

PROFESSIONAL SERVICES REQUEST FOR PROPOSALS

North Fork of the Upper South Platte Wildfire Ready Action Plan

Project Description

Jefferson Conservation District (JCD) and Denver Water are seeking technical Consultant support to develop the North Fork of the Upper South Platte Wildfire Ready Action Plan (North Fork WRAP) funded by Colorado Water Conservation Board (CWCB) through their Wildfire Ready Watersheds (WRW) initiative. Cash match is being provided by Denver Water and Aurora Water. The project includes 1) stakeholder outreach, 2) identifying existing data, data gaps, and values at risk, 3) hazard analysis, 4) susceptibility analysis, and 5) creating a pre- and post-fire preparedness plan. JCD will be hiring a professional facilitator for stakeholder meetings under a separate contract. The project duration is expected to be 12 months.

Background and History

The North Fork of the Upper South Platte is a critical water supply for over 2 million people in the Denver and Aurora metro areas. The North Fork supplies water to Strontia Springs Reservoir, where 80% of Denver Water's and 90% of Aurora Water's water supply moves through. The wildfire risk in this critical water supply watershed is extreme and some of the highest risk in the Colorado. While there have been significant investments in forest treatments in this watershed, there are many limitations in the use of standard forest management practices to significantly reduce risk including accessibility and designated wilderness areas. Given these challenges, there is a need to determine a portfolio of projects to be more prepared for and to minimize impacts from wildfire.

This project serves as the Wildfire Ready Watersheds planning phase to identify partners, needs, and general project locations of both wildfire mitigation activities, post-fire recovery planning, and proactive watershed projects that can be constructed before a wildfire in preparation to receive wildfire and post-fire sediment and debris flows. The project includes the use of existing data and assessments and development of new hazard and susceptibility analyses. The aggressive schedule reflects the existing collaboration, information, and experience with wildfire in the watershed. Any new project development is anticipated at a conceptual level to be further developed outside of this plan. However, incorporation of existing or planned projects from stakeholders should be included, as available.

The technical Consultant will use existing analysis, such as that performed by Colorado Forest Restoration Institute for Denver Water, Jefferson County Open Space, and the U.S. Forest Service South Platte Ranger District, which have already identified wildfire risk, likelihood, and priority areas for forest treatments. In addition, the consultant will compile the work of existing collaboratives, such as the Upper South Platte Partnership, and organizations like JCD that are already working on forest treatments. This will be assessed and synthesized into a plan that provides a roadmap for all of the entities working in the watershed to continue to complete critical work in parallel.

Project Objectives

The project objectives are:

- Engage all key watershed stakeholders in the planning effort, including land managers, water and power utilities, emergency managers, local fire protection districts, non-profit organizations, and post-fire support agencies. Monthly meeting facilitation is not included in the technical Consultant's scope of work.
- Develop a public-facing GIS platform for plan development and future project and success tracking. This will be created and maintained by Denver Water with technical Consultant guidance during this project.
- Begin to fill hydrologic and hydraulic hazard assessment gaps with additional modeling.
- With all existing and new project data, complete a Susceptibility Analysis.
- Develop pre-fire and post-fire action plan(s) that identify:

- Actions and priority areas for wildfire risk reduction. Note that this will primarily be a compilation of existing stakeholder priority areas.
- Plan for post-fire flooding/debris flows in areas where risk cannot be reduced and identify appropriate post-fire mitigation actions in these areas.
- Proactively identify watershed and stream restoration projects to build watershed resilience for future fires and high intensity rain events.
- Identify roles and responsibilities for wildfire response
- Identify opportunities and agencies for post-fire recovery

Consultant Scope of Services

The Consultant will provide work as outlined for the technical Consultant in the WRW Grant Statement of Work (Attachment 1) and the Budget and Schedule (Attachment 2). The key tasks for the Consultant, as further described in the Scope of Services, are:

- Project Management and Administration
- Identify Values at Risk, Compile Existing Data and Assessments, and Gap Analysis
- Hazard Analysis
- Susceptibility Analysis
- Pre- and Post-Fire Preparedness Plan

The tasks, hours, and budgets were created for planning purposes for the grant application. As the technical expert, the Consultant shall provide recommended changes in their proposal along with rationale. Any changes must still meet CWCB and stakeholder goals for the WRAP. Please also review CWCB's resources and fact sheets for a WRAP at <https://www.wildfirereadywatersheds.com/actionplan>.

This WRAP is intended to be a first iteration knowing that wildfires in this watershed are frequent and natural, vegetation recovery is limited due to the Pikes Peak granite soils, and limitations on proactive forest treatments exist. Updates are intended and the key stakeholders are aware that not all analyses needed may be able to be accomplished in this iteration. We are relying on the guidance of our technical Consultant to prioritize the most useful analyses for a first iteration which will provide recommendations for near-term actions.

