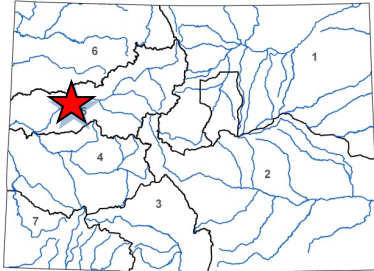




Water Plan Grant Application

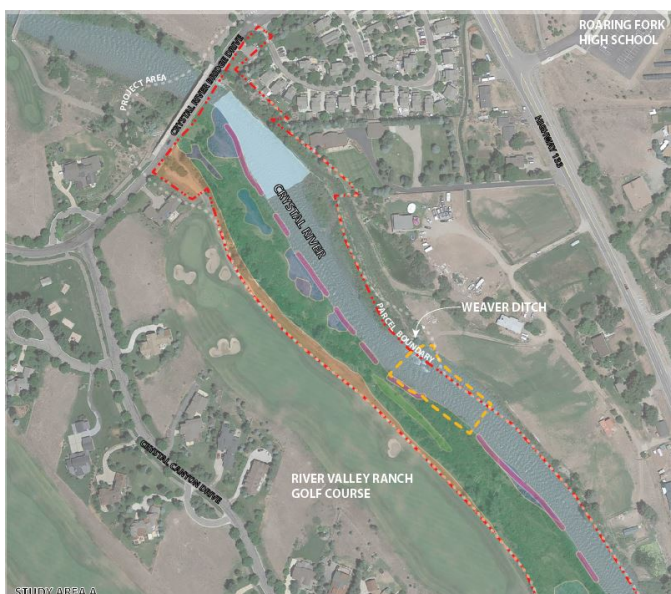


L O C A T I O N	
County/Countries:	Garfield
Drainage Basin:	Colorado

D E T A I L S	
Total Project Cost:	\$1,466,478
Water Plan Grant Request:	\$744,367
Recommended amount:	\$744,367
Other CWCB Funding:	\$0
Other Funding Amount:	\$437,091
Applicant Match:	\$240,000
Project Type(s): Stream Restoration	
Project Category(Categories): Environment and Recreation	
Measurable Result: 3,500 ft of restored stream; 18 acres of restored habitat; 500 Coloradans impacted annually	

Roaring Fork Conservancy, with the Town of Carbondale, is proposing to restore and enhance a one-half mile, 18-acre reach of the Crystal River as it flows through the town of Carbondale and improve the efficiency of the town-owned Weaver Ditch headgate and diversion.

Project goals Include: restoring the ecological integrity of the riparian zone through streambank stabilization, reconnection of the floodplain, and replacement of invasive weed communities and plant monocultures with healthy and diverse riparian plant regimes, while preserving healthy bird and wildlife habitat; development of a long term, self-sustaining solution to improve river channel stability, fish habitat and spawning areas by promoting conditions that support and enhance instream biotic structure and diversity; creating a self-sustaining diversion and head gate structure for the Weaver Ditch to function as part of the river system while improving the water delivery for the Town of Carbondale; enhancement of passive user experiences of Riverfront Park through interpretive signs, trails, gathering spaces, and educational programs.



The project is the result of a stakeholder led planning process, which resulted in a comprehensive Stream Management Plan (SMP) that identified and prioritized the implementation of the Crystal River Restoration and Weaver Ditch Efficiency Project. The Project will have measurable aquatic and vegetative benefits to the local reach and will serve as a model for other projects in the Crystal Valley, Roaring Fork Watershed, and state of Colorado, demonstrating how a completed SMP can be implemented and translate to significant benefits to the environment.



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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 & Supply Projects	Matthew.Stearns@state.co.us
Conservation, Land Use Planning	Kevin.Reidy@state.co.us
Engagement & Innovation Activities	Ben.Wade@state.co.us
Agricultural Projects	Alexander.Funk@state.co.us
Water Sharing & ATM Projects	Alexander.Funk@state.co.us
Environmental & Recreation Projects	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	Roaring Fork Conservancy
Name of Water Project	Crystal River at Riverfront Park Restoration and Efficiency Project
CWP Grant Request Amount	\$744,367
Other Funding Sources: Colorado Parks and Wildlife	\$20,000
Other Funding Sources: AVL T R3 Fund	\$10,000
Other Funding Sources: Fishing is Fun	\$30,000
Other Funding Sources: Pitkin County Healthy Rivers (the other \$45,000 referenced is dedicated to an automated headgate, also to be installed this fall)	\$20,000
Other Funding Sources: GOCO Resilient Communities	\$55,000
Other Funding Sources: WaterSMART	\$252,091
Other Funding (pending): CPW Fishing is Fun 2021	\$50,000
Applicant Funding Contribution (Town of Carbondale)	\$240,000



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Total Project Cost	\$1,466,478
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Applicant & Grantee Information	
Name of Grantee(s) Roaring Fork Conservancy	
Mailing Address 22800 Two Rivers Road Basalt, CO 81621	
FEIN	
Organization Contact Heather Lewin	
Position/Title Director of Science and Policy	
Email heather@roaringfork.org	
Phone (970) 927-1290	
Grant Management Contact same	
Position/Title	
Email	
Phone	
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	
Description of Grantee/Applicant	
Provide a brief description of the grantee's organization (100 words or less).	
<p>In our 24th year, Roaring Fork Conservancy is known for building consensus on complex water issues. We bridge gaps between hard science, land use and energy policies, recreation, agriculture, and the interests of residents. We regularly advise and inform planners and elected officials on watershed issues. Our education program has reached over 125,000 individuals. RFC's 9 staff members work regularly with a strong network of partners, interns, and volunteers <i>to inspire people to explore, value and protect the Roaring Fork Watershed</i>. With a committed 11-member board, RFC is an independent, 501(c)(3) nonprofit organization in good standing.</p>	
Type of Eligible Entity (check one)	
<input type="checkbox"/>	Public (Government): 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.
<input type="checkbox"/>	Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
<input type="checkbox"/>	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
<input type="checkbox"/>	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.
<input checked="" type="checkbox"/>	Non-governmental organizations (NGO): Organization that is not part of the government and is non-profit in nature.
<input type="checkbox"/>	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes .
Type of Water Project (check all that apply)	
<input type="checkbox"/>	Study
<input checked="" type="checkbox"/>	Construction



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	Other
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Category of Water Project (check the primary category that applies and include relevant tasks)		
	Water Storage & Supply - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity, multi-beneficial projects, water sharing agreements, Alternative Transfer Methods, and those projects identified in basin implementation plans to address the water supply and demand gap. <i>Applicable Exhibit A Task(s):</i> Note: For Water Sharing Agreements or ATM Projects - please include the supplemental application available on the CWCB's website.	
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, water efficiency, and drought planning. <i>Applicable Exhibit A Task(s):</i>	
x	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. <i>Applicable Exhibit A Task(s): Task 2 and 3</i>	
	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. <i>Applicable Exhibit A Task(s):</i>	
x	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. <i>Applicable Exhibit A Task(s): Task 1 and 2</i>	
	Other	Explain:

Location of Water Project	
Please provide the general county and coordinates of the proposed project below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Countries	Garfield
Latitude	39° 23' 39" N
Longitude	107° 12' 42" W

Water Project Overview



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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.

Colorado's riparian habitats are under constant pressure-whether from over allocation of rivers, anthropogenic demands, or climate change. A stakeholder led planning process, resulting in the Crystal River Management Plan (CRMP) (2016) a comprehensive Stream Management Plan (SMP), identified and prioritized the implementation of the Crystal River Restoration and Weaver Ditch Efficiency Project. The project reach is severely to unsustainably degraded. A collaborative team of experts has worked hand-in-hand with the Town of Carbondale to develop restoration plans to address the habitat, hydrologic, agricultural and cultural pressures within this reach and associated upland areas. The Crystal River Restoration and Weaver Ditch Efficiency project will have measurable aquatic and vegetative benefits to the local reach and serve as a model for other projects in the Crystal Valley, Roaring Fork Watershed, and state of Colorado-demonstrating how a completed SMP can be implemented and translate to significant benefits to the environment. The project is designed to target multiple objectives through a collaborative and holistic approach. Habitat and wildlife values are key to the goals of the project, which will restore wetland and riparian areas, preserve healthy habitat, enhance hydrologic connectivity and fisheries, prevent unnecessary dewatering, and provide wildlife-associated recreation for future generations.

