COLORADO Colorado Water Conservation Board	Sandhill Crane Water Education and En Colorado Op	
Department of Natural Resources		
Water Plan Grant Application	November 2019 Bo	oard Meeting
P I I I I I	DETAILS	
Lat: 37.5792° N	Total Project Cost:	\$20,255
Long: -106.1481° W	Water Plan Grant Request:	\$7,730
a my IN	Recommended Amount:	\$7,730
men my for the first	Other CWCB Funding:	\$0
a property 2	Other Funding Amount:	\$2,700
Sand as a start	Applicant Match:	\$9,825
JINT A Jaw	<pre>Project Type(s): Study, Other</pre>	
LOCATION	Project Category(Categories): Engagement & Innovation	Ì
County/Counties: Rio Grande, Alamosa	Measurable Result: 32,500 Coloradoans Impa	acted by
Drainage Basin: Rio Grande	Engagement Activity	,

. . . . . . . .

Colorado Open Lands (COL) is a 501(c)3 nonprofit land trust that exists to protect Colorado's land and water resources. Colorado Open Lands has conserved nearly 500,000 acres and over 358 miles of Colorado's waterways since its founding in 1981.

Rocky Mountain Sandhill Cranes uniquely depend on both healthy wetland habitat and irrigated crops. They are therefore tied to many water issues that face the Upper Rio Grande Watershed. The San Luis Valley provides critical migratory habitat for the Sandhill Cranes which are listed as a Tier I Species of Greatest Conservation Need in the Colorado State Wildlife Action Plan. In the spring and fall, thousands of tourists flock to the San Luis Valley to attend the annual Monte Vista Crane Festival, which provides a significant boon to the economies of Rio Grande and Alamosa counties. However, the two stakeholder groups that most actively participate in crane tourism, the tourists that visit the Valley and the businesses that receive their dollars, are not actively engaged in water issues.

The applicant's goal is to use grant funding to engage these two groups by creating water-related programming for the Monte Vista Crane Festival to engage visitors in water issues locally and statewide and use grant funds to conduct a study that would quantify the economic impact of Sandhill Cranes to Monte Vista and the San Luis Valley and use this as a tool to engage local stakeholders, including local businesses, in water issues.

The project meets Goals 11, 12 and 14 in the Rio Grande Basin Implementation Plan including protecting and preserving aquatic wildlife habitats, maintaining wetlands for the benefit of a healthy watershed and to maintain and enhance water-dependent recreational activities.

The applicant believes this project will help achieve the education, outreach, and public engagement objective set forth in Colorado's Water Plan by working to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020." Additionally, COL states this project will address Section 10.3 F of the Water Plan by working to "Enhance Environmental and Recreational Economic Values: Protect and enhance river-based environments and recreational opportunities that support local and statewide economies and are important for the enjoyment of current and future generations of Coloradans."

Funding Recommendation: Staff is recommending a grant of \$7,730 from the Engagement and Innovation category of funding.



# Sandhill Crane Water Education and Engagement Colorado Open Lands

November 2019 Board Meeting



# **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 Project Summary

Name of Applicant	Colorado Open Lands			
Name of Water Project	Sandhill Crane Water Education and Engagement			
CWP Grant Request Amount		\$7,730		
Other Funding Sources MV Crane Festival		\$1000 Cash \$1,700 In Kind \$2865 Cash \$6,960 In-Kind		
Applicant Funding Contribution				
Total Project Cost		\$20,255		



Applicant & Grantee Information			
Name of Grantee(s)	Colorado Open Lands		
Mailing Address	1546 Cole Boulevard, Lakewood, CO 80401		
FEIN	84-0866211		
Organization Contact	Max Ciaglo		
Position/Title	Conservation Fellow		
Email	mciaglo@coloradoopenlands.org		
Phone	7303-726-4121		
Grant Management Contact	Same as above		
Position/Title			
Email			
Phone			
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).

Colorado Open Lands (COL) is a 501(c)3 nonprofit land trust that exists to protect Colorado's land and water resources. COL is led by a full-time staff of eighteen and governed by a Board of Directors. Our staff has a wide range of expertise from fundraising, non-profit management, environmental education, community outreach and engagement, and event management, to geographic information systems (GIS), rangeland ecology, agricultural stewardship and systems management, conservation easement negotiations, ecosystem science and water rights law. Founded in 1981, Colorado Open Lands has conserved nearly 500,000 acres and over 358 miles of Colorado's waterways.



