

# **Colorado Water Conservation Board**

# Water Plan Grant Application

# Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Water Storage Projects Conservation, Land Use Planning Engagement & Innovation Activities Agricultural Projects Environmental & Recreation Projects Anna.Mauss@state.co.us Kevin.Reidy@state.co.us Ben.Wade@state.co.us Alexander.Funk@state.co.us Chris.Sturm@state.co.us

# FINAL SUBMISSION: Submit all application materials in one email to waterplan.grants@state.co.us

in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.

	Water Projec	t Summary	
Name of Applicant Costilla		ostilla County Conservancy District	
Name of Water Project	Upper Culebra Watershed Assessment		
CWP Grant Request Amount	·	\$ 107,224.00	
Other Funding Sources C <u>WCB Watershed</u> Restoration Program		\$ 399,831.00	
Other Funding Sources Healthy Rivers Fund		\$ 20,000.00	
Other Funding Sources SdCNHA		\$ 30,000.00	
Other Funding Sources LOR		\$ 29,807.00	
Other Funding Sources Trinchera Blanca		\$ 48,000.00	
Other Funding Sources Gates		\$ 88,119.00	
Other Funding Sources In-kind		\$ 48,000.00	



Other Funding Source GOCO Resilient Cummunity	\$ 70,000.00	
Applicant Funding Contribution	\$ 28,000.00	
Total Project Cost	\$ 868,982.00	

Applicant & Grantee Information					
Name of Grantee(s):	Costilla County Conservancy District				
Mailing Address:	324 Main Street, San Luis CO 81152				
FEIN					
Organization Contact	Gary Gurule				
Position/Title	Director/Board Member				
Email	ggurule@costillaccd.org				
Phone	719-992-1472				
Grant Management Co	ontact Ronda Lobato				
Position/Title	Director/Board Member				
Email	lobator@costillaccd.org				
Phone	719-992-1472				
Name of Applicant (if different than granted)	Name of Applicant (if different than grantee) Same as above				
Mailing Address					
Position/Title					
Email					
Phone					
Description of Grantee/Applicant					
Provide a brief description of the grantee's organization (100 words or less).					



The lead for the Upper Culebra Watershed Assessment project will be the Costilla County Conservancy District. The Costilla County Conservancy District ("District") is a political subdivision of the State of Colorado, organized pursuant to C.R.S. 37-1-101, et. seq. ("Conservancy Law of Colorado"). The District's jurisdictions include approximately 14,373 parcels within the southern half of Costilla County ("County"). The District was organized under the Conservancy Law of Colorado on May 26 of 1976. This Service Plan ("Plan") has been developed in accordance with the requirements of the Conservancy Law of Colorado and as included recreation, water quality, water augmentation, and watershed restoration and protection as it top

priority. In 2018 the district held an election to remove TABOR restrictions and allow the District to seek grant funds, such as these, to support watershed health. The proposal won with overwhelming support, giving the district the ability to raise grants funds to support such projects.

Together with their partners the District held over 16 stakeholder outreach meeting to better understand landowner and community concerns and identify needs. It was from these meetings that the Project partners were chosen to make up a Technical Advisory Team that will assist the hired contractor with project activities and prioritizing recommended projects for

implementation. Together they developed an RFP and identified four partner categories: Funding, Technical, Advisory and Oversight.

	Type of Eligible Entity (check one)				
	<b>Public (Government):</b> Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.				
Х	<b>Public (Districts):</b> Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.				
	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.				
	<b>Private Individuals, Partnerships, and Sole Proprietors:</b> Private parties may be eligible for funding.				
	<b>Non-governmental organizations (NGO):</b> Organization that is not part of the government and is non-profit in nature.				
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes.				

	Type of Water Project (check all that apply)						
Х	X Study (Watershed Assessment)						
	Construction						
	Identified Projects and Processes (IPP)						
	Other						

# Category of Water Project (check the primary category that applies and include relevant tasks)



	Water Storage - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap <i>Applicable Exhibit A Task(s):</i>					
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. <i>Applicable Exhibit A Task(s):</i>					
	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website. <i>Applicable Exhibit A Task(s):</i>					
	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. Applicable Exhibit A Task(s):					
x	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. Applicable Exhibit A Task(s):					
	Other	Explain:				

Location of Water Project				
Please provide the general county and coordinates of the proposed project below in <b>decimal degrees</b> . The Applicant shall also provide, in Exhibit C, a site map if applicable.				
County/Counties	County/Counties Costilla			
Latitude 37.2050° N,				
Longitude 105.5005° W				

## Water Project Overview

Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain.

The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.



The Upper Culebra Watershed Assessment (UCWA) is a stakeholder driven watershed assessment that encompasses the Upper Culebra Basin, from the headwaters, on Culebra Peak, to the valley at San Acacio. There are many environmental challenges facing the Upper Culebra watershed, including: extended drought, forest fire potential, extensive beetle kill, water quality impairments, endangered species, degraded habitat, and other anthropogenic impacts. While stakeholders recognize the vital need to implement projects to address these concerns, the current condition of the Upper Culebra Watershed is largely undocumented.

The UCWA was prompted and organized by the Costilla County Conservancy District (CCCD) in partnership with the Land Rights Council (LCR), the Sangre de Cristo Acequia Association (SdCAA), Herederos, Colorado Parks and Wildlife (CPW), Natural Resources Conservation Service (NRCS), Costilla County Emergency Managers, Land Use Department, and Commissioners, Colorado Open Lands, and community stakeholders. Project partners make up a Technical Advisory Team that will assist the hired contractor with project activities and prioritizing recommended projects for implementation.

The UCWA will assess the ecological condition of the Upper Culebra watershed by collecting, compiling, and analyzing data characterizing: riparian habitat, geomorphology, geology, adjacent uplands, water infrastructure, aquatic habitat, flow regimes, grazing, forest health, and water quality through the collection of new data and the analysis of existing data. This project will result in a comprehensive assessment of the Upper Culebra Watershed that partners, including our watershed group, federal, state, and local entities, and private landowners, can use to prioritize, secure funding, and implement collaborative, multi-benefit projects that improve the health and resiliency of the Upper Culebra Watershed. The data will be used to create reports, which will be included in the final Upper Culebra Watershed Assessment Report. The UCWA will summarize the causes of current and potential future degradation and prioritize projects for implementation to improve watershed health for ecological and sustainability benefits.

