

PROJECT PROPOSAL SUMMARY SHEET

Title: San Juan Basin Integrated Water Management Plan, Phase III

Project location: San Juan River Basin on a subset of rivers and streams in Archuleta and Mineral counties. Primary focus will be on the upper San Juan River from the Continental Divide to the confluence with Mill Creek. Additional effort will be extended to the Rio Blanco and Navajo River drainages as time and budget allows (Attachment A).

Grant type: Stream Management Plan/Integrated Water Management Plan

Grant request/amount: \$49,225

CWCB Statewide WSRF match funding: \$14,768

CWCB Basin WSRF match funding: \$9,845

Cash match funding: \$24,613

In-kind match funding: \$23,956

Project sponsor:

Mountain Studies Institute, on behalf of the Upper San Juan Watershed Enhancement Partnership, 501(c)3 nonprofit, 679 East 2nd Ave, Suite 8, Durango, CO 81301

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PROJECT DESCRIPTION:

Based on community feedback, watershed assessments, and modeling efforts from Phases I and II (2018-2021), Phase III (this proposal) will complete the final steps of a Stream Management Plan (SMP)/Integrated Water Management Plan (IWMP) process. Specifically, the Upper San Juan Watershed Enhancement Partnership will: 1) ensure stakeholder input and scientific analysis guide the planning and decision-making process, 2) expand an inventory of agricultural infrastructure needs to the Rio Blanco and Navajo River, and 3) identify and prioritize multi-benefit water projects in an Integrated Water Management Plan.

OBJECTIVES & OUTCOMES: The primary objective of Phase III (this proposal) is to utilize community feedback and technical information from Phase II's assessment to understand where opportunities and constraints exist and, ultimately, facilitate a prioritization of proposed projects or management actions to address water uses and needs in the San Juan River Basin. Primary outcomes will include:

1. Completion of a well-coordinated process that informs and incorporates input from stakeholders and the community as a whole;
2. Current data, models, and inventories incorporating the project areas' hydrology, E&R water needs, agriculture infrastructure, forest health, and climate change scenarios to enhance understanding of existing and potential future water resource conditions;
3. Identification of cooperative projects to address multiple water needs, including environmental, recreational, agricultural, and municipal;
4. Prioritized actions or projects based on community values and evaluation of benefits (e.g. ecological, economic, recreational, agricultural efficiency), direct or indirect consequences, and feasibility; and
5. A comprehensive plan that describes the goals, objectives, and results from this process for other organizations or agencies to utilize, reference, and leverage for project implementation.

Specific methods and deliverables associated with these outcomes are outlined in Attachments C and D. The timeframe for Phase III is 12 months (see Attachment B for budget and schedule). The timeframe for the entire process will be 42 months (Phase I=18 months, Phase II=12 months, Phase III=12 months). The outlined target end date and schedule in Attachment B accounts for potential delays and adaptations related to the COVID-19 pandemic to ensure this group abides state health guidelines and continues safe practices in the development and implementation of the IWMP.

APPLICATION CRITERIA

I. Basic Applicant Qualifications

A. Applicants' Commitment

Mountain Studies Institute (MSI): MSI is a non-advocacy, research and education institute based in the San Juan Mountains of southwest Colorado. Through our ongoing role coordinating the San Juan Headwaters Forest Health Partnership (SJHFHP) in Pagosa Springs, MSI was approached to address a growing need for and interest in furthering efforts to develop a SMP or IWMP for the San Juan Basin. MSI remains committed to the diverse representation and community-driven processes that incorporate conversations and assessments of consumptive and non-consumptive water uses developed during Phases I and II of this project. Phase III will continue to uphold these standards and goals.

Support from our community liaison (Western Wildscapes) and engaged steering committee members will guide the IWMP process and final plan, provide outreach to key stakeholder groups, align complimentary efforts, identify community project priorities, and develop outreach and project funding strategies. The dedication and expertise of this effort's local representatives has fostered collaborative dialogue, shared responsibilities, and cooperative accomplishments.

B. Project Purpose

In recognition of limited tools and knowledge gaps in the state's understanding of environmental and recreational (E&R) water needs, the Colorado Water Plan and the Southwest Basin Roundtable's Basin Implementation Plan (BIP) made funds and support available for local watershed groups to assess such needs and explore opportunities to address them through a SMP or IWMP process. Building on the E&R water needs focus of SMPs, Integrated Water Management Plans have evolved to include analysis of both non-consumptive and consumptive uses, such as water for irrigation or drinking water supplies. IWMPs offer an approach that supports mutually beneficial opportunities that provide for current and future water needs, with a comprehensive understanding of needs and gaps for environmental, recreational, agricultural and municipal water uses. Due to its broader goals and inclusion of multiple water uses, this project has shifted to an IWMP process for its analysis and planning.

The overarching purpose of this three-phase project is to foster community-driven processes that support water-related values and issues identified by local stakeholders, evaluate water needs and knowledge gaps, and identify opportunities to meet those needs in the San Juan River Basin. The final phase, Phase III (this proposal), will utilize the outcomes from Phases I and II to enhance understanding of the Basin's and State's water resource needs and prioritized actions to protect, restore, or improve these resources. Specifically, Phase III deliverables will create education tools that highlight these efforts, identify prioritized actions/projects to address and benefit multiple water uses outlined in an IWMP, and compile project information into cutsheets (templates) ready for incorporation into the Identified Projects and Processes (IPPs) list for the Southwest Basin Implementation Plan.

C. Broad-based Involvement and Support

Many stakeholders affected by the health and function of streams within the San Juan Basin have expressed interest in the process and support for this proposal. They include but are not limited to: Archuleta County, Pagosa Area Water and Sanitation District, San Juan Headwaters Forest Health Partnership, San Juan Water Conservancy District, Town of Pagosa Springs, U.S. Forest Service, Colorado Parks and Wildlife, Stollsteimer Creek Watershed Steering Committee, Natural Resource Conservation Service, San Juan Water Conservancy District, Chama Peak Land Alliance, Lower Blanco POA, Audubon Society, Pagosa Wetlands Partners, science organizations, outdoor industry companies and groups, interested members of the public and more. Phase III will involve these groups at relevant junctures and ensure they are part of the communication plan. MSI and TU will also closely coordinate the efforts of the WEP with the Southwest Basin Roundtable and its E&R Subcommittee. Attachment E contains letters of support from these groups.

D. In-kind Support and Cash Match

MSI respectfully requests \$49,225 from the Colorado Watershed Restoration Program (CWRP) towards a total budget of \$98,450 (a 50% match). MSI will make requests of both the statewide Water Supply Reserve Fund (WSRF) for \$14,768 (proposed, 15% match) and the Southwest Basin Roundtable WSRF for \$9,845 (proposed, 10% match). The combined total of CWCB funds from the CWRP (50%) and two WSRF (15+10=25%) grants would cover no more than 75% of the total project costs.

To show local commitment and support, MSI's team will seek \$24,613 in cash from partners including Archuleta County, Town of Pagosa Springs, The Nature Conservancy, Trout Unlimited, Southwestern Water Conservation District, San Juan Water Conservancy District, and others (25% match, unsecured/requested). MSI anticipates in-kind contributions from 12 steering committee members (9 meetings), 20-25 stakeholders (4 public meetings) as well as committed in-kind match from Trout Unlimited and SJCD/NRCS staff towards a total of \$23,956 in-kind funding (24.3% match). Please find a detailed description of in-kind and cash match sources in Attachment B, Table 1.4.

II. APPLICATION AND EVALUATION CRITERIA

A. Qualifications Evaluation

MSI is the lead project sponsor, with support and assistance from Mely Whiting of Trout Unlimited and Al Pfister of Western Wildscapes. MSI will be the fiscal agent for this grant. In Phase I of the project, a steering committee was formed with diverse representation from local ranchers/producers, ditch company leaders, outdoor recreation businesses, water districts, local and state government agencies, local Colorado State University extension office, non-profits, and private citizens. This steering committee and stakeholder group will continue to guide and provide direction for the development of an IWMP. MSI will work with identified partners, those listed above, as well as Lotic Hydrological and the San Juan Water Conservation District, to support administrative tasks, coordinate inventory and assessment processes, and compile project opportunities into an Integrated Water Management Plan (see Attachments C & D). Biographies and information for key personnel are included in Attachment F.

MSI will enlist the help of Mely Whiting and Al Pfister to engage the consultants, steering committee, and public stakeholders to ensure the successful completion of all tasks. Mandy Eskelson will be the Project Lead, overseeing MSI's responsibilities as coordinator, facilitator and fiscal agent, with project assistance from Aaron Kimple. Al Pfister will serve as the community liaison for the project, securing local leadership and developing outreach.