## 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.				
	<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.				
Х	<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	Study			
	Construction			
	Identified Projects and Processes (IPP)			
Х	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. Applicable Exhibit A Task(s): Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. Applicable Exhibit A Task(s): Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website. Х Applicable Exhibit A Task(s): Agricultural - Projects that provide technical assistance and improve agricultural efficiency. Applicable Exhibit A Task(s): 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	Rio Grande, Alamosa		
Latitude	37.5792° N		
Longitude	106.1481° 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 San Luis Valley (SLV) provides critical migratory habitat for Rocky Mountain Sandhill Cranes which are listed as a Tier I Species of Greatest Conservation Need in the Colorado State Wildlife Action Plan. In the spring and fall, thousands of tourists flock to the SLV to attend the annual Monte Vista Crane Festival, which provides a significant boon to the economies of Rio Grande and Alamosa counties.

Sandhill Cranes uniquely depend on both healthy wetland habitat and irrigated crops. They are therefore tied to many water issues that face the Upper Rio Grande Watershed. However, the two stakeholder groups that most actively participate in crane tourism, the tourists that visit the SLV and the businesses that receive their dollars, are not actively engaged in water issues.

Our goal is to use CWP funding to engage these two groups through the lens of Sandhill Cranes. We plan to

- 1. Create water-related programming for the Monte Vista Crane Festival to engage visitors in water issues locally and statewide.
- Conduct a study to quantify the economic impact of Sandhill Cranes to Monte Vista and the SLV and use this as a tool to engage local stakeholders, including local businesses, in water issues.



Measurable Results				
To catalog measurable rest values as applicable:	ults achie	eved with the CWP Grant funds, please provide any of the following		
	New Storage Created (acre-feet)			
		nnual Water Supplies Developed or Conserved (acre-feet), mptive or Non-consumptive		
	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			
32,500	Number of Coloradans Impacted by Engagement Activity			
	Other	Explain:		

# 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;)

Sandhill Cranes have a unique relationship with water in the San Luis Valley; they depend upon sufficient water in our rivers, healthy wetlands, and thriving agriculture. As they migrate in the spring and fall Sandhill Cranes attract thousands of visitors to the SLV. This tourism generates a significant amount of money that is brought into the local economy.

The Rio Grande Basin Implementation Plan (BIP) has identified the following resource issues: Significant decline of the groundwater aquifers that sustain agriculture, towns, and critical ecosystems; lack of a diverse economy; and degraded and at-risk wildlife habitats, which directly affect Sandhill Cranes. However, tourists and the local communities that benefit most directly from crane tourism dollars are often unaware of or not engaged in these issues, or in the significant work being conducted in the SLV to mitigate these issues that benefit Sandhill Cranes and promote tourism.

Overall, this project addresses the following Rio Grande Basin Implementation Plan Goals

- Goal 11—Protect, preserve, and enhance terrestrial and aquatic wildlife habitats throughout the Basin.
- Goal 12—Conserve, restore, and maintain wetlands and riparian areas for the benefit of a healthy watershed.
- Goal 14—Maintain and enhance water-dependent recreational activities.



We feel that this project helps the basin meet these goals by helping the local community and the tourists who come here to watch wildlife understand the vital roll the aquifer and other water resources play in maintaining wildlife populations and ecosystem balance. Our goal is to educate stakeholders about the water needs of Sandhill Cranes, and the connections these birds have to the valley's rural economies. A subsequent outreach and engagement effort through the Roundtable PEPO will also work to engage these stakeholders locally.

Further, this project will help achieve the education, outreach, and public engagement objective set forth in Colorado's Water Plan by working to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020."

Specifically, this project will focus on these four issues outlined in the CWP (pg.1-4).

- 1. Establishing cooperative alternatives to the rapid removal of water from farms and ranches to supply urban growth.
- 2. Implementing projects and methods that take into account potential multiple beneficiaries, potential multiple uses, and the effects on river systems on which all Coloradans rely.
- 3. Replacing the continued mining of groundwater aquifers to supply municipal growth with renewable water resources and the implementation of collaborative projects and methods.
- 4. Developing a statewide conservation ethic that recognizes the need to work within Colorado's naturally arid environment, increases the understanding of conservation practices, and reduces wasteful behavior.

Additionally, this project will address Section 10.3 F of the CWP, working to "Enhance Environmental and Recreational Economic Values: Protect and enhance river-based environments and recreational opportunities that support local and statewide economies and are important for the enjoyment of current and future generations of Coloradans." To achieve this goal we will conduct a study to quantify the economic impact of Sandhill Crane tourism to the SLV and use this as a tool to engage the local business community on water issues. Local businesses acknowledge that crane tourism does provide a boon to the economy, but they fail to understand that the cranes are here because of the water and the grain crops that are grown in the San Luis Valley and that these resources are under significant threat. This means many of these businesses are still not engaged in local water issues. We believe that quantifying the number of crane tourism dollars coming into the economy will highlight the importance of cranes and the water on which they depend and further help to engage and educate local communities in the conservation of both water and critical habitat.