Measura	ble R	esults
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To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:

	New Storage Created (acre-feet)				
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive				
	Existing Storage Preserved or Enhanced (acre-feet)				
	Length of Stream Restored or Protected (linear feet)				
	Efficiency Savings (indicate acre-feet/year OR dollars/year)				
	Area of Restored or Preserved Habitat (acres)				
	Quantity of Water Shared through Alternative Transfer Mechanisms				
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning				
	Number of Coloradans Impacted by Engagement Activity				
Х	Other Explain: Assessment of the Upper Culebra Watershed				



# Water Project Justification

Provide a description of how this water project supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the applicable Roundtable <u>Basin Implementation Plan</u> and <u>Education Action Plan</u>. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)

Colorado Water Plan – Section 6.6:

- Support the development of multipurpose projects and methods that benefit environmental and recreational water needs as well as water needs for communities or agriculture.
- Understand, protect, maintain, and improve conditions of streams, lakes, wetlands, and riparian areas to promote self-sustaining fisheries and functional riparian and wetland habitat to promote long-term sustainability and resiliency.
- Maintain watershed health by protecting or restoring watersheds that could affect critical infrastructure and/or environmental and recreational areas

### Rio Grande Basin Implementation Goals:

1. Protect, preserve, and/or restore the sustainability of the Rio Grande Basin watersheds by focusing on watershed health and ecosystem function.

6. Support the development of projects and methods that have multiple benefits for agricultural, municipal and industrial, and environmental and recreational water needs.

10. Promote water management and administrative practices that are adaptive, flexible, and responsive to optimize multiple benefits.

11. Protect, preserve, and enhance terrestrial and aquatic wildlife habitats throughout the Basin.

Conserve, restore, and maintain wetlands and riparian areas for the benefit of a healthy watershed.
Work to sustain active river flows throughout the year in cooperation with water users and

administrators to restore and sustain ecological function of the rivers and floodplain habitats within the context of existing water rights and compact obligations.

# **Related Studies**

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

The information about the Upper Culebra Watershed is sparse at best. The Costilla Water Conservancy District sought out partners to better understand the upper watershed conditions. The District heard from the Colorado State Forest Service who described the upper watershed forest condition from the recently completed Colorado State Forest Resource Assessment. James Fischer, the Trinchera Ranch Forester, who manages 100,000 forested acres just north of the Culebra Watershed, shared their Sustainable Forest Initiative assessment and management plan.

The District heard from Colorado Parks and Wildlife, District Wildlife Manager, Conrad Albert, who described the wildlife corridors, their conditions and the state of the wildlife that are using them. They also helped understand riparian condition and the disconnect between streams and the adjacent riparian areas and the degradation of those riparian area. We heard from NRCS, Area Rangeland Specialist, Cynthia Villa, who described the degradation of range conditions that exist across the Valley and the threat this is causing for ranchers.



The District consulted with the Colorado Rio Grande Restoration Foundation staff, Emma Reesor and Daniel Boyce. We reviewed their upper, middle and lower Rio Grande assessments, and the projects that were implemented as a result of those assessments.

We also reviewed their stream management plan and process and how that implementation is working. Finally, we worked with longtime partner Colorado Open Lands, to understand the work that they are doing in the lower watershed and how that work could be augmented by the Upper Culebra Watershed Assessment. We also spent considerable time working with partners from the Rio Grande Basin Roundtable to explore funding options, assessment necessity, and RFP creation.

# Previous CWCB Grants, Loans or Other Funding

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project.

Just awarded the COLORADO WATERSHED RESTORATION PROGRAM GRANT on 1/28/2020

# **Taxpayer Bill of Rights**

The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application.

This is not an issue in 2018 the District held an election removing Tabor limits.



	Submittal Checklist					
Х	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.					
Exhib	bit A					
Х	Statement of Work <sup>(1)</sup>					
Х	Budget & Schedule <sup>(1)</sup>					
Х	Engineer's statement of probable cost (projects over \$100,000)					
Х	Letters of Matching and/or Pending 3 <sup>rd</sup> Party Commitments <sup>(1)</sup>					
Exhib	bit C					
Х	Map (if applicable) <sup>(1)</sup>					
	Photos/Drawings/Reports					
Х	Letters of Support (Optional)					
Х	Certificate of Insurance (General, Auto, & Workers' Comp.) <sup>(2)</sup>					
	Certificate of Good Standing with Colorado Secretary of State <sup>(2)</sup>					
	W-9 <sup>(2)</sup>					
	Independent Contractor Form <sup>(2)</sup> (If applicant is individual, not company/organization)					
Engagement & Innovation Grant Applicants ONLY						
	Engagement & Innovation Supplemental Application <sup>(1)</sup>					

(1) Required with application.

(2) Required for contracting. While optional at the time of this application, submission can expedite contracting upon CWCB Board approval.



## ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

#### Introduction & Purpose

Colorado's Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado's water communication, outreach, education, and public engagement efforts; advance Colorado's water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

### **Application Questions**

\*The grant fund request is referred to as "project" in this application.

#### Overview (answer for both tracks)

In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)?

Who is/are the target audience(s)? How will you reach them? How will you involve the community?

Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources?



### Overview (answer for both tracks)

Describe how you plan to measure and evaluate the success and impact of the project?

What research, evidence, and data support your project?

Describe potential short- and long-term challenges with this project.

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado's Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).

### Engagement Track

Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys."

Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado's Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional.

Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).



Describe how the project achieves the basin roundtable's PEPO Education Action Plans.

### Innovation Track

Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.

Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.

Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge?

Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.



# **Colorado Water Conservation Board**

### Water Plan Grant - Exhibit A

Statement Of Work			
Date: January 28, 2019			
Name of Grantee: Costilla County Conservancy District			
Name of Water Project: Upper Culebra Watershed Assessment			
Funding Source:CWP, CWCB Watershed, Healthy Rivers Fund, Sangre de Cristo National Heritage Area, LOR Foundation, DOLA, CdHPE			

Water Project Overview:

The Upper Culebra Watershed Assessment (UCWA) is a stakeholder driven watershed assessment that encompasses the Upper Culebra Basin, from the headwaters, on Culebra Peak, to the valley at San Acacio. There are many environmental challenges facing the Upper Culebra watershed, including:extended drought, forest fire potential, extensive beetle kill, water quality impairments, endangered species, degraded habitat, and other anthropogenic impacts. While stakeholders recognize the vital need to implement projects to address these concerns, the current condition of the Upper Culebra Watershed is largely undocumented.