Lotic Hydrological will be responsible for helping stakeholders understand Phase II assessment results, identification of potential locations and management actions, analysis and modeling of possible project benefits and feasibility, project prioritization, and development of the final IWMP report. The San Juan Conservation District will be responsible for conducting an inventory of agricultural infrastructure and a needs assessment on the Rio Blanco, and possibly the Navajo River, to be included in modeling and project identification.

For details on in-kind services and cash contributions of the applicant organization and its partners, see section I.D above.

B. Organizational Capability

Mountain Studies Institute (applicant, fiscal agent) (MSI): In addition to MSI's long-standing relationships in the community and experience convening a group in the Pagosa Springs Community around forest health, MSI is a respected scientific research institute in the San Juan Mountains. Through efforts that range from youth education and outreach to specific and ongoing science and monitoring efforts, MSI has varied and intimate knowledge of San Juan Mountain communities and the issues that affect them. Within this project's geographic scope, MSI has been the coordinator for the [San Juan Headwaters Forest Health Partnership](#) for the past seven years, during which time the partnership has leveraged over one million dollars in funding and accomplished over 5,000 acres of treatment around priority water resources for Archuleta County communities. This work was made possible by coordinating the interests and values of individual landowners, agencies, and local interests. In adjacent La Plata County, MSI has also been the fiscal sponsor and coordinator for the [Animas River Community Forum](#) since 2016, in response to major disturbance events (e.g. Gold King Mine in 2015 and 416 Fire in 2018), with objectives to promote communication, coordination, and collaborative action for watershed recovery and resilience. MSI is a non-partisan actor committed to convening stakeholders without a vested interest in particular outcomes. Two MSI staff will be dedicated to managing the project, engage and convene stakeholders, oversee Lotic's and SJCD's work, and conduct public outreach to secure broad support for the outcomes. Please refer to Attachment F for more detailed biographies and information of key project personnel.

Mely Whiting, Trout Unlimited (TU): TU will provide organizational and strategic support for the effort and serve as liaison with the SW Basin Roundtable. Mely Whiting has extensive experience in stakeholder group efforts, including the Upper Colorado Wild and Scenic River Stakeholder Group and Learning by Doing (she has co-chaired both), the Water Quality Forum, and the River Protection Workgroup. She is the SW Basin Roundtable's environmental representative and was instrumental in both reaching roundtable consensus on an approach for identifying E&R water supply needs, as reflected in the roundtable's BIP, and developing the San Miguel SMP pilot project, the roundtable's first effort to address the identified needs. Mely is a resident of Pagosa Springs.

Al Pfister, Western Wildscapes (WW): Al has over 37 years of experience dealing with stream and watershed management issues in seven western states. He has worked for and with Federal Agencies (USFWS, BLM, USFS, BOR, EPA, ACOE, Defense Department, WAPA, BIA), State, County and local government officials, Native American Tribes, and private landowners in their respective involvement and implementation of land use plans in their management of streams. Relying on this extensive experience, Al will act as a community liaison to support development and coordination of both the steering committee and stakeholder group, and will assist Lotic in technical, regulatory, and policy

aspects of the project. AI provides additional technical expertise from a faunal, floral and ecological perspective. AI is a resident of Pagosa Springs.

Lotic Hydrologic LLC (Lotic): MSI's team proposes to again contract Lotic to carry out technical analysis and development of the Integrated Water Management Plan. Lotic provides technical expertise, water resource engineering services, and a firm commitment to scientific problem solving when engaged in both field data collection and complex quantitative analysis. They generate the high-quality data tools and interpretations necessary to inform science-based decision making in public policy development and natural resource management. Lotic helps clients implement strategies that protect diverse water users while maintaining high levels of environmental quality and contributing to the long-term stewardship of water resources. Seth Mason, founder of Lotic Hydrologic, is originally from Pagosa Springs and remains tied to the community.

San Juan Conservation District (SJCD): MSI's team proposes to again contract SJCD to carry out technical aspects for the agricultural inventory and assessment and assist in project identification and prioritization. SJCD offers 72 years of technical expertise, water resource planning, and commitment to improving the efficiency and conservation of water resources in the district. SJCD's team has a strong rapport with local irrigators and ditch companies, with a resume of assisting water users in identifying infrastructure issues and implementing solutions. SJCD is located in Pagosa Springs and represents landowners in Archuleta County and parts of Hinsdale and Mineral counties.

C. Proposal Effectiveness:

The success and relevance of stream or integrated water management planning efforts are highly dependent on a combination of stakeholder engagement and scientific analysis to evaluate water needs and prioritize actions. Phases I and II (2018-currently) have demonstrated the collective capacity of this project's proponents and partners to successfully incorporate both components.

In 2018, MSI, TU, and WW initiated a three-phase process to meet the goals of the Southwest BIP and Colorado Water Plan, shaped from a grassroots level by local conditions, values, and priorities. Thanks to the generous support of the CWCB and a collection of partners, a diverse stakeholder group gathered and began a coordinated, community-led process to understand and address water needs in the San Juan Basin during Phase I of the project. This stakeholder group is now known as the [Upper San Juan Watershed Enhancement Partnership \(WEP\)](#), with a committed steering committee working to identify priority values, data gaps, and develop unified goals and outcomes of collective interest for the community. The steering committee is composed of diverse representatives from local ranchers/producers, ditch company leaders, outdoor recreation businesses, water districts, local and state government agencies, academic extension offices, non-profits, and private citizens.

In 2020, for Phase II, the WEP partnered with Lotic Hydrological and the SJCD to assess the project area's historical and current hydrology, ecological attributes, recreational water needs, and agricultural infrastructure systems to provide the technical information necessary to understand multiple water needs and uses in the Basin. Results from these studies will help stakeholders understand current conditions; explore options to make improvements (e.g. efficient and easier to use water delivery systems, riparian and aquatic habitat, recreation opportunities); and map priority locations. The assessment and modeling results will also incorporate forest health and climate change considerations to complement existing local workgroups and agencies (e.g. U.S. Forest Service, San Juan Headwaters Forest Health Partnership) and prepare for potential future conditions involving wildfire or drought.

Therefore, this process may serve as a model for incorporating these two critical components into IWMP processes elsewhere in Colorado.

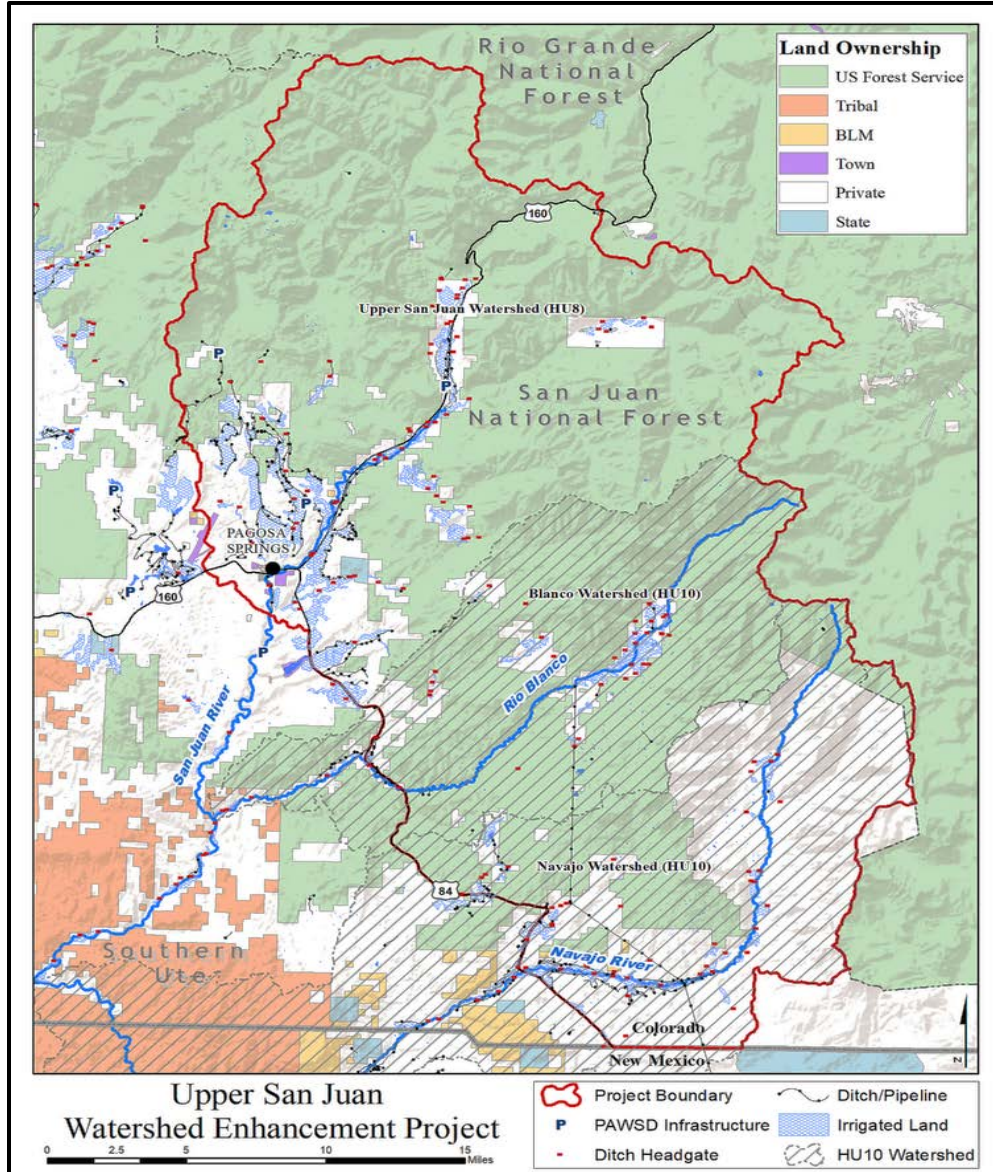
The WEP, Lotic, and SJCD will share the results of these assessments with stakeholders in winter/spring 2021 to begin gathering input on where the community identifies priority issues, locations, and potential projects. This initial review will inform the outline and development of the Integrated Water Management Plan in Phase III. Stakeholder interest in this project was apparent after the first online, public meeting that took place during Phase II. After this meeting, public survey results and follow up emails shared priority areas, contact information, and photo documentation for the project team to consider in planning. This type of continued engagement will be crucial to ensuring the outcomes of the final phase represent community values and goals. The success of this project will be monitored and recorded in CWCB progress and final reports that capture public survey results for each meeting, the enhanced collaborations and outreach between community partners, prioritized project cutsheets (templates) that address multiple objectives to be integrated into the Southwest Basin Roundtable's IPP list, and a locally-driven and community approved Integrated Water Management Plan.