Consultant Qualifications

Statements of Qualifications should describe the Consultant's direct and recent experience in executing similar hazard and susceptibility analyses and developing similar plans, along with references. Consultants should include resumes of all key personnel who will be involved (2 pages maximum per resume). Resumes will not count toward the overall page limit of the proposal. Additional submittal information is provided below.

The Consultant must demonstrate they have the capacity to complete the work within the proposed time frame.

Project Assumptions

The following assumptions were made in the development of this Scope of Work:

- Roles and Responsibilities within the Project:
 - Grant Fiscal Agent and Administrator and Consultant Contract Manager: JCD
 - Program Lead: Denver Water
 - Cash Match: Denver Water and Aurora Water
 - Professional Facilitator for Stakeholder Meetings: TBD
 - Potential Stakeholders: Listed in Task 1 Description in Statement of Work (Attachment 1)
- The Consultant will provide QA/QC measures to ensure data compilation and assessment and any modeling assessments and results are accurate.

- The GIS application referenced will be an ESRI Web App hosted on Denver Water’s Portal. Delivery of all updated or new .shp files or geodatabases will be required to be submitted to Denver Water for use in the public-facing tool.
- Based on the Grant Budget and Schedule (Attachment 2), the Consultant scope of services should not exceed \$185,000.

Existing Resources:

Please refer to the list provided in the Statement of Work (Attachment 1), Task 2, Description of Task, for an initial list of plans and data that are likely to be available.

Project Schedule

JCD and Denver Water may elect to follow the proposals with a formal questionnaire and/or interview to assist with the proposal evaluation. Final selection of a Consultant will be based upon the selection criteria detailed on page 7. The contract will be executed with and managed by JCD.

The anticipated Project Schedule is summarized as follows:

- October 16, 2023 Request for Proposals issued
- October 24, 2023 Final Written Questions Due at **5:00pm MT**
- November 7, 2023 Proposals Due at **5:00pm, MT**
- Week of Nov. 13th Consultant Interviews, if needed
- November 17, 2023 Consultant Selected
- December 11, 2023 Estimated Start Date
- January 31, 2025 Project completion date

Proposals shall include a detailed schedule with any deviations from the aforementioned schedule clearly identified.

Scope of Services

The following tasks can be reorganized as is appropriate for the proposed approach, as long as the key objectives of the project are met. Please carefully review the information available in the North Fork WRAP Statement of Work (Attachment 1) and the resources and fact sheets from CWCB at <https://www.wildfirereadywatersheds.com/actionplan> for more detailed information.

Task 1 – Project Management and Administration

Project Management and Administration includes the following activities:

- General Project Management
- Project workshops/meetings
- Monthly Progress Report with invoice submittal

Time for this task is allocated to the Consultant Project Manager to oversee and administer the project. Monthly invoices shall be prepared and submitted to JCD in an approved format. Invoices shall be broken down by task, Prime Consultant, and Subconsultants, and include the following:

- Total contract amount
- Detailed charges for the current invoice period
- Total charges to date
- Outstanding balance
- Current amount remaining
- Total amount due

Monthly project status reports shall be prepared and submitted to JCD, along with the monthly invoices. The reports shall include the following:

- A summary of services completed during the invoiced period.
- Project issues and potential change logs.
- Milestones and/or deliverables scheduled in the coming month.

A minimum of monthly Project Manager (PM to PM) meetings should be planned.

Twelve, 2-hour stakeholder meetings are planned with up to four in person meetings. Attendance at monthly stakeholder meetings will be required but can be included in Task 1 or in Tasks 2 through 5.

Deliverables:

The following deliverables will be provided as part of Task 1:

- Monthly invoice with progress report and log of changes or conflict resolutions
- Standing PM meeting (minimum of monthly)

Task 2 – Identify Values at Risk, Compile Existing Data and Assessments, and Gap Analysis

Task 2 includes the following activities:

- Recommend and compile infrastructure, risk assessment outputs, and other spatial data from stakeholders and publicly available sources to support the Hazard Assessment.
- Enter into applicable agreements, as needed, with data owners for use in gap, hazard, and susceptibility analysis.
- Develop a report or list of non-sensitive available data, data gaps, and a prioritized list of data or assessment needs for this first phase of WRAP development and recommendations for future data collection or assessments for future phases.
- Consultant will develop a draft and final report with stakeholder review and comments containing:
 - Data from stakeholders including source and information available
 - Data and assessment gaps
 - Recommendations for hazard analyses to be completed in Task 3 based on data availability and budget.
 - Recommendations for future data collection or assessments for future phases.
 - Develop GIS data package to Denver Water and any interested stakeholder with publicly available information. Sensitive data will remain with the Consultant for hazards assessment.

Deliverables:

The following deliverables shall be provided as part of Task 2:

- Draft and final report or other similar deliverables that includes all of the information specified above.