# **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.

This project will complement other outreach activities currently ongoing in the valley around water education. This project will provide additional resources to longstanding PEPO efforts of the Rio Grande Basin Roundtable. They support educational efforts of the Rio Grande Watershed Conservation and Education Initiative, and their ongoing education and engagement efforts on water issues to San Luis Valley youth, adults and water users.

The Statewide Comprehensive Outdoor Recreation Plan (SCORP) reported on "The 2017 Economic Contributions of Outdoor Recreation in Colorado." In this report they detail economic contributions of people engaged in wildlife watching activities, including bird watching to different regions. They demonstrated a significant benefit to the economy from these activities. However, the categories in the report are too broad to address water-dependent wildlife tourism, and the regional boundaries are too coarse to address county specific tourism and effectively engage the local community. Similarly, the USFWS "Banking on Nature" program examines the economic impacts of National Wildlife refuges but the nature of the study makes the findings to general and fails to include the effects of wider community conservation efforts.

While this tool would be very powerful for local tourism agencies, the Monte Vista Crane Festival Committee, and the San Luis Valley National Wildlife Refuge Complex, none of these groups have had sufficient resources to execute such a project.

# 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. WSRF:

[Colorado Open Lands] Education & Outreach Implementation in RG Basin POGG1 PDAA 201700000375 Rio Grande Basin RT Completed

[Colorado Open Lands] Anderson Lazy EA Conservation Easement POGG1 PDAA Rio Grande Basin RT \_\_\_\_Completed

Colorado Open Lands [Riparian Reconnect (WSRF)} Purchase order: 201800000789 Completed

Colorado Open Lands [Tarryall Meadow Ranch Watershed Reclamation and Habitat Enhancement] Purchase Order: 12000000086

Colorado Open Lands [Fourmile Creek Stream Channel & Floodplain Enhancement Project] Purchase order: 11000000002

### CWP GRANTS ----

[Colorado Open Lands] – [Enhancing the Colorado Water Plan through Comprehensive Education and Outreach] [POGG1 PDAA 2018000] Rio Grande Basin RT- PEPO Project -...Completed

[Colorado Open Lands] – [ Acequia Conservation Initiative][POGG1,PDAA,201900002510]Rio Grande Basin RTIn Progress



Colorado Open Lands [Tarryall Creek Riparian Restoration and Bank Stabilization } Purchase order: 09000000104

Colorado Open Lands [North Fork of the South Platte Headwaters WARSSS Assessment] Purchase order: 11000000037

## **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.

We have no TABOR requirements.

Submittal Checklist					
Х	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.				
Exhib	Exhibit A				
Х	Statement of Work <sup>(1)</sup>				
Х	Budget & Schedule <sup>(1)</sup>				
	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				
	Map (if applicable) <sup>(1)</sup>				
	Photos/Drawings/Reports				
Х	Letters of Support (Optional)				
	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)				
Enga	gement & Innovation Grant Applicants ONLY				
Х	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)?

The goal of this project is to conduct pubic outreach around Sandhill Cranes and their water needs in the Upper Rio Grande Watershed in the San Luis Valley. The project will educate both tourists visiting the San Luis Valley to see Sandhill Crane and local communities about local and statewide water issues. In conjunction with the educational efforts we will also conduct an analysis of the economic impacts of crane related tourism to the San Luis Valley. We will use this study as a tool to conduct outreach to the local community, and to generate active participation by local businesses, farmers, and community members in the ongoing stewardship of critical habitat resources and associated water issues.

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

We have two different target audiences. The first audience is tourists that visit the Rio Grande Watershed to watch Sandhill Cranes in the fall and the spring, typically from metropolitan areas on the front range of Colorado. To engage them on local and statewide water issues we will provide programming at the annual Monte Vista Crane Festival. This will include a short video on cranes and water issues in the San Luis Valley and an interactive panel discussion between community members that represent a variety of water users. This target group will also provide survey feedback about their visit that will be used in the final economic analysis.

