supporting documentation, model computer files, and associated GIS data.
- Debris Flow Technical Memorandum with all supporting documentation, model computer files, and associated GIS data.
- Optional: Hillslope and Gully Erosion Technical Memorandum with all supporting documentation, model computer files, and associated GIS data.

### **BID ITEM 5. Susceptibility Analysis**

Using the collected GIS data, relevant information and reports, and the post-fire hazard analyses, the CONSULTANT will perform a susceptibility analysis that evaluates risk to water infrastructure, transportation, utility infrastructure, life safety, and property. This assessment will identify critical values at risk throughout the study area.

**Intersection of Values at Risk with Hazards (point-of-impact).** Using available or developed hazard data, a geospatial overlay of the identified values with the post-fire hazards will be completed to assess risk. This evaluation will be based on the WRW Framework Risk Matrix. The intersection of assets and hazards will generate a preliminary binary determination of whether assets are at risk from post-fire hazards.

**Watershed Susceptibility Risk Evaluation (watershed risk).** Using the collected data and hazard/value at risk intersection analysis, provide a GIS based comparison of relative watershed-to-watershed post-fire susceptibility as low, moderate, or high. Watershed sub-basins should be delineated at a scale that provides enough detail to address specific risk and identify mitigation opportunities. This analysis will develop a risk rating score to be used in understanding severity of post-fire impacts of associated hazards on life, property, and infrastructure at the watershed level.

**Susceptibility Analysis (stream corridor or stream reach risk).** Using both the point-of-impact intersection analysis and the watershed susceptibility evaluation, a study-area wide

susceptibility evaluation will be completed for relevant and probable post-fire hazard impacts. The suggested list of evaluations is provided below in two categories in the template SOW, Recommended and Optional. The CONSULTANT and BRWG will determine which evaluations are relevant for the given study and update the list as appropriate for the final SOW. This list is not all encompassing and can be modified with additions relevant to the study watershed.

Recommended (Baseline):

- Loss of life
- Water infrastructure damage and post-fire maintenance
- Flooding and flood damage
- Debris flows (including mudflow and rockfall)
- Fluvial erosion/deposition and geomorphic change
- Transportation and utility interruptions
- Water quantity (supply, delivery, and redundancy)
- Optional (Enhanced):
  - Dam failure (jurisdictional and non-jurisdictional)
  - Drinking or Environmental Water quality (short-term and long-term impacts)
  - Economic (business closures, loss of property, wages, time)
  - Air quality
  - Natural resource loss
  - Contamination (mine waste runoff; hazardous chemicals/materials, water supply water quality and treatment post-fire) including surface water, groundwater, soils, and air.

The susceptibility analysis will include specific detail for each relevant impact regarding:

- Summary of consequences that may occur due to adverse impacts from hazards with detail for each high value asset
- Redundancy of systems or lack of redundancy (water supply, sewerage, transportation, emergency response systems)
- Whether the value is easily repaired or replaced if damaged
- If the post-fire hazard can be reasonably mitigated and a brief description of how,
- Whether hazards may require closing of lands, and/or access via roads or bridges,
- If emergency access or evacuation is will likely be prevented or will require extraordinary measures such as air support, and
- Any other community specific details regarding the adverse impacts or consequences of post-fire hazards.

**Reporting and Mapping.** Based on the data collection effort and susceptibility evaluation, a susceptibility report and complimentary web-based mapping summarizing risk levels by watershed, infrastructure type, and life/property. This narrative will document elements of risk including redundant systems or lack of redundancy.

- **Post-Fire Susceptibility Report.** Narrative summary of data collection, hazard evaluation, susceptibility analysis, and recommendations.

- **Post-Fire Susceptibility Mapping.** Online or PDF maps showing various susceptibility scenarios and outcomes following wildfires including severity/risk by watershed.