This project has smoothly adapted to function under COVID-19 protocols; advanced key collaborations with state agencies (Colorado Parks & Wildlife), local governments (Town of Pagosa Springs), businesses (Pagosa Outside), and foundations ([Great Outdoors Fund](#)) to enhance river recreation; and is primed to leverage funding and partnerships to implement identified projects that enhance the ecological and economic vitality of the watershed. Financial support to finish this planning process in Phase III will ensure no gaps in funding delay the progress and momentum accomplished in Phases I and II.

ATTACHMENT A: MAP

Figure 1: Project area for Phase III Upper San Juan Basin Integrated Water Management Plan

The map below illustrates the geographic scope of Steering Committee representation, Phase II assessment locations, and project areas to be considered in the IWMP (red boundary). The scope for the IWMP has been developed through stakeholder and Steering Committee input during Phases I & II. GIS shapefiles and coordinates can be provided upon request.



Streams and waterways include the San Juan River mainstem including and above the Town of Pagosa Springs, East Fork of the San Juan River, West Fork of the San Juan River, Rio Blanco River, and Navajo River. Phase II's assessment primarily focuses on the upper San Juan from the Continental Divide to the confluence with Mill Creek; with some analysis in the Navajo and Rio Blanco area. Phase III will extend the agricultural infrastructure inventory to Rio Blanco, as well as the Navajo River if time and budget permit. The IWMP will capture assessments and consider management priorities for all three sub-watersheds.

ATTACHMENT B: PROJECT BUDGET AND SCHEDULE

MSI respectfully requests \$49,225 from the Colorado Watershed Restoration Program (CWRP) towards a total budget of \$98,450 (a 50% match). MSI has developed a funding plan to request \$14,768 (proposed, 15% match) from the statewide Water Supply Reserve Fund (WSRF) and \$9,845 from the Southwest Basin Roundtable WSRF (proposed, 10% match). The combined total of CWCB funds from the CWRP (50%) and two WSRF grants (15+10=25%) would cover no more than 75% of the total project costs.

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Table 1.1 Budget, Phase III

Task	Description	Target Start Date	Target End Date*	CWCB CWRP Funds	CWCB Statewide WSRF Funds	CWCB Basin WSRF Funds	Other Funding Cash	Other Funding In-Kind	Total
1	Program Management & Stakeholder Engagement	6/1/21	6/30/23	\$17,375	\$5,213	\$3,475	\$8,688	\$18,206	\$52,956
2	Agricultural Infrastructure Analysis	6/1/21	6/30/23	\$14,875	\$4,463	\$2,975	\$7,438	\$5,750	\$35,500
3	Finalize Integrated Water Management Plan	6/1/21	6/30/23	\$12,500	\$3,750	\$2,500	\$6,250		\$25,000
	Subtotal			\$44,750	\$13,425	\$8,950	\$22,375	\$23,956	\$113,456
	Grant Administration			\$4,475	\$1,343	\$895	\$2,238		\$8,950
	TOTAL			\$49,225	\$14,768	\$9,845	\$24,613	\$23,956	\$122,406

*Anticipated end date is 6/30/2022, but an extra year was added to accommodate potential unforeseen delays due to the COVID-19 pandemic.

Table 1.2: Project Fund Summary and Percentages

Project Total	\$ 98,450	Percentage of Project Total
CWCB WRP	\$ 49,225	50%
Statewide WSRF	\$ 14,768	15%
Basin Roundtable WSRF	\$ 9,845	10%
Total CWCB Fund Request	\$ 73,838	75%
Cash Match	\$ 24,613	25.0%
In-kind Match	\$ 23,956	24.3%
Cash + In-kind Total	\$ 48,569	49.3%

The requested funding for Phase III will support the following tasks and expenses:

Table 1.3: Detailed Budget

Tasks	Responsible Party	Task Details	Rate	Cost	Task Total
1. Project Management & Stakeholder Engagement	MSI Program Director	Meeting Facilitation, Project Management	90 hrs @ \$65/hr	\$5,850	\$34,750
	MSI Project Lead	Facilitation, Group(s) Coordination, Stakeholder Engagement Plan	350 hrs @ \$45/hr	\$15,750	
	MSI Project Team	Outreach printing/publishing costs	50 @ \$20	\$1,000	
	Western Wildscapes	Community outreach & project support	270 hrs @ \$45/hr	\$12,150	
2. Agricultural Infrastructure Needs Analysis	SJCD Team	Data Review, Inventory, Prioritize Projects	650 hrs @ \$35/hr	\$22,750	\$29,750
	SJCD Team	Data Access & Inventory Oversight	200 hrs @ \$35/hr	\$7,000	
3. Finalize Integrated Water Management Plan	Lotic Team	Develop Management Goals and Objectives	32 hrs @ \$125/hr	\$4,000	\$25,000
	Lotic Team	Identify candidate actions, projects and processes	32 hrs @ \$125/hr	\$4,000	
	Lotic Team	Evaluate and prioritize alternatives	68 hrs @ \$125/hr	\$8,500	
	Lotic Team	Plan for implementation	40 hrs @ \$125/hr	\$5,000	
	Lotic Team	Develop final planning document	28 hrs @ \$125/hr	\$3,500	
				Subtotal	\$89,500
Grant Management	MSI Finance Team	Grant Management Indirect Fee		Subtotal x 10%	\$8,950
				PROJECT TOTAL	\$98,450

Table 1.4 Matching Funds Sources and Status

Cash Match	Amount	Status
Archuleta County BOCC	\$2,500	Requested
Forever Our Rivers Foundation	\$4,613	Requested
Mountain Studies Institute	\$500	Committed
Pagosa Tourism Board	\$1,000	Requested
San Juan Water Conservancy District	\$2,000	Committed
Southwestern Water Conservation District	\$10,000	Requested
The Nature Conservancy	\$1,000	Requested
Town of Pagosa Springs	\$1,000	Requested
Trout Unlimited	\$2,000	Requested
CASH MATCH TOTAL	\$25,000	

In-kind Match	Amount	Status
Trout Unlimited Advising Services (160 hrs @ \$50/hr)	\$8,000	Committed
Steering Committee/Partner Meetings (2 hrs x \$28.02 professional volunteer rate = \$56.04 x 12 professional volunteers = \$672.48 x 9 meetings)	\$6,052	Anticipated
Public meetings (2 hrs x 25.96 CO volunteer rate = \$51.92 x 20 volunteers = \$1,038.40 x 4 meetings)	\$4,154	Anticipated
San Juan Conservation District Staff Time (50 hrs @ \$35/hr)	\$1,750	Committed
Natural Resources Conservation Service Staff Time (100 hrs @ \$40/hr)	\$4,000	Committed
IN-KIND MATCH TOTAL	\$23,956	

SCHEDULE

Phase II tasks and funding will end in May 2021, with the target start date for Phase III beginning June 2021 to continue momentum with stakeholders, planning and project development over a 12-month period. Currently, the Upper San Juan Watershed Enhancement Partnership (WEP) is planning on hosting all meetings remotely, unless special circumstances require an in-person site visit, in which all state COVID-19 guidelines would be upheld to reduce risk for all involved parties.