Roaring Fork Conservancy, with the Town of Carbondale is proposing to restore and enhance a one-half mile, 18-acre reach of the Crystal River as it flows through the town of Carbondale and improve the efficiency of the town owned Weaver Ditch headgate and diversion.

Project goals:

- 1) Restore the ecological integrity of the riparian zone through streambank stabilization, reconnection of the floodplain, and replace invasive weed communities and plant monocultures with healthy and diverse riparian plant regimes, while preserving healthy bird and wildlife habitat.
- 2) Develop a long term, self-sustaining solution to improve river channel stability, fish habitat and spawning areas by promoting conditions that support and enhance instream biotic structure and diversity.
- 3) Create a self-sustaining diversion and head gate structure for the Weaver Ditch to function as part of the river system while improving the water delivery for the Town of Carbondale and consistent with future ditch improvements and efficiencies.
- 4) Enhance passive user experiences of Riverfront Park through interpretive signs, trails, gathering spaces, and educational programs.

The planning phase, including significant stakeholder and community outreach, is now complete along with 90% design, engineering plans, permitting, and updated project budget. With this funding, construction is anticipated to begin fall 2021 and be completed in 2022.



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Measurable Results		
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)	
3500	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
18	Area of Restored or Preserved Habitat (acres)	
	Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement	
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning	
500 annually	Number of Coloradans Impacted by Engagement Activity	
	Other	Explain:

Water Project Justification
<p>Provide a description of how this water project supports the goals of Colorado's Water Plan, the Analysis and Technical Update to the Water Plan, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. 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).</p> <p>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;)</p> <p>The proposed Crystal River Restoration and Weaver Ditch Efficiency project supports several key goals and objectives of both the Colorado Water Plan (CWP) and the Colorado Basin Implementation Plan (CBIP). One of the primary goals of both plans is the development of Stream Management Plans (7-3, CWP; 15, CBIP) that can facilitate environmental and recreational projects and needs. This project stems directly from the findings and recommendations of the 2016 Crystal River Management Plan (CRMP).</p> <p>The CRMP states that "The reaches of the Crystal River between Thompson Creek and the confluence with the Roaring Fork exhibit the most degraded overall functional condition" (5.4, CRMP). This project will work to reverse some of that degradation and create a more sustainable and resilient channel, diversion, banks, and riparian area and serve as a pilot project for comparable areas on the Crystal and other streams. In most years, the State's In-Stream Flow right on the lower Crystal is not met. Improvements to the river channel and diversion structure will create a low flow channel with fish passage, may benefit flows, and work towards the overall goals of the ISF program to preserve the natural environment (Section 6.6, CWP)</p> <p>The CBIP conducted significant public outreach and input to develop the primary themes and goals for the Basin. The number one Basin Wide theme is to "Protect and Restore Healthy Streams, Rivers, Lakes and Riparian Area" with the goal to "protect and rehabilitate healthy rivers, streams, lakes and riparian areas" (p43, CBIP). The highest priority identified through Plan Input Surveys were related to environmental</p>



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health (p39, CBIP). This project, in similar fashion, conducted significant public and stakeholder outreach to meet the goals of protecting and rehabilitating river and riparian areas.

The CBIP goals are echoed in the Colorado Water Plan as well. This project will “support a strong environment that includes healthy watersheds, rivers and streams, and wildlife” (Executive Order D 2013-005). The Crystal River Restoration is a Tier I priority project within the Colorado Basin. (CBIP 2021 Update) This project represents a significant action identified in the CRMP and the CBIP and supports actions called for by the CWP. (p 6-178, Stream Management Plans, Multipurpose projects) The 2021 BIP update highlights “tourism, agriculture and energy” as “critical and integral components of the Basin Economy.” (17, CBIP 2021(draft)) The impacts of this project will benefit tourism through increased angling opportunities, fish habitat and passage, as well as serve as an example of agricultural efficiency though diversion structure rebuild and headgate automation.

The improvement of both the efficiency and operation of the Weaver Ditch diversion and headgate improves the diversion itself as well as habitat conditions for this reach of the Crystal River. This action aligns with the CWP’s call for projects that “address more than one type of need” (p 9-44, CWP). With input from multiple stakeholders, the final design provides sustainability for the diversion, the river and the adjacent riparian area in Riverfront Park and serves as a model for the two other ditches operated by the Town, as well as privately managed diversions.

The CBIP update discusses concerns of climate change impacts. (p11) This project, through re-establishment of the thalweg, strategic diversion structure reconstruction, and riparian creation, enhancement, and protection will serve as an example of enhanced resiliency in a stream system.

Another significant goal of the CBIP is to strengthen the knowledge and understanding of water issues and needs among the general population of the basin. Carbondale (population 6,785) and the Town’s Riverfront Park are in the heart of the Roaring Fork Valley (population 32,197) and within easy reach by hundreds of school age children as well as classes from Colorado Mountain College. Currently, there is a disconnect between the downtown and the river. The Weaver ditch runs through town, through parks and one can often even spot fish swimming in the ditch waters. However, the Crystal River runs on the edge of town and is less visible. The education plan associated with the project will help lessen this disconnect. The project location will help facilitate the stated objective of “Enhancing K-12 water education opportunities, both inside and beyond the classroom” and “Enhancing water education opportunities in higher education.” (41) There will also be passive educational opportunities through interpretive signage in both Riverfront Park and Sopris Park, which the Weaver ditch runs through.

The goals and objectives for the Project also align with the CWP’s Technical update, which identifies projected gaps in “Environment and Recreation.” Notably, the concern that “drier conditions in late summer could increase risk to cold water ...fish due to higher water temperatures and reduced habitat” (41,90 A&T Update) is addressed in the instream component of this project through the creation of a low flow channel, as well as enhanced riparian shading. In addition, the diversion structure rebuild will help the Town of Carbondale secure their allocated water right with less environmental disturbance and maintenance. The Technical update also states that “recreational use and environmental conservation are major drivers in the basin and are important for economic health and quality of life.” (77) This project benefits both recreation and the environment. Of note, the Crystal River near Redstone (upstream of the project site) was selected a “Flow Tool Node” for the Colorado Basin.

In summary, the Crystal River Restoration Project at Riverfront Park meets multiple goals for Environment and Recreation across all planning documents, as well as piloting diversion and headgate improvements and efficiencies that will benefit water rights holders including municipalities and agriculture.



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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.

Crystal River Management Plan 2016
Carbondale Water and Wastewater Master plan 2016
Carbondale Parks and Recreation Master Plan 2015
Regional Water Efficiency Plan Roaring Fork Watershed, Colorado 2015
Municipal Water Efficiency Plan, Town of Carbondale Colorado 2015
Opportunities for Water Conservation Roaring Fork Conservancy
Town of Carbondale Source Water Protection Plan 2015
Wildland Hydrology Crystal River Restoration Scoping 2014
Roaring Fork Watershed Plan 2012/2019 update
Crystal River and Coal Basin Aquatic Life Use Assessment 2012
State of the Roaring Fork Watershed 2008

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.

Applicant Name	Water Activity Name	Approving Roundtable	Contract/PO Number	% CWCB	PO Date
Roaring Fork Conservancy	Watershed/SMP	Colorado	POGG1 PDAA 201700000911	37%	4/7/2017
Roaring Fork Conservancy	Watershed	Colorado	OE PDA 1300000021	38%	8/9/2012
Roaring Fork Conservancy	Water Plan-Education	Colorado	POGG1 PDAA 201800000766	37%	3/7/2018
Roaring Fork Conservancy	Watershed	Colorado	POGG1 PDAA 201900002688	50%	2/13/2019
Roaring Fork Conservancy	Watershed- WSRA	Colorado	C150520	56%	5/16/2013
Roaring Fork Conservancy	WSRF	Colorado	POGG1 2019-30	75%	6/20/2019

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.

N/A



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Submittal Checklist	
x	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract .
Exhibit A	
x	Statement of Work ⁽¹⁾
x	Budget & Schedule ⁽¹⁾
x	Engineer's statement of probable cost (projects over \$100,000)- included in Budget & Schedule
x	Letters of Matching and/or Pending 3 rd Party Commitments ⁽¹⁾
Exhibit C	
x	Map (if applicable) ⁽¹⁾
x	Photos/Drawings/Reports (Attachments 1-6)
x	Letters of Support (Optional)
	Certificate of Insurance (General, Auto, & Workers' Comp.) ⁽²⁾
x	Certificate of Good Standing with Colorado Secretary of State ⁽²⁾
x	W-9 ⁽²⁾
n/a	Independent Contractor Form ⁽²⁾ (If applicant is individual, not company/organization)
Water Sharing Agreements and Alternative Transfer Methods ONLY	
n/a	Water Sharing Agreements and Alternative Transfer Methods Supplemental Application ⁽¹⁾

(1) Required with application.