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Qualifications Evaluation



### **Project Objectives:**

The objectives of this project are to evaluate the natural resources within the basin to better understand the basin to drive projects and management decisions to protect existing resources, improve degraded conditions, reduce community risk, and improve community resiliency. The project takes a peak to valley approach and includes evaluating plant community composition and health, wildlife and aquatic habitat, and diversions and water related infrastructure within the basin.

The project is tailored to evaluate how water and sediment flow through the system in routine and extreme flow conditions and how the water quality changes through the system. The data collected will be used to model the whatifs in disaster and disturbance planning including fire, infestation, and drought. Floodplain connectivity and fluvial landscapes will be assessed looking at how this affects the rate at which water moves through the system, the stream power associated with floods and dissipation areas (fluvial hazard zones), and the effects on aquatic and riparian communities.

The project will assess existing data sets available through stakeholders and public resources to identify and compile data. From these existing data sets the field assessments will be developed to complement and improve the understanding of the natural resources within the basin. Methods will be adjusted to align with existing data as needed to ensure trend assessments and comparisons can be completed where possible. Methods will be documented to allow future efforts to expand on data sets and evaluate trends within the basin.

In addition to documenting the conditions within the basin the project is developed to utilize community members and volunteers to broaden the impact of the assessment and provide hands on experiences that can shape the community and spread awareness of the assessment and the overreaching objectives.

The assessment is the first step in collecting the data to develop projects that improve conditions within the basin, reduce risk, and protect natural resources. The data collected and data collection activities will be used to educate the community on best management practices provide opportunities to identify collaborative projects that will improve habitat, mitigate flooding, and improve water supply reliability.



Tasks

#### Task 1 - Riparian Habitat Assessment

Description of Task:

# **Description of Task**

Assess the condition of riparian habitat throughout the project reach through site visits, targeted surveying,

data collection, and the analysis of existing data.

### Method/Procedure

#### Method/Procedure:

#### Desktop Assessment

The first step of the riparian habitat assessment will be to compile existing data sets including aerial imagery, National Land Cover Datasets, disturbance layers, and LiDAR to identify potential riparian associations within the study area. Existing datasets will be compiled and evaluated. Finally, we will reference the Field Guide to Wetland and Riparian Plant Associations (Carsey, 2003), which includes riparian associations and Hydrogeomorphic (HGM) river classifications (Cooper, 1998) throughout Colorado. This information will be used to generate a list of distinct classes and likely riparian associations to target with the field sampling. There are likely four to five different riverine subclasses in this project area. The streams from the National Hydrography Dataset (NHD) will be evaluated to determine if the streams are appropriately located and classified, and whether the segment is likely to be perennial, intermittent, or ephemeral. The streams will be further classified to include the riparian association. This initial evaluation will be performed in conjunction with Task 2 – Aquatic Habitat Assessment.

#### Field Assessment

Once the initial compilation of data is complete our team will meet with the technical advisory committee (TAC) and other stakeholders to confirm and/or refine the sampling plan and monitoring protocol based on existing data sets, TAC monitoring goals, and resources available. The final protocol must be repeatable throughout the watershed, by various observers, and over time. The riparian assessments will be conducted on reach lengths of 20 Bankfull widths, or typically between 500 and 1,000 ft, and will be consistent with tools such as Functional Assessment of Colorado Streams (FACStream) and Stream Quantification Tool (SOT). Use a combination of objective sampling points and rapid assessment methods to evaluate riparian associations and riparian health conditions within each drainage. Cover classes to be measured include upper- and mid-canopy cover (using periscope) by species, understory shrub cover by species, and ground cover (using laser) by species and surface class such as rock, soil, and litter. Photo documentation will capture vegetation conditions in each hydrosere as well as the overall riparian association of each site. With reference conditions defined from line-point intercept data, a rapid categorical assessment will be conducted for the remaining sites to classify the condition of the stream banks, overbank, and terrace hydroseres within each riparian association as well as the overall health of the riparian area in question. The rapid assessment will also document impacts to vegetation from grazing, flooding, roadways, and other land use. The reference conditions will be used to determine the degree of departure between degraded reaches and reference reaches, and to inform revegetation criteria for future restoration and land use management projects. Areas identified with severe degradation will be evaluated for probable cause of degradation and recommended projects or management practices will be added to the priority project list for inclusion in Task 11.



Tasks

#### Deliverable:

Will include data relating to the condition of riparian habitat throughout the project area including percent of vegetative cover in riparian areas and along streambanks, species composition, impacts to vegetation from grazing, flooding, access easements, livestock grazing, and land use activities. Contractor will identify trends in riparian habitat condition. All electronic data sets including maps detailing riparian classification and sampling points. Detailed samples will be compiled into a report showing photographs and measurement data along with interpretation of data by riparian ecologist.

### Tasks

### Task 2 – Aquatic Habitat Assessment

Description of Task:

Aquatic habitat assessment will sample conditions within the basin based on habitat suitability index protocols including riparian habitat conditions and evaluate barriers that protect or prohibit population abundance.

#### Method/Procedure:

The first step of the aquatic habitat assessment will be to collaborate with Colorado Parks and Wildlife and project partners to identify and obtain available aquatic habitat data sets and identify data needs. Existing data sets will be evaluated and compiled, including literature review, compilation of GIS coverages, including U.S. Forest Service Disturbance datasets and aerial imagery.

The streams from the National Hydrography Dataset (NHD) will be evaluated to determine if the streams are appropriately located and classified and whether the segment is likely to support aquatic life. This evaluation will stratify the stream segments into Rosgen Stream Classifications in conjunction with Task 1 and Task 9.

Aquatic habitat assessments are coupled with the assessments performed in Tasks 1, 3, 4, and 9 to perform a habitat suitability assessment, including stream cover from vegetation, overhanging banks, turbulence, and depth; availability of spawning gravels including assessment of embeddedness and distribution; holding areas including pool depth and other slow movement areas. Macro-invertebrate sampling will be performed at selected sites to rapidly evaluate stream water quality and available food.

Evaluation of streams for fish barriers that may be critical to maintaining pure-strain populations and those barriers that may be prohibiting population abundance will be evaluated. This will include evaluating road/stream crossings in conjunction with Task 11 for fish passage requirements including height, depth, and velocity.