ITEM 5. Deliverable(s)

- Post-fire susceptibility report
- Post-fire susceptibility mapping including all supporting and developed GIS data

### **BID ITEM 6.1. Pre-Disaster Planning and Mitigation Activities**

Building on the susceptibility analysis and identified values-at-risk, a WRAP will be developed to identify both:

1. Pre-Fire Actions: Actions, management strategies, and mitigation projects that can be implemented before a wildfire to protect values-at-risk from post-fire hazards, and
2. Post-Fire Actions: Actions, management strategies, and mitigation projects that can be implemented following a fire to protect life and property.

The outcome of this effort will produce two types of action plans:

1. Pre-disaster preparedness plan.
2. Post-disaster preparedness plan

For all identified actions, estimates of implementation costs, permit requirements, timelines, stakeholders, and lead agency (project manager) will be developed.

**Pre-Disaster Preparedness Plan.** A pre-disaster preparedness action plan will be developed to provide a list of possible actions that might be taken to protect infrastructure or values-at-risk from post-fire hazards. The types of mitigation actions will likely fall into the following categories:

1. **Watershed and Stream Restoration:** Watershed, floodplain, or stream corridor improvements including stream corridor rehabilitation and restoration that can mitigate post-fire hazards. These may be improvements that provide increased flood storage via floodplain reconnection, provide sediment and debris storage through floodplain restoration, protect vulnerable locations from potential erosion via revegetation, stream realignment, re-establishment of secondary and/or overflow channels, and projects that seek to enhance overall stream corridor function.
2. **Infrastructure Upgrades:** These improvements would be rehabilitation, removal, or replacement of existing infrastructure. Examples might include road crossing upgrades including debris racks, creation of redundant intakes or development of water supply alternatives, moving structures out of floodplain or fluvial hazard zones, consideration of location of power and water lines, and other infrastructure improvements that result in more resilient outcomes.
3. **Warning Systems:** Post-fire flood and debris flow warning systems are typically installed after post-wildfire assessment has identified at-risk drainages. In order to expedite the process by which assessment moves to action, communities may consider development of a warning system installation plan that can be quickly implemented following a fire. The warning system implementation plan could be a part of the post-fire action plan



(see Post-Fire Actions). In certain watersheds, installation of rainfall and flow measurement gages may be useful for water/drainage management regardless of wildfire. If installed, these might be the first line of defense to warn downstream communities of post-fire hazards. The same logic applies to early warning systems installed in drainages that are naturally prone to flood or debris flow - strategic use of these early-warning instruments may save lives in natural hazard prone areas regardless of whether there is a wildfire.

4. **Water Supply Systems:** Planning will focus on identification of vulnerabilities of key water infrastructure and treatment processes to wildfires. Pre-disaster mitigation planning will consider what actions can be taken to enhance reliability of water supply and delivery:
  - Evaluation of redundancy in the supply and infrastructure and planning for improved short- and long-term water intake and source redundancy
  - Creation of incident plan for facilities and personnel.
  - Identification vulnerabilities of diversion, conveyance, and treatment (drinking water) infrastructure to direct impacts from wildfires including defensible space and ignitability improvements.
  - Identification of early warning source water monitoring / gaging locations (e.g., turbidity sensors)
  - Planning for adjustments to drinking water treatment processes based on potential short- and long-term effects of wildfire on drinking water quantity, quality, and treatability considering the following:
    - Raw water quality thresholds for alternative water supplies or treatment processes
    - Impacts to secondary processes and treatment trains such as residuals handling and onsite chemical storage
    - Upgrades to treatment systems/technology that can be made ahead of time
    - Additional monitoring requirements for operational control and infrastructure protection
    - Emergency power supply load testing based on foreseeable wildfire response conditions
    - Training exercises and drills for during- and post-wildfire operations
5. **Ordinances and Special Hazard Areas:** Where post-fire hazards have been identified, communities may consider special hazard areas or ordinances regarding development in such areas to reduce future loss. The *Fluvial Hazard Zone example ordinance* and *Planning for Hazards website provide examples*. As part of the study, the Core Project Team may evaluate and consider the development of stream corridor easement and buyout programs that seeks opportunities for reducing risk in hazard prone areas. For instance, in areas that are identified as natural depositional zones, mechanisms to support the landowner's ability to contribute their lands in service to the broader community through programs such as the EWP floodplain easement funding (and/or other NRCS easement programs) might be appropriate (note, some of these programs