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

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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)
<p>In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)?</p> <p>The goal of the project is to implement riparian and river restoration priorities identified by stakeholders (Town of Carbondale, American Rivers, Aspen Valley Land Trust, Colorado Parks and Wildlife, River Valley Ranch, Roaring Fork Conservancy) through the Crystal River Management Plan (CRMP). The river, riparian and headgate improvements were planned using data collected during the SMP process, as well as site specific assessments and hydraulic analysis, and community feedback collected through various means of stakeholder engagement. The project represents a significant degree of ongoing collaboration among stakeholders on the Crystal River and advances the success of the implementation of the Crystal River Stream Management Plan (Lotic 2016). This project is intended to serve the community both as a model for future Crystal River restoration and diversion system improvement projects, and as an educational resource for community members and others interested in multi-benefit water projects. The project focuses on restorative elements and natural assets which promote educational opportunities without comprising the wildland nature of the park. The project will be visible and accessible to the over 100 homes in River Valley Ranch, as well as within walking distance from downtown Carbondale and five of its local schools.</p>
<p>Who is/are the target audience(s)? How will you reach them? How will you involve the community?</p>



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The target audiences are residents and visitors to the Town of Carbondale, youth attending local schools, and water rights holders looking to upgrade infrastructure and habitat. RFC already has a significant presence in the Carbondale school system. Using programs pertinent to the location mixed with new programming that will be developed, RFC Education staff anticipates reaching over 500 students a year. Currently, river access from the schools is challenging or not possible. This site will create accessible outdoor teaching space that is immediately usable. In addition, RFC hosts a series of Watershed Explorations for community members each year that highlight the importance of projects that create healthy riparian areas and include best management practices. This project location and goals is ideal for a community program, which could be implemented as soon as next summer. This project has been regularly highlighted in RFC's newsletter, local papers, and websites. We anticipate this communication to continue through the construction and completion of the project.

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?

As briefly mentioned above, the project represents a significant collaboration between the diverse Crystal River stakeholders, with direct involvement from the Town of Carbondale, Carbondale residents, River Valley Ranch Golf Club and residents, Aspen Valley Land Trust, Trout Unlimited, Roaring Fork Audubon Society, American Rivers, and Colorado Parks and Wildlife. While this project does not involve an agricultural property, there has been interest from the ranching community in replicating the project for agricultural diversions upstream if this project proves successful. This project is a significant step forward in the implementation of the Crystal River Management Plan and ongoing efforts to turn planning documents into on the ground improvements. The Town participated as stakeholders in the Planning process and has partnered with Pitkin County Healthy Rivers (even though the town itself is in Garfield County) to implement improvements in diversion and automation and raw water delivery pursuant to the Plan. Aspen Valley Land Trust is invested in conserving open space and passive recreation in River Valley Ranch, in partnership with Roaring Fork Conservancy whose mission includes connecting school children and the public with local rivers and river health. Other funding sources include: GOCO Resilient Communities, WaterSMART, Pitkin County Healthy Rivers, CPW Fishing is Fun, CPW Wetlands Grant, Aspen Valley Land Trust's R3 Fund, and the Town of Carbondale.

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

Project success and impact will be measured by regular monitoring and comparisons to baseline conditions, as well as fish surveys and water quality testing. We will track engagement through RFC's education program by gathering statistics on individuals participating in programs and feedback from teachers and community members. Recreational fishing will be monitored informally. Furthermore, the interest generated, and implementation of future projects will help gauge impact.

What research, evidence, and data support your project?



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The Crystal River Management Plan found riparian vegetation, debris supply, physical structure, biotic structure all to be “severely impaired” in this reach. In addition to data collected in the CRMP process, the consultant group performed intensive riparian and instream evaluations to create the final design. (See Attached) Our community and youth engagement will continue to build upon the outreach used to create both the CRMP and the current project design- soliciting community feedback as well as sharing and exploring the science of river and riparian health.

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

Our biggest challenge currently is fund raising. With support of the community and town through the stakeholder process, 404 permitting complete, design plans complete, and budget determined, timely funds are the final piece necessary to begin construction this fall. Long term challenges include learning from both riparian and instream restoration successes and opportunities for improvement.

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.”

This project will create an outdoor classroom for both active and planned educational activities, as well as passive education through the trail and signage. The goal is to significantly improve people’s understanding of water needs for environmental (aquatic and riparian), recreational (fishing, boating, and the CPW’s Carbondale Fish Hatchery, located at the upper end of the project) and irrigation for both agricultural and municipal uses (Weaver Ditch headgate). Roaring Fork Conservancy already works with local schools and the public in this area. Adding Riverfront Park to the mix of venues will provide a new and exciting opportunity for community education. Some of the existing educational programs that would benefit from safe river access and healthy riparian field site are: Identifying Macroinvertebrates, Aquatic Macroinvertebrates and the Pollution Tolerance Index, Riparian Ecology Surveys, and The Art and Science of Birds. RFC education staff anticipates using the site for 500 local students each year. The Park is, in many ways, a unique location combining the river, extensive riparian and irrigation in an easily accessible public setting. It would be an example of a success story in which multiple users worked together to improve an imperiled section of the Crystal River.

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.

The CWP notes that “The environment and recreation are too critical to Colorado’s brand not to have robust objectives; a strong Colorado environment is critical to the economy and way of life.” (p 10-7, CWP). Agriculture and recreation are the two major economic drivers in the Crystal River valley. As noted in the Crystal River Management Plan, this reach of the lower Crystal “the most degraded overall functional condition” (Section 5.4, CRMP). This project is hopefully the first of several involving the river channel with ditch diversion and headgate efficiency improvement aimed at restoring that overall functioning condition and a “strong environment” for the Crystal River. This project will allow educational programs to take



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advantage of a physical example of Stream Management Planning in action- highlighting the shared benefit (environment, recreation, and conservation/efficiency) that is possible through collaboration and creative problem solving around river issues.

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

One of the primary goals of the Colorado BIP for public outreach is to enhance “K-12 water education opportunities, both inside and beyond the classroom”, and for higher education. (p 41, CBIP). Riverfront Park is within easy access, even walking distance, from most Carbondale schools (over 1,000 students) with existing facilities, walkways, and parking, making this area and the project an ideal location to enhance education opportunities called for in the BIP. RFC education staff is already actively working in Carbondale schools, and anticipates regularly using this space due to its ease of access and educational opportunities. RFC has already brought students from Colorado College and University of Santa Barbara’s Bren School of Environmental Science and Management on tours of this area. The programs taught at this site would incorporate many of the Statewide Water Education Action Plan (SWEAP) guiding principles set forth in the Colorado Water Plan (CPW). The Riverfront Park would create accessible, engaging, and equitable education and outreach programs engaging marginalized communities that often do not have safe access to watershed experiences. We anticipate demand to increase as the project comes to fruition, creating a venue to share the multiple facets of the project that align with Stream Management Planning and the CBIP.

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

The Colorado Basin Education Action Plan echo’s the Colorado BIP in its goals for enhanced K-12 and higher education opportunities. Currently the Roundtable has developed a website and social media platforms that could highlight this project and the opportunities it can provide. It also enhances “coordination with watershed groups and other community organizations to inform a broader set of the public about CBRT activities” (CBRT Education Action Plan 2015-17) that will lead to greater public engagement in the Roundtable process.