Task 3 – Hazard Risk Analysis

The Hazard Risk Analysis will be selected based on the results and discussion in Task 2. The Consultant will:

- Conduct the agreed upon hazard analysis or analyses from Task 2.
- Present a draft of the modeling results to the stakeholder group for review and input for each analyses.

- Update the model as needed to meet the needs of the stakeholders within budget and scope and present final modeling results to the stakeholder group.
- Develop draft and final model report(s) that include all supporting documentation, model computer files, and associated GIS data, as security conditions allow.

Deliverables:

The following deliverables shall be provided as part of Task 3:

- Presentation of draft and final results (pdf or ppt deliverable)
- Draft and final technical report with all supporting documentation, model computer files, and associated GIS data as security conditions allow.

Task 4 – Susceptibility Analysis

Task 4 includes the following activities:

- Conduct a post-fire susceptibility analysis using all available data.
- Present a draft of the analysis to the stakeholder group for review and input.
- Update the analysis as needed to meet the needs of the stakeholders within budget and scope and present final analysis results to the stakeholder group.
- Develop draft and final report(s) and provide GIS package of spatial results to stakeholders as data security conditions allow.

Deliverables:

The following deliverables shall be provided as part of Task 4:

- Presentation of draft and final results (pdf or ppt deliverable)
- Draft and final technical report with all supporting documentation, model computer files, and associated GIS data as security conditions allow.

Task 5 – Pre- and Post-Fire Preparedness Plan

The Consultant, with input from stakeholders, will create a report that includes the key plan elements and considers the following:

- Priority areas and/or programs for wildfire risk reduction (forest treatments, defensible space, etc.). Note that it is expected this will primarily be a compilation of existing stakeholder priority areas and programs as most stakeholders in the watershed have recently updated assessments and pre-fire mitigation plans.
- Opportunities or a strategy for areas where forest management efforts are not able to be implemented or are too cost-prohibitive to implement in the near future to protect values at risk.
- Identify roles and responsibility for post-fire recovery including key agency support, grant opportunities, projects, needed contracts or MOUs and other critical information to be ready for post-fire needs.

The Consultant will engage stakeholders to receive initial input, brainstorm, and receive feedback on the plan.

Deliverables:

The following deliverables shall be provided as part of Task 5:

- Presentation(s), if applicable(pdf or ppt deliverable)

- Draft and final preparedness plan with spatial results in shp file, raster data, and pdf maps, as needed. A record of critical decisions, prioritizations, or tasks for future iterations should be included in the plan or appendix to the plan for future reference.

Proposal Requirements

The proposal shall outline the Consultant's Scope of Services, which shall include, at a minimum, the criteria set forth within this RFP and the Consultant's approach to administer and complete the project. A detailed project approach assists JCD in understanding the Consultant's comprehension of the project and the opportunities and constraints that a project of this complexity may contain. At a minimum, the Proposal shall include the following:

- A cover letter
- The project approach, including any unique solutions and clearly identifying assumptions.
- Tailored 2-page resumes, including projects similar in nature and complexity to the Wildfire Ready Action Plan. Resumes shall be provided for key personnel shown within the project organization chart. Key personnel proposed for the project shall remain available for the entirety of the project.
- A manpower labor estimate (work breakdown structure) by labor type/hours for the following major project phases and tasks provided under *Scope of Services*. Include the corresponding hourly rates. Tasks may be reorganized as is appropriate for the proposed approach.
 - Task 1: Project Management and Administration
 - Task 2: Identify Values at Risk, Compile Existing Data and Assessments, and Gap Analysis
 - Task 3: Hazard Analysis
 - Task 4: Susceptibility Analysis
 - Task 5: Pre- and Post-Fire Preparedness Plan
- A detailed schedule with any deviations from the schedule included herein clearly identified and tied to the project approach.
- Proposals shall be limited to 10 pages, not including resumes (a double-sided page is counted as 2 pages).
- Based on grant application estimates, the cost of services should not exceed \$185,000.

Selection Criteria

JCD, Denver Water, and Aurora Water will review the Proposals and make a selection based on best value while considering the following criteria:

Criteria	Standard	Weighting Factor
Project Personnel Qualifications	Do the assigned personnel have the skills and experience to complete the needed assessments? Do the personnel have the experience to provide a detailed and complete study? Do the personnel have firsthand experience in this type of work?	30%
Firm Qualifications	Does the firm have the appropriate support capabilities to meet the demands of the project? Has the firm done previous projects of this type of scope?	30%
Proposed Approach, Project Plan, and Schedule	Does the proposal show an understanding of the project objectives and the results desired from the project?	20%
Cost and Work Hours	Do the work hours presented accurately reflect the level of effort required to complete the project?	20%

The scale of the criteria is from 1 to 10; 1 is a poor rating, 5 is an average rating, and 10 is an outstanding rating. Criteria will be multiplied by the associated weight to give a weighted criteria score. The weighted criteria scores will be summed for a cumulative score. The maximum possible cumulative score is 10.