Tasks 1 & 3:

- Mountain Studies Institute (MSI), Western Wildscapes (WW), Lotic Hydrological, and San Juan Conservation District (SJCD) will coordinate project management/steering committee meetings on a flexible schedule based on project needs, but these will likely occur every month for the first six months, break over winter holidays, and return for three remaining meetings to finalize project priorities and the IWMP.
- Public stakeholder meetings will be broken down into two focused workshops within the first six months of Phase III, to gather key community decision makers and managers for initial discussions on IWMP goals, objectives and potential actions. This will provide initial example plans and lists to share with the general public for feedback on prioritization and alterations during the two remaining scheduled public meetings within the last six months of Phase III.
- Outreach resources will be developed and communicated by MSI and Western Wildscapes throughout this final phase. In the first three months, MSI will work with Fort Lewis College to create an ArcGIS StoryMap education tool by collecting content, photos, and maps; organize into a draft in the fall/winter; and finalize by spring/early summer of 2022.
- Lotic and the WEP will work with stakeholders develop an Integrated Water Management Plan throughout Phase III, completing the document by early summer 2022.

Task 2: SJCD will conduct field work to evaluate agricultural infrastructure over the first four months of Phase III, during the summer/early fall of 2021. Crews will start work in the Rio Blanco and move down to the upper Navajo River, depending on time and budget. SJCD will also participate in steering committee and public meetings to help articulate project opportunities and priorities.

Table 1.5: Estimated Schedule, Phase III

Tasks	Month (After Contract Initiation)												Total # of Meetings
	1	2	3	4	5	6	7	8	9	10	11	12	
Project Management/Steering Committee Meetings	X	X	X	X	X	X			X		X	X	9
Public Meetings		X		X						X		X	4
Education/Outreach Resources	X	X	X	X	X	X	X	X	X	X	X	X	
Agricultural Infrastructure/Water Needs Analysis	X	X	X	X	X	X				X		X	
Finalize Integrated Water Management Plan	X	X	X	X	X	X	X	X	X	X	X	X	

ATTACHMENT C: SCOPE OF WORK

GRANTEE AND FISCAL AGENT: Mountain Studies Institute

PRIMARY CONTACT: Mandy Eskelson

ADDRESS: 679 East 2nd Avenue, Suite 8, Durango, CO 81301

PHONE: 970-387-5161

PROJECT NAME: San Juan Basin Integrated Water Management Plan: Phase III

INTRODUCTION AND BACKGROUND

Mountain Studies Institute (MSI), in close coordination with Western Wildscapes and the support of Trout Unlimited (TU), will act as the Project Management Team to facilitate Phase III of a three-phased approach to develop an Integrated Water Management Plan (IWMP) for the San Juan Basin. The MSI-led Project Management Team (Team) will be primarily responsible for managing the work of the Partners (Lotic and SJCD) and coordinating the involvement of Upper San Juan Watershed Enhancement Partnership Steering Committee, stakeholders, and community at large. As information is developed in Phase III, the Team will ensure Partners communicate and coordinate with the steering committee, stakeholders, and public to develop planning and action priorities to address multiple water uses and needs in the project area.

OBJECTIVES

1. Ensure the IWMP process includes and makes decisions based on stakeholder and community involvement and support, as well as on current scientific analysis and data.
2. Extend analysis of agricultural infrastructure to the Rio Blanco, and potentially Navajo River, to collect information for models and project consideration in multiple watersheds in the San Juan Basin.
3. Create a comprehensive plan that describes the goals, objectives, and results from this planning process for other organizations or agencies to utilize, reference, and leverage for project implementation.

Tasks
<u>Task 1 – Project Management & Stakeholder Engagement</u>
Description of Task:
Mountain Studies Institute (MSI), in close coordination with Western Wildscapes (WW) and support of Trout Unlimited (TU), will act as the Project Management Team. The MSI-led Project Management Team (Team) will be primarily responsible for managing the work of the partners Lotic Hydrological and San Juan Conservation District (SJCD), and coordinating Steering Committee, stakeholder and community involvement in Phase III. Proactive outreach and feedback collection to finalize the goals, objectives, actions, and priorities of the Integrated Water Management Plan will be essential to completing the community-driven SMP/IWMP process.
Method/Procedure:
<ul style="list-style-type: none"> • Subtask 1.1 and 1.2: Project Management, Stakeholder Engagement, Facilitation The Team will lead 9 meetings with steering committee members and partners and host 4 public meetings with stakeholders. Meetings will discuss Integrated Water Management Plan development and funding project implementation.

Tasks
<ul style="list-style-type: none"> <p>• Subtask 1.2: Education Resources MSI will utilize their partnership with Fort Lewis College to supervise a college level, GIS-focused internship to create an ArcGIS StoryMap for the Upper San Juan Watershed Enhancement Partnership (WEP), including collaborative content from San Juan Headwaters Forest Health Partnership and other local partners. This will offer interactive learning tools for college students and the public to learn more about state and regional water issues, the San Juan Basin, the WEP, and the Integrated Water Management Plan and projects under development. Materials from the StoryMap can also be reformatted into printable or other digital formats to reach stakeholders with outreach preferences and/or access.</p> <p>• Subtask 1.3: Community Outreach & Long-term Plan Western Wildscapes will assist SJCD with outreach materials (media announcements, flyers) and communication to landowners about agriculture infrastructure inventory process on Rio Blanco and Navajo River. WW will also work with steering committee members to develop long-term organization and funding strategies for the Upper San Juan Watershed Enhancement Partnership.</p>
<p>Deliverables:</p>
<ul style="list-style-type: none"> 1.1: Coordinated stakeholder events to collect feedback and build community support for the Integrated Water Management Plan. 1.2: Collaborative online and printable education resources, including an ArcGIS StoryMap, booklets or flyers highlighting IWMP partners, process, and plans; local, state, and regional water initiatives; interactions between forest and watershed health; and mitigation actions for stakeholders. 1.3: Long-term plan for Upper San Juan Watershed Enhancement Partnership and project funding/implementation.
<p>CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)</p>
<p>MSI will provide CWCB with a progress report after the first six months, beginning from the date of the executed contract. The progress report shall describe the fully or partially completed tasks identified in the statement of work, including a description of accomplishments, issues if any occurred, and any corrective actions taken. Upon project completion, MSI will provide CWCB a final report that summarizes the project and documents how the project was completed. The final Integrated Water Management Plan and compilation of cutsheets for priority projects created by Lotic will also be included in the report and shared with our other funding supporters. This report will be informed by the entire project team.</p>

Tasks
<u>Task 2 – Agricultural Water Needs Analysis</u>
Description of Task:
<p>Following similar strategies used on the upper San Juan River in Phase II, San Juan Conservation District (SJCD) will be responsible for conducting data collection, field surveys and analysis of agricultural infrastructure and water supply needs for the Rio Blanco. This work will extend to the Navajo River, depending on time and budget. These analyses will compliment and be incorporated into Lotic Hydrological’s modeling and project development for the Integrated Water Management Plan.</p>
Method/Procedure:
<ul style="list-style-type: none"> ● Subtask 2.1: Data Review, Inventory, Prioritize Projects SJCD will compile and review existing information and data relevant to characterizing agricultural water use and needs for the Rio Blanco and Navajo River. Then SJCD will work with agricultural water users, ditch representatives, and water rights holders to inventory current conditions of irrigation systems within the project area. This inventory will evaluate irrigation infrastructures to determine deficiencies within each system, identify candidate and priority areas, and develop potential water efficiency improvements and cost estimates. ● Subtask 2.2: Data Access and Inventory Oversight SJCD supervisors will oversee access to databases and other resources, assist with outreach before field surveys, coordinate site visits, compile appropriate data and information to assist Lotic’s analysis of watershed conditions and map priority areas for future improvement projects.
Deliverable:
<p>2.1: General report of existing information and data gaps. An evaluation report, tables, and maps summarizing agricultural water user preferences, priorities, alternatives, and potential funding mechanisms to be considered in the IWMP. These reports and findings may require general calculations and locations to respect landowner and ditch company privacy.</p> <p>2.2: Participation and/or presentations of agricultural inventory results for public meetings. Data tables, maps, and narratives suitable for use with stakeholder engagement, public meetings, and CWCB reporting.</p>
CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)
<p>Appropriate data and mapping from this inventory will be included in technical analyses and project exploration, developed by Lotic Hydrological, and submitted in the project’s final report from Mountain Studies Institute to the CWCB.</p>