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Colorado Water Conservation Board

Water Plan Grant - Exhibit A

Statement Of Work

Date:	June 30th, 2021
Name of Grantee:	Roaring Fork Conservancy
Name of Water Project:	Crystal River at Riverfront Park Restoration and Efficiency Project
Funding Source:	Multiple (Colorado Water Plan Grant, GOCO Resilient Communities, WaterSMART, Pitkin County Healthy Rivers, CPW Fishing is Fun, Aspen Valley Land Trust's R3 Fund, and the Town of Carbondale.)
Water Project Overview:	
<p>Colorado's riparian habitats are under constant pressure-whether from over allocation of rivers, anthropogenic demands, or climate change. A stakeholder led planning process, resulting in the Crystal River Management Plan (CRMP) (2016) a comprehensive Stream Management Plan (SMP), identified and prioritized the implementation of the Crystal River Restoration and Weaver Ditch Efficacy Project. The project reach is severely to unsustainably degraded. A collaborative team of experts has worked hand-in-hand with the Town of Carbondale to develop restoration plans to address the habitat, hydrologic, agricultural and cultural pressures within this reach and associated upland areas. The Crystal River Restoration and Weaver Ditch Efficiency project will have measurable aquatic and vegetative benefits to the local reach and serve as a model for other projects in the Crystal Valley, Roaring Fork Watershed, and state of Colorado-demonstrating how a completed SMP can be implemented and translate to significant benefits to the environment. The project is designed to target multiple objectives through a collaborative and holistic approach. Habitat and wildlife values are key to the goals of the project, which will restore wetland and riparian areas, preserve healthy habitat, enhance hydrologic connectivity and fisheries, prevent unnecessary dewatering, and provide wildlife-associated recreation for future generations.</p> <p>Roaring Fork Conservancy, with the Town of Carbondale is proposing to restore and enhance a one-half mile, 18-acre reach of the Crystal River as it flows through the town of Carbondale and improve the efficiency of the town owned Weaver Ditch headgate and diversion.</p>	
Project Objectives:	
<ol style="list-style-type: none">1) <u>Restore</u> the ecological integrity of the riparian zone through streambank stabilization, reconnection of the floodplain, and replace invasive weed communities and plant monocultures with healthy and diverse riparian plant regimes, while preserving healthy bird and wildlife habitat.2) <u>Develop</u> a long term, self-sustaining solution to improve river channel stability, fish habitat and spawning areas by promoting conditions that support and enhance instream biotic structure and diversity.3) <u>Create</u> a self-sustaining diversion and head gate structure for the Weaver Ditch to function as part of the river system while improving the water delivery for the Town of Carbondale and consistent with future ditch improvements and efficiencies.4) <u>Enhance</u> passive user experiences of Riverfront Park through interpretive signs, trails, gathering spaces, and educational programs.	



Last Updated: May 2021

Tasks
Task 1 – In-Channel Improvements
Description of Task: <ol style="list-style-type: none">1. The timing In-channel improvements construction will be coordinated with Colorado Fish and Wildlife to mitigate impacts to fish habitat and spawning. Work is to include:<ol style="list-style-type: none">a. The Weaver Ditch Headgate Structure and “Island” Rebuild –The project reach includes the Weaver Ditch diversion structure, which will be modified with a permanent boulder grade control structure and engineered riffle to reduce in-channel maintenance needs and improve channel stability issues associated with semi-annual push up dam construction.b. Maintenance Access Ramp Installation – a maintenance access ramp will provide a dedicated and durable access point to service and maintain the Weaver Ditch diversion from the east side of the river adjacent to the headgate.c. In-Channel Improvements – Instream work is focused on the lower 1600 feet of the river channel through the project reach, from the Weaver Diversion, downstream to the Crystal Bridge Drive bridge. The thalweg in this stretch will be re-established to provide low flow connectivity for fish. The channel ins this location is currently over-widened and becomes very shallow during low flow periods, blocking fish passage. An additional, smaller riffle crest will be constructed partway down the reach to provide additional pool habitat. Material excavated from the thalweg will be used to build a gravel bar and low lying vegetated area on the inside of the bend. Habitat boulders, small rock vanes and other roughness elements will be placed along the outside of the bend to promote faster moving water to maintain the thalweg and to provide bank stabilization. The engineered riffle, improved thalweg, additional riffle, and habitat elements will also work together to provide connectivity at a wide range of flow and improve hydraulic diversity, provide resident fish with holding and feed areas through the project reach. Re-establishing a thalweg and reducing an annual occurrence of channel bed and bank de-stabilization will return the river to a more natural state with a deeper low flow channel and adjacent gravel bar. More healthy sections of the Crystal River upstream and downstream of the project reach were used as a reference.d. West Bank Improvements – Approximately 900 feet of stream bank will be restored, primarily through regrading and planting. Specific sections will be rebuilt with boulder steps to create access points for anglers and other river users, limiting the formation social trails that damage riparian vegetation. The access points will connect with an interpretive/education focused trail system, see the Upland Improvements described in Task 2 for more information
Method/Procedure:



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This task will be performed primarily by the selected construction contractor. Preparation and management of the project site during construction will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state, and local regulations. Regular inspections of the project during construction will be conducted by the project team and their consultants.

Equipment to be utilized will include excavators, dump trucks, front-end loaders and miscellaneous smaller earth moving equipment. The contractor will manage the flow of the river during construction with the use of coffer dams and other control measures, isolating one half of the river and then the other. The project has been designed to balance cut and fill of alluvium, minimizing haul off of river alluvium. Boulder will be imported for the diversion grade control and the habitat boulders. Access to the project will be from the east bank adjacent to the Weaver headgate.

Haul off of fine material will be needed for the west bank improvements, where most banks will be laid back to 3:1 to 5:1 and revegetated.

The contractor will be required to utilize machine-controlled equipment in the river and on the banks, meaning that GPS location will be compared to a digital elevations model of finished grade real time to ensure the completed project matches the intended design.

Deliverable:

The completed construction of the in-channel improvements as described in the project's construction plans and specifications.

The completed work will be documented with photographs and as-built survey, both of which will be provided to CWCB as part of the final report.

Tasks
Task 2 – Upland Improvements
Description of Task:
<ol style="list-style-type: none">1. Upland improvements include riparian restoration, habitat enhancement and preservation, and creation/formalization of cultural and recreational amenities.<ol style="list-style-type: none">a. Paving and Trail Network - The project will make improvements for accessibility to Riverfront Park, allowing visitors of every ability to access the Crystal River. The improvement will make Riverfront Park the only accessible Crystal River frontage within the Town of Carbondale. The accessible ramp off Crystal Bridge Drive will lead to a rustic gathering area with direct access to the Crystal River. This area is intended to also serve as an outdoor classroom for the five nearby schools, helping to create the community's future river stewards. Additional hard and soft-scape trails will be formalized within the park providing passive recreational opportunism such as wildlife viewing while preserving important habitat and sensitive areas by deterring off trail use.



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- b. Site Features and Furnishing- Two locations will become outdoor classroom and public gathering spaces (see attached “Preferred Alternative” map), one at the north end of the park near Crystal Bridge Drive and one at the south end of the park. The north end location near Crystal Bridge Drive will be along the bank with multiple points for visitors to access the river. This access will be a universally accessible gathering space, serving as an educational opportunity and for recreational opportunities such as angling. This gathering space will also serve as an area to inform the public about regulations or special information about the park. The second public gathering space will be near the existing cottonwood grove at the south end of the park. This space will be focused on the wetland and upland areas of the park. Interpretive elements will be updated throughout the park expanding and updating the current interpretive materials to make them more accessible and interactive. Site furnishings providing areas for picnicking, nature play, shade, respite and exploration will be included in the formalizing public gathering areas.
- c. Restoration Planting and Seeding - Riparian improvements will focus on removing invasive species while retaining vegetation in functional habitat areas. The project team has worked with the Roaring Fork Audubon Society to develop a riparian restoration plan that provided nesting and habitat for the various bird species that visit or reside in Riverfront Park including waterfowl.

Method/Procedure:

This task will be performed primarily by the selected construction contractor. As with the in-channel project elements, preparation, and management of the project site during construction will utilize construction techniques and Best Management Practices that are consistent with industry standards and in compliance with federal, state, and local regulations. Regular inspections of the project during construction will be conducted by the project team and their consultants.

Equipment to be utilized will include excavators, carts, trucks, and miscellaneous smaller earth moving equipment. Heavier equipment will be used on the north end of the project for the outdoor classroom and boulder terracing. Smaller, less impactful equipment will be used for the revegetation and trails improvements towards the south end of the project. Much of the invasive species removal and revegetation will be done with hand tools. During river isolation discussed in Task 1, construction access from the river will be utilized when needed to supply material and equipment to a specific location on the bank. Construction access will also be available from Crystal Bridge Drive on the north end of the project.

Temporary irrigation will be utilized during the vegetation establishment period.

Deliverable:

The completed construction of the Upland Improvements as described in the project’s construction plans and specifications. (See Attached)

The completed Upland Improvements work will be documented with photographs and as-built survey, both of which will be provided to CWCB as part of the final report.