Proposal Submittal

Selection of a Consultant will be based on the selection criteria previously described. The Proposal shall address each component of the selection criteria.

Costs associated with Proposal preparation, pre-proposal meeting attendance, interview attendance, etc. shall be borne entirely by the proposing Consultant. Proposal information will become the property of JCD.

- **Proprietary Or Confidential Information:**
 - Proposers acknowledge that JCD may be required to disclose any or all of the documents submitted with a Proposal, pursuant to the Colorado Open Records Act, C.R.S. § 24-72-201.1, et seq. Under C.R.S. § 24-72-204(3)(a)(IV), JCD may deny inspection of any confidential commercial or financial information furnished to JCD by an outside party. Therefore, a Proposer must clearly designate any documents submitted with its Proposal that the Proposer deems proprietary or confidential, to aid JCD in determining what must be disclosed in response to a request for documents under the Colorado Open Records Act.
 - The Proposer's designation of material to be redacted must be reasonable or it will not be honored. For example, a Proposer may not designate the entire Proposal to be confidential and proprietary.

An electronic PDF copy of the Consultant's Proposal shall be uploaded to Dropbox via this link: <https://www.dropbox.com/request/tHfwvAl64iF4w8cwLvev> by 5:00 p.m. local time, November 7, 2023. Please contact Alison Witheridge, alison.witheridge@denverwater.org, at 303-628-6168 with requests for clarification, additional information, or questions regarding the submission of this RFP. Content related questions must be submitted in writing by October 24th at 5pm. Please submit one PDF of the Consultant's Proposal with intellectual or proprietary property redacted to the same location.

Attachments

Attachment 1 – North Fork WRW Statement of Work

Attachment 2 – North Fork WRAP Grant Budget and Schedule

ATTACHMENT 1
North Fork WRW Statement of Work



Last Updated: May 2021

Colorado Water Conservation Board
Water Plan Grant – Statement of Work – Exhibit A

Statement Of Work	
Date:	7/11/2023
Name of Grantee:	Jefferson Conservation District
Name of Water Project:	North Fork of the Upper South Platte Wildfire Ready Action Plan (WRAP)
Funding Source:	Colorado Watershed Restoration Grants – Wildfire Ready Watersheds
Water Project Overview:	



Last Updated: May 2021

The Colorado Restoration Grant will be used to develop the North Fork of the South Platte Wildfire Ready Action Plan.

There have been significant investments in forest treatments and risk assessments in the North Fork of the Upper South Platte (North Fork) through existing partnerships such as the Upper South Platte Partnership and the From Forests to Faucets Partnership. Key stakeholders are well aware that there are many limitations in the use of standard forest management practices to significantly reduce wildfire risk including accessibility and designated wilderness areas. This plan will build on existing wildfire mitigation and preparedness activities to look holistically for opportunities to restore landscapes and build resilience to future fires.

The North Fork includes 9 HUC 12s within two HUC10s. Eight of the nine HUC 12s have an overall susceptibility ranking above 40.

HUC 12 No.	HUC 12 Name	All Values at Risk and Hazards Susceptibility Rating (WRW Viewer; scale 1 - 60)
101900020201	Geneva Creek	44
101900020202	Headwaters North Fork South Platte River	49
101900020203	Craig Creek	26
101900020204	Bailey	51
101900020301	Deer Creek	40
101900020302	Elk Creek	51
101900020303	Buffalo Creek	47
101900020304	Rowland Gulch-North Fork South Platte River	44
101900020305	Last Resort Creek-North Fork South Platte River	46

Significant assessments including burn probability, hillslope sediment availability and debris flow analyses have already been completed within the watershed. In addition, many of the fire protection districts already have recently updated Community Wildfire Protection Plans. This WRAP will focus on bringing together watershed stakeholders and combining the pertinent information from all of the existing plans and programs, build on existing analyses, create new hazard analyses as needed, and create a pre- and post-fire preparedness plan with potential projects and the entities who could lead or co-lead them.

This work will be accomplished through the following tasks:

Last Updated: May 2021

- Task 1: Stakeholder Outreach and Coordination and GIS Coordination
- Task 2: Identify Values at Risk, Compile Existing Data and Assessments, and Gap Analysis
- Task 3: Hazard Analysis
- Task 4: Susceptibility Analysis
- Task 5: Pre-and Post-Fire Action Plan
- Task 6: Project Administration and Grant Management

Project Objectives:

- Engage all key watershed stakeholders in the planning effort, including land managers, water and power utilities, emergency managers, local fire protection districts, non-profit organizations, and post-fire support agencies.
- Develop a public-facing GIS platform for plan development and future project and success tracking.
- Begin to fill hydrologic and hydraulic hazard assessment gaps with additional modeling.
- With all existing and new project data, complete a Susceptibility Analysis
- Develop draft pre-fire and post-fire action plan(s) that identify:
 - Actions and priority areas for wildfire risk reduction
 - Plan for post-fire flooding/debris flows in areas where risk cannot be reduced
 - Proactively identify watershed and stream restoration projects to build watershed resilience for future fires and high intensity rain events.
 - Identify roles and responsibilities for wildfire response
 - Identify opportunities and agencies for post-fire recovery

Tasks

Task 1 – Stakeholder Outreach and GIS Coordination

Description of Task:



Last Updated: May 2021

Many watershed stakeholders already collaborate on wildfire risk reduction, raw water supply operations, sediment management, emergency preparedness planning, and recreation within the North Fork. This task will focus on stakeholder coordination through a contracted facilitator and development of a public-facing GIS platform, hosted by Denver Water.