such as the EWP floodplain easement are only available after a disaster and should be considered as part of the post-fire mitigation plan).

6. **Burn Severity Mitigation and Fire Prevention:** These include forest health, fuels mitigation, and community-based planning efforts such as potential operational delineations (PODs). These may also include fuels management efforts such as prescribed fires and vegetation management (thinning, removal of ladder fuels, etc.). Development of strategic fuel/fire breaks. Implementation of defensible space and fire safe landscaping around critical facilities/assets. Installation of on-site firefighting equipment at critical facilities such as set up of sprinkler systems, water tanks, and/or other equipment to protect assets in fire prone landscapes.
7. **Risk Mitigation Infrastructure:** Efforts meant to reduce the likelihood that a hazard will affect critical assets. These may include strategic creation of sediment detention basins and traditional flood and debris flow mitigation actions such as setback levees, debris nets, and planned overflow channels.
8. **Education and Outreach:** These efforts are meant to provide early-warning systems in a sense to property owners living in high-risk areas (based on pre-fire assessments) through the deployment of education and outreach efforts that encourage actions such as identifying insurance gaps, identifying opportunities for home upgrades such as floodproofing, and general outreach and awareness of possible vulnerabilities due to the physical landscape.

**Site Suitability Evaluation:** Using the Stream Data Conditions Assessment from Task 3, the CONSULTANT will work with stakeholders to evaluate the suitability of locations within the watershed and along river corridors to support mitigation projects that enhance floodplain connectivity, provide sediment storage, create floodplain storage, increase riparian corridors and vegetative diversity, and incorporate restoration practices that complement the overall goals and objectives of the WRAP. Additionally, the suitability evaluation should identify temporal, geographical, legal, or administrative constraints and opportunities that may limit or assist in the ability to meet goals and objectives.

*Project Data Sheets.* For each identified action, develop and summarize the following information:

- Location map and summary of property boundaries and ownership
- Identification of post-fire hazard(s) resulting in life and property risk. In some cases, hazard risk will encapsulate an area such as a stream corridor that has several adjacent values-at-risk
- Brief summary of the hazard impacts and associated consequences
- Alternatives analysis of mitigation action(s) to include:
  - Estimates of implementation costs including professional services, permits, construction, and maintenance for each proposed action(s).
  - Anticipated permit requirements and associated schedule requirements/impacts. Provide a complete blueprint of the permitting processes required to implement identified projects including:
    - Permitting requirements and associated needs
    - Agencies and contacts

- Timing of permits (required review process)
- Identification of professional services needed
- Permit costs and estimated technical support fees
- A list of project stakeholders and whether any actions, permission, approvals, or other specific support is required from stakeholders
- A bullet summary of next steps and action items required to implement the project
- Timelines for project implementation (start to finish). These do not need to be date specific, but rather provide estimates of time from an NTP for a project
- Lead agency or sponsor (this may change based on grant requirements or other factors)
- Potential funding sources including partner committed funds and available grants or reimbursement programs

**Funding:** As part of the preparedness plan, the Core Project Team will research and document available federal, state, and local funding opportunities, including how to procure funding and the associated rules and requirements of each program. The purpose of this effort is to create an easy-to-follow road map (i.e., funding program summary) outlining how funding can be used and leveraged to maximize mitigation efforts will result in improved outcomes and reduce missed recovery opportunities. Additionally, an understanding of the community's capability (agencies, stakeholders, partners) to provide local match will be developed. Federal disaster recovery funding has a local match requirement, therefore, having an idea of what types of funding are available locally, including in-kind, etc. will allow for faster access to federal funding.

