

Grand Conservation District

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Moab, Utah

WaterSMART

Cooperative Watershed Management

Program Phase 1

Funding Opportunity R23AS00362

Castleland Resource Conservation & Development, Inc.

on behalf of

Grand Conservation Districts

Moab Area Watershed Partnership's

Watershed Management Plan Revision

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Technical Proposal and Evaluation Criteria

Executive Summary

The Moab Area Watershed Partnership (MAWP), with support from the State of Utah's Grand Conservation District (GCD) and Castleland Resource Conservation & Development, Inc, intends to revise their existing watershed management plan. The MAWP's watersheds are Mill, Pack and Castle Creek in Grand County, Utah. There are over 20 partners associated with the MAWP and they include all local, State and Federal agencies that are responsible for land and other management activities in the MAWP watersheds, as well as environmental and restoration groups. The MAWP's goal of holistic, properly functioning watersheds is hampered by inadequate funding for site specific project planning efforts that meet local Floodplain Administrator FEMA requirements. Recent listings of E. coli, and in progress TMDL for E. coli, a significant fire in our watershed headwaters and significant extreme flood events have increased our need for project plans that meet FEMA floodplain management guidelines. Those plans will impact all of our partners and their creation will take a collaborative effort. The MAWP has already identified specific stream segments of concern and those segments that will be targeted with this planning effort and they are on non-federal property. The MAWP intends to lead project planning and project design efforts and incorporate them into the revision of the watershed management by September of 2027. The planning efforts are intended to mitigate E. coli contamination through opportunities identified in the TMDL, complete pre-project surveying, planning and project design work to improve habitat and biological integrity and protect infrastructure by improving proper functioning condition in our watersheds.

Project Location

The MAWP was formed to improve water quality and quantity in the Mill Creek and Castle Creek watersheds shown in Figure 1. Both watersheds are located in Grand County, Utah. The Mill Creek watershed includes Pack Creek, and both creeks originate high in the La Sal Mountains and flow through the City of Moab. The Castle Creek watershed also originates high in the La Sal Mountains and flows through the community of Castleton and the Town of Castle Valley. Both watersheds discharge to the Colorado River. Both watersheds are in the 1403005, Upper Colorado River, Kane Spring USGS Hydrologic unit.

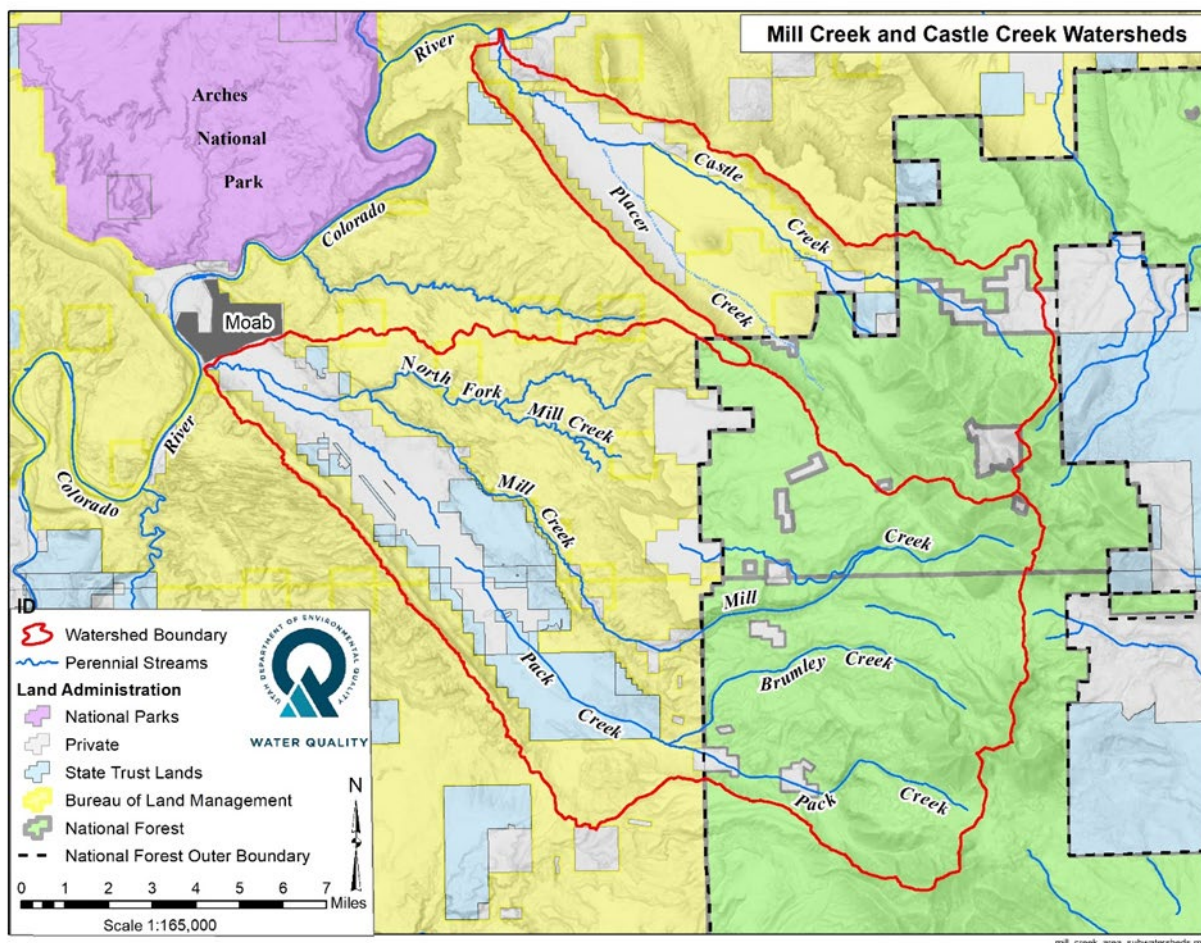


Figure 1: Hydrobasins in the Moab Area Watershed Partnership's Watershed Management Plan

Sub-watersheds or more specifically, stream segments, have been identified through the MAWP's monitoring efforts as having the water quality leading to their impaired status. They are identified as segments of concern in the MAWP Watershed Management Plan, Version 2.2 and are the focus for the project discussed for this grant. The focus segments for this project are shown in Figure 2.

