Project Title:
Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project

Project Being Submitted To:
Bureau of Reclamation WaterSMART Cooperative Watershed Management Program Phase II
Funding Opportunity Announcement No. BOR-DO-21-F002

Applicant:
Purgatoire Watershed Partnership
3590 E. Main Street
Trinidad, CO 81082

Project Manager:
Julie Knudson
Executive Director/Watershed Coordinator
Purgatoire Watershed Partnership
3590 E. Main Street
Trinidad, CO 81082
jknudson@purgatoirepartners.org
970-420-1915
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I. Executive Summary

The Purgatoire Watershed Partnership (applicant), based in the City of Trinidad and Las Animas County in Colorado, submits this grant application in support of the Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project on November 17, 2020.

The Purgatoire Watershed Partnership will conduct this multi-component project - Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project - on the Purgatoire River in Trinidad, Colorado to address multiple watershed concerns and water uses (agricultural, municipal, ecological, and recreational). This project will protect and stabilize riverbanks, reduce erosion, improve water delivery systems to increase efficiency and functionality to address water supply needs, provide fish passage, remove invasive species and restore native vegetation, improve aquatic conditions for fish, and improve channel/floodplain connectivity. Specific project components include installation of multiple in-stream fish habitat structures, incorporation of fish passage into the currently impassable diversion dam that has prevented fish movement upstream since the early 1900’s, removal of woody invasive species across the project area and native revegetation efforts, and improvement of agricultural water delivery systems and public safety through the installation of an erosion protection wall, a trash diversion device, a diversion dam cap, and protective fencing. Additional project partners include the City of Trinidad, Purgatoire River Water Conservancy District, Baca Ditch Company, Picketwire Ditch Company, Colorado Parks & Wildlife, Trout Unlimited, Downtown Trinidad Development Group, Spanish Peaks-Purgatoire River Conservation District’s Purgatoire Watershed Weed Management Collaborative, and Coalitions & Collaboratives. Project partners and watershed stakeholders are excited for the implementation of this on-the-ground watershed management project collaboratively developed and prioritized by watershed stakeholders through the development of our Purgatoire River Management Plan.

This project will begin construction in September 2021 and is estimated to take two years and be complete by September 2023 at the latest. The proposed project is not located on a Federal facility or Federal lands.

II. Project Location

The proposed project – Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project - is located in Colorado in Las Animas County in the center of downtown Trinidad. The project latitude and longitude is 37° 10'23” N, 104° 30’27” W. The Purgatoire River is an important tributary of the larger Arkansas River Basin. See Project Maps below.
Overview of Project Area

Closeup of Diversion Dam and Associated Project Components

- Woody Invasive Species (throughout project area)
- Erosion Protection Wall
- Trash Diversion Device
- Automated Headgate Security Fencing
- Diversion Dam Cap
- Fish Passage
- Fish Habitat Structures
III. Technical Project Description

The proposed project – the Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project - was developed and prioritized collaboratively by stakeholders and focuses on addressing multiple important watershed concerns and water uses (agricultural, municipal, ecological, and recreational). This project consists of seven main project components that will improve water delivery systems to increase efficiency and functionality to address water supply needs, provide fish passage, protect and stabilize riverbanks, reduce erosion, remove invasive species and restore native vegetation, improve aquatic conditions for fish, and improve channel/floodplain connectivity.

The seven project components consist of:

- Incorporation of fish passage into the currently impassable diversion dam
- Installation of multiple in-stream fish habitat structures (cross-vanes, J-Hook vanes)
- Removal of woody invasive species across the project area and conducting complementary native revegetation efforts

Improvement of agricultural water delivery systems and public safety through the:

- Installation of an erosion protection wall
- Installation of a trash diversion device
- Installation of a diversion dam cap
- Installation of automated headgate protective fencing for safety and security

The proposed project will be implemented and supported by an exciting partnership between a diverse set of organizations and entities representing agricultural, municipal, ecological, and recreational interests. Project partners in addition to the Purgatoire Watershed Partnership include the City of Trinidad, Purgatoire River Water Conservancy District, Baca Ditch Company, Picketwire Ditch Company, Colorado Parks & Wildlife, Trout Unlimited, Downtown Trinidad Development Group, Spanish Peaks-Purgatoire River Conservation District’s Purgatoire Watershed Weed Management Collaborative, and Coalitions & Collaboratives.

The proposed project will address critical water supply needs, water quality concerns, and restoration needs of the watershed.