**Project Prioritization:** For all identified projects, the CONSULTANT will help the Core Project Team develop a prioritization plan. This plan will be completed by representatives of the community through consensus within the stakeholder group. Prioritization will include analysis of physical aspects such as the potential to reduce post-fire hazards and community risk and enhance the environment as well as social aspects such as degree of landowner support, cohesive vision among neighbors, and the potential for finding successful funding. Furthermore, during project prioritization, projects will be aligned with the goals and objectives with specific funding sources.

Following the development of pre-disaster actions, a Pre-Disaster Preparedness Report will be developed. The report will provide a summary of all recommended major actions as described above as well as a watershed wide map showing locations of the proposed actions. Ideally, this would be incorporated into an online web map for public and agency access.

#### ITEM 6.1 Deliverable(s)

- Pre-Disaster Preparedness Plan
- Pre-Disaster action mapping including all supporting and developed GIS data
- Online web map displaying proposed mitigation activities

## **BID ITEM 6.2. Post-Disaster Preparedness Plan**

A post-disaster action plan will be developed to provide a list of actions that might be taken to further assess post-fire hazards, implement warning systems, and protect infrastructure or values-at-risk from post-fire hazards. The types of mitigation actions would fall into the following categories:

1. **Post-Fire Assessments:** These are planned analyses and assessments that would occur once a fire reaches a significant size. Primarily, these are meant to be updates to the post-fire hazard evaluations completed as part of the WRW Framework study to better determine real-world post-fire impacts. These evaluations would consider the fire footprint, burn severity, and other factors that were unknown during the framework study and Pre-Disaster Preparedness Plan preparation. Post-fire hazards can then be re-run against the values-at-risk to determine where mitigation may be necessary. This type of mitigation is primarily point-of-impact post-fire protection such as flood protection, soil stabilization, engineered asset protection, erosion control, and sediment capture systems (see Post-Fire Recovery Actions below). The preparedness plan would identify needed assessments, the process for obtaining/procuring these analyses, timelines (critical to project funding, especially EWP), and how the information will be distributed and shared.
2. **GIS Data Preparedness:** This action would identify available GIS data and provide a summary plan to regularly update data when newer versions become available. This plan would indicate who oversees maintaining the data and how the data would be stored.
3. **Warning Systems:** This action would consider the development of a comprehensive hazard warning system including gages for rainfall, stream flows, debris flows, water quality, and soil moisture. Although the number and placement of gages will vary depending on the event, this plan will indicate who the lead agency or sponsor will be for the development of the system, prioritize high risk watersheds that are susceptible to significant hydrologic response, post-fire flooding, debris flows, and landslides. Additionally, flood travel times can be estimated beforehand for various stream reaches to be used in the development of final warning system configurations. Although not required, a procurement plan and preliminary scope of work might be developed and on-hand to decrease response time following a fire.
4. **Contracting.** Stakeholders will consider pre-disaster contracting and agreement development. This may include:
  - a. Creating and procuring active on-call/as-needed contracts with technical assistance teams so that when a disaster occurs, teams can be deployed quickly. These on-call contracts should plan for the fact that there will be many logistical needs if deployed.
  - b. Maintaining on-call contracts with contractors who can implement fire recovery actions such as mulching, stream work, or infrastructure protection.
5. **Interagency Community/Coordination Strategy:** As part of the post-disaster plan, an interagency communication/coordination strategy will be developed. In advance of a

fire, intergovernmental agreements (IGAs) or memorandums of understanding (MOUs) between key stakeholders who will support, fund, and implement recovery projects will be developed and executed.