Stream Segments of Concern in MAWP Watersheds

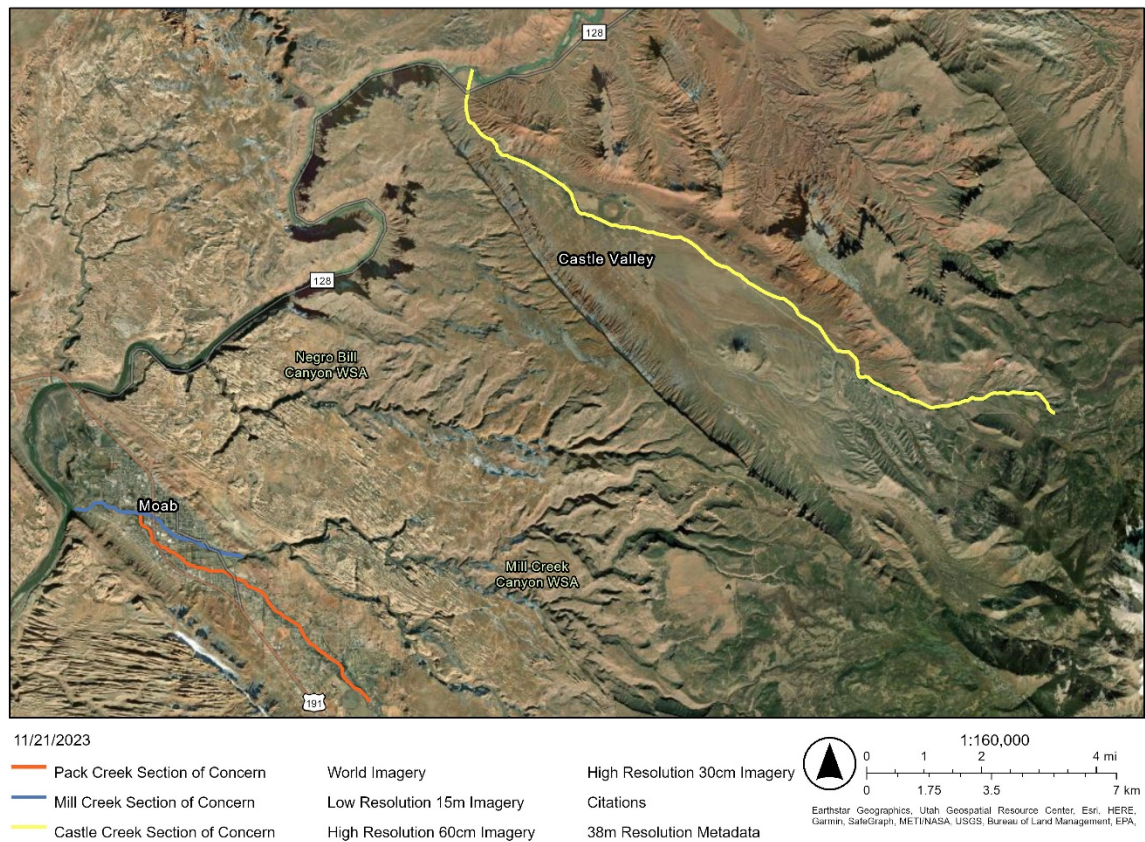


Figure 2: Stream Sections where MAWP monitoring indicates these stream segments are responsible for their impaired listing. This project will focus on these areas.

Technical Project Description

Applicant Category

The Castleland Recourse Conservation & Development, Inc on behalf of Grand Conservation District (GCD), is applying as a partner of the existing Moab Area Watershed Partnership (MAWP). The MAWP was originally organized by representatives and employees of Utah Division of Water Quality (DWQ), including a local Watershed Coordinator position. A primary goal of the MAWP is implementing Total Maximum Daily Load projects that restore water quality to impaired waterbodies. Since its inception in 2011, the MAWP has held almost 100 meetings covering a wide variety of issues and supporting numerous and varied projects. Not all projects have specifically targeted water quality because water quantity has become an issue for the MAWP. Recent studies have shown that our EPA Sole Source Aquifer is near the extent of Safe Yield, making projects that also focus on water retention are of importance.

The MAWP prepared its original Watershed Management Plan in 2014. The current plan, *A Comprehensive Water Management Plan for the Moab Area Version 2.2* was originally completed in 2021 and slightly revised in 2022. That plan is over 200 pages long and most notably recognizes specific areas within the MAWP's watersheds with water quality issues to address. The current version of the plan is available at the MAWP's website: [Moabwatersheds.org](https://moabwatersheds.org). The MAWP is preparing to develop Version III of the plan on our six year revision cycle by fall of 2027. A list of completed and projects in progress, Sampling Analysis Plans, Project Implementation plans, Agendas, Minutes and other documents are also listed and described on that website.

Eligibility of Applicant

The Castleland Recourse Conservation & Development, Inc will be applying on behalf of the Grand Conservation District as the eligible applicant and will be the acting fiscal agent. The Grand Conservation District is a legal subdivision of the State of Utah led by publicly elected supervisors. The GCD is responsible for local soil and water conservation programs in their area. The Grand Conservation District serves in Grand County, Utah.

Historically, the MAWP has relied heavily on UDWQ for financial support of the Watershed Coordinator position and other incidentals associated with the position and facilitating the MAWP and for project specific Non-Point Source grants funded with State of Utah NPS and Federal EPA 319 funding.

A significant obstacle to implementing projects is not finding project implementation funding, but rather it is lack of funds for appropriate project planning. The MAWP intends to use this grant's funding for cooperative project planning for specific projects to be incorporated into Version III of our Watershed Management Plan. Not only will having these site specific plans assist the group in implementing effective projects to improve watershed function and water quality, but it will improve interagency coordination opportunities.

Project Description and Goals

The MAWP mission is: *"The Moab Area Watershed Partnership is a collaboration of diverse stakeholders who share knowledge and develop, and facilitate implementation of, a holistic watershed plan that conserves and enhances water quality and quantity in the Mill Creek (including Pack Creek) and Castle Creek watersheds."* To do this, funds will provide **partial** support of the Watershed Coordinator and MAWP incidentals as a relatively minor component of the budget. The major goal and focus of this funding request is to facilitate planning to support watershed water quality improvements for E. coli contamination as well as habitat improvements that are resilient to flooding and support a properly functioning watershed.

The first goal for this funding is to better address water quality concerns along the local creeks. Mill, Pack and Castle Creeks were listed for E. coli impairment in the last five years. With the encouragement of the MAWP, UDWQ is writing a TMDL for these watersheds that will be completed in March of 2024. Project planning for an E. coli TMDL is the water quality aspect the MAWP would like to focus on for this grant. The MAWP realizes it will take significant planning and cooperation to instigate the TMDL findings. To reduce this non-point source contamination

we will need to determine what best management practices will be needed and where to put them with the cooperation of MAWP partners and property owners. That planning will also include cost estimates and result in one or more “shovel ready” projects that the MAWP can and will find funding for.

The Mill Creek watershed, which includes Pack Creek, has had numerous insults to its habitat and biological integrity over the last three years. Prior to that there were already several sections of the creeks which were identified as being entrenched, limited in habitat and limited in biological integrity. In 2021 a fire burned in the headwaters of Mill Creek and heavily burned the headwaters of Pack Creek. The post fire monsoon season provided and still is providing numerous high and fast water flows in Pack Creek, many reaching its intersection with Mill Creek. These flash floods have affected infrastructure and degraded several stream segments. The MAWP and others have supported and instigated repair of the infrastructure and infrastructure to “slow down the water” with partial help from NRCS and FEMA resources. However, none of those resources are available for planning improvements to degraded stream sections.

2022’s very active monsoon season resulted in several floods in Mill Creek. On August 20th flood waters reached the FEMA 100 year designated flood plain, and in some locations left the channel and exceeded it. The USGS estimated the almost 5,000 CFS flow as about a 1 in 50 year event. That event and other events that fall damaged public and private infrastructure as well as severely impacting the habitat and biological integrity of the stream itself. See Figure 3. The City of Moab and Grand County should be commended at this time as almost all the infrastructure has been repaired and those institutions are planning on upgrading undersized infrastructure to accommodate future events. However, the stream banks and riparian areas that were significantly damaged by these events have not been tended to and at this time there aren’t any funds targeting those areas. Requirements for No Rise certificates to meet FEMA Flood Plain Administration guidelines has hampered progress in these areas, and is one impetus for this grant proposal.



Figure 3: Mill and Pack Creek riparian areas have been significantly impacted by monsoonal flooding events after a fire in their upper watershed.

Relatively recently ordinances have been passed to protect infrastructure from these high water flooding events by limiting development in the FEMA designated 100 year flood plain. Those ordinances specifically require that almost any effort to manipulate riparian area characteristics require a no-rise certificate from a certified engineer. This requirement is in addition to cultural and environmental permits that the MAWP has had a history of obtaining. The two miles of Mill Creek and four miles of Pack Creek where most of the degradation has occurred have not been surveyed and therefore before any project can proceed project areas will require surveying to assist in preparing project specific no-rise certificates.