Method/Procedure:

- JCD (grant sponsor) will hire a professional facilitator for regular stakeholder meetings and deliverable reviews/comments for the duration of the planning process.
- Facilitator with JCD will identify and maintain project boundaries/guardrails to stay on scope and budget.
- Outreach and recruitment of stakeholders will begin immediately so the group is ready to go with contract initiation.
- Denver Water, with input and guidance from the stakeholder group (and within DW GIS policies), will develop a GIS-based platform for data and modeling result visualization. As desired by the stakeholder group, Denver Water is willing to maintain this into the future with considerations for project and success tracking.
- Anticipated stakeholders include:
 - Denver Water and Aurora Water
 - Jefferson County (Open Space, Emergency Management, Road & Bridge, Planning & Zoning, Floodplain Administration, Wildfire Commission, Sheriff's Office)
 - Park County
 - US Forest Service and the Colorado State Forest Service
 - Fire Districts (Platte Canyon, North Fork, Inter-Canyon, Elk Creek, West Metro)
 - Core Electric Cooperative (formerly Intermountain Regional Electric Association)
 - Colorado Dept of Transportation (US Highway 285)
 - Trout Unlimited, Abandoned Mine Lands
 - Colorado Parks and Wildlife
 - Communities of Grant, Shawnee, and Bailey in Park County and Pine, Buffalo Creek, and Foxton in Jefferson County
 - Others as recruited by key partners and public announcements.
- If required for sharing critical infrastructure data, stakeholders will work directly with the engineering/modeling consultant (consultant) for consideration of assets and hazard risk/susceptibility assessments including non-disclosure or data sharing agreements. The project sponsor nor Denver Water will retain sensitive data for other entities.

Deliverables:

- The professional facilitator will develop:
 - Meeting agendas
 - Meeting notes documenting decisions, outcomes, opinions, and action items
 - Facilitate data/GIS layer collection between stakeholders and the consultant
 - Compile project draft deliverable review comments for submittal to the consultant.
- Denver Water will develop a public-facing GIS platform to visualize planning data with input and direction of watershed stakeholders.

Tasks

Task 2 – Identify Values at Risk, Compile Existing Data and Assessments, and Gap Analysis



Last Updated: May 2021

<p>Description of Task:</p>
<p>Task 2 focuses on data compilation from the watershed stakeholders and public datasets including values at risk focusing on protection of life and human safety, drinking water infrastructure (local community and downstream suppliers), power infrastructure, and roads critical to response, evacuations, and accessing critical infrastructure. The North Fork is a 50-mile tributary that is mostly defined by V and U-shaped valley segments with rugged slopes and small communities within the valley. It is also directly upstream of a critical water supply reservoir that serves nearly two million people between Denver Water and Aurora Water service areas. The focus of this effort will be assessing risks within the main valley where most of the critical infrastructure (towns, highways, water supply conveyance) as well as any other critical tributaries identified by the stakeholder group, if all tributaries cannot be assessed within the budget of this plan. Several risk and post-fire assessments and modeling have already been completed, however, notably missing are hydrologic and hydraulic results for post-fire flooding. These data gaps will be assessed through this task.</p> <p>Known plans and data to be compiled and assessed:</p> <ul style="list-style-type: none">● CWPPs<ul style="list-style-type: none">○ Platte Canyon FPD CWPP 2020 (Park County)○ Elk Creek and Intercanyon FPDs 2021 (Jefferson and Park Counties)○ North Fork FPD 2011 (Jefferson County)○ Jefferson County CWPP● Other Relevant Plans, Data, and Modeling:<ul style="list-style-type: none">○ Jefferson County Open Space Forest Health Plan 2022○ Cost-Benefit Analysis of Denver's Forest to Faucets Program 2021○ Denver Water F2F Wildfire Risk Modeling (baseline risk, erosion, debris flow, untreatable risk areas, burn probability, extreme fire behavior, crown fire activity, fuel treatments) CFRI 2023 and 2020○ Colorado Geological Survey - Debris Flow Susceptibility for Jefferson County○ Denver Water Strontia Springs Reservoir Watershed Sediment Studies and Plan:<ul style="list-style-type: none">■ Modified Watershed Assessment of River Stability and Sediment Supply (WARSSS) Reconnaissance Level Assessment 2019■ Modified WARSSS Predictive Level Assessment for the Lower North Fork and Buffalo Creek Watershed 2020■ Strontia Springs Reservoir Watershed Sediment Management Plan 2021
<p>Method/Procedure:</p>
<ul style="list-style-type: none">● JCD will hire a consultant who will:<ul style="list-style-type: none">○ Recommend and compile infrastructure, risk assessment outputs, and other spatial data from stakeholders and publicly available sources to support the Hazard Assessment.○ Enter into applicable agreements, as needed, with data owners for use in gap, hazard, and susceptibility analysis.○ Develop a report or list of non-sensitive available data, data gaps, and a prioritized list of data or assessment needs for this first phase of WRAP development and recommendations for future data collection or assessments for future phases.● Denver Water and the consultant will work together to share non-sensitive data to support development of the GIS-based visualization tools to share among stakeholders.