6. **Infrastructure upgrades:** These improvements would be improvements, removal/abandonment, or replacement of existing infrastructure. Similar to pre-disaster actions, examples might include road crossing upgrades including debris racks, creation of redundant intakes or development of water supply alternatives, and other infrastructure improvements that result in protection from post-fire hazards. These improvements generally would be actions that didn't occur under pre-disaster actions due to limited financial resources, permitting requirements, property owner permissions, or other factors. Specifically, if a pre-disaster activity is deemed not practical to implement pre-fire, it might reside under these post-disaster action items.
7. **Post-Fire Recovery Actions:** These actions cover the full breadth of actions following a fire and include watershed recovery implementation such as mulching or seeding and point-of-impact actions such as flood protection, erosion protection, sediment capture, channel improvements, debris racks, etc. For the preparedness plan, sponsors may determine general locations where certain post-fire recovery treatments might be necessary. For example, identifying the best locations for mulching within the study area based on existing hillslopes and land ownership. These processes take time following a fire and having a head start will lead to better outcomes. Additionally, locations where flood or erosion protection might be needed following a fire will accelerate NRCS damage survey report development.

For items 1-5 a summary list of steps and actions necessary before and after a fire will be developed. Additionally, lead agencies, sponsors, and partners will be indicated to accelerate coordination following a fire.

For items 6-7, each identified action will include the following (written as a concise 1-2 page project brief):

- A bullet summary of steps and actions necessary before and after a fire
- Location map and summary of property boundaries and ownership
- Identification of post-fire hazard(s) resulting in life and property risk
- Short summary of the hazard impacts and associated consequences
- A list of project stakeholders and whether any actions, permission, approvals, or other specific support is required from stakeholders
- Lead agency or sponsor (this may change based on grant requirements or other factors)
- Potential funding sources including partner committed funds and available grants or reimbursement programs

Other key elements of the preparedness plan will include:

**Roles and Responsibilities:** Develop internal guidance for responding to post-fire recovery. Determine roles and responsibilities.

**Financial Needs:** As part of the WRW Framework study, an estimate of the financial needs of the state and each sub-region (e.g., counties) in the face of a disaster and keep an updated

budget available that can immediately be used as a justification for emergency funding requests. This should include support for personnel during an emergency and funds to kick off data collection, data analysis, and initial long-term planning. While it will be difficult to estimate exact values, getting order of magnitude estimates correct can accelerate funding immediately post-disaster and avert problems as months and years pass.

**Financial Capability:** An understanding of the community’s capability (agencies, stakeholders, partners) to provide local match will be developed. Generally speaking, federal disaster recovery funding has a local match requirement—this process will provide information regarding of what types of funding are available locally, including in-kind, will allow for faster access to federal funding.

**Permitting:** Have a strategy for permitting in place ahead of time. Consider development of model ordinances for disaster recovery, i.e., streamlined permitting processes for emergency recovery actions. Within these, have clear language as to what type, size, and scale of event triggers the use of the disaster response permitting process.

**Pre-Flood-After-Fire Guidance:** Provide pre-flood guidance on sizing and locating crossing structures for geomorphic compatibility (e.g., passing sediment and debris). Temporary emergency access crossings often become permanent so equipping those conducting this work with guidance on best structure selection, location, and sizing might reduce the chances that bad temporary fixes become long term problems. This guidance should also provide recommendations for private access, such as driveways. See *Resilient Crossings Handbook* developed following the 2013 Colorado floods.

Following the development of post-disaster actions, a Post-Disaster Preparedness Report will be developed. The report will provide a summary of all recommended major actions as described above as well as a watershed wide map showing locations of the proposed actions. Ideally, this would be incorporated into an online web map for public and agency access.

#### ITEM 6.2 Deliverable(s)

- Post-Disaster Preparedness Plan
- Post-Disaster action mapping including all supporting and developed GIS data
- Online web map displaying proposed mitigation activities (optional)

## Bid Submittal Details

Questions will be due 24 January 2025, Friday, with answers and/ or an addendum published on 30 January 2025, Thursday.