#### Deliverable:

Data from field assessments and population surveys will be combined to perform a limiting factor analysis which is used to identify degradation within the basin and assist in determining potential project effects on improvement of aquatic habitat. Some limiting factors that have been identified by previous assessments include excess sedimentation impacting spawning beds which results in reductions in the younger age classes. Dried streambeds during important spawning events may prevent fish from accessing refuges, or low flows resulting in higher stream temperatures.

Data will be compiled into a final report documenting measurements, evaluations, and recommendations for improving aquatic habitat. Maps of spatial analysis will be produced along with associated data sets so these data may be made publicly available by the Costilla County Conservancy District. Data collected by the



### Tasks

team will be shared with Costilla County Conservancy District. Some data sets obtained through agencies or individuals may necessitate confidentiality be maintained. These datasets will be generalized with agency approval within the final report where necessary.

# Tasks

## Task 3 – Flow Regimes Assessment

### **Description of Task:**

Flow regimes assessment will compile available records of water use within the basin including place and timing of use and conduct interviews to supplement data sets to identify opportunities to improve water administration within the basin and develop cooperative agreements to provide water at the right time and place

## Method/Procedure:

The flow regime assessment will compile available data from within the basin from the available gage records and diversion records, along with evaluation of documentation from other sources. A map including ditches, streamflow gages, and irrigated areas is included as an attachment to this proposal. This evaluation will be completed in conjunction with Task 2, Task 9, and Task 11 to evaluate the flows necessary to maintain aquatic habitat, evaluate condition of diversion structures and associated records, and evaluate opportunities to improve geomorphic condition.

### **Deliverable:**

To identify if short-comings in available water supply are the result of diversions and if agreements could be developed to mitigate shortages, or where additional streamflow gages could be installed to improve administration

# Task 4 – Water Quality Assessment

## **Description of Task:**

Water quality assessment will collect spatially distributed samples of water quality including standard field parameters, nutrients, and metals.

## Method/Procedure:

Compile existing data from all known sources including TMDL report. Evaluate spatial characteristics within each sub-drainage. Perform rough assessment of water quality conditions during fall 2019 using specific conductance and pH as surrogate for constituents. Collect grab samples for analysis at key locations such as above and below Sanchez Reservoir, at Culebra Chama gage, and a subset of the secondary drainages. Collect water quality samples from top and bottom at Sanchez Reservoir Sites Deploy five Hobowater temperature loggers to assist in aquatic habitat evaluation and evaluate temporal variation. Plot field parameters and evaluate flow network for changes in water chemistry. Present findings from initial



assessment and propose additional sampling based on initial results. Develop 2019/2020 sampling plan including additional sampling for seasonality Evaluate additional sites for assessment with field water quality

# **Deliverable:**

Understand water quality throughout the basin, identify trouble spots and recommend projects that will ensure ongoing water quality

# Task 5 – Forest Health Assessment

## **Description of Task:**

Forest health assessment will evaluate forest composition, forest health, and disturbance history. These assessments will determine areas of greatest concern to target restoration and management to improve forest health and reduce community risk

# Method/Procedure:

The Forest Health Assessment will be composed of three phases: 1) accumulation and evaluation of background information to establish baseline data and to determine the need for additional information to be collected by the team for this project; 2) targeted field sampling for additional information data needed for the assessment, including ground-truthing of spatial data layers and aerial imagery; and 3) analysis of all information to assess the Forest Health trends across the Upper Culebra Watershed and provide recommendations to improve the health of forest resources. A primary source of spatial data for the forest health assessment will be the LANDFIRE database, including data layers for vegetation type and cover, surface fire behavior fuel models, canopy characteristics, fire regime, and disturbance history. In addition, the team has determined that Forest Inventory Analysis (FIA) data are available on the private lands throughout the Culebra Watershed and could be utilized in the assessment through collaboration with the Colorado State Forest Service (CSFS). The CSFS can also provide statewide forest health assessment findings, which will contribute a landscape level context to the Forest Health report.

The survey plots will follow U.S. Forest Service (USFS) common stand exam protocols and will be assigned at random locations within each stand using GIS. Stand exams will capture information regarding site condition, vegetation composition, tree age, height, basal area and diameter, canopy structure and cover, insect and disease factors, dead and downed fuel loading, and snag density. Plot-level survey work would be carried out in the fall, spring, or summer, as dictated by weather conditions.

Surveys would be delayed by heavy snow fall due to the need to gather surface fuel data. Two crews of two experienced staff members will complete the stand surveys. The number of required plots will depend on the homogeneity of stands within the watershed and the density of available FIA data. The team will utilize a UAV drone to survey the watershed to determine the degree of stand homogeneity and gather aerial data. The drone can be used to develop an orthophoto mosaic across representative portions of the watershed, and through post processing, this data can be extrapolated to the watershed level.



## **Deliverable:**

Understanding of overall forest health, site condition, vegetation composition, tree age, height, basal area and diameter, canopy structure and cover, insect and disease factors, dead and downed fuel loading, and snag density, which will lead to projects that will improve forest quality and reduce fire risk.

# Task 6 – Grazing Assessment

# **Description of Task:**

Grazing assessment will evaluate range conditions, existing infestations of invasive species, and current use by livestock and wildlife including communal grazing areas and aspen stand conditions

# Method/Procedure:

The team will conduct a qualitative grazing assessment detailing the current observed condition of ecological sites within the proposed project area. The assessment will begin by analyzing current Natural Resource Conservation Service (NRCS) Ecological Site Descriptions (ESDs). Qualified range ecologists will then complete qualitative observations of each ecological site to determine current use (livestock and wildlife) and make general observations of range condition, utilization, and other landscape level observations. The team will use a modified observation form, taking aspects from NRCS National Range and Pasture Handbook (NRCS 2003) and the Bureau of Land Management Interpreting Indicators of Rangeland Health (Pellant et al. 2005) manuals. SWCA will notate any large infestations of invasive species and large variations from the ESDs. SWCA will utilize high-quality aerial imagery to assist in the development of baseline grazing infrastructure throughout the watershed.

The assessment of the adjacent uplands will be completed in conjunction with the Riparian Habitat Assessment, Grazing Assessment, and Forest Health Assessment. Once the initial desktop analysis has been performed the team will develop an appropriate protocol for the Uplands Assessment that will be completed in conjunction with the Riparian Health Assessment, Forest Health Assessment, and Grazing Assessment.

The upland conditions will be assessed using a rapid assessment method.

## **Deliverable:**

To determine true grazing trends, pressure, and forage utilization and establish protocols for future monitoring and make recommendations for grazing and upland habitat improvement.