The project will address critical water supply needs through significant irrigation infrastructure improvements, installation of fish habitat structures, and removal of woody invasive species that currently block efficient water transport downstream. Specifically, installation of the diversion dam cap will make more water available to irrigators by allowing them to access their entire appropriated water right for the ditches at times of low water. Currently irrigators are not able to pick up the full release amount of water from Trinidad Reservoir (which is their right) when flows are low. The installation of this diversion dam cap will allow movement of the full water right into the Baca-Picketwire headgate and out to the ditches. Installation of the trash diversion device will significantly improve the accuracy and functionality of water movement into the headgate, as it is currently a common occurrence for river trash to get sucked into the headgate
and compromise the functionality of the headgate. The installation of the smooth concrete erosion protection wall will increase the efficiency of water movement into the headgate, as compared to the current rough eroding riverbank and historic rock/discarded concrete debris chunks that are there now. The installation of the automated headgate and security fencing to protect it will ensure significantly increased functionality and accuracy of water delivery and make more water available at the correct times for irrigators, as well as increasing the accuracy of water delivery downstream to other water users. Installation of the cross-vane fish habitat structures will provide benefits for fish, but as well will be installed for maximum benefit for water delivery to the headgate, as there is a slight bend in the river above the diversion dam, and this fish habitat structure will better direct the water into the headgate. Removal of dense woody invasive species in the project area along the river will have multiple benefits, including improving water delivery to the diversion dam as well as improving water delivery downstream.

The project will address critical water quality concerns through decreasing sediment pollution, improving water temperature, and mitigating impacts from flooding. The installation of the erosion protection wall will provide significantly improved bank stabilization and a reduction in erosion/sediment pollution into the system, and will provide significantly improved flood protection for the irrigation headgate. Currently, high flood waters can easily erode behind the poorly protected riverbank and compromise the integrity of the headgate. Water temperature conditions will be improved for fish through the installation of fish habitat structures both upstream and downstream of the diversion dam (providing more deep-water pools with cooler temperatures). These structures will also provide riverbank protection and reduce the current bank erosion/sediment pollution that we are seeing at several locations in the project area. These fish habitat structures will also help to maintain river stability and dissipate excess water energy, which helps to mitigate impacts from flooding and further protect against erosion.

The project will address critical restoration needs of the watershed through improving fish habitat and passage, improving channel/floodplain connectivity, improving wildlife habitat, mitigating unnecessary fire risk, reducing flood risk, reducing bank erosion, and increasing biodiversity. Woody invasive species (particularly Russian olive) are currently a dominant component of the vegetative composition of our project area, and their presence has significantly contributed to an ‘armoring’ of the riverbank, resulting in riverbank ‘downcutting’ and an increasing disconnect between the channel and its floodplain. Their presence has resulted in degraded wildlife habitat, and as well present an unnecessary fire hazard. The overstory in the project area includes mature cottonwoods that have been deemed important to protect by stakeholders. As cottonwoods are not fire-adapted, stakeholders would also like to see the woody invasive vegetation removed in order to reduce unnecessary fire risk (especially in this urban river corridor where the potential threat of human-started fire is higher). Stakeholders are also concerned about the risk of flooding resulting from these dense, overgrown invasive species infestations that easily trap large debris floating downstairs during flood conditions and could quickly form a large debris ‘jam’ presenting a catastrophic threat to property and infrastructure. Post-treatment active revegetation (seeding, select native plantings) will serve to protect newly opened up areas from developing herbaceous invasive species infestations, as well as improving vegetative biodiversity in the project area and improving wildlife habitat.
The project will also directly benefit native and sport fish species through the incorporation of fish passage into the diversion dam and the installation of fish habitat structures above and below the dam. Installation of the fish habitat structures will also reduce erosion through providing river bank protection and stabilization. The Baca-Picketwire diversion dam was built in the early 1900’s and since that time has prevented all fish movement upstream of the diversion. By incorporating fish passage into the diversion dam, it will allow downstream native and sport fish access to upstream habitat that they could not previously access. It has been determined that incorporating fish passage into the project will provide an additional 3.25 miles of habitat upstream to the base of Trinidad Lake. The Purgatoire River in and around the project location represents a transition zone for cool and cold-water fish species such as trout to more warm-water native fish downstream. Providing fish passage will allow these fish critical access to upstream habitat and more favorable conditions with seasonal changes in flow and temperature.

Below the diversion dam, there exists a diverse native fish assemblage including flathead chub (a species of special concern) and suckermouth minnow (state endangered), as well as other native cyprinid species. Flathead chub are also known historically in the vicinity of the project site.

In summary, the project will benefit multiple water uses within the watershed, including agricultural, municipal, environmental, and recreational users. Expected project outcomes include improved functionality and efficiency of irrigation infrastructure and improved water delivery, reduction of invasive species, increase in native vegetation, improved bird and wildlife habitat, improved aquatic habitat that will not only benefit fish but also other aquatic life, new upstream fish passage that has not been possible since the early 1900’s, improved channel/floodplain connectivity, improved riverbank stabilization and reduced erosion, improved water quality by reducing sediment input into the system and creating new cooler temperature pools for fish, and improved fire mitigation protection for the benefit of the local ecosystem.