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<p>Deliverables:</p> <ul style="list-style-type: none"> ● Consultant will develop a draft and final report with stakeholder review and comments containing: <ul style="list-style-type: none"> ○ Data from stakeholders including source and information available ○ Data and assessment gaps ○ Recommendations for hazard analyses to be completed in Task 3 based on data availability and budget. ○ Recommendations for future data collection or assessments for future phases. ○ Develop GIS data package to Denver Water and any interested stakeholder with publicly available information. Sensitive data will remain with the consultant for hazards assessment. ● Denver Water will visualize the GIS data on a publicly-available platform to view all non-sensitive, publicly viewable data and assessment results.
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Tasks
<p>Task 3 – Hazard Analysis</p>
<p>Description of Task:</p> <p>Task 3 will implement the recommended hazard analyses from Task 2. Based on existing data, this is likely to be hydrologic, hydraulic, and/or fluvial modeling to understand impacts to the North Fork valley plus any other subwatershed(s) with critical infrastructure. Debris flow pathway modeling may also be needed pending discussion with the Colorado Geological Survey. The North Fork is a naturally confined channel and engineered in some reaches to convey 850 cfs of water downstream for water supply. There are several flow gages, but LIDAR is only available for the lower half of the watershed.</p>
<p>Method/Procedure:</p> <ul style="list-style-type: none"> ● The consultant will: <ul style="list-style-type: none"> ○ Conduct the agreed upon hazard analysis or analyses from Task 2. ○ Present a draft of the modeling results to the stakeholder group for review and input for each analyses. ○ Update the model as needed to meet the needs of the stakeholders within budget and scope and present final modeling results to the stakeholder group. ○ Develop draft and final model report(s) that include all supporting documentation, model computer files, and associated GIS data.as data security conditions allow. ● Stakeholders will: <ul style="list-style-type: none"> ○ Attend/review hazard analysis meetings, review draft information and reports and provide feedback within agreed upon timeframe. ● Denver Water will incorporate hazard analysis results into GIS-based platform for stakeholder use.
<p>Deliverables:</p> <ul style="list-style-type: none"> ● Consultant will provide: <ul style="list-style-type: none"> ○ Presentation of draft results (pdf or ppt deliverable) ○ A draft and final technical report with all supporting documentation, model computer files, and associated GIS data as data security conditions allow.



Last Updated: May 2021

Tasks	
Task 4 – Susceptibility Analysis	
Description of Task:	
Task 4 will use all available data, including the results from Task 3, hazard analysis, to perform a susceptibility analysis to identify critical values at risk in the watershed. The priority will be identifying values at risk in the North Fork valley and any critical subwatersheds identified in Tasks 2 and 3. The analysis will include the recommended baseline evaluations. Additional consideration for the abandoned mines located in Hall Valley and Geneva Creek and impacts to wildfire response and post-fire conditions will be included.	
Method/Procedure:	
<ul style="list-style-type: none">● The consultant will:<ul style="list-style-type: none">○ Conduct a post-fire susceptibility analysis using all available data.○ Present a draft of the analysis to the stakeholder group for review and input.○ Update the analysis as needed to meet the needs of the stakeholders within budget and scope and present final analysis results to the stakeholder group.○ Develop draft and final report(s) and provide GIS package of spatial results to stakeholders as data security conditions allow.● Stakeholders will:<ul style="list-style-type: none">○ Attend/review susceptibility analysis meetings and reports and provide feedback within agreed upon timeframe.● Denver Water will incorporate susceptibility analysis results into GIS-based platform for stakeholder use.	
Deliverables:	
<ul style="list-style-type: none">● Consultant will provide:<ul style="list-style-type: none">○ A draft and final susceptibility report○ Spatial susceptibility results as data security agreements allow in shp files and pdf maps, as needed.	