Our second target audience is local community members. We will engage them by conducting a study survey on the economic impact of crane tourism to the San Luis Valley. This study will quantify the



#### Overview (answer for both tracks)

direct benefits of irrigated agriculture, wetlands on private and public lands, and water conservation activities through the lens of Sandhill Cranes. We will use the results of this study to conduct a variety of outreach activities, predominantly through ongoing PEPO programs, including community presentations, written articles in the Roundtable Newsletter and in local newspapers, and various other mediums, especially targeted at the business community. We will also use the data to engage ag producers in helping sustain the Sandhill Crane population through education on compatibility of agriculture operations and cranes, crane habitat restoration and enhancement, looking at alternate crops that are more water and crane friendly and finally, to help ensure the economic diversity that crane tourism provides.

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?

This project will be a collaboration between multiple federal, state, and local groups including: US Fish and Wildlife Service, Colorado Open Lands, Colorado Parks and Wildlife, Rio Grande County Tourism Board, Monte Vista Chamber of Commerce, and Friends of the San Luis Valley Wildlife Refuges. The Monte Vista Crane Festival will be a funding partner in this project. By focusing on water, wildlife, and economics this project brings together a diverse group of collaborators and will benefit from a wide variety of resources and expertise from the different groups.

Additionally, the video and panel discussion at the crane festival will engage a diverse group of water users in the valley, including groundwater irrigators that produce barley (the main food source for cranes), and surface water users including ranchers who steward working wetlands that provide vital crane habitat. This part of the project will provide a platform for these local water users to discuss the water issues that they are facing (e.g. growing water supply gap, aquifer sustainability, agricultural dry-up, climate change, water exportation threats) that directly affect Sandhill Cranes, thereby engaging Coloradans from across the state, and interstate tourists from within the Rio Grande Watershed on a variety of water issues that affect Sandhill Cranes and the San Luis Valley community.

Finally, this project supports the objectives of the Monte Vista Crane Festival and it is because of the mutual support of their projects and this project they have agreed to provide a \$2700 cash and in-kind donation to the project. The Monte Vista Crane Festival is run entirely by volunteers with an annual cash budget under \$12,000 and a very high in-kind contribution in volunteer services, so this \$2700 commitment is substantial.

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

This project offers many opportunities to reliably measure the success and impact of our efforts. We plan to measure the success of this project by the number of people reached through our engagement activities. This includes the number of people that attend the panel discussion at the crane festival, the number of people that attend talks where the results of the economic impact analysis are presented, and the number of articles published by participating agencies and other publications discussing the results of the economic study. Additionally, the impact of this project will be evaluated by the number of local businesses that engage in water issues, participate in Monte Vista Crane Festival activities, or work to increase Crane related tourism to the San Luis Valley.

The final mark of success will be how the study results are implemented by the variety of economic development groups that are participating in the survey.



#### Overview (answer for both tracks)

What research, evidence, and data support your project?

The SCORP shows significant contributions to the economy from wildlife watching activities, totaling an estimated \$2.4 billion statewide and \$277 million in the South Central region, including Rio Grande and Alamosa counties, supporting over 13,000 jobs statewide and over 1,200 jobs regionally. Additionally, an economic impact study conducted in Central Nebraska found that crane related tourism contributed over \$14 million to the local economy, sustaining over 180 jobs, and generating almost \$380,000 in local tax revenue. This study also demonstrated the potential for other businesses and destinations to capitalize on this opportunity that were not traditionally considered to be affected by this specific form of tourism.

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

One short-term challenge of this project will be generating interest among festival attendees to attend a water panel. While the traditional talks at the crane festival focus more directly on crane conservation and biology, the people that attend this festival are already engaged and excited about the talks offered, and we believe this will translate to talks about water. Additionally, while out-of-town attendance at a water talk may need additional advertisement, we believe that attendance by SLV residents on this topic may be higher than what is usually seen at the Festival.

The long-term challenges of this project will be taking the step from local engagement through the economic impact study to delivering long-term impacts. Making that step will require consistent outreach to the business community through the Monte Vista Crane Festival. The Monte Vista Crane Festival has a 36-year legacy within the community, and a history of collaboration with local businesses and stakeholders. We believe that this project will create significant local engagement, and that the long-standing reputation of the Monte Vista Crane Festival will help us leverage this engagement into long-term impacts. In facing these challenges, the benefits of bringing together this diverse group of stakeholders cannot be overstated and will continue the collaborative spirit of the San Luis Valley.

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."

The San Luis Valley has faced many water challenges in recent decades and approached them with unique solutions. Our project will both educate a new stakeholder group—crane festival tourists (predominantly from the front range of Colorado)—about these issues and use an innovative approach—an economic impact study—to engage the local business community which until now has not been extensively engaged in water issues.