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Tasks
Task 3 – Outreach, Oversight, and Administration
Description of Task: Throughout the construction phase, public outreach and coordination will continue. Dedicated efforts will be made to provide the public and stakeholder with information about the work occurring at River Front Park and in the Crystal River and why the restoration and park improvements are vital to ecosystem and community. RFC as well as consultants will ensure that work is completed and stays on schedule. In addition, coordination between project partners as well as reporting and communicating to funders.
Method/Procedure: This task will be performed by Roaring Fork Conservancy, the project team, and consultants. The team will keep the public and stakeholders updated on construction progress through websites, periodic articles in the local paper (Sopris Sun), and other methods. In addition, the team will have a public meeting at River Valley Ranch prior to the start of construction to update the public on schedule and set expectations for activities during construction. This task also includes final reporting and project documentation.
Deliverable: Final reporting will include documentation of stakeholder meetings and outreach as well as any published articles.

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

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

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

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

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

Payment

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

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

Performance Measures

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit 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.



Budget and Schedule

Project End Date: May 31, 2022

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Colorado Water Conservation Board

Water Plan Grant - Detailed Budget Estimate

Fair and Reasonable Estimate

Prepared Date:Juen 30, 2021

Name of Applicant:Roaring Fork Conservancy

Name of Water Project:Crystal River at Riverfront Park Restoration and Efficiency Project

EXAMPLE C: Construction

Task 1 - In-channel Improvements

Sub-task	Unit	Quantity	Unit Cost	Total Cost		CWCB Funds	Matching Funds
Site Preparation							
Erosion Control and General BMPs - Furnish, Install, and Manage	LS	1	\$ 15,000.00	\$ 15,000.00		\$ 15,000.00	\$ -
Construction Access and Repair	LS	1	\$ 20,000.00	\$ 20,000.00		\$ 20,000.00	\$ -
Care of Water - Furnish, Install, and Manage	LS	1	\$ 100,000.00	\$ 100,000.00		\$ 100,000.00	\$ -
Site Restoration	LS	1	\$ 15,000.00	\$ 15,000.00		\$ 15,000.00	\$ -
Weaver Ditch Diversion "Island" Rebuild							
Haul and Disposal of Alluvial Material Offsite	CY	0	\$ 50.00	\$ -		\$ -	\$ -
Clear and Grub	SY	138	\$ 1.00	\$ 138.00		\$ -	\$ 138.00
General Excavation and Stockpiling	CY	56	\$ 17.00	\$ 945.00		\$ -	\$ 945.00
Removal, Haul and Disposal of Existing Concrete Barriers	LS	1	\$ 1,000.00	\$ 1,000.00		\$ -	\$ 1,000.00
Alluvial Backfill	CY	108	\$ 12.00	\$ 1,299.00		\$ -	\$ 1,299.00
Type C Bank Boulder - Furnish	TON	138	\$ 75.00	\$ 10,341.00		\$ -	\$ 10,341.00
Type C Bank Boulder - Install	TON	138	\$ 100.00	\$ 13,787.00		\$ -	\$ 13,787.00
8 oz Non-Woven Filter Fabric	SY	167	\$ 10.00	\$ 1,672.00		\$ -	\$ 1,672.00
Erosion Control Blanket	SY	74	\$ 15.00	\$ 1,110.00		\$ -	\$ 1,110.00
Furnish and Install Topsoil	CY	13	\$ 100.00	\$ 1,271.00		\$ -	\$ 1,271.00
Filter Boulders - Furnish	TON	3	\$ 75.00	\$ 211.00		\$ -	\$ 211.00
Filter Boulders - Install	TON	3	\$ 100.00	\$ 282.00		\$ -	\$ 282.00
Maintenance Access Ramp							
Clear and Grub	SY	129	\$ 1.00	\$ 130.00		\$ -	\$ 130.00
General Excavation and Stockpiling	CY	83	\$ 17.00	\$ 1,415.00		\$ -	\$ 1,415.00
Haul and Disposal of Alluvial Material Offsite	CY	81	\$ 50.00	\$ 4,035.00		\$ -	\$ 4,035.00
Remove Fence	LF	26	\$ 2.00	\$ 52.00		\$ -	\$ 52.00
Furnish and Install 6" Aggregate Base Course	CY	31	\$ 30.00	\$ 917.00		\$ -	\$ 917.00
Alluvial Backfill	CY	35	\$ 12.00	\$ 420.00		\$ -	\$ 420.00
Type C Bank Boulder - Furnish	TON	7	\$ 75.00	\$ 550.00		\$ -	\$ 550.00
Type C Bank Boulder - Install	TON	7	\$ 100.00	\$ 734.00		\$ -	\$ 734.00
8 oz Non-Woven Filter Fabric	SY	55	\$ 10.00	\$ 550.00		\$ -	\$ 550.00
Erosion Control Blanket	SY	47	\$ 15.00	\$ 711.00		\$ -	\$ 711.00
Furnish and Install Topsoil	CY	6	\$ 100.00	\$ 612.00		\$ -	\$ 612.00
Furnish and Install Access Gate	LS	1	\$ 300.00	\$ 300.00		\$ -	\$ 300.00
Furnish and Install Livestock Fence	LF	60	\$ 40.00	\$ 2,400.00		\$ -	\$ 2,400.00
In-channel Improvements							
General Excavation and Stockpiling	CY	3,396	\$ 17.00	\$ 57,733.00		\$ 41,727.00	\$ 16,006.00
Haul and Disposal of Alluvial Material Offsite	CY	1552	\$ 50.00	\$ 77,600.00		\$ 60,868.00	\$ 16,732.00
Regrade Riffle	CY	1,748	\$ 18.00	\$ 31,466.00		\$ -	\$ 31,466.00
Grade Control Boulder - Furnish	TON	476	\$ 75.00	\$ 35,665.00		\$ 11,000.00	\$ 24,665.00
Grade Control Boulder - Install	TON	793	\$ 100.00	\$ 79,255.00		\$ 49,000.00	\$ 30,255.00
Habitat Boulder Clusters - Furnish	TON	93	\$ 75.00	\$ 6,961.00		\$ -	\$ 6,961.00
Habitat Boulder Clusters - Install	TON	93	\$ 100.00	\$ 9,282.00		\$ -	\$ 9,282.00
Cutoff Wall	LS	1	\$ 80,000.00	\$ 80,000.00		\$ -	\$ 80,000.00
Alluvial Backfill	CY	96	\$ 12.00	\$ 1,152.00		\$ 1,152.00	\$ -
West Bank Improvements							
Bank 1							
Clear and Grub	SY	355	\$ 1.00	\$ 355.00		\$ 355.00	\$ -
General Excavation and Stockpiling	CY	177	\$ 17.00	\$ 3,014.00		\$ 3,014.00	\$ -
Haul and Disposal of Alluvial Material Offsite	CY	93	\$ 50.00	\$ 4,643.00		\$ 4,643.00	\$ -
Alluvial Backfill	CY	84	\$ 12.00	\$ 1,014.00		\$ 1,014.00	\$ -
Type C Bank Boulder - Furnish	TON	43	\$ 75.00	\$ 3,232.00		\$ 3,232.00	\$ -
Type C Bank Boulder - Install	TON	43	\$ 100.00	\$ 4,310.00		\$ 4,310.00	\$ -
Type D Bank Boulder - Furnish	TON	102	\$ 75.00	\$ 7,632.00		\$ 7,632.00	\$ -
Type D Bank Boulder - Install	TON	102	\$ 100.00	\$ 10,175.00		\$ 10,175.00	\$ -
Rock Barb - Furnish	TON	21	\$ 75.00	\$ 1,547.00		\$ -	\$ 1,547.00
Rock Barb - Install	TON	21	\$ 100.00	\$ 2,063.00		\$ -	\$ 2,063.00
Habitat Boulder Clusters - Furnish	TON	17	\$ 75.00	\$ 1,266.00		\$ -	\$ 1,266.00
Habitat Boulder Clusters - Install	TON	17	\$ 100.00	\$ 1,688.00		\$ -	\$ 1,688.00
8 oz Non-Woven Filter Fabric	SY	170	\$ 10.00	\$ 1,698.00		\$ 1,698.00	\$ -
Erosion Control Blanket	SY	252	\$ 15.00	\$ 3,782.00		\$ 3,782.00	\$ -
Furnish and Install Topsoil	CY	21	\$ 100.00	\$ 2,101.00		\$ 2,101.00	\$ -
Live Willow Fascine	EA	6	\$ 50.00	\$ 300.00		\$ 300.00	\$ -
Cobble/Topsoil Mix	CY	0.8	\$ 75.00	\$ 57.00		\$ 57.00	\$ -
Bank 2							
Clear and Grub	SY	114	\$ 1.00	\$ 115.00		\$ 115.00	\$ -
General Excavation and Stockpiling	CY	82	\$ 17.00	\$ 1,389.00		\$ -	\$ 1,389.00
Haul and Disposal of Alluvial Material Offsite	CY	52	\$ 50.00	\$ 2,583.00		\$ 2,583.00	\$ -
Alluvial Backfill	CY	30	\$ 12.00	\$ 361.00		\$ -	\$ 361.00