# Task 7 – Wildlife Assessment

# **Description of Task:**

Wildlife inventory and assessments will evaluate habitat condition specific to threatened and endangered species, areas with high potential for human-wildlife conflict, and threats to wildlife and habitat

# Method/Procedure:



Team will use a combination of GIS data and aerial survey data to complete a desktop review to inventory major upland habitat types and document land use within the Project Area. The team will make an initial evaluation of: the potential for suitable habitat for these species to occur within the project area; the potential for suitable pollinator species habitat within the project area; suitable habitat corridors with high potential for use by migratory wildlife species; potential threats to wildlife and/or their habitats; and areas and land-use practices with the potential for human–wildlife conflict. For example, areas where agricultural land use overlaps with mule deer seasonal use areas, creating higher potential for wildlife damage to crops, or areas where seasonallivestock grazing may degrade wildlife habitat.

The team will also provide an analysis of potential human–wildlife conflicts in the Project Area and, in collaboration with CPW, NRCS, and the Advisory team, make recommendations to address conflicts. The team will also identify potential areas where there is an opportunity to improve habitat to help CPW, NRCS, and the Advisory team achieve short- and long-term goals for the overall Project Area.

The team will conduct the following field-based activities:

**Wildlife Inventory**: Field-based inventory of key wildlife species (specific species to be identified in coordination with CPW, NRCS, and Advisory team) to determine species occurrence and general use areas within the Project Area. Wildlife species potentially of interest for inventory are federally and state protected species and those with high potential for human–wildlife conflict as identified in the desktop analysis. Some, but not necessarily all, of the species that could be included in this inventory are mule deer, elk, big horn sheep, black bear, wolverine, southwestern willow flycatcher, yellow-billed cuckoo, big brown bat, Mexican free-tailed bat, silver-haired bat, pallid bat, Townsend's big-eared bat, bald eagle, osprey, peregrine falcon, sandhill crane, burrowing owl, golden eagle, and mountain plover.

• Human–Wildlife Conflict Inventory: Timed field surveys of areas identified in the desktop analysis as having high potential for human–wildlife conflict to identify the status and extent of various indicators of conflict, including, but not limited to, wildlife damage to agricultural crops; grazing impacts to wildlife habitats; and the impact of roadways, fences, and other barriers to wildlife movement.

• **Pollinator Inventory:** Field-based verification of areas with potentially high value for pollinator species as identified in the desktop analysis and, within those areas, an inventory of pollinator species presence.

• **Corridor Inventory**: Field-based verification of corridors identified during the desktop analysis as having habitat and land use with high potential for wildlife movement

## **Deliverable:**

The team will provide maps of: potentially suitable habitat for threatened and endangered species and species of special concern; areas with potentially high value for pollinator species; habitat and land-use corridors with high potential for wildlife movement; identifiable threats to wildlife and/or their habitats; and areas with high potential for human–wildlife conflict.

# Task 8 – Historical Land Use

## **Description of Task:**

Team will evaluate practices pertaining to human occupation and utilization of the land will be analyzed through time to better understand how the land has been used and whether it can sustain the continuation of traditional use and practice



# Method/Procedure:

SWCA will conduct archival research and informal interviews with community members to gather information on human and natural impacts within the area. This research will focus on items such as farming and irrigation, mining and geology, forest use, grazing, and river-based recreation. Innovations and practice pertaining to human occupation and utilization of the land will be analyzed through time to better understand how the land has been used and whether it can sustain the continuation of traditional use and practice.

# **Deliverable:**

A report that defines current land use and its sustainability and can residents continue using current practices

# Task 9 – Geology/GeomorphologyAssessment

# **Description of Task:**

Geomorphology assessments will evaluate the stability of slopes and channels within the basin including areas of sediment supply and areas at risk of slope failure during and after a disturbance event such as fire or flood event

## Method/Procedure:

The initial step in completing a geomorphic assessment is referred to as a Rapid Level Assessment (RLA) (Rosgen, 2009). An RLA is performed through the evaluation of existing remotely sensed data such as aerial imagery, elevation digital elevation models, and calculated data such as disturbance and vegetation data layers. This assessment will compile an inventory of categorized areas, including areas with significant geomorphic risk, along with identified by stakeholders as problem areas, to guide where more detailed field analysis should be performed.

The next step of the assessment is the Rapid Resource Inventory for Sediment and Stability Consequences (RRISSC) (Rosgen, 2009); where the inventory of sites from the first step are visited by geomorphologists and the condition of the site is documented though observations, photographs, and measurements. This portion of the assessment is to target areas to allow the assessment to be completed within the given constraints including time, budget, and resources. The categorization identified in the RLA will be verified to ensure all areas are represented within the sample set. The team will survey sites within 1,500 ft of a road passable by high clearance 4x4 vehicle with landowner permission.

The last step in the field analysis is a Prediction Level Assessment (PLA), (Rosgen, 2009). This is the portion of the assessment where detailed field measurements including profile and cross-sections are measured. The top 10 sites identified through criteria that have been collaboratively developed with the assessment team and stakeholders.

In addition, 10-15 stable sites will be surveyed for Bankfull indicators, cross sections, and profile to develop a regional curve that will be used to identify sites with departure and inform future restoration designs. Additional measurements collected as part of the Aquatic/Riparian Habitat Assessments and infrastructure tasks will merged with the data collected for this task where appropriate.



## **Deliverable:**

Deliverables will include all point data, GIS datasets, final maps, report including calculated values, graphs, methods, and summary of findings. To include a potential project list.

# Task 10 – Infrastructure Assessment

# **Description of Task:**

Infrastructure assessment evaluates bridges, diversions, and return flows for operation during floods, drought, and routine operations.

# Method/Procedure:

### **Method/Procedure**

Existing infrastructure including bridges, diversion structures and ditches, and intake/discharge pipes relate to the stream system and ideally exist harmoniously with each other. This assessment will begin by gathering roadway information from Costilla County and diversion structure locations from Colorado Division of Water Resources GIS files. Our team will assess the information available in these data sets and supplement where necessary, the assessment will complement the Safety and Emergency Management Task11.