Through this project's outreach and engagement activities we plan to reach:

- 1,000 crane tourists visiting the SLV, mostly from metropolitan areas in Colorado through Monte Vista Crane Festival activities including multiple video screenings and a water education program;
- 22,000 SLV residents and Rio Grande water users through the monthly Roundtable radio show and newsletter;
- 4,500 SLV residents and Rio Grande water users through a published article in The Valley Courier;
- 5,000 additional Colorado water users by sharing the short video on a variety of platforms through a diverse network of partners.

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.

This project speaks directly to chapter 10.1 of Colorado's Water Plan where it states "*The CWP* values a productive economy that supports vibrant and sustainable cities; viable and productive agriculture; and a robust skiing, recreation, and tourism industry." By understanding the economic impact of this long-time SLV event we are ensuring that it continues to bolster the SLV's wildlife, habitat, and agricultural community.

This project also addresses the actions defined in Section 10.3 of the CWP by its ability to "Enhance Environmental and Recreational Economic Values: Protect and enhance river-based environments and recreational opportunities that support local and statewide economies and are important for the enjoyment of current and future generations of Coloradans."

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

Our project will achieve the Rio Grande Basin Roundtable's outreach goals by providing content to be shared across their multiple platforms, including monthly newsletters, Roundtable webpage, and the monthly radio program. The project will achieve the education goals by using the Crane Festival as an outreach event to reach a variety of stakeholders. Additionally, we will actively participate in other events to talk about the results of our study. Last, we believe that our project will help achieve the "Multiple-Use Project Implementation Discussion" goal by engaging new and unique stakeholders in water issues.

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

This project will help the Rio Grande Basin to communicate their water message to multiple new audiences. This project will work to educate these audiences on "The two single most important issues facing the Rio Grande Basin [which] are aquifer depletions and the prolonged drought" as identified in the PEPO EAP by delivering the message through the lens of Sandhill Cranes.

# **Colorado Water Conservation Board**

## Water Plan Grant - Exhibit A



Statement Of Work			
Date:	August 1, 2019		
Name of Grantee:	Colorado Open Lands		
Name of Water Project:	Sandhill Crane Water Education and Engagement		
Funding Source:	CWP Grant		
Water Project Overview:			

The San Luis Valley (SLV) provides critical migratory habitat for Rocky Mountain Sandhill Cranes which are listed as a Tier I Species of Greatest Conservation Need in the Colorado State Wildlife Action Plan. In the spring and fall, thousands of tourists flock to the SLV to attend the annual Monte Vista Crane Festival, which provides a significant boon to the economies of Rio Grande and Alamosa counties.

Sandhill Cranes uniquely depend on both healthy wetland habitat and irrigated crops. They are therefore tied to many water issues that face the Upper Rio Grande Watershed. However, the two stakeholder groups that most actively participate in crane tourism, the tourists that visit the valley and the businesses that receive their dollars, are not actively engaged in water issues.

Our goal is to use CWP funding to engage these two groups through the lens of Sandhill Cranes. We plan to

- 1. Create water-related programming for the Monte Vista Crane Festival to engage visitors in water issues locally and statewide.
- 2. Conduct a study to quantify the economic impact of Sandhill Cranes to Monte Vista and the SLV and use this as a tool to engage local stakeholders, including local businesses in water issues.

### **Project Objectives:**

**Objective 1.** Conduct a study to analyze the economic impact of crane related tourism to the San Luis Valley. **Objective 2.** Produce a short video about how Sandhill Cranes depend on water users in the San Luis Valley, specifically ground water users irrigating crops, ranchers that create temporary wetlands during hay production, and the National Wildlife Refuge. The video will also give an overview of the different issues that these water users face.

**Objective 3.** Implement water related outreach to tourists at the annual Monte Vista Crane Festival. Show the produced video on Sandhill Cranes and Water, host a talk by local water authorities followed by a panel of Rio Grande Basin water users.



Tasks

#### Task 1 – Economic Impact Study

Description of Task:

We will conduct an economic impact analysis of the effects of crane tourism to the San Luis Valley. The study will be made up of two components.

- 1. We will deploy four traffic counters in strategic locations around major crane viewing areas. These counters will allow us to estimate the number of cars visiting the San Luis Valley to view Sandhill Cranes.
- 2. We will conduct a survey of crane tourists that will be used to estimate their total economic output.

Method/Procedure:

Colorado Open Lands will collaborate with partners from the Monte Vista Crane Festival Committee, the US Fish and Wildlife Service, the Monte Vista Chamber of Commerce and the Rio Grande Tourism Board to develop a study design for the economic impact study.

We will start by working with the Monte Vista Crane Festival and the US Fish and Wildlife Service to determine the best locations to deploy traffic counters. Potential locations for these traffic counters will be crane viewing areas on the Monte Vista Wildlife Refuge, and high traffic areas in the cities of Monte Vista and Alamosa. These counters will be deployed year-round in order to acquire baseline traffic data, as well as traffic data during the crane migration in the spring and fall when crane tourists visit the SLV.