The second goal of this funding application is to cooperatively plan projects to improve habit and biological integrity by improving proper functioning condition in streams through bank lay backs, revegetation in the channel with grasses and willows that allow flood flows through, and other channel stabilization efforts. This work will not only improve water quality and biological integrity, it will also improve groundwater quantity by slowing down higher water flows, allowing more time for groundwater infiltration. These streams cross over 350 private properties, and lie within the City and the County, meaning collaborative efforts are needed to effectively improve conditions. To meet both water quality and stream corridor function goals work over the coming 3 years will:

- 1) Provide for planning of projects recommended by the UDWQ E. Coli TMDL
- 2) Provide for the identification of stream sections currently in need of restoration
- 3) Survey the affected areas and use that data to complete no-rise certification
- 4) Pre-project planning with MAWP partners and restoration providers
- 5) Prepare on the ground plans for implementation of restoration activities to increase or restore proper functioning conditions on Mill and Pack Creek

Evaluation Criteria

Evaluation Criterion A – Watershed Group Diversity and Geographic Scope

The MAWP was formed in 2011 by UDWQ because two watersheds in the Moab area were not attaining their beneficial use. Those two watersheds, Mill Creek and Castle Creek are shown in Figures 4 and 5 and those figures include political and land agency boundaries. The MAWP's watersheds encompass the entirety of both the Mill Creek (Including Pack Creek) and Castle Creek watersheds, from their headwaters in the La Sal Mountains to their confluence with the Colorado River. All of the political institutions and land management agencies inside those boundaries are represented by partners in the MAWP, sometimes with more than one representative, as the political institutions have agencies within themselves. Furthermore, other agencies that do not own land but are responsible for managing aspects of the landscape are also partners in the MAWP.

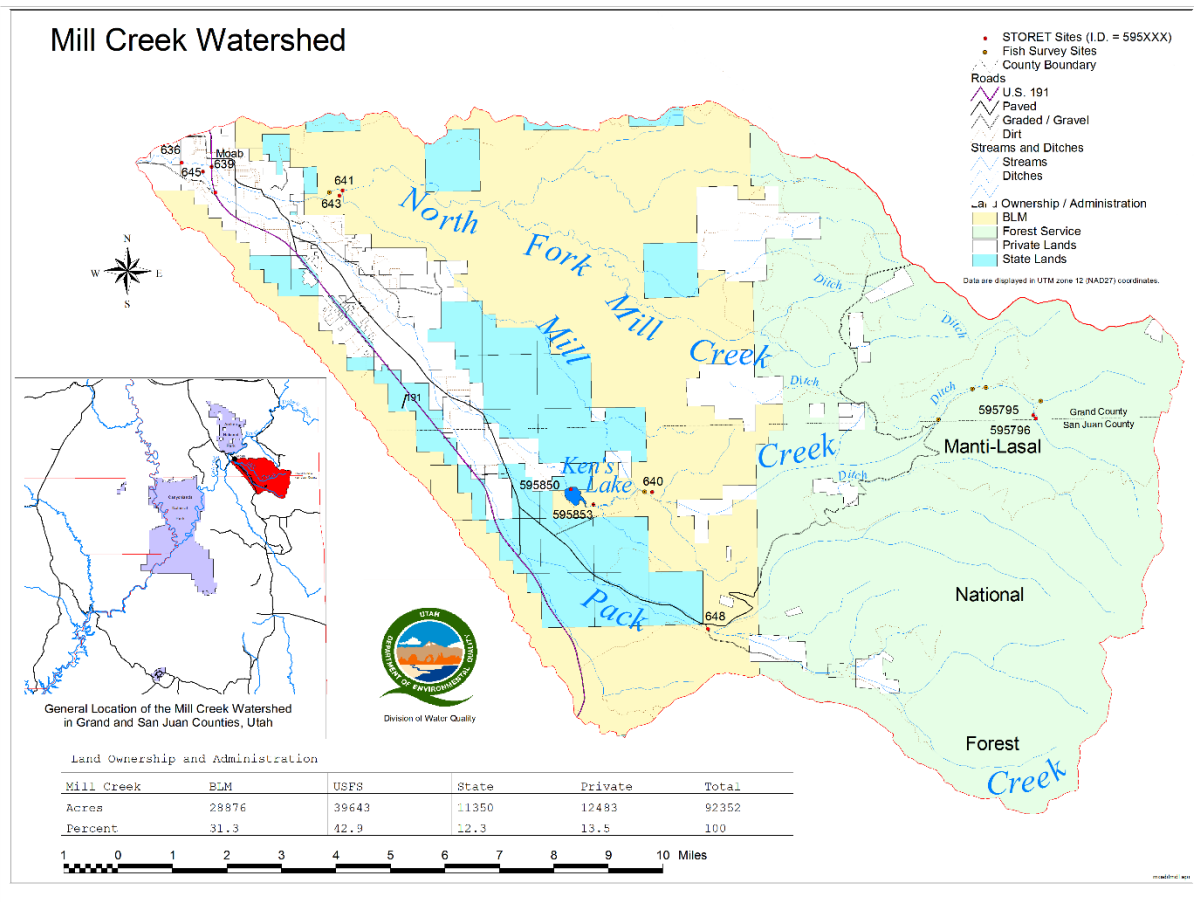


Figure 4: Land ownership and political boundaries in the Mill Creek Watershed.

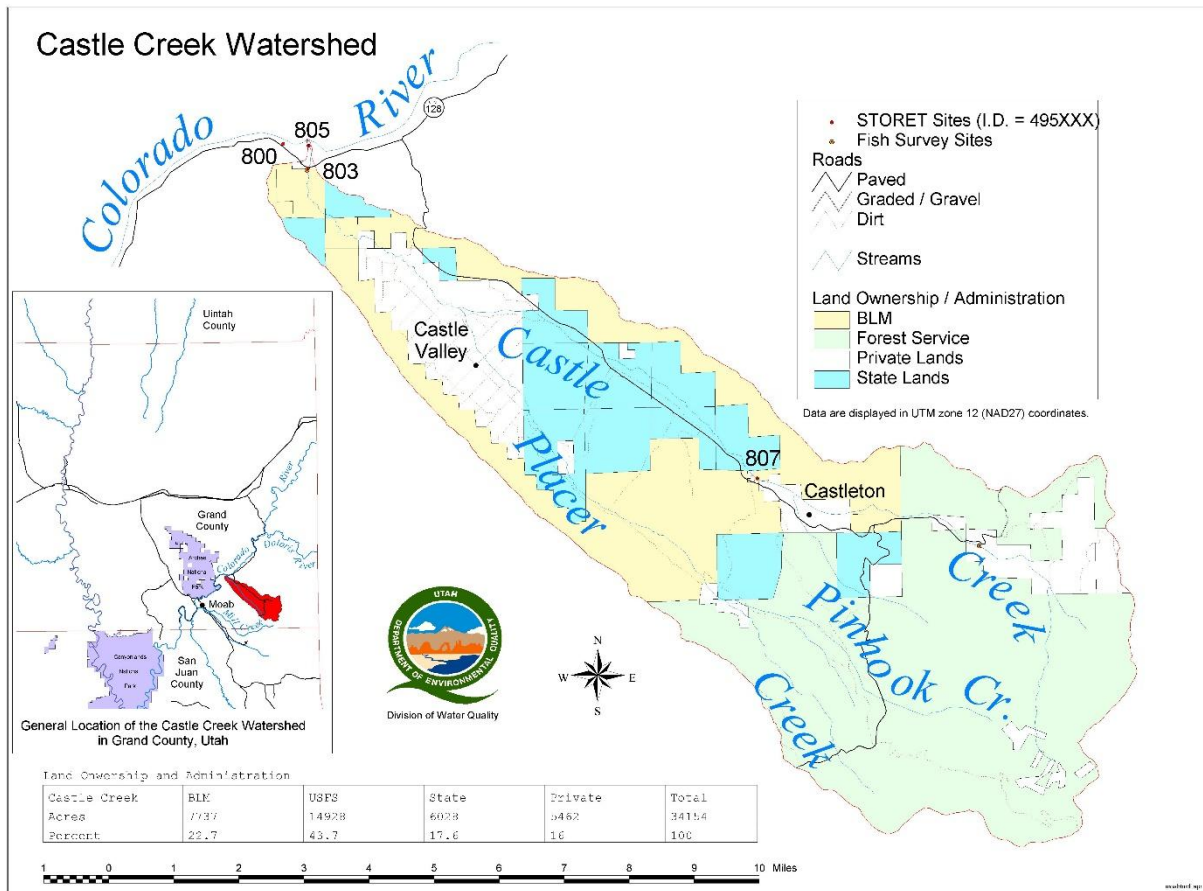


Figure 5: Land ownership and political boundaries in the Castle Creek Watershed.