Our team will work with stakeholders and other resources to compile a list of additional structures including those associated with water and wastewater facilities, ditch returns, and drains. Evaluation of structures will include structures that are in use and where necessary those structures that were historically place and are no longer used. Once structures have been identified our team will work with the Technical Advisory Committee to secure access to sites on private property to assess those structures. The assessment will include photographs and detailed notes concerning the structure including overall condition and basic measurements. Our team will evaluate roads within Ceilo Vista via aerial imagery and identify sites that have visible indicators of impacts to the streams or are in high risk zones. The structures will be categorized based on level of degradation of the structure, impacts to geomorphic stability, and impacts to aquatic and riparian ecosystems.

## Deliverable:

Our team will then develop a list of projects that may be implemented to improve overall watershed health. Projects that relate to historic structures will be reviewed by archaeologists for addition recommendations. The results of this analysis will be formatted into maps for spatial reference, catalogs of information on each of the structures, and compiled within a report detailing methods, findings, and recommendations



# Task 11 – Safety and Emergency Management Assessment

# **Description of Task:**

Identify any existing emergency management plans on key parcels in the upper watershed to include Cielo Vista, Dos Hermanos, Vermijo Park and Sangre de Cristo Ranches (Costilla County Emergency Management). Identify areas of key infrastructure in villages in middle and lower watershed and any practices that could be implemented to protect communities and mitigate damage form fire/flood. Map roadways identify critical access points and make recommendations on improving current assets. Identify area water sources that can be used in case of a wildfire.

# Method/Procedure:

SWCA is a leader in the assessment of wildfire risk and can utilize various fire behavior modeling tools (including the Interagency Fuel Treatment Decision Support System [IFTDSS], FlamMap, and FARSITE) to determine the areas at greatest risk from catastrophic wildfire and, therefore, areas to be prioritized for wildfire mitigation actions. The team routinely develops composite wildfire hazard and risk assessments for our fire planning work that identify not only fuel hazards, but also areas prone to extreme fire behavior due to climatic trends, potential extreme weather scenarios, and topographic features, and areas that have experienced high frequencies of fire ignitions due to human activity or lightning.

The team will then estimate which areas are most prone to post-fire debris-flow hazards by modeling simulated fire severity scenario data with precipitation, topography, soils, and landcover data. Our methods will be based on the science and research of the U.S. Geological Survey (USGS) Landslide Hazards Program for pre- and post-fire debris-flow hazards assessment. The team will map and assess wildfire response capabilities and weaknesses, including spatial assessments

of ingress and egress on existing roadways, bridges, access points and turnarounds, locations of potential anchor points and fuel breaks to facilitate safe and effective suppression of wildfire, locations of firefighting resources and availability and suitability of suppression water sources. SWCA will utilize the National Hydrography Dataset (NHD) as well as any locally available data, to identify potentially suitable hydrants, creeks, lakes, cisterns, etc. These water sources will be evaluated for accessibility within a GIS model, and critical access roads will be identified.

# **Deliverable:**

The team will present a map deliverable that addresses the safety and emergency management concerns of the advisory team as well as written recommended mitigation actions for safe and effective emergency response, including emergency communications to aid protection of community members and first responders. All findings will be presented in the UCWA report.

# **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.

**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 CWCB in hard copy and electronic format 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 B. Per Water Plan 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 Water Plan 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 Water Plan 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.

(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.





COLORADO

Colorado Water **Conservation Board** 

Department of Natural Resources

# **Colorado Water Conservation Board**

# Water Plan Grant - Exhibit B

# **Budget and Schedule**

January 28, 2020 Prepared Date Name of Applicant: Name of Water Project: Project Start Date:

**Costilla Conty Conservancy District** Upper Culebra Watershed Assessment April 2021

Project End Date: Dec 2021

_			50%	25%	
Description		Project Cost	CWCB Watershed	CWP	Costilla County Conservancy District
Task 1	Riparian Habitat Assessment	62,500.00	\$31,250.00	\$15,625.00	\$5,625.00
Task 2	Aquatic Habitat Assessment	98,052.00	\$49,026.00	\$14,513.00	\$14,513.00
Task 3	Flow Regimes Assessment	15,200.00	\$7,600.00	\$3,800.00	\$3,800.00
Task 4	Water Quality Assessment	61,450.00	\$30,725.00	\$15,363.00	\$4,062.00
Task 5	Forest Health Assessment	129,477.00	\$64,739.00	\$2,369.00	
Task 6	Rangeland Assessment	150,950.00	\$75,475.00	\$7,737.50	
Task 7	Wildlife Assessment	72,047.00	\$36,024.00	\$18,011.00	
Task 8	Historical Land Use	42,202.00	\$12,202.00	\$0.00	
Task 9	Geology/Geomorphology Assessment	55,450.00	\$27,725.00	\$13,862.00	
Task 10	Infrastructure Assessment	63,776.00	\$31,888.00	\$15,944.00	
Task 11	Safety and Emergency Management Assessment	66,355.00	\$33,177.00		
TOTAL		817,459.00	\$399,831.00	\$107,224.50	\$28,000.00

CWA	TBF	SDCNHA	GOCO Resiliance	LOR	Gates	In-kind	Total
\$10,000.00						\$2,000.00	\$64,500.00
\$10,000.00			\$10,000.00			\$2,000.00	\$100,052.00
						\$2,000.00	\$17,200.00
	\$14,000.00					\$10,000.00	\$74,150.00
			\$30,000.00		\$32,369.00	\$2,000.00	\$131,477.00
			\$30,000.00		\$37,737.50	\$2,000.00	\$152,950.00
					\$18,012.00	\$2,000.00	\$74,047.00
		\$30,000.00				\$10,000.00	\$52,202.00
				\$13,863.00		\$2,000.00	\$57,450.00
				\$15,944.00		\$12,000.00	\$75,776.00
	\$34,000.00					\$2,000.00	\$69,177.00
\$20,000.00	\$48,000.00	\$30,000.00	\$70,000.00	\$29,807.00	\$88,118.50	\$48,000.00	\$868,981.00



October 25, 2019

Chris Sturm, Stream Restoration Coordinator Colorado Water Conservation Board 1313 Sherman St., Rm. 721 Denver, CO 80203

### Re: Upper Culebra Watershed Assessment Grant Application

Dear Mr. Sturm,

On behalf of Colorado Open Lands (COL), I am writing to express our strong support for the Upper Culebra Watershed Assessment proposal, submitted by the Costilla County Conservancy District. Colorado Open lands is a private, nonprofit, 50l(c)3 organization based in Lakewood, Colorado. In 2008, Colorado Open Lands became one of the first land trusts in the nation to receive accreditation by the Land Trust Accreditation Commission, an independent program of the Land Trust Alliance. We have been working in Costilla County for over 9 years. Our staff has a wide range of expertise that spans rangeland ecology, conservation easement negotiations and stewardship, ecosystem science, water rights law and habitat restoration. This expertise ensures that the land and habitat that we conserve also remains protected.