Type C Bank Boulder - Furnish	TON	37	\$ 75.00	\$ 2,797.00		\$ -	\$ 2,797.00
Type C Bank Boulder - Install	TON	37	\$ 100.00	\$ 3,729.00		\$ -	\$ 3,729.00
Habitat Boulder Clusters - Furnish	TON	8	\$ 75.00	\$ 633.00		\$ -	\$ 633.00
Habitat Boulder Clusters - Install	TON	8	\$ 100.00	\$ 844.00		\$ -	\$ 844.00
8 oz Non-Woven Filter Fabric	SY	47	\$ 10.00	\$ 471.00		\$ 471.00	\$ -
Erosion Control Blanket	SY	106	\$ 15.00	\$ 1,584.00		\$ -	\$ 1,584.00
Furnish and Install Topsoil	CY	8	\$ 100.00	\$ 776.00		\$ -	\$ 776.00
Live Willow Fascine	EA	7	\$ 50.00	\$ 350.00		\$ -	\$ 350.00
Cobble/Topsoil Mix	CY	7	\$ 75.00	\$ 507.00		\$ -	\$ 507.00
Bank 3							
Clear and Grub	SY	762	\$ 1.00	\$ 763.00		\$ 763.00	\$ -
General Excavation and Stockpiling	CY	622	\$ 17.00	\$ 10,574.00		\$ -	\$ 10,574.00
Haul and Disposal of Alluvial Material Offsite	CY	484	\$ 50.00	\$ 24,207.00		\$ 24,207.00	\$ -
Alluvial Backfill	CY	138	\$ 12.00	\$ 1,655.00		\$ -	\$ 1,655.00
Type C Bank Boulder - Furnish	TON	165	\$ 75.00	\$ 12,413.00		\$ -	\$ 12,413.00
Type C Bank Boulder - Install	TON	165	\$ 100.00	\$ 16,550.00		\$ -	\$ 16,550.00
Rock Barb - Furnish	TON	26	\$ 75.00	\$ 1,969.00		\$ -	\$ 1,969.00
Rock Barb - Install	TON	26	\$ 100.00	\$ 2,626.00		\$ -	\$ 2,626.00
Habitat Boulder Clusters - Furnish	TON	17	\$ 75.00	\$ 1,266.00		\$ -	\$ 1,266.00
Habitat Boulder Clusters - Install	TON	17	\$ 100.00	\$ 1,688.00		\$ -	\$ 1,688.00
Erosion Control Blanket	SY	871	\$ 15.00	\$ 13,063.00		\$ 13,063.00	\$ -
Furnish and Install Topsoil	CY	58	\$ 100.00	\$ 5,820.00		\$ -	\$ 5,820.00
Live Willow Fascine	EA	21	\$ 50.00	\$ 1,050.00		\$ -	\$ 1,050.00
Cobble/Topsoil Mix	CY	57	\$ 75.00	\$ 4,262.00		\$ -	\$ 4,262.00
Bank 4							
Clear and Grub	SY	92	\$ 1.00	\$ 93.00		\$ 93.00	\$ -
General Excavation and Stockpiling	CY	101	\$ 17.00	\$ 1,718.00		\$ -	\$ 1,718.00
Haul and Disposal of Alluvial Material Offsite	CY	0	\$ 50.00	\$ -		\$ -	\$ -
Alluvial Backfill	CY	104	\$ 12.00	\$ 1,244.00		\$ -	\$ 1,244.00
Type C Bank Boulder - Furnish	TON	72	\$ 75.00	\$ 5,363.00		\$ -	\$ 5,363.00
Type C Bank Boulder - Install	TON	72	\$ 100.00	\$ 7,150.00		\$ -	\$ 7,150.00
Rock Barb - Furnish	TON	7	\$ 75.00	\$ 534.00		\$ -	\$ 534.00
Rock Barb - Install	TON	7	\$ 100.00	\$ 712.00		\$ -	\$ 712.00
Habitat Boulder Clusters - Furnish	TON	4	\$ 75.00	\$ 317.00		\$ -	\$ 317.00
Habitat Boulder Clusters - Install	TON	4	\$ 100.00	\$ 422.00		\$ -	\$ 422.00
8 oz Non-Woven Filter Fabric	SY	87	\$ 10.00	\$ 867.00		\$ -	\$ 867.00
Erosion Control Blanket	SY	68	\$ 15.00	\$ 1,026.00		\$ 1,026.00	\$ -
Furnish and Install Topsoil	CY	4	\$ 100.00	\$ 444.00		\$ -	\$ 444.00
Live Willow Fascine	EA	7	\$ 50.00	\$ 350.00		\$ -	\$ 350.00
Cobble/Topsoil Mix	CY	5	\$ 75.00	\$ 392.00		\$ -	\$ 392.00
Bank 5							
Clear and Grub	SY	539	\$ 1.00	\$ 540.00		\$ 540.00	\$ -
General Excavation and Stockpiling	CY	0	\$ 17.00	\$ -		\$ -	\$ -
Haul and Disposal of Alluvial Material Offsite	CY	0	\$ 50.00	\$ -		\$ -	\$ -
Alluvial Backfill	CY	134	\$ 12.00	\$ 1,608.00		\$ -	\$ 1,608.00
Type C Bank Boulder - Furnish	TON	47	\$ 75.00	\$ 3,537.00		\$ -	\$ 3,537.00
Type C Bank Boulder - Install	TON	47	\$ 100.00	\$ 4,716.00		\$ -	\$ 4,716.00
Habitat Boulder Clusters - Furnish	TON	13	\$ 75.00	\$ 950.00		\$ -	\$ 950.00
Habitat Boulder Clusters - Install	TON	13	\$ 100.00	\$ 1,266.00		\$ -	\$ 1,266.00
8 oz Non-Woven Filter Fabric	SY	64	\$ 10.00	\$ 643.00		\$ -	\$ 643.00
Erosion Control Blanket	SY	581	\$ 15.00	\$ 8,722.00		\$ 8,722.00	\$ -
Furnish and Install Topsoil	CY	43	\$ 100.00	\$ 4,267.00		\$ -	\$ 4,267.00
Live Willow Fascine	EA	18	\$ 50.00	\$ 900.00		\$ -	\$ 900.00
Cobble/Topsoil Mix	CY	35	\$ 75.00	\$ 2,599.00		\$ -	\$ 2,599.00
Bank 6							
Clear and Grub	SY	452	\$ 1.00	\$ 453.00		\$ 453.00	\$ -
General Excavation and Stockpiling	CY	135	\$ 17.00	\$ 2,293.00		\$ -	\$ 2,293.00
Haul and Disposal of Alluvial Material Offsite	CY	54	\$ 50.00	\$ 2,687.00		\$ -	\$ 2,687.00
Alluvial Backfill	CY	81	\$ 12.00	\$ 974.00		\$ -	\$ 974.00
Type C Bank Boulder - Furnish	TON	100	\$ 75.00	\$ 7,511.00		\$ -	\$ 7,511.00
Type C Bank Boulder - Install	TON	100	\$ 100.00	\$ 10,014.00		\$ -	\$ 10,014.00
Habitat Boulder Clusters - Furnish	TON	17	\$ 75.00	\$ 1,266.00		\$ -	\$ 1,266.00
Habitat Boulder Clusters - Install	TON	17	\$ 100.00	\$ 1,688.00		\$ -	\$ 1,688.00
8 oz Non-Woven Filter Fabric	SY	127	\$ 10.00	\$ 1,275.00		\$ -	\$ 1,275.00
Erosion Control Blanket	SY	363	\$ 15.00	\$ 5,442.00		\$ 5,442.00	\$ -
Furnish and Install Topsoil	CY	15	\$ 100.00	\$ 1,534.00		\$ -	\$ 1,534.00
Live Willow Fascine	EA	26	\$ 50.00	\$ 1,300.00		\$ -	\$ 1,300.00
Cobble/Topsoil Mix	CY	35	\$ 75.00	\$ 2,610.00		\$ -	\$ 2,610.00
Construction Contingency	LS	1	\$ 61,356.86	\$ 61,356.86		\$ 35,235.06	\$ 26,121.80