Second, we will develop a survey to administer to crane tourists. This survey will be modeled off surveys from a similar study conducted in Nebraska for the crane migration on the South Platte (detailed in previous question). We also plan to include questions asking about the extent to which the tourists are educated about water issues, both local and statewide. This information will help us guide future water education efforts.

Third, we will deploy volunteers from the Friends of the San Luis Valley Refuges to multiple locations throughout the SLV to administer the survey to crane tourists and collect their responses.

Deliverable:



### Tasks

1. Completed report on the economic impacts of crane tourism to the San Luis Valley. This report will summarize the findings of the economic impact study, detailing the contributions of crane related tourism to local businesses and to local municipalities through taxes. It will further make recommendations for the local community to further capitalizing on this opportunity.

- 2. Outreach materials tying these economic benefits to water including
  - Article in the Rio Grande Basin Roundtable monthly newsletter
  - Appearance on the Rio Grande Basin Roundtable's monthly radio show
  - At least three articles published in local and regional publications
  - Presentation at Rio Grande Basin Roundtable meeting
  - Presentation at at least one event to local businesses
  - Article in the Friends of the San Luis Valley National Wildlife Refuges newsletter and website.

# Tasks

#### Task 2 - Short Video on Water and Sandhill Cranes

Description of Task:

Colorado Open Lands will contract with a videographer to produce a short video that explores the connection between Sandhill Cranes and water in the San Luis Valley.

#### Method/Procedure:

Colorado Open Lands will work with our partners to engage with a variety of water users in the San Luis Valley that provide resources to Sandhill Cranes. These include: Barley producers using both groundwater and surface water to irrigate their crops that provide food for Sandhill Cranes; Hay producers and ranchers that create temporary wetlands during irrigation that are used by Sandhill Cranes; Monte Vista National Wildlife Refuge water managers that use both groundwater and surface water to create Sandhill Crane habitat; and local water experts that can discuss the supply and demand gap and environmental factors that affect river flows and cane habitat.

We will work with these stakeholders to develop the message of the video and focus on the issues and subjects that are important to them. We will then choose willing stakeholders to highlight in the video. Finally, this video will be shown during the Monte Vista Crane Festival to crane tourists visiting the SLV.

#### Deliverable:

A short 8-10 minute video that highlights the importance of water and water issues in the San Luis Valley to Sandhill Cranes. This video will be shown to approximately 1,000 crane tourists at the Monte Vista Crane Festival that are made up predominantly of Colorado water users. Further efforts to share the video through various platforms and partners will reach a minimum of 5000 additional Colorado water users.



### Tasks

#### Task 3 - Water Education at Monte Vista Crane Festival

Description of Task:

Colorado Open Lands will work with the Monte Vista Crane Festival and local water users to develop a water education program at the Monte Vista Crane Festival to engage crane tourists and local attendees to the festival. This will include a talk from a local water expert, a panel discussion from multiple water users, and a screening of the short video detailed in Task 2.

Method/Procedure:

Through the engagement activities detailed in Task 2 we will recruit a water expert to give an educational presentation at the annual Monte Vista Crane Festival. We will also recruit local water users through this engagement process to participate in a panel discussion after the talk and a screening of the short video detailed in Task 2. The panel will consist of the water expert, three water users that use a either ground water to produce a crop that Sandhill Cranes use for food or surface water to flood working meadows and creating habitat for Sandhill Cranes, or a combination of the two types of water, and one representative of a wildlife agency that uses water rights to directly create wildlife habitat.

Deliverable:

Colorado Open Lands and the Monte Vista Crane Festival will produce an educational program at the annual Monte Vista Crane Festival that will engage 250 crane tourists in water issues in the San Luis Valley and statewide.

### **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.



## **Reporting Requirements**

**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

Prepared Date: August 1, 2019

Name of Applicant: Colorado Open Lands

Name of Water Project: Sandhill Crane Water Education and Engagement

Project Start Date: January 1, 2020

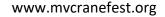
Project End Date: December 31, 2020

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1	Economic Impact Study	1-Jan-20	31-Dec-20	\$4,497	\$8,648	\$13,145
2	Short Video on Water and Sandhil Cranes	1-Jan-20	8-Mar-20	\$2,850	\$3,585	\$6,435
3	3 Water Education at Monte Vista Crane Festival		8-Mar-20	\$383	\$292	\$675
			Total	\$7,730	\$12,525	\$20,255