COL has partnered with the Costilla County Conservancy District to conserve the private properties in the Lower Culebra Basin. In doing so, we are creating a buffer that protects wildlife corridors, open space and perhaps most importantly the Hispano farms and ranches that hold the States earliest water rights. The Conservancy has been a true partner and we are pleased that they will be assessing the Upper Culebra Watershed.

Their proposal will help the landowners, rights holders and all those living below Culebra Peak, by helping them understand the true condition of the various resources that make up the upper Culebra Watershed. This grant will add to the significant investment that has already been made to ensure that this community remains safe and the resources are managed in way that will insure the next 150 years of its use. It is because of the Costilla county Conservancy Districts ongoing commitment to protecting the Culebra that we support this request for funding.

Sincerely,

Judy hopez

Judy Lopez San Luis Valley Conservation Project Manager Colorado Open Lands



October 30, 2019

Costilla County Conservancy District 324 Main St. San Luis, CO 81152 Attn: Board of Directors

**Re: Culebra Watershed Assessment** 

Dear Members,

As owner of the Cielo Vista Ranch, I am writing this letter in support of the Culebra Watershed Assessment. The Culebra Watershed has a variety of resource assets that include diverse forests, beautiful streams and riparian areas, a variety of plant life and habitat for a myriad of wildlife species. However, I understand the watershed has endured 14 years of drought, taking a toll on our natural resources. I share the communities' goal of long-term watershed sustainability of the watershed and the assessment will give a clearer picture of watershed conditions that the community can use to drive management decisions.

I understand that the assessment will serve as a baseline of information regarding all of the resource aspects that make up the watershed. The study will report the geomorphology constraints, forest condition, river and riparian health, viability, quantity and kind of grazing resources, infrastructure, and safety concerns. This proposal will serve to inform us of the resource conditions and give us data for science-based management practices that meet all our goals.

I support funding this project and will have my team provide input and data to assist in the planning process. Please let me know if you have any questions.

Thank you for your attention.

With Regards,

William Harrison



352 Main Street PO Box 100 San Luis, CO 81152

(719) 672-3372 (719) 672-3962 fax

www.costillacounty-co.gov

October 15, 2019

Costilla County Conservancy District 324 Main St, San Luis, CO 81152 Attn: Board of Directors

Re: Culebra Watershed Assessment

Dear Members,

The Costilla County Board of Commissioners is writing this letter in support of the Culebra Watershed Assessment. The Culebra Watershed and its 14,000-foot namesake peak, Culebra Peak, sits above the hispano villages that were established when the Sangre de Cristo Land was settled by pioneers from New Mexico in the mid-1800's. There are over 400 families who are heirs of this legacy that live below the watershed that provides irrigation and livestock water, wood for heat and building materials, grazing for our cattle and sheep, and habitat for a myriad of wildlife species.

**COSTILLA COUNTY** 

BOARD OF COUNTY COMMISSIONERS

"Where Colorado Began"

The Costilla Board of Commissioners understands that the assessment will serve as a baseline of information regarding all of the resource aspects that make up the watershed. The study will report the geomorphology constraints, forest condition, river and riparian health, viability, quantity and identify grazing resources, infrastructure, and safety concerns. This proposal will not only inform the community of the resource conditions but will also provide a list of key projects that will help ensure long-term viability of the area.

The Board wholeheartedly supports funding this project and looks forward to working with the planning team by providing input and data as needed.

Please let me know if you have any questions and thank you for your attention to this matter.

Sincerely,

COSTILLA COUNTY BOARD OF COMMISSIONERS;

Steven Romero, Chair



October 10,2019

Costilla County Conservancy District 324 Main St, San Luis, CO 81152 Attn: Board of Directors

Re: Culebra Watershed Assessment

Dear Members,

The Sangre de Cristo Acequia Association (SdCAA) is writing in support of the Culebra Watershed Assessment. The SdCAA is the only Colorado association working solely to preserve the rich culture and history of the southern Colorado acequias. The Culebra Watershed and it's 14,000-foot peaks sit above the hispano villages that were established when the Sangre de Cristo Land was legally recognized in the mid 1800's. There are over 400 families who are heirs of this legacy that live below the watershed that provides irrigation and livestock water, our wood for fires and building, grazing for our cattle and sheep, and a myriad of wildlife.

We understand that the assessment will serve as a baseline of information regarding all of the resource aspects that make up the watershed. The study will report the geomorphology constraints, forest condition, river and riparian health, viability, quantity and kind of grazing resources, infrastructure, and safety concerns. This proposal will not only inform us of the resource conditions but will provide a list of key projects that will help insure long-term viability of the area.

The Sangre de Cristo Acequia Association wholeheartedly supports funding this project and look forward to working with the planning team by providing input and data as required.

Thank you for your attention.

With Regards,

Delmer Vialpondo

Delmer Vialpando President, Sangre de Cristo Acequia Association



November 12, 2019

Chris Sturm - Stream Restoration Coordinator

Colorado Water Conservation Board

1313 Sherman St., Rm. 721 Denver, CO 80203

### **Re: Upper Culebra Watershed Assessment Grant Application**

Dear Mr. Sturm,

On behalf of the Rio Grande Basin Roundtable, I am writing to express our strong support for the Upper Culebra Watershed Assessment proposal, submitted by the Costilla County Conservancy District.

The Costilla County Conservancy District has spent the last year conducting a comprehensive stakeholder outreach to better understand both the needs and expectations of an Upper Watershed assessment. This outreach brought to light overwhelming support to better understand the condition of the Upper Culebra Watershed, a concern that was galvanized by the Spring Fire in 2018. There has been little information gathered and so comprehensive data sets are needed. The Conservancy will have contractors looking at forest condition, riparian health, stream reach condition, grazing health and safety. There are over 300 families that live below the watershed, which makes understanding these resource concerns critical.

Their proposal will help the landowners, rights holders and all those living below Culebra Peak, understand the true condition of the various resources that make up the upper Culebra Watershed. This grant will add to the significant investment that has already been made to ensure that this community remains safe and the resources are managed in way that will insure the next 150 years of its use. It is because of the Costilla County Conservancy Districts ongoing commitment to protecting the Culebra that we support this request for funding.