Task 2 - In-channel Improvements

Sub-task	Unit	Quantity	Unit Cost	Total Cost	CWCB Funds	Matching Funds
Site Improvements Paving						
Road Base Trail	SF	2,596	\$ 4.00	\$ 10,384.00	\$ 10,384.00	\$ -
Concrete Path	SF	1,460	\$ 12.00	\$ 17,520.00	\$ 17,520.00	\$ -
Compacted Earth Trail	LF	2,260	\$ 1.00	\$ 2,260.00	\$ 2,260.00	\$ -
River Cobble	CY	6	\$ 4.00	\$ 24.00	\$ 24.00	\$ -
Site Walls & Other Features						
Timber Walls	LF	337	\$ 50.00	\$ 16,850.00	\$ -	\$ 16,850.00
Concrete Stairs	LF	18	\$ 36.00	\$ 648.00	\$ -	\$ 648.00
6x6 dowel fence 42" w/ galvanized wire mesh	LF	82	\$ 45.00	\$ 3,690.00	\$ -	\$ 3,690.00

6x6 dowel fence 36"	LF	48	\$ 30.00	\$ 1,440.00		\$ -	\$ 1,440.00
Steel Handrail	LS	1	\$ 3,000.00	\$ 3,000.00		\$ -	\$ 3,000.00
Beamstone Walls	LF	26	\$ 190.00	\$ 4,940.00		\$ -	\$ 4,940.00
Beamstone Steps	LF	342	\$ 150.00	\$ 51,300.00		\$ -	\$ 51,300.00
Boulder Seats	EA	4	\$ 500.00	\$ 2,000.00		\$ -	\$ 2,000.00
Boardwalk	LF	90	\$ 125.00	\$ 11,250.00		\$ 2,618.00	\$ 8,632.00
Boardwalk additional pier and handrail (contingency)	EA	1	\$ 1,800.00	\$ 1,800.00		\$ -	\$ 1,800.00
Timber Stairs	EA	7	\$ 1,000.00	\$ 7,000.00		\$ -	\$ 7,000.00
Boulder Fishing Access Type A	EA	3	\$ 1,000.00	\$ 3,000.00		\$ -	\$ 3,000.00
Boulder Fishing Access Type B	EA	1	\$ 2,500.00	\$ 2,500.00		\$ 2,500.00	\$ -
Landscape							
Import Topsoil	CY	237	\$ 70.00	\$ 16,590.00		\$ 16,590.00	\$ -
Supply Mulch (10 sf per planting)	SF	11,940	\$ 0.33	\$ 3,940.20		\$ -	\$ 3,940.20
Acer Glabrum / Rocky Mountain Maple (5 Gal)	EA	2	\$ 80.00	\$ 160.00		\$ 160.00	\$ -
Alnus Tenuifolia / Thinleaf Alder (5 Gal)	EA	47	\$ 80.00	\$ 3,760.00		\$ -	\$ 3,760.00
Artemisia Tridentata / Big Sagebrush (5 Gal)	EA	2	\$ 80.00	\$ 160.00		\$ 160.00	\$ -
Betula Occidentalis / Water Birch (5 Gal)	EA	46	\$ 80.00	\$ 3,680.00		\$ 3,680.00	\$ -
Chrysothamnus Nauseosus / Rubber Rabbitbrush (5 Gal)	EA	2	\$ 80.00	\$ 160.00		\$ 160.00	\$ -
Cornus Sericea / Red Twig Dogwood (5 Gal)	EA	48	\$ 80.00	\$ 3,840.00		\$ -	\$ 3,840.00
Populus Angustifolia / Narrowleaf Poplar (5 Gal)	EA	46	\$ 80.00	\$ 3,680.00		\$ 3,680.00	\$ -
Prunus Virginiana Melanocarpa / Western Chokeberry (5 Gal)	EA	2	\$ 80.00	\$ 160.00		\$ 160.00	\$ -
Salix Bebbiana / Bebb'S Willow (5 Gal)	EA	52	\$ 80.00	\$ 4,160.00		\$ -	\$ 4,160.00
Salix Drummondiana / Drummond'S Willow (5 Gal)	EA	57	\$ 80.00	\$ 4,560.00		\$ -	\$ 4,560.00
Salix Lasiandra / Whiplash Willow (5 Gal)	EA	58	\$ 80.00	\$ 4,640.00		\$ -	\$ 4,640.00
Salix Monticola / Rocky Mountain Willow (5 Gal)	EA	62	\$ 80.00	\$ 4,960.00		\$ 1,920.00	\$ 3,040.00
Shepherdia Argentea / Silver Buffaloberry (5 Gal)	EA	52	\$ 80.00	\$ 4,160.00		\$ -	\$ 4,160.00
Acer Glabrum / Rocky Mountain Maple (1 Gal)	EA	4	\$ 80.00	\$ 320.00		\$ -	\$ 320.00
Alnus Tenuifolia / Thinleaf Alder (1 Gal)	EA	71	\$ 80.00	\$ 5,680.00		\$ -	\$ 5,680.00
Artemisia Tridentata / Big Sagebrush (1 Gal)	EA	4	\$ 80.00	\$ 320.00		\$ -	\$ 320.00
Betula Occidentalis / Water Birch (1 Gal)	EA	68	\$ 80.00	\$ 5,440.00		\$ -	\$ 5,440.00
Chrysothamnus Nauseosus / Rubber Rabbitbrush (1 Gal)	EA	4	\$ 80.00	\$ 320.00		\$ -	\$ 320.00
Cornus Sericea / Red Twig Dogwood (1 Gal)	EA	73	\$ 80.00	\$ 5,840.00		\$ -	\$ 5,840.00
Populus Angustifolia / Narrowleaf Poplar (1 Gal)	EA	69	\$ 80.00	\$ 5,520.00		\$ -	\$ 5,520.00
Prunus Virginiana Melanocarpa / Western Chokeberry (1 Gal)	EA	4	\$ 80.00	\$ 320.00		\$ -	\$ 320.00
Salix Bebbiana / Bebb'S Willow (1 Gal)	EA	79	\$ 80.00	\$ 6,320.00		\$ -	\$ 6,320.00
Salix Drummondiana / Drummond'S Willow (1 Gal)	EA	86	\$ 80.00	\$ 6,880.00		\$ -	\$ 6,880.00
Salix Lasiandra / Whiplash Willow (1 Gal)	EA	87	\$ 80.00	\$ 6,960.00		\$ -	\$ 6,960.00
Salix Monticola / Rocky Mountain Willow (1 Gal)	EA	92	\$ 80.00	\$ 7,360.00		\$ -	\$ 7,360.00
Shepherdia Argentea / Silver Buffaloberry (1 Gal)	EA	77	\$ 80.00	\$ 6,160.00		\$ 6,160.00	\$ -
10 Cl Wetlands Plug Grass	EA	641	\$ 2.00	\$ 1,282.00		\$ -	\$ 1,282.00
Willow and Cottonwood Cuttings	EA	1200	\$ 2.00	\$ 2,400.00		\$ 2,400.00	\$ -
Seeding & Revegetation	SF	77600	\$ 0.35	\$ 27,160.00		\$ 27,160.00	\$ -
Wildlife Fencing	LF	3222	\$ 14.50	\$ 46,719.00		\$ 46,719.00	\$ -
Tree Protection Fencing	LF	750	\$ 12.50	\$ 9,375.00		\$ 9,375.00	\$ -
Irrigation System (materials and installation)	LS	1	\$ 16,000.00	\$ 16,000.00		\$ 16,000.00	\$ -
Siting deadfall logs	LS	1	\$ 500.00	\$ 500.00		\$ 500.00	\$ -
Site Furnishings							
Closure Gates	EA	2	\$ 300.00	\$ 600.00		\$ -	\$ 600.00
Closure Gate Posts & Bases	EA	2	\$ 800.00	\$ 1,600.00		\$ -	\$ 1,600.00
Gate Installation	LS	1	\$ 1,500.00	\$ 1,500.00		\$ -	\$ 1,500.00
Entry Monument (contingency)	EA	1	\$ 8,000.00	\$ 8,000.00		\$ 1,000.00	\$ 7,000.00
Kiosk Signs	EA	2	\$ 5,000.00	\$ 10,000.00		\$ -	\$ 10,000.00
Interpretive Signs	LS	1	\$ 20,000.00	\$ 20,000.00		\$ -	\$ 20,000.00