The MAWP has supported partners in the entire watersheds by a variety of means. They have supported land management planning activities, agency and institutional projects and any projects that received non-point source funding from UDWQ.

The MAWP has had difficulty developing and implementing projects in some stream sections of concern due to lack of funding for collaborative and comprehensive planning. The MAWP has chosen to ask for this grant's assistance in the cooperative watershed planning for the stream sections shown in Figure 6 because the MAWP's robust Sampling Analysis Plan has shown these stream sections, specifically, to be impairment.

Stream Segments of Concern in MAWP Watersheds

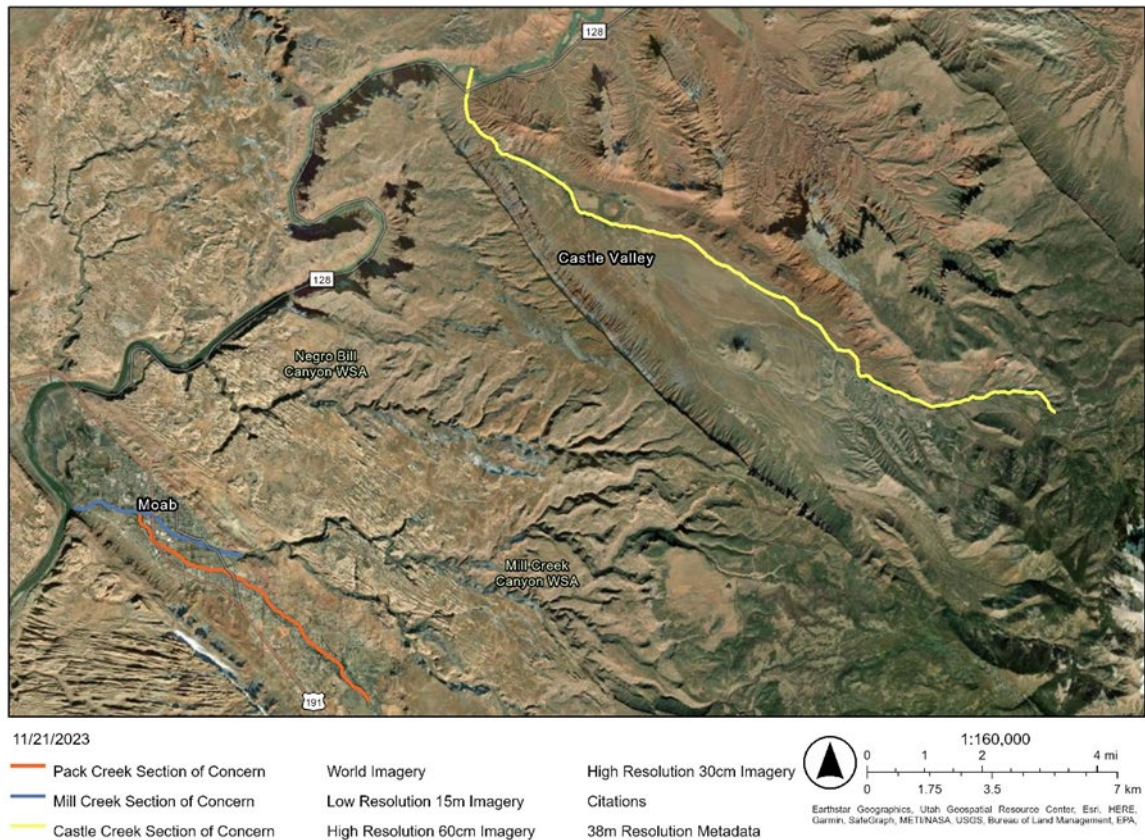


Figure 6: Stream sections of concern that are targeted with this grant application.

PARTNERS

The MAWP has been in existence for over 10 years. Participation by concerned stakeholders has varied as conditions have changed in the creeks, with attendance at meetings being quite consistent since 2017. The agenda's for MAWP meetings are published on the internet and through a large email list of over 100 people. UDWQ and the MAWP have supported and encouraged numerous stakeholders to attend and meeting participation continues to grow annually. The stakeholders are a diverse group that generally have a significant interest and/or land management responsibility in our watersheds. Letters of support from some of the partners are included at the end of this proposal. The current stakeholders and their responsibilities to the watershed are listed in Table 1.

Table 1. MAWP partners and their responsibilities, charter and/or mission statement	
Partner	Responsibilities, Charter and/or Mission Statement
Utah Division of Water Quality	Jurisdictional responsibility to enforce the Clean Water Act
Grand County	Stormwater, Recreation, Zoning, and Water Quantity and Quality

San Juan County	Stormwater, Recreation, Zoning, and Water Quantity and Quality
City of Moab	Domestic Water Supplier, Stormwater, Recreation, Zoning, Water Quantity and Quality, Waste Water
Grand Water and Sewer Service Agency	Domestic and Agricultural Water Supplier, Water Quantity and Quality, Waste Water
San Juan Spanish Valley Special Services District	Domestic Water Supplier, Water Quantity and Quality, Waste Water
Bureau of Land Management, Moab Field Office	Federal Lands Policy and Management Act, 2008 BLM Moab Field Office Resource Management Plan
United States Forest Service, Manti-La Sal National Forest, Moab Ranger District	Manti La Sal National Forest Land and Resource Management Plan, Mission Statement: "The mission of the Forest Service is to sustain the health, diversity, and productivity of the nation's forests and grasslands to meet the needs of present and future generations"
Grand Conservation District	Grand County Resource Needs Assessment
United States Geological Survey	Monitoring and Studies
Utah Geological Survey	Monitoring and Studies
Utah Division of Water Rights	Utah Code Title 73
Utah Division of Wildlife Resources	Utah Code Title 79
Rim to Rim Restoration	Non-Profit Restoration Organization; Mission Statement: To foster motivation for ecological responsibility in SE Utah and reestablish native vegetation for the benefit of wildlife, people and sustainable watersheds.
Canyonlands Watershed Council	Non-Profit Environmental Organization, Mission Statement; The Canyonlands Watershed Council promotes and protects the health of southeastern Utah water and watersheds
South Eastern Utah Health Department	Utah Code Title 26A
National Resource Conservation Service	Federal Agency, Mission Statement: Helping people help the land
Utah Division of Forestry Fire and State Lands	Utah Code Title 65A
Utah Department of Agriculture	Utah Code Title 3 and 4
The Nature Conservancy	Non-Profit Environmental Organization, Mission Statement "To conserve the lands and waters on which all life depends."

Utah State University Extension	Provide research-based programs and resources with the goal of improving the lives of individuals, families and communities throughout Utah.
The Community of Pack Creek	Representation in water and land issues affective their community.

The MAWP agreed to a set of by-laws in 2013 to provide guidance for an executive committee, explains the responsibilities of partners, and when and who are authorized to make press releases. The MAWP Executive Committee consists of a Chair, Vice-Chair and the Watershed Coordinator. The MAWP makes decisions on a consensus-based criteria. The term we use is “does anyone have an objection” to a certain action. If there are no objections, the action proceeds. If there are, either do not perform the action, discuss the action until we are in agreement, or modify the action until there is agreement. The Executive Committee has little authority to act without approval from the MAWP. The MAWP does not have a formal partnership agreement and anyone with interest in the matter at hand and shows up to the meeting where it is discussed is considered an equal partner.

The MAWP had no fiduciary component. All partners participate at their own expense or at the expense of their agency.

The MAWP has encouraged new entity and public participation through their website and Facebook page. Occasional press releases also encourage public participation.

Evaluation Criterion B – Addressing Critical Watershed Needs Sub-Criterion B1 Critical Watershed Needs or Issues

This project focuses entirely on critical watershed needs. The watersheds were historically listed for non-attainment for temperature and total dissolved solids and although those characteristics are naturally occurring, the MAWP has supported projects to address those issues as much as is possible. Historically, the MAWP and its stakeholders have had excellent success implementing projects that have been through a planning process. However, there are several critical needs that we do not have project plans for and the MAWP partners have been unable to produce plans due to limited funding.