Tasks	
Task 5 – Disaster Preparedness Plans	
Description of Task:	
Task 5 will use all of the data and assessment results available to create a pre- and post-fire preparedness plan.	
Key pre-fire elements of the Preparedness Plan will focus on:	
<ul style="list-style-type: none">● High-severity wildfire mitigation utilizing existing prioritizations and plans.	



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- Opportunities for landscape restoration or infrastructure protection downstream of areas where forest treatments cannot efficiently be implemented.
- Opportunities for watershed and stream restoration efforts to provide sediment and debris storage for existing burn scars and for future fires. These will also likely have other ecosystem benefits.
- Identify transportation, community, water, and power infrastructure upgrades addressing results found in the susceptibility analysis that can be completed pre-fire
- Anticipating warning system needs and if any upgrades are needed in the near-term. Rain gages and real-time, continuous water quality sondes can be added to USGS stations to support community flood.
- Education and outreach

Key post-fire elements of the Preparedness Plan will focus on:

- Post-fire assessment and stakeholder readiness will identify a process for convening stakeholders post-fire. Roles and responsibilities will vary depending on the location of the burn scar, but general leadership based on public or private ownership and opportunities for recovery funding will be identified.
- Depending on stakeholder input, Denver Water can continue to maintain GIS inventories and online viewers.
- Warning system triggers
- Gain an understanding of coordination agreements and contracting needs for each entity.
- Infrastructure upgrades for transportation, community, water and power that can be triggered post-fire, where pre-fire funding may not be available.
- Identify post-fire actions that could be implemented depending on the severity, slope, extent, location, etc of the fire. Develop specifications for different treatments. Identify locations for structures, such as sediment basins, that would not be constructed pre-ifre, but where they could be triggered post-fire.

Method/Procedure:

- The consultant, with input from stakeholders, will create a report that includes the key plan elements and considers the following:
 - Priority areas and/or programs for wildfire risk reduction (forest treatments, defensible space, etc.)
 - Opportunities or a strategy for areas where wildfire mitigation efforts are not able to be implemented or are too cost-prohibitive to implement in the near future to protect values at risk.
 - Identify roles and responsibilities for post-fire recovery including key agency support, grant opportunities, projects, needed contracts or MOUs and other critical information to be ready for post-fire needs.
- The consultant will hold at least two stakeholder meetings to present, brainstorm, and receive feedback on the action plan.
- Stakeholders will play a critical role in guiding the consultant in identifying priorities for near-term plan development versus discussions and planning that will need to happen in a later phase.
- Denver Water will incorporate preparedness results into GIS-based platform for stakeholder use, as needed.

Deliverables:



Last Updated: May 2021

- Consultant will provide:
 - A draft and final preparedness plan with spatial results in shp files, raster data, and pdf maps, as needed.
 - Meeting notes that record critical decisions for prioritization and tasks for future iterations.

Tasks	
Task 6 – Project Administration and Grant Management	
Description of Task:	
Task 6 will cover project administration and grant management, primarily by JCD.	
Method/Procedure:	
<ul style="list-style-type: none">• As the project sponsor, JCD will hire and manage the professional facilitator and the consultant.• JCD will support the professional facilitator with stakeholder outreach, meeting facilitation, and data gathering.• JCD will manage and compile all stakeholder in-kind match reports and cash match funding.	
Deliverables:	
<ul style="list-style-type: none">• JCD will provide grant-required reports and invoices to CWCB as specified in the grant requirements.	

Budget and Schedule
This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

Reporting Requirements
Progress Reports: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.



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Final Report: At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions.

Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to _____ as part of the project documentation.

Performance Measures

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit C. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

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(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

EXHIBIT B
North Fork WRAP Grant Budget and Schedule



Colorado Water Conservation Board
Water Plan Grant - Detailed Budget Estimate
Fair and Reasonable Estimate

Prepared Date: SUBMITTED 7/11/23
Name of Applicant: Jefferson Conservation District
Name of Water Project: North Fork of the South Platte Wildfire Ready Action Plan

Task 1 - Stakeholder Outreach and GIS Coordination										
Sub-task	Item	Hourly Rate	# Hours	Sub-total	Item Cost	Item Quantity	Sub-total	Total	CWCB Funds	Matching Funds
Monthly Meetings, 8 virtual, 4 in-person										
GIS Coordination and Tool Development										
TOTAL								\$ 20,500.00	\$ 8,700.00	\$ 11,800.00
Other Direct Costs (see below)								\$ 438.00	\$ 438.00	
OVERALL TOTAL								\$ 20,938.00	\$ 9,138.00	\$ 11,800.00

Other Direct Costs

Item:	Copies & Printing (Black & White)	Copies & Printing	Materials and Final	Logging and Meals	Travel Expenses	Mileage	Total
Units:	No.	No.	Lump Sum	Per Diem	Lump Sum	Miles	
Unit Cost:	\$0.10	\$0.50		\$ 100.00		\$0.535	
Facilitator: 4 in-person meetings, 20 agendas x 4mtgs = 100 mi Denver to Bailey	100					800	\$438
Total Units:	100	0	0	0	0	800	
Total Cost:	\$10	\$0	\$0	\$0	\$0	\$428	\$438