Task 3 - Outreach, Oversight, and Administration

Sub-task	Unit	Quantity	Unit Cost	Total Cost		CWCB Funds	Matching Funds
Traffic Control	LS	1	\$ 5,000.00	\$ 5,000.00		\$ 5,000.00	\$ -
Construction Bonding/Ins (5%)	LS	1	\$ 61,356.86	\$ 61,356.86		\$ 42,106.86	\$ 19,250.00
Mob and Demob (5%)	LS	1	\$ 61,356.86	\$ 61,356.86		\$ 42,106.86	\$ 19,250.00
Construction Stakeout	LS	1	\$ 8,000.00	\$ 8,000.00		\$ 8,000.00	\$ -
Construction Review Observations	LS	1	\$ 25,000.00	\$ 25,000.00		\$ 25,000.00	\$ -
Interpretive Design Programming/Details	LS	1	\$ 15,020.00	\$ 15,020.00		\$ -	\$ 15,020.00
Irrigation Consultant (Irrigation Design)	LS	1	\$ 2,250.00	\$ 2,250.00		\$ 2,250.00	\$ -
TOTAL				\$ 1,466,477.78		\$ 744,366.78	\$ 722,111.00



TOWN OF CARBONDALE

511 Colorado Avenue
Carbondale, CO 81623
www.carbondalegov.org
(970) 963-2733 Fax: (970) 963-9140

June 21, 2021

To whom it may concern,

The Town of Carbondale strongly supports the Crystal River Restoration and Weaver Ditch Headgate project. The Town has committed funding for this project in our 2021 budget which is split between the Water Fund and the Rec Use and Sales Tax Fund. The Water Fund includes \$200,000 in matching funds and the Rec Use and Sales Tax Fund has \$20,000 in matching funds and could be increased if necessary to complete the project.

Thank you for your support of this project.

Sincerely,



Jay Harrington
Town Manager



Pitkin County Healthy Rivers
530 East Main Street Suite 301
Aspen Colorado 81611
970 920 5191 office
970 379 865 cell
pitkincountyrivers.com

June 30, 2021

Town of Carbondale
Mark O'Meara
Utilities Director
511 Colorado Avenue
Carbondale, CO 81623

Re: Funding for the Weaver Ditch Telemetry Project

Dear Mr. O'Meara:

Funds have been appropriated for \$62,000.00 within the Pitkin County Healthy Rivers Program's 2021 budget line items for joint efforts with the Town of Carbondale on its Weaver Ditch Telemetry Project.

Please let me know if you need anything further.

Sincerely

Lisa MacDonald
Administrator



Grant Award Spring 2020

Applicant: Town of Carbondale

Project: Planning, Design and Permitting for the Riverfront Park Restoration Project

Amount: \$ 50,000.00

Date: June 22, 2020

This Grant Agreement, is made this 22nd day of June 2020 by and between the Town of Carbondale, ("the Town") Attn: Jay Harrington -Town Manager, 511 Colorado Ave. Carbondale, CO 81623 and the Pitkin County Healthy Rivers Board ("Pitkin County") 530 E. Main St. Ste 301 Aspen, CO 81611.

The purpose of the Grant Agreement is to provide a process for payment of public funds to be used exclusively for costs incurred by in connection with the Town of Carbondale's Riverfront Park Project planning, design and permitting.

Through this Agreement, the Town and Pitkin County have agreed that:

The Town shall:

Complete the planning, design, and permitting for the project while simultaneously fundraising for construction.

The grant monies will be used to fund the final design based on the current 60% plans, and interpretive and educational program development.

The Town will report to the Pitkin County Healthy Rivers Board upon completion of the planning phase- anticipated by the end of 2020. The Town of Carbondale and/or other project team members will be available to answer questions, tour the site, and provide additional information for Healthy Rivers Board members upon request.

Pitkin County shall:

Grant \$ 50,000.00 to the Town of Carbondale approved for funding by the Healthy Rivers Board on April 16, 2020 and authorized by the Board of County Commissioners on June 16, 2020.

CRS §8-17.5-101. *[Not Applicable to agreements relating to the offer, issuance, or sale of securities, investment advisory services or fund management services, sponsored projects, intergovernmental agreements, or information technology services or products and services]* Contractor certifies, warrants, and agrees that it does not knowingly employ or contract with an illegal alien who will perform work under this contract and will confirm the employment eligibility of all employees who are newly hired for employment in the



United States to perform work under this contract, through participation in the E-Verify Program or the Department program established pursuant to CRS §8-17.5-102(5)(c), Contractor shall not knowingly employ or contract with an illegal alien to perform work under this contract or enter into a contract with a subcontractor that fails to certify to Contractor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this contract. Contractor (a) shall not use E-Verify Program or Department program procedures to undertake pre-employment screening of job applicants

while this contract is being performed, (b) shall notify the subcontractor and the contracting State agency within three days if Contractor has actual knowledge that a subcontractor is employing or contracting with an illegal alien for work under this contract, (c) shall terminate the subcontract if a subcontractor does not stop employing or contracting with the illegal alien within three days of receiving the notice, and (d) shall comply with reasonable requests made in the course of an investigation, undertaken pursuant to CRS §8-17.5-102(5), by the Colorado Department of Labor and Employment. If Contractor participates in the Department program, Contractor shall deliver to the contracting State agency, Institution of Higher Education or political subdivision a written, notarized affirmation, affirming that Contractor has examined the legal work status of such employee, and shall comply with all of the other requirements of the Department program. If Contractor fails to comply with any requirement of this provision or CRS §8-17.5-101 et seq., the contracting State agency, institution of higher education or political subdivision may terminate this contract for breach and, if so terminated, Contractor shall be liable for damages.

PUBLIC CONTRACTS WITH NATURAL PERSONS. CRS §24-76.5-101. Contractor, if a natural person eighteen (18) years of age or older, hereby swears and affirms under penalty of perjury that he or she (a) is a citizen or otherwise lawfully present in the United States pursuant to federal law, (b) shall comply with the provisions of CRS §24-76.5-101 et seq., and (c) has produced one form of identification required by CRS §24-76.5-103 prior to the effective date of this contract.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the latest date written below:

Pitkin County Healthy Rivers

Town of Carbondale

/s/ Lisa Macdonald

 6/25/20
Jay Harrington

From: [Sullivan - DNR, Brian](#)
To: [Connor Coleman](#)
Cc: [John Groves - DNR](#); [Kendall Bakich - DNR](#); [Perry Will - DNR](#)
Subject: Fwd: AVLT grant application
Date: Tuesday, July 14, 2015 1:33:50 PM
Attachments: [2015_05_29 - AVLT application to CPW Wetland-Riparian Grant.pdf](#)

Hi Connor:

I am writing to let you know that your wetland grant application for the Carbondale - Crystal River project was approved for partial funding of \$20,000 (vs. \$50,000 grant request).

Specifically, the funding is approved for on-the-ground project implementation costs for wetland/riparian components, and not planning/design costs or in-stream fish habitat components.

Please let me know if you can accept this funding under these conditions. If so, I will work with you to develop a Scope of Work so we can request a state purchase order. No costs to be reimbursed by the grant may be incurred before we have a purchase order.

Thanks, congrats, and let me know if you have any questions, comments, or concerns.

Brian Sullivan
Wetlands Program Coordinator
Terrestrial Section - Statewide Programs Unit



P 970.472.4306 | brian.sullivan@state.co.us
317 W. Prospect Rd., Fort Collins, CO 80526
cpw.state.co.us/aboutus/Pages/Wetlands.aspx

----- Forwarded message -----

From: **Connor Coleman** <Connor@avlt.org>
Date: Fri, May 29, 2015 at 7:19 PM
Subject: AVLT grant application
To: "brian.sullivan@state.co.us" <brian.sullivan@state.co.us>

Brian,

Attached is our grant application for the CPW Wetlands for Wildlife Program.

Thanks,

Connor

CONNOR P. COLEMAN
STEWARDSHIP DIRECTOR
ASPEN VALLEY LAND TRUST
320 Main St., Suite 204

Carbondale, CO 81623

[970.963.8440](tel:970.963.8440)|o

[970.963.8441](tel:970.963.8441)|f

connor@avlt.org



Saving the best....to last!