Recently a listing of non-attainment for beneficial use due to E. coli has occurred on Mill, Pack and Castle Creek. MAWP monitoring plans and results indicate the contamination is not extensive in most of our watersheds. It is restricted to the areas shown in Figure 4. With encouragement from the MAWP, UDWQ has responded to that listing and those monitoring results and is in the process of developing a TMDL for E. coli. The MAWP realizes we will need to plan for E. coli mitigation practices recommended by the TMDL. MAWP partners can find funding for these projects IF we have a project plan. The reason why we chose this particular funding opportunity is to ensure the MAWP can help guide cooperative effort amongst numerous partners within the MAWP.

In addition to water quality changes, a significant fire and extreme weather events have highlighted areas where work is needed along our creeks. The fire heavily burned a large portion of Pack Creek headwaters and to a lesser extent Mill Creek headwaters. The resultant flooding in Pack Creek due to monsoon weather events damaged infrastructure from the community of Pack Creek to the confluence with Mill Creek. Repair of the infrastructure that has been ongoing with NRCS and local funding has repaired or replaced most of the damaged infrastructure. However, Pack Creek itself lost a good portion of habitat, biological integrity and weaknesses in its proper functioning condition were exposed.

Proper functioning condition weaknesses were also exposed when several extreme weather events took place just over a year ago. The Mill and Pack Creek watersheds were clobbered with two significant flooding events and numerous smaller events last August. One event was estimated as a 1 in 47 year event by the USGS and reached the extent of the FEMA 100 year flood plain (and in some areas into the 500 year mapped areas). That event removed a large amount of vegetation in some areas, moved debris throughout the system, changing the channel morphology, and in some reaches the channel moved significantly laterally or downward.

Some MAWP partners who have planned and implemented previous restoration work on these corridors noted that previous restoration efforts generally “weathered the storms”, remained in place and provided as good as could be expected proper functioning condition qualities. However, there were numerous sections where restoration work has not taken place that were heavily impacted and need restoration. In order to perform the needed work funding is needed to assist with project prioritization and site specific plans to restore proper functioning condition to Mill and Pack Creek.

Sub-Criterion B2: Project Benefits

This project contains elements of all three tasks listed in the NOFO. They are listed for each task below.

Task A: Watershed Group Development

The MAWP is a well-established partnership. This application for funding is intended to expand the development of the partnership to include more collaborative planning and project implementation. The Grand and San Juan County Watershed Coordinator facilitates the MAWP and is supported by UDWQ through non-point source funding. Several partners, The City of Moab, Grand County, the BLM and the Canyonlands Watershed Council have also supported the Watershed Coordinator position with small funding amounts to UDWQ. Other active partners provide support through participation on the Executive Committee, preparing project proposals or assisting with project implementation.

In addition to being a venue to discuss and guide local and regional policy, historically, the MAWP has reviewed, offered constructive criticism and encouraged projects that improve

water quality and water quantity that are brought to the MAWP by project sponsors. The MAWP has identified a lack of planning funding as an obstacle to project implementation. In the past partners have discussed possible projects that unfortunately have not been implemented; the MAWP has become acutely aware that lack of funding for planning has inhibited efforts to achieve watershed improvement goals.

This grant application, if funded, will expand MAWP's capacity by creating site specific implementation plans and improving the Partnership's ability to achieve its goals and objectives. It should be noted that in the budget section a relatively small portion of the requested funding is for Watershed Coordinators position and MAWP incidentals. Those funds would allow the position to accept greater responsibility and support the incidentals associated with MAWP activities. The majority of the funding is for site specific project planning, as outlined below.

Task B: Watershed Restoration Planning

The MAWP has begun to revise its current watershed management plan which needs to be completed before September 2027. The majority of watershed planning efforts, monitoring, meetings, interviews, determining watershed characteristics, identifying areas of concern and elucidating specific concerns and watershed characteristics that are in need of restoration or improvement are currently being performed by the MAWP and its watershed coordinator.

The MAWP has determined that Section 5 of the plan outlines where and what kind of actions/projects will help improve the watershed but needs specific project plans to ensure work can proceed in a coordinated manner. This funding will directly support the MAWP to direct and contract for pre-planning and on the ground project plans. This enables the MAWP to take a larger role in restoration planning efforts and revise the current plan with essential projects.

Task C: Watershed Management Project Design

This task is the primary focus of this grant application. The MAWP with UDWQ's support intends to develop restoration project plans to mitigate two specific watershed issues.

The first is mitigating the E. coli contamination in Mill, Pack and Castle Creek. Areas where E. coli contamination exists have been determined and all monitoring data for E. coli as well as a season of Microbial Source Tracking sampling has been performed. The data is currently being analyzed by UDWQ, and a TMDL will be developed in the next few months. That TMDL will also require approval from the EPA at some time in the future. The MAWP is requesting this funding to implement that TMDL, perform project pre-planning and procure project plans.

The second watershed issue this grant will fund is restoring proper functioning condition in Mill and Pack Creek. Some of the funds requested are necessary for pre-planning activities like a comprehensive review of the identified sections of those creeks and determining where

activities should occur and what activities or actions could improve their proper functioning condition. The majority of the funding would be used to procure specific on the ground plans with engineering designs, specifications and cost estimates.

Evaluation Criteria C – Readiness to Proceed

The MAWP has numerous components of their Watershed Management Plans that are updated every six years. The six year cycle matches UDWQ’s rotating basin monitoring and targeted funding cycle. Although request for proposals and State of Utah NPS funding is available every year for the entire State, UDWQ focuses EPA 319 funding towards major basins of the State on a revolving cycle. The EPA funding requires an approved watershed management plan and a strategic project implementation plan that the MAWP currently has and will be updated with activities associated with this grant.

This project aligns with the timeline for the MAWP to complete its watershed management plan revision with definitive project plans that the MAWP collaborators can find funds to implement. The timeline below, in Table 2, has several components that the MAWP is not requesting funding to complete. The portions of this timeline that the MAWP is requesting full or partial funding for are in italics. Specific costs and cost shares for the partially funded tasks will be detailed in the budget section of this application.

There are not any new policies or administrative actions required to revise the watershed management plan or design projects identified in this grant application.

Table 2: MAWP Watershed Management Plan Version III Project Timeline (Tasks listed in italics are tasks the MAWP is requesting full or partial funding for)					
Major Tasks	Objectives	Milestones	Start Date	End Date	Responsible Party
<i>Task 1: Facilitate bi-monthly meetings & manage partnership work</i>	<i>Provide progress reports and receive input from partners</i>	<i>Annual progress reports to several entities</i>	<i>On-going</i>	<i>On-going</i>	<i>Watershed Coordinator</i>
Task 2: Write and Submit WaterSMART Grant	Obtain funding for Cooperative Planning	MAWP approval of Grant and GDC submittal	11/1/2023	12/5/2023	Watershed Coordinator and GCD

Task 3: UDWQ TMDL for E. coli	Understanding sources of E. Coli	Determine mitigation needs	10/1/2023	3/24/2024	UDWQ Staff, Sandy Wingert
Task 4: UDWQ Intensive Watershed Monitoring MAWP Sampling Analysis Plan	Determine beneficial use attainment	Incorporation of data in UDWQ AWQMS database	10/1/2024	9/30/2025	UDWQ Monitoring Section and Watershed Coordinator
<i>Task 5: Incorporate new monitoring data into Watershed Plan</i>	<i>Summarize Water Quality in Watersheds</i>	<i>Revise Section 3 of Watershed Plan</i>	<i>10/1/2024</i>	<i>9/30/2026</i>	<i>Watershed Coordinator</i>
<i>Task 6: Review Watershed Concerns and Resource Issues</i>	<i>Identify and Understand Critical Watershed Issues</i>	<i>Revise Section 4 of Watershed Plan</i>	<i>10/1/2024</i>	<i>9/30/2026</i>	<i>MAWP partners and Rim to Rim. Watershed Coordinator will coordinate activities</i>
<i>Task 7: Develop Pre- planning requirements for plans to mitigating E. Coli</i>	<i>Mitigate E. coli contamination</i>	<i>A list of requirements for an E. coli mitigation plan</i>	<i>10/1/2024</i>	<i>3/30/2025</i>	<i>The MAWP will work with consultants on developing plans, Rim to Rim and the Watershed Coordinator will coordinate the activities</i>