Page 1 of 2

Monte Vísta Crane Festíval PO Box 585 Monte Vísta, CO 81144







July 31, 2019

Ben Wade and the CWCB Board of Directors Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203

Re: Colorado Water Plan Grant for Sandhill Crane Water Education and Engagement

### Dear Mr. Wade,

The Monte Vista Crane Festival Committee is thrilled to partner with Colorado Open Lands to implement the Sandhill Crane water education and engagement program. The Monte Vista Crane Festival is the oldest birding festival in Colorado and has been held every March since 1983. The festival is one of the largest annual events in Monte Vista and across the San Luis Valley. Attendance is predominantly from out-of-town visitors instead of residents which benefits the economies of the Valley immensely. Quantifying the number of visitors and the economic benefit they provide has been needed for decades but conducting a rigorous economic analysis has been beyond the capacity of our all-volunteer planning committee.

Quantifying crane fest visitation numbers and the local economic impact of the festival is important for many reasons. The San Luis Valley National Wildlife Refuge Complex is a critical component to providing habitat for the Sandhill Crane in the Valley and the Refuge and Refuge staff are a critical component to the Monte Vista Crane Festival. Having a better understanding of Refuge visitation will assist the Refuge in leveraging adequate funding for both staffing and visitor services as well as habitat enhancement and protection projects that benefit cranes on the Refuge. Secondly, solid visitation numbers and economic input of the festival will benefit the City of Monte Vista, Rio Grande County, and the Valley to improve visitor services and expand an appreciation for Sandhill Cranes which is sometimes taken for granted by locals.

Furthermore, the water education component of this grant is an especially exciting opportunity to communicate with crane visitors and residents about water and wetland resources. The San Luis Valley is an extensive wetland area in the state of Colorado. Our water supports the agricultural economy of the Valley and it is a critical resource that supports Sandhill Cranes and other wetland dependent species. Sandhill Cranes are an iconic species that people easily connect with and this project capitalizes on the opportunity to educate locals and visitors alike about water issues in the San Luis Valley.

Given the extensive benefits this project will bring to the Monte Vista Crane Festival our Committee is pleased to commit to \$2,700 (\$1000 cash and \$1,700 in-kind) to support this project. Given that our annual operating budget is under \$12,000 this is a significant contribution from our small group. We look forward to all the benefits that this project will bring to the Monte Vista Crane Festival, the San Luis Valley Refuge Complex, the City of Monte Vista and the entire Valley. Thank you for your consideration.

Sincerely,

ThA Norg

Jenny Nehring, Coordinator, Monte Vista Crane Festival Committee







Serving the Monte Vista area.



719.852.2731 chamber@montevistachamber.org www.montevistachamber.org

August 12, 2019

Ben Wade and the CWCB Board of Directors Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203

Re: Colorado Water Plan Grant for Sandhill Crane Water Education and Engagement

Dear Mr. Wade,

The Monte Vista Chamber of Commerce is glad to lend our support to the efforts of Colorado Open Lands and the Monte Vista Crane Festival to implement a Sandhill Crane water education and engagement program. The Chamber of Commerce strives to create a sustainable business environment and improve quality of life for our community members. This is why we have been a partner of the Monte Vista Crane Festival since it began 36 years ago.

The Monte Vista Crane Festival is an incredible opportunity to showcase all that the San Luis Valley and Monte Vista have to offer, and it has long been a unique economic opportunity for members of the Chamber of Commerce. While we have noticed a significant increase in the number of tourists attending the festival we have not had the resources to quantify the economic impact that this visitation has had, and how much it has changed. Understanding this impact would help the Chamber of Commerce better serve our members and help us fulfill our mission to the community.

Sandhill Cranes are a unique part of the heritage of the San Luis Valley, predating human occupation, but certainly benefiting by many of the agricultural practices now present in the San Luis Valley. The fact that they have an economic impact is only one of the myriad ways that they benefit our community, but this work will only serve to broaden the support for wildlife and water conservation in the San Luis Valley. Thank you for your consideration.

Sincerely,

Jerry A. Aphu-

Jerry Apk**e**r Chamber Manager Monte Vista Chamber of Commerce



August 14, 2019

Ben Wade and the CWCB Board of Directors Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203 Re: Colorado Water Plan Grant for Sandhill Crane Water Education and Engagement

Dear Mr. Wade,

Please accept this letter of support for Colorado Open Lands and the Monte Vista Crane Festival in their application to the Colorado Water Plan Grant program. The mission of the Rio Grande Basin Round Table (RGBRT) is to foster cooperation in Colorado's Rio Grande basin through support of multi-purpose projects that help us manage, protect, and sustain water use for today and into the future. We support this project because it speaks directly to this mission. This project engages a unique group of stakeholders in water issues in the Rio Grande Basin, including the significant decline of the groundwater aquifers that sustain agriculture, towns, and critical ecosystems; lack of a diverse economy; and degraded and at-risk wildlife habitats issues that our communities face alongside the Sandhill Cranes.