Electronic Proposals for the PROJECT will be received from interested CONSULTANTS via email to [projects@blueriverwatershed.org](mailto:projects@blueriverwatershed.org) and [info@blueriverwatershed.org](mailto:info@blueriverwatershed.org) before **2:00 PM (MST) on 12 February 2025, Tuesday**. A response confirming CONSULTANT's bid receipt will be provided via email before 5:00 PM the same day.

No hard copy (mailed) or faxed proposals will be accepted. Bids received after the stated deadline will not be accepted.

### **Only complete bid packages will be considered. Complete bid packages must include:**

1. BID FORM (Signed) with proposed cost for all tasks (included below, pages 26-29)
2. BID SCHEDULE (link found in *List of Relevant Files*)
3. PROPOSED PROJECT SCHEDULE (link found in *List of Relevant Files*)
4. RATE SHEET
5. Technical & Project Approach
  - Signed cover letter with expression of interest in the project, including a statement that all employees that will be working on the project have read, understand, and will comply with all sections of this request for proposals
  - Written detailed narrative of the CONSULTANT'S services proposed if awarded the contract per the bid items above. The narrative should include any options that may be beneficial for the Core Project Team to consider. Briefly describe the approach to execute the scope of work to include the methods and assumptions used, and any exceptions and/or risks.
  - Written description of the level of refinement and extent of hydrology, hydraulics, hazard zones and debris flow analysis assumed within this bid proposal. Briefly describe the CONSULTANT'S expertise and experience with the technical modeling aspect of the PROJECT.
  - Include a description of the software and other analysis tools to be used.
  - Written description of how the project would be managed and who would have primary responsibility for its professional completion. Identify what portion of work, if any, may be subcontracted or outsourced to subconsultants. Include all applicable information herein requested for each subconsultant.
  - Respond to: Can the work be completed in the necessary timeframe, with target start and completion dates met? Address present and projected workload that may interfere with completion of this project. Are other qualified personnel available to assist in meeting the project schedule if required? Is the project team available to attend meetings as required by the Scope of Work?

6. Past Performance

- Annotated list of at least three (3) projects that you have worked on that are relevant to this scope of work that have involved the staff and subcontractors/subconsultants proposed to work on this project. Include the owner's name, title of project, beginning price, ending price, contact name, email and phone number, subconsultants on the team and a brief description of the work and any change orders. The Consultant authorizes BRWG to verify any and all information contained herein and hereby releases all those concerned providing information as a reference from any liability in connection with any information provided.

7. Experience & Qualifications of Key Personnel

- List Key Personnel and briefly describe their roles and qualifications for, and/or experience with all skills relating to the PROJECT scope of work. Include professional affiliations and references.
- List all sub-contractors and briefly describe their role and their qualifications for, and/or experience relating to the PROJECT scope of work

8. Redlines or suggested changes to the BRWG Services Contract (link found in *List of Relevant Files*)

## Bid Evaluation Criteria

NOTE - When possible, BRWG seeks to work with Disadvantaged Business Enterprises (DBEs): small business concerns where at least 51% interest is owned by individuals from communities that have been historically disadvantaged socially or economically. This includes business-owned by ethnic/ racial/ cultural minorities, women, and persons of the LGBTQ, disability, and veteran communities. BRWG asks all new contractors and suppliers to self-certify size and diversity, but no formal certification is required. Bidders are encouraged to include a statement if they qualify as a DBE.

Evaluation factors and significant subfactors as stated in the solicitation are as follows. BRWG will evaluate proposals based on the following criteria:

- Technical & Project Management approach to the scope of work
- Past Performance on Similar Projects (with references)
- Experience of Key Personnel
- Price (both bid schedule & rates)

## Disclaimer

BRWG reserves the right at its sole discretion to award the contract to the CONSULTANT with the best combined technical approach and cost, cancel this RFP, to reject any and all bids, to postpone or refuse to award a contract, and to take any other action it deems to be in the best interests of the project.