<i>Task 8: Develop Plans to mitigating E. Coli</i>	<i>Mitigate E. coli contamination</i>	<i>"Shovel Ready" Project Plans</i>	<i>3/30/2025</i>	<i>10/1/2025</i>	<i>The MAWP will work with consultants on developing plans, Rim to Rim and the Watershed Coordinator will coordinate the activities</i>
<i>Task 9: Develop Pre- planning requirements for plans to survey stream corridors</i>	<i>Obtain data that will be necessary for no rise certificate(s)</i>	<i>A list of requirements for Topological Data set to be used by contractors for no rise certificate(s)</i>	<i>3/1/2025</i>	<i>6/30/2025</i>	<i>Rim to Rim and the Watershed Coordinator will coordinate activities with contractors</i>
<i>Task 10: Survey river corridors</i>	<i>Obtain data that will be necessary for no rise certificates</i>	<i>Topological data set to be used by Contractors for no rise certificate(s)</i>	<i>6/30/2025</i>	<i>1/1/2026</i>	<i>Rim to Rim and the Watershed Coordinator will coordinate activities with contractor</i>
<i>Task 11: Develop pre- planning requirements for proper functioning stream restoration</i>	<i>Increase resilience of streams to extreme events and improve habitat and biological integrity</i>	<i>A list of Requirements for "shovel ready" project plans</i>	<i>10/1/2026</i>	<i>3/30/2027</i>	<i>The MAWP will work with consultants on developing plans. Rim to Rim and the Watershed Coordinator will coordinate activities</i>

<i>Task 12: Develop plans for increasing proper functioning condition in watershed areas of concern</i>	<i>Increase resilience of streams to extreme events and improve habitat and biological integrity</i>	<i>"Shovel Ready" Project Plans</i>	<i>3/1/2026</i>	<i>9/30/2027</i>	<i>The MAWP will work with consultants on developing plans. Rim to Rim and the Watershed Coordinator will coordinate activities</i>
<i>Task 13: Apply for grants in 2025 for fiscal year 2026 as per UDWQ's revolving basin funding cycle when SE Utah is the target basin</i>	<i>Obtain funding for implementation of planned projects</i>	<i>Implement Planned projects</i>	<i>2/1/2027</i>	<i>10/1/2027</i>	<i>The MAWP and Watershed Coordinator with partners sponsoring projects</i>
<i>Task 14: Review and Update draft version of "Watershed Action Plan"</i>	<i>Clearly planned projects to implement</i>	<i>Incorporate findings from Section 4 and "shovel ready" plans into Section 5</i>	<i>10/1/2024</i>	<i>9/30/2027</i>	<i>Watershed Coordinator</i>
<i>Task 15: Review and Update Final Version of Watershed Management Plan</i>	<i>Working and living version of guidance document for watershed improvements in MAWP watersheds</i>	<i>Published Watershed Management Plan</i>	<i>10/1/2024</i>	<i>9/30/2027</i>	<i>Watershed Coordinator will submit final version to the MAWP for approval.</i>

Evaluation Criterion D – Department of the Interior and Bureau of Reclamation Priorities
Sub-Criterion D1 Climate Change

The MAWP is well aware that climate change will affect the supply of water in our arid watersheds. The MAWP engaged Western Water Resources (A subdivision of NOAA) to determine the extent of climate change in our area. Their analysis determined our area will have

a 17% available water deficit due to increased use of water by vegetation by 2050. The MAWP is working to strengthen our water supply sustainability working with water providers to better monitor our water supply and find opportunities to use our water more wisely.

Analysis also suggests will also see an increase in the frequency and extremity of extreme monsoonal events, similar to those of the past few years. Extreme flow events severely impacted our riparian areas, and significant infrastructure has suffered for it. One of the objectives of this project, the proper functioning stream planning, will address this aspect of climate change by developing specific project plans that meet FEMA Floodplain Administrator requirements and increase resiliency of riparian areas: implementing these projects will also protect infrastructure by enhancing infiltration, reducing stormwater flows into the creeks and protecting natural floodplain function

Sub-Criterion D2 Disadvantaged or Underserved Communities

According to the United States Census Service, as of July 2022 Grand County is about 80 % white, not Hispanic or Latino. The other 20% is mostly Hispanic of Latino, 11%, and Native Americans, 5%. Over 11% of people in Grand County are economically in poverty. Grand County qualifies as a disadvantaged or underserved community. The properly functioning stream objective of this project will primarily serve individuals that own property in the riparian areas, however as observed in the recent severe flooding, large events can impact areas outside of the immediate riparian area. Mitigating those impacts will positively affect the entire community, including community members living in poverty.

Sub-Criterion D3 Tribal Benefits

The objectives of these projects do not have any specific tribal benefits because none of the properties affected by the objectives are on tribal properties or properties significant to any tribe.

Project Budget

Budget Proposal

Table 3: Summary of budget items the MAWP is requesting full or partial funding for.			
6. Budget Object Category	Total Cost	Federal Estimated Amount	Non-Federal Estimated Amount
a. Personnel	\$27,000	\$0	\$27,000
b. Fringe Benefits	\$0	\$0	\$0
c. Travel	\$0	\$0	\$0
d. Equipment	\$0	\$0	\$0

e. Supplies	\$2,000	\$2,000	\$0
f. Contractual	\$176,340	\$176,340	\$0
g. Construction	\$0	\$0	\$0
h. Other Direct Costs	\$4,350	\$4,350	\$0
i. Total Direct Costs	\$209,690	\$182,690	\$27,000
j. Indirect Charges	\$650	\$650	\$0
Total Costs	\$210,340	\$183,340	\$27,000
Cost Share Percentage		87%	13%

Budget Narrative

Salary and Fringe

It is projected 20% of the Watershed Coordinators time will be spent on tasks listed in Table 3 over three years. The watershed coordinator is partially responsible for every task with the exception of Task 3 and 4. The watershed coordinator position is part-time at 20 hours per week, therefore the percentage of time appears larger than might be expected. If the Watershed Coordinator was full time, the percentage would only be 10 %. The watershed coordinator is a non-benefited position and therefore there aren't any fringe charges in this budget.

The 10% De Minimis indirect cost rate is considered a reasonable and acceptable rate by the MAWP, GCD and UDWQ.

An estimate of MAWP partner's time for the tasks they are involved with (tasks 1, 2, 6, 7, 8, 11, 12, 13) has been valued at \$27 dollars per hour. MAWP has used this rate for in-kind volunteer efforts for over the past several years. We have assumed 20 attendees, 6 times per year for three years in calculating the value of this in-kind match. The MAWP actually considers this estimate of in-kind match significantly under estimated in both hours and rate. It was added as match more to draw attention to the real effort MAWP partners put into this project and the partnership as a whole as opposed to determine the exact value of their efforts.

Tasks in this projects timeline that the MAWP is not requesting financial assistance for

It should be noted that there are several tasks in Table 3 that are not included in the budget. Those tasks will be required to revise the MAWP's watershed management plan but are not considered part of this funding request. The MAWP is not requesting financial assistance for development of the TMDL, the intensive monitoring that UDWQ performs by sampling 13 sites for chemical and physical characteristics on a monthly basis during from 10/1/2024 to 9/30/2025 or writing this grant application. The TMDL for E. coli will be finished prior to the award of this grant and therefore cannot be considered "match" for this project. The writing of the grant is also an excluded cost and cannot be considered match. The intensive monitoring is

and has been quite expensive, however, we are unable to determine what those actual costs are at this time and since we are not requesting financial assistance for that task, we have left it in the Task list, but haven't listed it in budget as match.

It should also be noted that some but not all of the pre-planning activities associated with determining requirements for project plans have already occurred or will occur prior to the award of this grant. Those efforts are not eligible to be include in the budget and therefore aren't included in the budget as a financial request or as match.