Tasks
<p><u>Task 3 – Finalize Integrated Water Management Plan</u></p>
<p>Description of Task:</p> <p>Lotic will provide WEP and the larger stakeholder group with data interpretations, visualizations, and predictive assessments to aid in cost-benefit assessments of contemplated actions. Lotic will assess the degree to which an action is likely to meet ecological or recreational planning goals and objectives. Lotic will also help stakeholders understand secondary positive or negative impacts of any action on the delivery and/or consumptive use of water. This approach will help stakeholders understand where opportunities and constraints exist and, ultimately, facilitate prioritization of proposed projects and management actions. See Attachment D for more details on method/procedure for each subtask.</p>
<p>Method/Procedure:</p> <ul style="list-style-type: none"> <p>● Subtask 3.1: Develop Management Goals and Objectives</p> <p>Over the course of several meetings, Lotic will work with stakeholders to articulate specific management goals and objectives that respond to the high-priority issues identified in Phase II. This effort will include discussions of morphologically-based, biologically-based, or flow-based management targets used as a direct or indirect measure of riparian area health, health of aquatic biota, recreational use opportunity, or receipt of ecosystem services. The characterization of multiple water use planning goals and objectives is necessary to direct the type of focused study needed to identify and evaluate the feasibility and effectiveness of alternative management actions or projects.</p> <p>● Subtask 3.2: Identify candidate actions, projects and processes</p> <p>Lotic will work with WEP to identify several candidate structural projects, collaborative processes, or management actions that respond to the planning goals and objectives. Lotic will initially identify alternatives through internal assessment of hydrological conditions, water use and administration, water delivery infrastructure condition, and ecological or recreational needs. Structural projects, collaborative processes or management actions may include, but will not be limited to, protection measures for high-value riparian areas, diversion structure improvements with fish bypass structures, agricultural efficiency improvements, in-channel habitat restoration, invasive species control, reservoir development and release schedule recommendations, recreational channel structures, and water leasing programs.</p> <p>● Subtask 3.3: Evaluate and prioritize alternatives</p> <p>Lotic will utilize process-based conceptual models, environmental flow analysis results, and recreational use preferences to predict ecological and recreational use outcomes of each candidate alternative action. These outcomes will be assessed against stakeholder-identified management goals and objectives. Actions will then be ranked against each other based on their predicted ability to meet stated goals and objectives. Lotic will subsequently work with project coordinators and local stakeholders to rank alternatives according to their relative feasibility.</p> <p>● Subtask 3.4: Plan for implementation</p> <p>Lotic will integrate the results from the effectiveness and feasibility assessments above to develop conceptual-level implementation cutsheets. Each implementation cutsheet will identify project champions, affected stakeholders, recommendations for overcoming technical, financial, or legal constraints, anticipated outcomes, and a monitoring plan for assessing long-term effectiveness. All cutsheets will be formatted to allow for straightforward incorporation into future drafts of the</p>

Tasks
<p>Southwest Basin Implementation Plan as Identified Projects and Processes (IPPs) for the upper San Juan River drainage.</p> <ul style="list-style-type: none"> • Subtask 3.5: Develop final planning document Lotic will produce a final report integrating all maps, graphics, memoranda, and technical reports produced by Phases I-III of the planning process. The report will additionally include identification of high-priority management recommendations and corresponding discussions for implementation of each recommendation.
<p>Deliverable:</p>
<p>3.1: Report detailing planning goals and objectives identified by stakeholders. 3.2: Table identifying candidate structural projects, collaborative processes, or management actions that respond to the planning goals and objectives. The table will reference candidate actions against high-priority planning reaches and the management issues present on those reaches. 3.3: Technical report discussing the employed methodologies and assessment results characterizing the effectiveness of each proposed alternative. The technical report will be accompanied by a table indicating the relative effectiveness and feasibility rankings assigned to each alternative. 3.4: Compilation of IPP cutsheets characterizing each high-priority project or collaborative action identified by stakeholders. 3.5: Publication-quality final report.</p>
<p>CWCB Deliverable: (Describe the deliverable the grantee will provide CWCB documenting the completion of this task)</p>
<p>The final Integrated Water Management Plan and compilation of cutsheets for priority projects created by Lotic will be included in Mountain Studies Institute’s reports to CWCB and shared with other funding supporters and partners.</p>

ATTACHMENT D: TASK 3 DETAILED SCOPE OF WORK

DESCRIPTION OF TASK 3

Lotic Hydrological will provide WEP and the larger stakeholder group with data interpretations, visualizations, and predictive assessments to aid in cost-benefit assessments of contemplated actions. Lotic will assess the degree to which an action is likely to meet ecological or recreational planning goals and objectives. Lotic will also help stakeholders understand secondary positive or negative impacts of any action on the delivery and/or use of water for consumptive uses.

PRIMARY OBJECTIVE

Lotic's technical expertise and experience with SMP/IWMP processes will assist the WEP in helping stakeholders understand where opportunities and constraints exist and, ultimately, facilitate a prioritization of proposed projects or management actions.

PROPOSED METHODS/PROCEDURES & DELIVERABLES

Subtask 3.1: Develop Management Goals and Objectives

Method/Procedure:

Over the course of several meetings, Lotic will work with stakeholders to articulate specific management goals and objectives that respond to the high-priority issues identified in Phase II. This effort will include discussions of morphologically-based, biologically-based, or flow-based management targets used as a direct or indirect measure of riparian area health, health of aquatic biota recreational use opportunity, or receipt of ecosystem services. Management targets may focus on a specific component of the aquatic or riparian ecosystem (e.g. fish biomass), a measure/indicator of whole ecosystem integrity (e.g. Multi-Metric scores for aquatic macroinvertebrates), or on the quality and quantity of ecosystem goods and services received by local communities (e.g. number of "boatable days" available to recreational users). Characterizations of environmental flows and recreational use preferences should inform (but not limit) these discussions. The characterization of planning goals and objectives is necessary to direct the type of focused study needed to identify and evaluate the feasibility and effectiveness of alternative management actions or projects.

Deliverable:

- Report detailing planning goals and objectives identified by stakeholders

Subtask 3.2: Identify candidate actions, projects and processes

Method/Procedure:

Lotic will work with the WEP to identify several candidate structural projects, collaborative processes, or management actions that respond to planning goals and objectives. Candidate actions will be drawn from several sources. Lotic will initially identify alternatives through internal assessment of hydrological conditions, water use and administration, water delivery infrastructure condition, and ecological or recreational needs. Discussions with local stakeholders may also point to some unique local opportunities not apparent to us. Reference to the Basin Implementation Plan list of Identified Projects and Processes may additionally provide candidate actions for implementation in the project area. Structural projects, collaborative processes or management actions may include, but will not be limited to, protection measures for high-value riparian areas, diversion structure improvements with fish bypass structures, agricultural efficiency improvements, in-channel habitat restoration, invasive species control, reservoir development and release schedule recommendations, recreational channel structures, and water leasing programs.

Deliverables

- Table identifying candidate structural projects, collaborative processes, or management actions that respond to the planning goals and objectives. The table will reference candidate actions against high-priority planning reaches and the management issues present on those reaches.

Subtask 3.3: Evaluate and prioritize alternatives

Method/Procedure:

Lotic will utilize process-based conceptual models, environmental flow analysis results, and recreational use preferences to predict ecological and recreational use outcomes of each candidate alternative action. Where identified alternatives are expected to impact hydrology, Lotic may use the hydrological simulation tools developed to assess the likely hydrological effects. For structural projects (e.g. diversion structure improvements), Lotic may use conceptual level engineering assessments and/or hydraulic models to evaluate outcomes. These outcomes will be assessed against stakeholder-identified management goals and objectives. Actions will then be ranked against each other based on their predicted ability to meet stated goals and objectives. Characterization of feasibility for each alternative is a social exercise that requires careful evaluation of administrative, legal, financial, and institutional constraints. Lotic will initially utilize streamflow records, hydrological simulation products, records from the Colorado Department of Water Resources, existing engineering reports, and discussions with local water users to characterize the demands, efficiencies, and use shortages associated with various uses of water from high-priority reaches. Lotic will utilize available engineering assessments or secure new conceptual level assessments to provide important information about the costs of structural projects. Lotic will work with the local Water Commissioner to identify critical administrative constraints on water management alternatives. Lotic will also work with stakeholders to further characterize land ownership, institutional constraints and understand local perceptions of equitable cost allocation for non-consumptive use projects. Through this process, Lotic hopes to identify likely proponents/champions for specific issues and areas of broad stakeholder interest and support. Lotic will subsequently work with project coordinators and local stakeholders to rank alternatives according to their relative feasibility.