Task 2 - Identify Values at Risk, Compile Existing Data and Assessments, and Gap Analysis										
Sub-task	Item	Hourly Rate	# Hours	Sub-total	Item Cost	Item	Sub-total	Total	CWCB Funds	Matching Funds
Recommend and compile data from stakeholders and publicly available sources										
	Engineering/modeling Consultant	\$ 180.00	100	\$ 18,000.00				\$ 18,000.00	\$ 18,000.00	\$ -
								\$ -	\$ -	\$ -
Document list of data, data source, data gaps, and recommendations for hazard assessment										
	Engineering/modeling Consultant	\$ 180.00	60	\$ 10,800.00				\$ 10,800.00	\$ 10,800.00	\$ -
	Draft and final report/list with one stakeholder review/comment period plus GIS package. 45 hrs + 15 hrs							\$ -	\$ -	\$ -
TOTAL								\$ 28,800.00	\$ 28,800.00	\$ -
Other Direct Costs (see below)								\$ 214	\$ 214.00	
OVERALL TOTAL								\$ 29,014.00	\$ 29,014.00	\$ -

Other Direct Costs

Item:	Copies & Printing (Black & White)	Copies & Printing	Materials and Final	Logging and Meals	Travel Expenses	Mileage	Total
Units:	No.	No.	Lump Sum	Per Diem	Lump Sum	Miles	
Unit Cost:	\$0.10	\$0.50		\$ 100.00		\$0.535	
Consultant: Field visits 1 days = 2 people = 100 mi RT Denver to Bailey	0					400	\$214
Total Units:	0	0	0	0	0	400	
Total Cost:	\$0	\$0	\$0	\$0	\$0	\$214	\$214

Task 3 - Hazard Analysis										
Sub-task	Item	Hourly Rate	# Hours	Sub-total	Item Cost	Item	Sub-total	Total	CWCB Funds	Matching Funds
Hydrologic and Hydraulic Model										
	Engineering/modeling Consultant	\$ 180.00	210	\$ 37,800.00				\$ 37,800.00	\$ 37,800.00	\$ -
								\$ -	\$ -	\$ -
Post-fire Hydraulics and/or FHZ										
	Engineering/modeling Consultant	\$ 180.00	180	\$ 32,400.00				\$ 32,400.00	\$ 7,500.00	\$ 24,900.00
Presentations and Technical Reports										
	Engineering/modeling Consultant 2 presentations *5 hours + 40 hours (draft) + 10 hours (final)	\$ 180.00	60	\$ 10,800.00				\$ 10,800.00	\$ 10,800.00	
TOTAL								\$ 81,000.00	\$ 56,100.00	\$ 24,900.00
Other Direct Costs (see below)								\$321	\$ 321.00	\$ -
OVERALL TOTAL								\$ 81,321.00	\$ 56,421.00	\$ 24,900.00

Other Direct Costs							
Item:	Copies & Printing (Black & White)	Copies & Printing	Materials and Final	Lodging and Meals	Travel Expenses	Mileage	Total
Units:	No.	No.	Lump Sum	Per Diem	Lump Sum	Miles	
Unit Cost:	\$0.10	\$0.50		\$ 100.00		\$0.535	
Consultant: Field visits 2 days * 2 people * 100 mi RT Denver to Bailey	0					600	\$321
Total Units:	0	0	0	0	0	600	
Total Cost:	\$0	\$0	\$0	\$0	\$0	\$321	\$321

Task 4 - Susceptibility Analysis										
Sub-task	Item	Hourly Rate	# Hours	Sub-total	Item Cost	Item	Sub-total	Total	CWCB Funds	Matching Funds
Susceptibility Analysis										
	Engineering/modeling Consultant	\$ 180.00	200	\$ 36,000.00			\$ -	\$ 36,000.00	\$ 11,000.00	\$ 25,000.00
TOTAL								\$ 36,000.00	\$ 11,000.00	\$ 25,000.00
Other Direct Costs (see below)								\$214	\$ 214.00	
OVERALL TOTAL								\$ 36,214.00	\$ 11,214.00	\$ 25,000.00

Other Direct Costs							
Item:	Copies & Printing (Black & White)	Copies & Printing	Materials and Final	Lodging and Meals	Travel Expenses	Mileage	Total
Units:	No.	No.	Lump Sum	Per Diem	Lump Sum	Miles	
Unit Cost:	\$0.10	\$0.50		\$ 100.00		\$0.535	
1 in-person meeting * 2 people * 100mi	0					400	\$214
Field Visits 1 day* 2 people * 100 mi RT	0	0	0	0	0	400	
Total Units:	0	0	0	0	0	400	
Total Cost:	\$0	\$0	\$0	\$0	\$0	\$214	\$214