Contractual tasks in the timeline that the MAWP is requesting funding for

There are the two categories of contractual and subaward costs in this request for funding. The contractual charges will require entities outside the MAWP. The MAWP is aware of several contractors who could be available to help with pre-planning and actual engineered design work associated with a "shovel ready" project plan. It is anticipated that some mitigation and restoration efforts will require an engineer's signature as well as a certificate of no-rise. The estimates of these costs for this budget was made with best professional judgement.

It will also take a fair amount of preplanning efforts to educate our consultant pool, write requests for proposals, vetting contractors, determining deliverables and other contractual issues. GCD will seek professional consultants for this smaller portion of the planning effort. The estimates of those costs are also made with best professional judgement.

The subaward category is for one of the MAWP partners, UDWQ. The Watershed Coordinator is an employee of UDWQ. This grant will supplement funding for his efforts in participating in the tasks associated with this grant. The amount of time he will spend on these efforts was estimated at an average of 4 hours per week for the next three years. We believe that is probably and underestimate of the time he will spend on all the tasks associated with preparing to revise the Watershed Management Plan and the revision of said plan and UDWQ is prepared to fund any costs in excess of this budgeted allocation.

Other Direct Costs

The MAWP is seeking assistance for the duration of this grant with meeting facility fees, hosting the MAWP's website and one computer for the Watershed Coordinator. The facility fees and website are listed in Task 1 of the announcement as applicable costs. Please note we are not developing a website, we are only paying for maintenance of the hosting of the web site. The MAWP meets bi-monthly (every other month) at a City of Moab Venue that charges a small fee for its use.

The current laptop used by the Watershed Coordinator for numerous purposes, including tasks 1, 2, 5, 6, 7, 9, 10, 11, 13 and 14, is over eight years old at this time and is due for replacement.

Timeline for Distribution of Funding

The MAWP and GCD are well aware that this grant can only distribute \$100,000 per year to the sponsor. This grant is requesting just over \$200,000 over the three years and we expect to spend between \$60,000 and \$80,000 per year. The timeline in Table 3 staggers the three main objectives for this funding to accommodate the distribution requirement and to make it possible for the MAWP and GCD to actually accomplish the tasks. The timeline envision this project will focus on the E. coli remediation first, and while wrapping that up, start on the stream survey effort and after the E. coli is finished and the stream survey is well under way, we will begin on the properly functioning stream objective.

Environmental and Cultural Resource Compliance

The project will occur in offices/meeting settings, and site visits will consist of either hiking through riparian areas or inspections of areas where E. coli mitigation could be considered. The proposed project will not impact the surrounding environment, and will not have any earth-disturbing work or other impacts. There are no species listed as threatened or endangered and there isn't any critical habitat in this projects focus area. The Matheson Wetlands is inside this project area but this planning effort will not impact the wetlands. No Water delivery systems will be impacted or are involved in this planning effort in this project. Archeological sites and registered historical places are not in the project area and as there is no earth disturbing activities planned if they were they would not be impacted. Therefore, this project will not require any environmental or cultural resource compliance activities.

Overlap or Duplication of Effort Statement

These projects are currently associated with other active or anticipated projects. The City of Moab and Grand County are continuing efforts to repair infrastructure, replace undersized infrastructure and install flood mitigation infrastructure and an early flood warning system. However, this project is focused on riparian areas between those efforts and mitigation of E. coli pollution. The City of Moab and Grand County's efforts do not spatially overlap and are not considered part of this project.

Conflict of Interest and other Disclosure Statements

There are currently no known actual or potential conflicts of interest at the time of this submission.

The GCD has never hired and has no plans to hire a lobbyist and will not use any of this funding to support lobbying.

Uniform Audit Reporting Statement

The Grand Conservation District has never and never expects to receive more than \$750,000 in funding and therefore has never been required to submit a Single Audit report.

Required Permits or Approvals, Letters of Support and Official Resolution

No permits or approvals are anticipated to be needed to implement this planning project. This project consists of meetings, on-site evaluations and GIS mapping. There will be no ground disturbance associated with this planning project.

Official Resolution:

The official resolution is on the next page. Letters of support are included in the packet as an Appendix A.

Grand Conservation District

PO Box 895, Moab Utah, 84532 - Phone (435) 260-0361

Chair – Sam Cunningham, Vice Chairman – Rhonda Gotway Clyde, Treasurer – Philip Kopell, Supervisors – Dee Taylor and Kara Dohrenwend

Resolution 11.28.2023

Adopted 11/28/2023

Resolution in Support of the Moab Area Watershed Partnership's Watershed Management Plan Revision

The Grand Conservation District is supportive of the Moab Area Watershed Partnership's Watershed Management Plan Revision. We recognize the need to update and revise the document to include current resource concerns and update the available data within. This Plan Revision will enable the Grand Conservation District and all entities to be eligible for funding that will assist in addressing the resource concerns therein.

This resolution certifies that this application for the Bureau of Reclamation WaterSMART funding opportunity R23AS00362, Cooperative Watershed Management, has the complete support of the Grand Conservation District. The Grand Conservation District will work with Reclamation to meet all established deadlines or cooperative agreements.



Grand Conservation District
Chairman

Appendix A: Official Letter of Support from the MAWP and other letters of support

It should be noted that partners had only three weeks to provide letters and with some agencies that time frame just isn't possible.



Moab Area Watershed Partnership

From: Bob O'Brien,
Moab Area Watershed Partnership, Chair
P. O. Box 46
Moab, UT 84532

Arne Hultquist
Southeastern Utah Watershed Coordinator
P. O. Box 46
Moab, UT 84532

To: To Whom it May Concern

November 15, 2023

Subject: Support of Grand Conservation District WaterSMART grant application for MAWP activities.

The Moab Area Watershed Partnership (MAWP) is a diverse group of stakeholders with a focus on water quality and quantity in the greater Moab area. The Grand Conservation District (GCD) has been a long term supporter and partner of the MAWP. GCD has been important and valuable asset to the partnership for over a decade. To begin with, we would like to thank GCD for its previous efforts in supporting the MAWP and participation as a partner.

The Moab Area Watershed Partnership (MAWP) has previously discussed our ability to obtain funding for planned projects and our inability to obtain funding for planning projects. Although we have always wanted the opportunity to fund planning of projects, recent events and the UDWQ's forthcoming TMDL for E. coli have made that need critical. The MAWP has been a partner in developing the current WaterSMART grant and sees it as an opportunity to further develop it watershed partnership by leading project planning and project design efforts that will be incorporated into the revision of the watershed management plan which is planned for completion by September of 2027.

The MAWP specifically discussed GCD's WaterSMART Cooperative Watershed Management grant for at our November meeting. At the meeting the MAWP attendees agreed that this grant is an excellent opportunity to continue our important efforts to develop and facilitate implementation of a holistic watershed plan that conserves and enhances water quality and quantity in the Mill Creek (including Pack Creek) and Castle Creek watersheds. The MAWP encourages you to support this project with a grant from your agency.

Thank you for your consideration of GCD's grant application for the MAWP and taking the time to review this letter of endorsement. Please contact us if you have any further questions or would like to know more about what was discussed.



Grand Water & Sewer Service Agency

3025 E. Spanish Trail Rd. ♦ PO Box 1046 ♦ Moab, UT 84532
435-259-8121 ♦ 435-259-8122 fax ♦ www.grandwater.org

AGENCY MANAGER
Ben Musselman

OPERATING COMMITTEE
Dan Pyatt (President)
Gary Wilson (V. President)
Brian Backus
Mike Holyoak
Kevin Clyde
Rick Thompson
Dale Weiss

FORMING BOARDS:

SVWSID
Gary Wilson (Ch)
Mike Holyoak (V. Ch)
Dale Weiss (Treas.)
Rick Thompson (Clerk)
Ken Helfenbein

GCWCD
Dan Pyatt (Ch)
Jerry McNeely (V. Ch)
Brian Backus
Preston Paxman
Kevin Clyde

GCSSWD
Gary Wilson (Ch)
Mike Holyoak (V. Ch)
Mike Duncan
Trish Hedin
Rick Thompson

November 21, 2023

Utah Division of Water Quality
195 N 1950 W
Salt Lake City, UT 84116

RE: Support of Moab Area Watershed Partnership's 2023 Cooperative Watershed Management WaterSMART grant application.