## Anticipated Timeline

14 January 2025, Tuesday	RFP Documents Available
24 January 2025, Friday	Written Questions Deadline, 3pm
30 January 2025, Thursday	Written Answers Published
12 February 2025, Tuesday	Bid Due, 2pm
18-19 February 2025	Potential Consultant Interviews
21 February 2025, Friday	(Tentative) Award Announced
25 February 2025, Tuesday	Anticipated NTP
August 2026	Anticipated Contract End Date

## Questions?

For information, contact: [projects@blueriverwatershed.org](mailto:projects@blueriverwatershed.org)

or

Vanessa Logsdon, Executive Director: [director@blueriverwatershed.org](mailto:director@blueriverwatershed.org)

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**END OF REQUEST FOR PROPOSALS**

# Bid Form

## BIDDER INFORMATION

Name: \_\_\_\_\_

Company: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone number: \_\_\_\_\_

E-mail address: \_\_\_\_\_

Tax identification number: \_\_\_\_\_

The Colorado State Department of Commerce, Division of Occupational and Professional Licensing licenses the Bidder to practice as a

Bidder holds license number: \_\_\_\_\_

License issued on (date): \_\_\_\_\_

License renewal date: \_\_\_\_\_

License Classification Title: \_\_\_\_\_

## ACKNOWLEDGEMENT OF ADDENDA

A. Bidder hereby acknowledges receipt of the following Questions & Answers or Addenda.

1. Date/ Initials: \_\_\_\_\_

2. Date/ Initials: \_\_\_\_\_

3. Date/ Initials: \_\_\_\_\_

## BID SUBMITTALS

To bid for the Work, the bidding CONSULTANT is required to submit all of the following:

1. Signed BID FORM
2. BID SCHEDULE (.xls)
3. PROPOSED PROJECT SCHEDULE
4. RATE SHEET for all personnel and subcontractors
5. Technical & Project Approach (described in the Request for Proposals)
6. Past Performance (described in the Request for Proposals)
7. Experience & Qualifications of Key Personnel (described in the Request for Proposals)
8. Redlines or suggested changes to the BRWG Services Contract

If bidding CONSULTANT receives a notice of intent to award the Contract from the Blue River Watershed Group after bid opening, the bidding CONSULTANT is to submit the following documents within 10 days.

- Insurance Certificate(s)
- Performance & Payment Bonds
- Warranty of Workmanship
- Evidence of authority to do business in the State of Colorado; or a written covenant to obtain such license within the time for acceptance of Bids.

## **BID DOCUMENTS**

In addition to this bid form, the Bid Documents consist of the Request for Proposals with the list of drawings and supporting documents listed therein, any addenda, and template agreement. As indicated in the RFP, bidding CONSULTANTS must submit a technical & project management approach to the scope of work, past performance on similar projects, and experience of key personnel.

## **COVENANT TO ENTER INTO AN AGREEMENT**

**In General:** Bidding CONSULTANT agrees, if this Bid is accepted, to enter into an Engineering Services Contract with Blue River Watershed Group to perform and furnish all work specified or indicated in the Contract Documents at the Contract Time and Contract Price identified in the Agreement.

## **COVENANT TO ACCEPT TERMS AND CONDITIONS**

Bidding CONSULTANT accepts all of the terms and conditions of the Bid Documents, including without limitation those dealing with the disposition of Bid security.

Bidding CONSULTANT will pick up, sign, and submit the Agreement with the Bonds and other documents required by the Agreement within ten (10) days after the date of Blue River Watershed Group's Notice of Intent to Award the Contract.