Deliverables

- Technical report discussing the employed methodologies and assessment results characterizing the effectiveness of each proposed alternative.
- Table indicating the relative effectiveness and feasibility rankings assigned to each alternative.

Subtask 3.4: Plan for implementation

Method/Procedure:

Lotic will integrate the results from the effectiveness and feasibility assessments above to develop conceptual-level implementation cutsheets. Each implementation cutsheet will identify project champions, affected stakeholders, recommendations for overcoming technical, financial, or legal constraints, anticipated outcomes, and a monitoring plan for assessing long-term effectiveness. Cutsheets may discuss needs/opportunities for development of grant application materials, scopes of work, or general planning recommendations that reflect important 'lessons-learned' from the first phase of work. All cutsheets will be formatted to allow for straightforward incorporation into future drafts of the Southwest Basin Implementation Plan as Identified Projects and Processes (IPPs) for the upper San Juan River drainage.

Deliverable

- Compilation of IPP cutsheets characterizing each high-priority project or collaborative action

identified by stakeholders

Subtask 3.5: Develop final planning document

Method/Procedure:

Lotic will produce a final report integrating all maps, graphics, memoranda, and technical reports produced by Phases I-III of the planning process. The report will additionally include identification of high-priority management recommendations and corresponding discussions for implementation of each recommendation.

Deliverable:

- Publication-quality final report

Table 1.6 Proposed Budget for Task 3: Finalize Integrated Water Management Plan

Subtask	Description	Unit (hr)	Mean Rate	Estimated Fee
3.1	Develop Management Goals and Objectives	32	\$ 125	\$ 4,000
3.2	Identify candidate actions, projects and processes	32	\$ 125	\$ 4,000
3.3	Evaluate and prioritize alternatives	68	\$ 125	\$ 8,500
3.4	Plan for implementation	40	\$ 125	\$ 5,000
3.5	Develop final planning document	28	\$ 125	\$ 3,500
Task Total				\$ 25,000

Table 1.7 Lotic Hydrological Detailed Fee Structure

Lotic Hydrological		
Name	Title	Rate
Seth Mason, M.S.	Principal Hydrologist	\$140.00
Jessica Mason, M.S., P.E.	Water Resources Engineer	\$140.00
Bill Hoblitzell, M.S.	Watershed Scientist	\$125.00
Zach Smith	Water Transaction Specialist	\$125.00
Will Wicherski, M.S.	Geomorphologist	\$105.00

ATTACHMENT E: LETTERS OF SUPPORT

Kindly find attached letters of support from:

- 1) Banded Peak Ranch
- 2) Colorado Parks & Wildlife
- 3) Colorado State University Archuleta County Extension Office/Resilient Archuleta
- 4) Pagosa Outside
- 5) San Juan Headwaters Forest Health Partnership
- 6) Southwest River Engineering
- 7) Town of Pagosa Springs
- 8) Trout Unlimited Five Rivers Chapter
- 9) The Nature Conservancy**
- 10) Archuleta County Board of County Commissioners**
- 11) San Juan Water Conservancy District**

** Letters of Support pending but expected



BANDED PEAK RANCH
-----EST. 1894-----

PO Box 159
Chromo, CO 81128
970.264.9268

November 4, 2020

Mountain Studies Institute
ATTN: Mandy Eskelson, Aaron Kimple
679 East 4th Avenue, Suite 8
Durango, CO 81301

Dear Ms. Eskelson and Mr. Kimple,

The Banded Peak Ranch supports Mountain Studies Institute's (MSI) application on behalf of the Upper San Juan Watershed Enhancement Partnership's proposed project entitled "San Juan Basin Integrated Water Management Plan, Phase III."

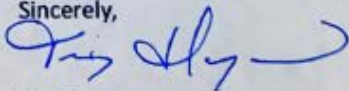
This project assists in meeting state, regional, and local goals to increase understanding of Colorado's water needs, identify gaps, and promote projects and processes to address those needs. The San Juan Basin contains the headwaters of the San Juan River and other major tributaries that contribute to the larger Colorado River System. Understanding water resources in this project area provides critical information to improve current and prepare for future conditions.

Phases I and II began identifying opportunities to sustain and improve water sources in the San Juan Basin based upon inventories and modeling of environmental, agricultural, and recreational water uses. Phase III will complete this planning process by utilizing the results from Phase II's watershed assessment in conjunction with community values to outline goals, objectives, and project priorities in an Integrated Water Management Plan.

The WEP will also develop education resources and outreach events to ensure stakeholders can easily understand and apply the findings from this plan to fund and implement projects to meet multiple water uses in the San Juan Basin.

The Banded Peak Ranch sits in the Navajo River Basin. This project will lead to a better understanding of the San Juan Basin and allow us to make appropriate conservation-oriented management decisions.

Sincerely,



Tim Haarmann
Banded Peak Ranch Manager
970.264.9269



COLORADO
Parks and Wildlife

Department of Natural Resources

Southwest Region
415 Turner Drive
Durango, CO 81303
P 970.375.6732 | F 970.375.6705

November 4, 2020

Mountain Studies Institute
ATTN: Mandy Eskelson, Aaron Kimple
679 East 4th Avenue, Suite 8
Durango, CO 81301

Dear Ms. Eskelson and Mr. Kimple,

Colorado Parks and Wildlife (CPW) supports Mountain Studies Institute's (MSI) application on behalf of the Upper San Juan Watershed Enhancement Partnership's proposed project entitled "San Juan Basin Integrated Water Management Plan, Phase III."

This project helps meet state, regional, and local goals to identify the Upper San Juan River's water needs and gaps, and with stakeholder direction, will promote projects and/or processes to address important issues. The San Juan Basin contains the headwaters of the San Juan River and other major tributaries that contribute to the larger Colorado River System. Understanding agricultural, environmental and recreational needs in this project area, all three significant economic drivers for the Town of Pagosa Springs and southwest Colorado, is to understand how to prioritize projects that benefit the community and environment.

Phases I and II began identifying opportunities to sustain and improve water resources in the San Juan Basin based upon inventories and modeling of environmental, agricultural, and recreational water uses. Phase III will complete this planning process by utilizing the results from Phase II's watershed assessment in conjunction with community values to outline goals, objectives, and project priorities in an Integrated Water Management Plan.

The WEP will also develop educational resources and outreach events to ensure stakeholders can easily understand and apply the findings from this plan to fund and implement projects to meet multiple water uses in the San Juan Basin.

CPW is an active member of the steering committee. The steering committee is effective and representative of the myriad interests in water resources in the upper San Juan River. The early progress and diverse partnerships led CPW leadership to select a pilot project to partner with a national non-profit organization called The Great Outdoors Fund to crowdfund improvements to preserve and enhance primitive recreational access to a signature reach of the river. CPW is hopeful this campaign will highlight the benefits that public/private partnerships could have to improve, support and promote outdoor recreation.



CPW has enjoyed the dedication and consistency of the WEP from its inception. Your organization continues to do an excellent job facilitating the various interests of the Partnership.

Sincerely,



Ryan Unterreiner
SW Region Water Resources Specialist



Archuleta County
Extension

P.O. Box 370
Pagosa Springs, Colorado 81147
(970) 264-5931
Robin.Young@colostate.edu

October 30, 2020

Colorado Water Conservation Board
ATTN: Chris Sturm
1313 Sherman St. Room 721
Denver, CO 80203

Dear CWCB Board Members,

I am writing today in support of Mountain Studies Institute's (MSI) application on behalf of the Upper San Juan Watershed Enhancement Partnership's proposed project entitled "San Juan Basin Integrated Water Management Plan, Phase III."

This project assists in meeting state, regional, and local goals to increase understanding of Colorado's water needs, identify gaps, and promote projects and processes to address those needs. The San Juan Basin contains the headwaters of the San Juan River and other major tributaries that contribute to the larger Colorado River System. Understanding water resources in this project area provides critical information to improve current and prepare for future conditions.

Phases I and II began identifying opportunities to sustain and improve water sources in the San Juan Basin based upon inventories and modeling of environmental, agricultural, and recreational water uses. Phase III will complete this planning process by utilizing the results from Phase II's

Colorado State University, U.S. Department of Agriculture and Archuleta County Cooperating.
Cooperative Extension programs are available to all without discrimination.