To Whom it may concern,

Today, I am writing on behalf of the Grand Water & Sewer Service Agency (GWSSA) in support of the Moab Area Watershed Partnership (MAWP) and their desire to apply for the 2023 WaterSMART Cooperative Watershed Management Grant.

GWSSA is very supportive of MAWP and their mission, which is to conserve and enhance the quantity and quality of water in the Mill Creek, Pack Creek, and Castle Creek Watersheds. A grant opportunity like this would greatly help their efforts to better address water quality concerns along these local creeks.

It is our belief that MAWP has provided a detailed grant application that identifies realistic and achievable goals.

We encourage you to support this project with a grant from your agency.

Thank you for your consideration and for taking the time to review this letter of endorsement. Please contact us if you have any further questions.

Regards,

Dan Pyatt
GWSSA Operating Committee President



November 21, 2023

Arne Hultquist
Utah Department of Environmental Quality
Utah Division of Water Quality
195 N 1950 West
Salt Lake City, Utah 84116

Reference: Letter of NRCS Intent for the Moab Area Watershed Partnership's 2023 Cooperative Watershed Management WaterSMART Grant Application.

Dear Mr. Hultquist,

NRCS's mission is to deliver conservation solutions so agriculture producers can protect natural resources and feed a growing world. NRCS envisions a world of clean and abundant water, healthy soils, resilient landscapes, and thriving agriculture communities through voluntary conservation.

One of our key priorities to accomplish this mission is to work with our producers to maintain or increase natural resource conservation benefits on many different land uses, while ensuring their ability to continue to produce food and fiber. We provide assistance to USDA program participants and partners by helping them create conservation plans to address resource concerns that have been identified in watershed plans.

As more work is performed to address the needs of Utah's natural resources, partnerships with other organizations that have similar goals will be essential.

Sincerely,

A handwritten signature in black ink that reads "Emily Fife". The signature is written in a cursive, flowing style.

EMILY FIFE
State Conservationist



S.J. & Jessie E. Quinney
College of Natural Resources
UtahStateUniversity

The Department of
Environment and Society

November 29, 2023

Bureau of Reclamation
WaterSMART Grant
1849 C Street NW
Washington, DC 20240-0001

Subject: Support of Moab Area Watershed Partnership's 2023 Cooperative Watershed Management WaterSMART grant application.

Dear WaterSMART Grant Review Committee:

As a Professor and Sustainable Communities Extension Specialist in the Department of Environment and Society at Utah State University, I am happy to write a letter of reference for the Moab Area Watershed Partnership's (MAWP) application of a Bureau of Reclamation WaterSMART grant. I have worked with the MAWP for almost a decade, attending meetings as my schedule allows and I have been highly impressed by the group's collective expertise, diverse representation, and engagement in many projects positively impacting the community and our water supply. In fact, I partnered directly with the MAWP in a previous successful grant to the state Division of Water Quality for the purchase and installation of a rain catchment system to feed a series of perennial food producing rain gardens on what is now the Moab Free Health Clinic facility.

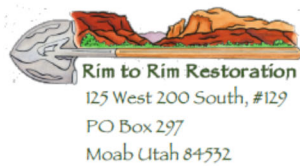
I have reviewed the MAWP's application draft for the 2023 WaterSMART Cooperative Watershed Management grant and can see that this grant is an excellent opportunity for the MAWP to continue their important efforts in developing and facilitating implementation of a holistic watershed plan that conserves and enhances water quality and quantity in our watershed area.

Thank you for your consideration of the MAWP's grant application and taking the time to review this letter of endorsement. Please contact me if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read 'Roslynn G.H. Brain McCann'.

Roslynn G.H. Brain McCann
Professor, Sustainable Communities Extension Specialist
<http://extension.usu.edu/sustainability>
Utah State University Moab
1850 S Aggie Blvd, Moab, UT 84532
(435) 797-5116



December 4, 2023

To: To Whom It May Concern

Subject: Support of Moab Area Watershed Partnership's 2023 Cooperative Watershed Management WaterSMART grant application.

Rim to Rim Restoration has participated with the Moab Area Watershed Partnership (MAWP) and have attended numerous MAWP meetings since its inception. We are supportive of the MAWP, its mission and the projects the partners discuss and help implement.

Rim to Rim Restoration has worked in Mill Creek since the early 2000s, and is acutely aware of the need for cooperative and comprehensive on the ground project planning and engineering to ensure that projects to improve water quality and protect water quantity are able to be implemented.

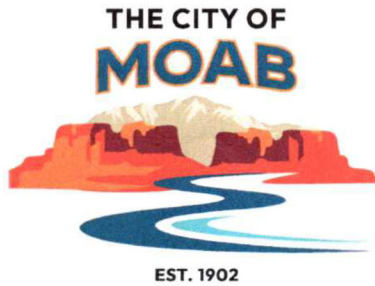
Rim to Rim Restoration has specifically discussed the 2023 WaterSMART Cooperative Watershed Management and agree that this grant is an excellent opportunity for the MAWP to continue, and expand, its important efforts to develop and facilitate implementation of a holistic watershed plan that conserves and enhances water quality and quantity in their watershed area. We encourage you to support this project with a grant from your agency.

Thank you for your consideration of the MAWP's grant application and taking the time to review this letter of endorsement. Please contact us if you have any further questions or would like to know more about what was discussed.

A handwritten signature in blue ink, appearing to read "Kara Dohrenwend", with a long horizontal flourish extending to the right.

Kara Dohrenwend
Director, Rim to Rim Restoration

217 East Center Street
Moab, Utah 84532
Phone: (435) 259-5121



Carly Castle
City Manager

To Whom It May Concern:

Date: 11/30/2023

Subject: Support of Moab Area Watershed Partnership's 2023 Cooperative Watershed Management WaterSMART grant application.

The City of Moab is very familiar with the Moab Area Watershed Partnership (MAWP) and has had our representatives attend numerous MAWP meetings. We have been supportive of the MAWP, their mission and the projects they discuss and help implement.

The City of Moab has specifically discussed the 2023 WaterSMART Cooperative Watershed Management grant for the MAWP. At that discussion we agreed that this grant is an excellent opportunity for the MAWP to continue their important efforts to develop and facilitate implementation of a holistic watershed plan which conserves and enhances water quality and quantity in the watershed area. We encourage you to support this project with a grant from your agency.

Thank you for your consideration of the MAWP's grant application and taking the time to review this letter of endorsement. Please contact us if you have any further questions or would like to know more about what was discussed.

Sincerely,

A handwritten signature in blue ink, appearing to be "Carly Castle", with a long, sweeping horizontal line extending to the right.

Carly Castle



GRAND COUNTY PLANNING & ZONING

59 N 200 E Moab, UT 84532 — 435.259.1343 — planning@grandcountyutah.net

November 30, 2023

Subject: Support of Moab Area Watershed Partnership's 2023 Cooperative Watershed Management WaterSMART grant application.

To Whom It May Concern,

The Grand County Planning & Zoning Department is a participating member of the Moab Area Watershed Partnership (MAWP). We have been supportive of the MAWP, their mission and the projects they pursue and help implement.

As the Moab and Spanish Valley areas continue to grow and development pressure increases, watershed planning is crucial to ensure we make responsible decisions about land use and future development as related to water demand and stormwater management. The County considers the MAWP a valuable partner in the effort to protect our critical water resources.

The Grand County Planning & Zoning Department has specifically discussed the 2023 WaterSMART Cooperative Watershed Management grant opportunity. At that discussion we agreed that this grant is an excellent opportunity for the MAWP to continue their important efforts to develop and facilitate implementation of a holistic watershed plan that conserves and enhances water quality and quantity in their watershed area. We encourage you to support this project with a grant from your agency.

Thank you for your consideration of the MAWP's grant application and taking the time to review this letter of endorsement. Please contact us if you have any further questions or would like to know more about what was discussed.

Sincerely,

Elissa Martin