## **REPRESENTATION OF BIDDER**

In submitting this Bid, bidding CONSULTANT represents, that:

**Nature of the Work:** Bidder has become familiar with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

**Discrepancy Resolutions:** Bidder has given Blue River Watershed Group (BRWG) written notice of all conflicts, errors, or discrepancies that Bidder has discovered in the Contract Documents and acknowledges that all written resolutions thereof, issued by BRWG prior to Bid opening are acceptable to Bidder.

## BRWG'S RIGHTS AT BID AWARD

Bidder agrees Blue River Watershed Group (BRWG) has the right to reject this Bid, or to award the Work or any part thereof to the undersigned at the prices stipulated. Bidder agrees to make no claim for damages for such rejection or award.

If the Bid is accepted, BRWG will notify Bidder of BRWG's intent to award the Services Contract to the Bidder. The Bidder shall have ten (10) days to arrive at mutual agreement and sign and return the Agreement to the BRWG.

Bidder agrees the Bid may be rejected if the submittals listed in this Document or the Notice of Intent to Award are not submitted within the time listed in the Notice of Intent to Award.

## NON-COLLUSION

Bidder agrees the Bid is genuine. The Bid is not made in the interest of or on behalf of any undisclosed person, firm, or corporation.

Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid.

Bidder has not solicited or induced any person, firm, or corporation to refrain from bidding.

Bidder has not sought by collusion to obtain for itself any other advantage over any separate Bidder or over BRWG.

## BID PRICING

Bidder will complete the Work for the prices listed herein.

## SUBSTANTIAL COMPLETION, PROJECT COMPLETION, AND LIQUIDATED DAMAGES

Bidder agrees that the Work will be Substantially Complete and ready for Approvals on or before the expiration of the Contract Time indicated in the Agreement.

Bidder agrees the Work will be complete and ready for final payment in accordance with the General Conditions on or before the expiration of the completion time indicated in the RFP and subsequent Agreement.

Bidder accepts the provisions of the Agreement as liquidated damages in the event of failure to complete the Work on time and in accordance with the Agreement.

## BID SCHEDULE

USE EXCEL SHEET: ([LINK](#))

**Contract SHALL be awarded on a Time and Materials, "NOT TO EXCEED" total contract amount of \$448,000.00**

**MEASUREMENT AND PAYMENT**

Detailed descriptions of the measurement and work descriptions for each bid item are included in the Request for Proposals for bid purposes only. The project will be bid LUMP SUM for the entirety of the work.

Units of measurement are listed in the bid schedule(s).

Refer to BRIWMP Master Plan for more detailed information to the following bid items, if applicable.

BRWG and the TAT shall make limited and intermittent observations of the progress and content of the work to determine if the work is proceeding in general accordance with the Agreement.

Bids shall encompass all costs associated with each bid item. This includes, but is not limited to planning, measuring, locating, surveying, executing, supplying, testing, cleaning, protecting, and finalizing Work and any and all incidentals. Bids shall include all costs associated with purchasing all materials necessary to complete Work. Bids shall encompass all costs associated with minimizing impacts upon the natural environment during any and all construction activities, including delays associated with sequencing.

**BID EXECUTION**

**EFFECTIVE DATE**

Bidder executes this Bid and declares it to be in effect as of \_\_\_\_\_ (DATE)

**BIDDER'S SUBSCRIPTION**

In submitting this bid schedule, it is understood that the right is reserved by Blue River Watershed Group to reject any or all bids, or to waive any irregularities or informalities in any bid or bids.

It is agreed that the bid may not be withdrawn by the Bidder for a period of forty-five (45) calendar days after the opening thereof.

The undersigned has not added any qualifying statements to the bid, nor has he(she) altered the proposal in any way.

A joint bid by more than one is clearly indicated below.

Respectfully submitted,

FIRM NAME: \_\_\_\_\_

Bidder's Signature: \_\_\_\_\_

Bidder's Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

SEAL (If corporation)

**END OF BID FORM DOCUMENT**

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