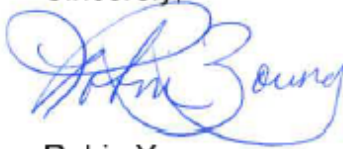
watershed assessment in conjunction with community values to outline goals, objectives, and project priorities in an Integrated Water Management Plan.

The WEP will also develop education resources and outreach events to ensure stakeholders can easily understand and apply the findings from this plan to fund and implement projects to meet multiple water uses in the San Juan Basin.

This project will impact Resilient Archuleta because we have direct communication with the public and can disperse information first hand to the community.

Thank you for your consideration.

Sincerely,



Robin Young
Resilient Archuleta
CSU Extension Director Archuleta County

October 30, 2020

Colorado Water Conservation Board
ATTN: Chris Sturm
1313 Sherman St. Room 721
Denver, CO 80203

Dear CWCB Board Members,

Pagosa Outside supports Mountain Studies Institute's (MSI) application on behalf of the Upper San Juan Watershed Enhancement Partnership's proposed project entitled "San Juan Basin Integrated Water Management Plan, Phase III."

This project assists in meeting state, regional, and local goals to increase understanding of Colorado's water needs, identify gaps, and promote projects and processes to address those needs. The San Juan Basin contains the headwaters of the San Juan River and other major tributaries that contribute to the larger Colorado River System. Understanding water resources in this project area provides critical information to improve current and prepare for future conditions.

Phases I and II began identifying opportunities to sustain and improve water sources in the San Juan Basin based upon inventories and modeling of environmental, agricultural, and recreational water uses. Phase III will complete this planning process by utilizing the results from Phase II's watershed assessment in conjunction with community values to outline goals, objectives, and project priorities in an Integrated Water Management Plan.

The WEP will also develop education resources and outreach events to ensure stakeholders can easily understand and apply the findings from this plan to fund and implement projects to meet multiple water uses in the San Juan Basin.

My business, our local economy, and the entire community directly benefit from this project. I will continue to enthusiastically support the WEP's efforts to promote processes and projects that identify, protect and enhance agricultural, municipal, environmental, and recreational water needs in the Pagosa area.

Sincerely,



Tobi Rohwer
Managing Partner
Pagosa Outside

November 2, 2020

Mountain Studies Institute
ATTN: Mandy Eskelson
679 E. 2nd Ave, Suite 8
Durango, CO 801301

Mountain Studies Institute and Upper San Juan Watershed Enhancement Partnership,

The San Juan Headwaters Forest Health Partnership (SJHFHP) supports Mountain Studies Institute's (MSI) application on behalf of the Upper San Juan Watershed Enhancement Partnership's (WEP) proposed project entitled "San Juan Basin Integrated Water Management Plan, Phase III."

This project assists in meeting state, regional, and local goals to increase understanding of Colorado's water needs, identify gaps, and promote projects and processes to address those needs. The San Juan Basin contains the headwaters of the San Juan River and other major tributaries that contribute to the larger Colorado River System. Understanding water resources in this project area provides critical information to improve current and prepare for future conditions.

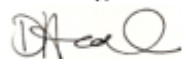
Phases I and II began identifying opportunities to sustain and improve water sources in the San Juan Basin based upon inventories and modeling of environmental, agricultural, and recreational water uses. Phase III will complete this planning process by utilizing the results from Phase II's watershed assessment in conjunction with community values to outline goals, objectives, and project priorities in an Integrated Water Management Plan.

The WEP will also develop education resources and outreach events to ensure stakeholders can easily understand and apply the findings from this plan to fund and implement projects to meet multiple water uses in the San Juan Basin.

The San Juan Headwaters Forest Health Partnership directly benefits from this project because the research, project prioritization, science-based decision making, and on-the-ground work in the San Juan River Basin and the forest existing on the same landscape are inherently connected. From its inception, the SJHFHP has prioritized projects and elected to work across jurisdictional boundaries by considering the impacts of our work on watersheds and the water resources that serve our community and countless others downstream. For this reason, the SJHFHP consistently prioritizes and supports forest restoration projects that directly influence watershed and forest resilience. The creation of an Integrated Water Management Plan by the WEP would help to further inform prioritization and project efforts. Furthering education and outreach efforts of both groups by working together is also an attractive and important opportunity for the SJHFHP.

The SJHFHP and its members gladly offer support for the WEP's proposed Phase III San Juan Basin Integrated Water Management Plan project.

Sincerely,



Dana Hayward, SJHFHP Partnership Coordinator

SOUTHWEST RIVER ENGINEERING

November 3, 2020

Colorado Water Conservation Board

ATTN: Chris Sturm

1313 Sherman St. Room 721

Denver, CO 80203

Dear CWCB Board Members,

Southwest River Engineering supports Mountain Studies Institute's (MSI) application on behalf of the Upper San Juan Watershed Enhancement Partnership's proposed project entitled "San Juan Basin Integrated Water Management Plan, Phase III."

This project assists in meeting state, regional, and local goals to increase understanding of Colorado's water needs, identify gaps, and promote projects and processes to address those needs. The San Juan Basin contains the headwaters of the San Juan River and other major tributaries that contribute to the larger Colorado River System. Understanding water resources in this project area provides critical information to improve current and prepare for future conditions.

Phases I and II began identifying opportunities to sustain and improve water sources in the San Juan Basin based upon inventories and modeling of environmental, agricultural, and recreational water uses. Phase III will complete this planning process by utilizing the results from Phase II's watershed assessment in conjunction with community values to outline goals, objectives, and project priorities in an Integrated Water Management Plan.

The WEP will also develop education resources and outreach events to ensure stakeholders can easily understand and apply the findings from this plan to fund and implement projects to meet multiple water uses in the San Juan Basin.

Southwest River Engineering looks forward to assisting in the implementation of the goals identified in Phase I and II for the improved efficiency of water use in the southwest portion of the state.

Sincerely,



Chris Pitcher P.E.



102 THIRD ST. • PO BOX 5727 • PAGOSA SPRINGS, CO 81147 • PHONE: 970.264.1195 • CPITCHER@SWRIVER.COM



551 Hot Springs Boulevard
Post Office Box 1859
Pagosa Springs, CO 81147
Phone: 970.264.4151
Fax: 970.264.4634

October 30, 2020

Colorado Water Conservation Board
ATTN: Chris Sturm
1313 Sherman St. Room 721
Denver, CO 80203

Re: Grant Application Letter of Support

Dear CWCB Board Members:

On behalf of the Pagosa Springs Town Council, please accept this letter of support for the Mountain Studies Institute and the Upper San Juan Watershed Enhancement Partnership's (WEP) grant application for **Phase Three** of the Upper San Juan Basin Integrated Water Management Plan. Phase Three will entail planning, design and implementation of the projects identified in Phase Two of the Plan.

The Town Council is very supportive of the efforts of the WEP and finds much value in better understanding our community's water usage and needs for all water users, including recreational, municipal, and agricultural.

The Pagosa Springs Town Council is pleased to continue its support of this project into the next phase. Thank you for your consideration of this application.

Sincerely,

A handwritten signature in black ink, appearing to read "Don Volger", with a long horizontal flourish extending to the right.

Don Volger, Mayor



Five Rivers Chapter

October 30, 2020

Colorado Water Conservation Board
ATTN: Chris Sturm
1313 Sherman St. Room 721
Denver, CO 80203

Dear Chris, CWCB Board and Staff:

On behalf of the Five Rivers Chapter of Trout Unlimited, I am writing to convey our support for Mountain Studies Institute's (MSI) proposed project "Upper San Juan Basin Integrated Water Management Plan, Phase III", a science-based watershed assessment.


As this project assists in meeting the Colorado Water Plan's goal of seeking to understand State water needs, identify gaps, and promote projects and processes to meet those needs, we feel this is an important next step to benefit all stakeholders.

We recognize that water use and availability in the Upper San Juan River Basin are critical issues in maintaining the environmental and economic vitality of the area, and tourism and associated recreation are key elements of that vitality.

We understand this watershed assessment will identify opportunities to sustain and improve water resources in the Upper San Juan Basin based upon inventories and modeling of environmental, agricultural, recreational, and municipal water uses. Current and future conditions and needs will be considered in conjunction with community values to develop a comprehensive and inclusive Integrated Water Management Plan.

We believe this concept proposal will facilitate continued public involvement in the Upper San Juan Watershed Enhancement Partnership's (WEP) effort in meeting the State of Colorado's Water Plan goal of promoting projects and processes to meet identified needs.