Further, this project addresses multiple goals in the Rio Grande Basin Implementation Plan and contributes to the goals of our PEPO Action Plan. We are especially excited at the opportunity this project will give the RGBRT and Rio Grande Basin water users to engage with water users across Colorado on the water issues that our basin faces and the successes that we have had. We are incredibly proud of the natural heritage of the San Luis Valley and are excited at the opportunity to support a project that directly benefits our wildlife and our communities. Thank you for your consideration.

Sincerely,

Nothe Country

Nathan Coombs

Chairman Rio Grande Basin Roundtable



CWCB Water Planning Grants 1313 Sherman St. Denver, CO

August 1, 2019

Dear CWCB Water Planning Grants Committee,

On behalf of the Rio Grande Watershed Conservation & Education Initiative, I am happy to provide a letter of support for Colorado Open Lands' Sandhill Crane Water Education & Engagement proposed water planning grant project.

We are proud to have partners across the San Luis Valley and Colorado connecting K-12 students with environmental education in their own community. Our mission to provide dynamic, effective conservation education for the San Luis Valley community to enhance understanding of natural resources stewardship and our working landscapes goes hand in hand with the mission of the Colorado Open Lands in providing open spaces for our community to enjoy and learn in. Open riparian areas and community access are imperative in engaging our younger community members with the outdoors and encouraging children and their families to become passionate about and involved in safeguarding those spaces for wildlife use in the future.

In particular, the proposed economic study will allow citizens across Colorado to interact with an important riparian corridor, gaining greater understanding and connection with habitat, wildlife, and the necessity of restoration and conservation practices and help our area to better value the benefits of conservation tourism.

RGWCEI is honored to partner with Colorado Open Lands in providing environmental educational experiences for our area children and recognizes that the connection between visitors from out of town and our wildlife areas are integral to the San Luis Valley's (and Colorado's) future sustainability.

Sincerely,

Bethany Howell

Bethany Howell Executive Director, Rio Grande Watershed Conservation & Education Initiative

# United States Department of the Interior



FISH AND WILDLIFE SERVICE San Luis Valley National Wildlife Refuge Complex Alamosa, Monte Vista & Baca National Wildlife Refuges 9383 El Rancho Lane Alamosa, CO 81101 (719) 589-4021



July 31, 2019

Ben Wade and the CWCB Board of Directors Colorado Water Conservation Board 1313 Sherman St., Room 721 Denver, CO 80203

Re: Colorado Water Plan Grant for Sandhill Crane Water Education and Engagement

Dear Mr. Wade,

The US Fish and Wildlife Service (USFWS) is excited to support the efforts of Colorado Open Lands and the Monte Vista Crane Festival to implement a Sandhill Crane water education and engagement program. The USFWS San Luis Valley National Wildlife Refuge Complex has been a partner of the Monte Vista Crane Festival since it's inception 36 years ago. This long-standing partnership helps us achieve our mission to "*Work with others to conserve, protect and enhance fish, wildlife and plants and their habitats for the continuing benefit of the American people.*" More recently, in 2018, we began a partnership with Colorado Open Lands and MillerCoors to enhance Sandhill Crane research and conservation in the San Luis Valley.

During the 36-year long tenure of the Monte Vista Crane Festival we have seen a steady increase of people visiting the San Luis Valley Wildlife Refuge Complex to view Sandhill Cranes and experience this wonderful migration. While the Sandhill Crane migration generates the most visitors to our refuges, we have not had the resources to quantify refuge visitation during this event. Quantifying crane visitation will help us leverage funding and focus future resources on projects to enhance visitor experiences and continue to increase the number of people that visit the San Luis Valley to view cranes.

Further, as water users in the San Luis Valley, we are excited at the opportunity to engage with other stakeholders to communicate with crane tourists about water issues in the San Luis Valley. Sandhill Cranes are a charismatic wildlife species that people from all walks of life connect with and they provide us with an invaluable opportunity to connect and educate people on the water management issues that we face. This project capitalizes on this opportunity, and we look forward to all the benefits that it will bring to the San Luis Valley Wildlife Refuge Complex and the community. Thank you for your consideration.

Sincerely, Suzanne Beauchaine Refuge Manager, Alamosa and Monte Vista NWR Refuges