Sincerely,

N.Le Carlo

Nathan Coombs Rio Grande Basin Roundtable Chairman

Colorado Rio Grande Restoration Foundation Rio Grande Headwaters Restoration Project 623 Fourth Street Alamosa, CO 81101 (719) 589-2230



October 10, 2019

Colorado Water Conservation Board 1313 Sherman St., Rm. 721 Denver, CO 80203

Re: Culebra Watershed Assessment

Dear Mr. Sturm,

On behalf of the Rio Grande Headwaters Restoration Project (RGHRP), I am writing this letter in support of the Culebra Watershed Assessment. The Culebra Watershed has a variety of resource assets that include diverse forests, beautiful streams and riparian areas, a variety of plant life and habitat for a myriad of wildlife species. That said, the watershed has also endured 14 years of drought that have taken its toll on all of these resources. The assessment will give a clear picture of watershed condition that can be used to drive management decisions. To that end, the community is working to insure the long-term sustainability of the watershed and the small communities that sit below it.

The RGHRP recently worked with the USFS and stakeholders to complete an assessment of the headwaters and major tributaries of the Rio Grande, the Upper Rio Grande Watershed Assessment (URGWA). The URGWA has been an incredible tool to the area, providing partners the data needed to inform management of these natural resources and improve the resiliency of the watershed. The value of these assessments is great and there is a high need to better understand the Culebra watershed. The assessment will serve as a baseline of information regarding all of the resource aspects that make up the watershed. The study will report the geomorphology constraints, forest condition, river and riparian health, viability, quantity and kind of grazing resources, infrastructure, and safety concerns. This proposal will not only inform us of the resource conditions, but will provide a list of key projects that will help insure long-term viability of the area.

The RGHRP wholeheartedly supports funding this project and look forward to working with the planning team by providing input and data as required. Please let me know if you have any questions.

Sincerely,

Enna Peer

Emma Reesor Executive Director, Rio Grande Headwaters Restoration Project

#### GATES FAMILY FOUNDATION

#### 29 April 2020

Colorado Water Conservation Board Water Plan Grants Program 1313 Sherman St. Denver, CO 80203

#### CWCB Staff,

The Gates Family Foundation is proud to support the Costilla County Conservation District (CCCD)'s application for funding support through the Colorado Water Conservation Board (CWCB)'s Steam Management Plan Grants program to implement a comprehensive assessment for the Culebra Creek watershed. The integrated, community-driven stakeholder engagement process promises to build an effective framework for sustainable natural resource management in the watershed. Of particular interest to the Gates Family Foundation, the CCCD's efforts focus on balancing ecosystem needs with those of residents including agricultural producers, as well as local economies.

The CCCD has built a network of effective partnerships in the watershed, including current and past Gates Family Foundation grantees. We are confident these partnerships will provide the requisite breadth of skills and relationships to successfully complete this assessment. Furthermore, timing is of the essence. Projected below-average runoff for the season ahead will stress watershed function with implications on forest health, groundwater recharge, instream habitat, agricultural production, and wildlife habitat and forage. Developing a baseline within these conditions could be critical for understanding long-term sustainability in the context of a changing climate and increased hydrologic uncertainty.

The Gates Family Foundation has a long history of programmatic and capital investments throughout the San Luis Valley, and we intend to continue building on those investments. The Foundation has invited the CCCD to submit a grant proposal for fourth quarter 2020 consideration. If successful, Gates funds would be available in January 2021. A CWCB Stream Management Plan grant will be instrumental in the success of this community-led initiative on behalf of Culebra Creek.

GFF encourages the CWCB to fund the CCCD's request of support. Please do not hesitate to contact me directly with any questions about GFF's support of the CCCD and this project.

Sincerely,

**Russ Schnitzer** 

Senior Program Officer, Natural Resources

1390 Lawrence Street, Suite 400 Denver, Colorado 80204-2081 303.722.1881 Fax 303.316.3038

www.gatesfamilyfoundation.org

October 30, 2019

Costilla County Conservancy District 324 Main St. San Luis, CO 81152 Attn: Board of Directors

**Re: Culebra Watershed Assessment** 

Dear Members,

As owner of the Cielo Vista Ranch, I am writing this letter in support of the Culebra Watershed Assessment. The Culebra Watershed has a variety of resource assets that include diverse forests, beautiful streams and riparian areas, a variety of plant life and habitat for a myriad of wildlife species. However, I understand the watershed has endured 14 years of drought, taking a toll on our natural resources. I share the communities' goal of long-term watershed sustainability of the watershed and the assessment will give a clearer picture of watershed conditions that the community can use to drive management decisions.

I understand that the assessment will serve as a baseline of information regarding all of the resource aspects that make up the watershed. The study will report the geomorphology constraints, forest condition, river and riparian health, viability, quantity and kind of grazing resources, infrastructure, and safety concerns. This proposal will serve to inform us of the resource conditions and give us data for science-based management practices that meet all our goals.

I support funding this project and will have my team provide input and data to assist in the planning process. Please let me know if you have any questions.

Thank you for your attention.

With Regards,

William Harrison

hhR DOS HERMANOS RANCH 6300 Ridglea Place, #316 Fort Worth, TX 76116

October 24, 2019

Costilla County Conservancy District 324 Main St, San Luis, CO 81152 Attn: Board of Directors

Re: Culebra Watershed Assessment

Dear Members,

As an owner of Dos Hermanos Ranch, I am writing this letter in support of the Culebra Watershed Assessment. The Culebra Watershed has a variety of resource assets that include diverse forests, beautiful streams and riparian areas, a variety of plant life and habitat for a myriad of wildlife species That said the watershed has also endured fourteen years of drought that have taken their toll on all of these resources. We believe that the assessment will give a clear picture of the watershed condition that we can use to drive our management decisions.

I understand that the assessment will serve as a baseline of information regarding the resource aspects that make up the watershed. The study will report the geomorphology constraints, forest condition, river and riparian health, viability, quantity and kind of grazing resources, infrastructure, and safety concerns. This proposal will not only inform us of the resource conditions, but will provide a list of key projects that will help insure long-term viability of the area. We look forward to receiving a copy of the completed Upper Culebra Watershed Assessment report.

Dos Hermanos Ranch wholeheartedly supports funding this project and look forward to working with the planning team by providing input and data as required.

Sincerely,

Rulp William

Philip C. Williamson