Respectfully submitted:


Frank (Buck) Skillen
President, Five Rivers Trout Unlimited

ATTACHMENT F: BIOGRAPHIES AND EXAMPLES OF WORK

1.1 Biographies

Ms. Mandy Eskelson, Mountain Studies Institute (applicant, fiscal agent) is a Water Programs Research Associate for Mountain Studies Institute (MSI). She received a master's degree from Oregon State University in Natural Resources, focusing in water conflict management and riparian ecology. She has been assisting Aaron Kimple, the original Project Lead, since January 2019 with project and grant management, communication, and facilitation responsibilities for the Upper San Juan Watershed Enhancement Partnership. Her background in education, outdoor recreation, non-profits and water resource management helps MSI manage other watershed groups (Animas River Community Forum), monitor water quality and aquatic health (416 Aquatic Monitoring), and organize public outreach/education events. Mandy will administer the grant, coordinate partner tasks, facilitate steering committee and public meetings, and develop education/outreach tools.

Mr. Aaron Kimple, Mountain Studies Institute is the Program Director of Forest Health for MSI. He has more than 10 years of experience in project management, nearly 20 years of experience with landscape ecology and environmental monitoring, and 7 years of experience in public facilitation and community outreach. In his role at MSI, Aaron facilitates partnership development and promotes community involvement. He manages MSI watershed projects, forest health initiatives, and facilitates community stakeholder groups (i.e. San Juan Headwaters Forest Health Partnership, Connecting for Conservation). Aaron works with the United States Forest Service, Bureau of Land Management, National Park Service, regional tribal entities, and the local governments of Archuleta, San Juan, La Plata and San Miguel Counties. Aaron will provide oversight and management expertise, as well as assist with facilitation and outreach.

Ms. Mely Whiting, Trout Unlimited Amelia (Mely) Whiting is legal counsel and project manager for Trout Unlimited, where she focuses on projects to protect, reconnect and restore Colorado's coldwater fisheries and their habitat. She has practiced water, public lands and environmental law in Colorado for over 25 years. She was an Assistant Attorney General for the Colorado Attorney General's office in the early 1990s, was in private practice in the late 1990s, and before joining Trout Unlimited, was regional legal counsel with the Solicitor's Office of the Department of the Interior. She has also taught environmental law courses to undergraduate students at Colorado Mountain College. Over the last three years, Mely's primary focus has been on working with partners to fund and implement habitat improvement projects. Mely was born in Montevideo, Uruguay, moving to the United States in the early 1980s. Mely's projects include The Upper Colorado River Wild & Scenic Stakeholder Group and the San Miguel Stream Management Plan. She serves on the Southwest Basin Roundtable as the environmental representative.

Mr. Al Pfister, Western Wildscapes Al is a natural resources manager and certified wildlife biologist that received his master's degree from Washington State University working on Postfire Avian Ecology in Yellowstone National Park. He has spent the past 36 years specializing in balancing sensitive and endangered species habitat needs with the surrounding communities' needs. These efforts have involved extensive interaction with Federal, State, County, and local governmental officials; private landowners; Tribal representatives; numerous user groups (recreation, ranching, energy, etc.), resolving aquatic and terrestrial management issues.

Mr. Seth Mason, Lotic Hydrological Seth completed his graduate level training in land Resources and Environmental Sciences at Montana State University. He received his B.A. in Environmental studies from the University of Colorado, Boulder. He specializes in hydrological modeling, stream characterization, deployment and operation of data collection and management systems, and development and coordination for water quality monitoring and assessment activities. Seth works extensively with city and county governments, federal agencies, and 501 (c) 3 organizations.

Ms. Cynthia Purcell, San Juan Conservation District Cynthia received her B.A. in elementary education from the University of Northern Colorado. She has 19 years' experience in managing grants, projects, employees, budget and finances, as well as public outreach/educational efforts for several special districts within Archuleta County.

1.2 Examples of Work

a) San Juan Headwaters Forest Health Partnership (MSI)

The San Juan Headwaters Forest Health Partnership (SJHFHP) was established to provide a venue for stakeholders to share perspectives and develop science-based collaborative priorities for management and monitoring of mixed-conifer forests on the Pagosa Ranger District (PRD) of the San Juan National Forest in Southwestern Colorado. The groups focus has broadened to include other vegetation types and forest health issues. MSI has been the coordinator for the San Juan Headwaters Forest Health Partnership for the past seven years, during which time the partnership has leveraged over a million dollars in funding and accomplished over 5,000 acres of treatment around priority water resources for communities in Archuleta County.

b) Connecting for Conservation (MSI)

Since 2014, Connecting for Conservation (C4C) has provided networking opportunities and workshops to encourage partnerships and coordinate collection action across a range of non-profit, agencies, owners and disciplines in the Four Corners. C4C was an idea born from the realization that many organizations in the Four Corners share conservation goals and interests but lack the resources to bring these goals to fruition as singular, coordinated efforts. Partners come together to identify issues and develop relationships that can address those issues. MSI (applicant) has coordinated C4C efforts since 2012.

c) Animas River Community Forum (MSI)

The Animas River Community Forum (ARCF) is a diverse community group that formed in response to the Gold King Mine (GKM) spill incident in 2015. MSI has been the fiscal sponsor and coordinator of ARCF since 2016. Since its inception, ARCF's purpose has been to promote communication, coordination, and collaborative action; foster knowledge, education, and robust communication; support resiliency in our communities; and enhance planning to improve public safety and health, all while respecting the institutional authorities and decisions of governmental and community organizations. ARCF published the educational booklet and Story Map of "Our Animas" and developed the 416 Fire Recovery and Response Action Plan address community questions and develop watershed resilience.

d) San Miguel Stream Management Plan (TU)

Trout Unlimited and the San Miguel Watershed Coalition partnered up to develop this stakeholder-driven effort to identify environmental and recreational water supply needs in the San Miguel basin and explore opportunities to cooperatively address identified gaps.

e) USFWS Region 6 Representative on San Juan River Recovery Implementation Committee – Southwestern Colorado, Southeastern Utah, Northwest New Mexico (WW)

Western Wildscapes has served as USFWS representative on interregional committee comprised of Federal and State agencies, Tribal Nations, and environmental organizations directing management and implementation of endangered fish recovery program and water management.

f) Cutthroat Trout Management Efforts (WW)

Served as USFWS representative in working with numerous stakeholder groups and Federal and State agency representatives in water, land use, and species management issues involving federally listed Lahontan and greenback cutthroat trout, and sensitive Colorado River and Rio Grande cutthroat trout.

g) Pagosa Skyrocket Working Group (WW)

Facilitating and organizing local stakeholder group comprised of Federal, State, Archuleta County representatives, and private landowners, towards the long-term conservation and eventual delisting of the federally endangered Pagosa skyrocket, a local endemic plant.

h) Gunnison Basin Strategic Committee—Gunnison and Saguache Counties, Colorado (WW)

Served as the USFWS's representative on a 13-member committee comprised of Federal, state, and county representatives; stakeholder and environmental group representatives appointed by Gunnison County Commissioners to deal with issues related to Gunnison Sage-grouse management. Proclamation of Al Pfister Day in Gunnison County, CO. on June 15, 2011 in recognition of efforts with Gunnison Basin Sage-grouse Strategic Committee.

i) Sage-grouse Local Working Groups—Western Colorado (WW)

Served as the USFWS's representative on 11 working stakeholder groups dealing with management issues for activities conducted within greater and Gunnison sage-grouse habitats. USFWS signatory for 5 greater sage-grouse local working group plans.

j) Eagle River Watershed Plan—Lotic Hydrological

Provided technical editing services and support during the 2013 update of the Eagle River Watershed Plan.

k) Middle Colorado River Integrated Watershed Management Plan—Lotic Hydrological

Headed a team of consultants to develop a plan to balance consumptive and non-consumptive water use with healthy geomorphic and ecological functions in the Middle Colorado riparian corridor. Conducted rapid and detailed assessments of hydrology, geomorphology, riparian condition, and aquatic biota. Worked with clients and stakeholders to characterize the demand for and delivery of important ecosystem goods and services from local streams and rivers and evaluated impacts to these services due to changes in climate or water demands.

l) Crystal River Stream Management Plan—Lotic Hydrological

Produced a guidance document for implementing high-priority projects and executing feasible water resource management alternatives in the Crystal River watershed. This work responded to a need articulated by stakeholders in the Crystal River watershed by conducting six interdisciplinary evaluations of the physical, biological, and human facets of the Crystal River watershed and utilizing a structured decision-making framework for guiding decisions confronted by several competing objectives. Results from this effort identified, prioritized, and provided initial project scoping for watershed actions to improve ecological conditions and functions in the Crystal River.