Additional project outcomes will be enhanced recreational opportunities including an enhanced fishery to support fishing enthusiasts, improved river access and view-scapes for community members who utilize the river corridor and the directly adjacent Riverwalk, and increased birding and wildlife viewing opportunities as a result of the enhanced habitat. Public safety will also be significantly improved through the installation of critical security/safety fencing, as well as improved line of sight along the Riverwalk (with woody invasive species removal) that stakeholders (both community members and law enforcement officials) have been asking for. As the project location is also a commonly used spot for enjoying the river through tubing and through kids (and adults) playing in the river directly in and around the diversion dam, this project is expected to significantly improve recreational enjoyment in this area not only because of improved public safety but also through improved aesthetics (e.g. improved views, removed invasive species, increased native vegetation). Municipal and associated local businesses (including project partners the City of Trinidad and the Downtown Trinidad Development Group [DTDG]) are particularly excited about increased protection of property and infrastructure through project efforts that will improve bank stabilization and reduce flood and fire risk. Addressing current public safety concerns (better fencing around irrigation infrastructure to protect kids and adults from injury, improving visibility and line of sight with woody invasive species removal) are also deemed particularly important to protect community members. The City and the DTDG are also excited to see the generally improved project area aesthetics as that is important to both of these partners to provide an enhanced experience and level of enjoyment.
for community members and visitors (a new restaurant and hotel are being developed by DTDG directly adjacent to the project area).

The following project work will focus on the seven main project components and be accomplished through partner labor, hired contractors, and donated volunteer labor from stakeholders.

**Project Component 1 – Erosion Protection Wall**

The erosion protection wall will be installed primarily to provide riverbank stabilization and flood protection of valuable irrigation infrastructure. The erosion protection wall will tie in directly with recent improvements made to the headgate entrance sides and floor. Current erosion protection measures in this area include a rough rock and crossbar structure that presents some level of erosion protection but also presents safety hazards from below and above. Additional ad hoc erosion protection materials (discarded chunks of concrete) on the river bank do not provide adequate riverbank protection and also present a safety hazard. The erosion protection wall will be constructed of concrete and include safety fencing to protect the public. This project work will be conducted by an experienced contractor and overseen by an engineer with experience working with these structures. Relevant project partners (primarily ditch company staff) will work closely with the contractor to provide project oversight for project component installation.

**Project Component 2 – Trash Diversion Device**

The trash diversion device will be installed just upstream of the headgate and serve the purpose of diverting trash away from the headgate as well as protecting recreational tubers from getting too close to irrigation infrastructure. Currently, headgate functionality is regularly compromised as river trash gets stuck in the headgate and prevents it from functioning properly during irrigation season. As well, the ditch rider who continually cleans out the trash from the headgate is regularly put into dangerous situations during the irrigation season when he is forced to remove trash in high velocity flows. The installation of this trash diversion device will significantly improve headgate functionality and significantly improve irrigator safety. The trash diversion device will be comprised primarily of reinforced steel and concrete, and installed by an experienced contractor. Ditch company staff and the ditch rider in particular will provide significant guidance and oversight on this project component.

**Project Component 3 – Automated Headgate Security Fencing**

A new automated headgate will be installed as a critical additional piece of all of the project efforts described in this grant application, but because the automated headgate will be purchased with separate Federal funds we cannot technically include the automated headgate itself as match for the proposed project, and we were unclear as to how much we could discuss the significant water delivery benefits that will result from the installation of the automated headgate in this grant application. However, a critical component of this new automated
headgate will be the installation of security/safety fencing to protect this important investment from vandals as well as to protect public safety, as kids and adults frequently utilize the project area for recreation, and unprotected irrigation infrastructure presents a significant public safety hazard. As such, we will be installing security fencing around the new automated headgate as part of our project, which will involve installation of anchoring posts and fencing material. Ditch company staff, DTDG, and City of Trinidad staff will provide significant guidance and oversight on this project component to ensure adequate protection of valuable infrastructure as well as public safety protection.

**Project Component 4 – Diversion Dam Cap**

The diversion dam cap will be installed on top of the existing diversion dam to accomplish full capture and diversion of ditch company water rights. The diversion dam was built prior to the installation of Trinidad Reservoir in the early 1900’s, and it does not adequately deliver the full water right at low river flows, resulting in irrigators not being able to receive all of the water that is legally theirs. As such, a diversion dam cap will be installed across the top of the existing dam spillway to accomplish full capture of this legal water right. The diversion dam cap will be comprised of reinforced steel and concrete, and installed by an experienced contractor. This diversion dam cap will also be closely tied into other project components including the fish passage component, and a recreational tubing chute component not discussed further in this grant application as we are not seeking funding for that through this grant application. All project partners will be providing significant guidance and oversight on this project component.

**Project Component 5 – Fish Passage**

Fish passage will be installed to provide sport and native fish passage upstream of the Baca-Picketwire diversion dam, something that has not been possible since the early 1900’s when the diversion dam was installed. This project component is enthusiastically supported by project partners including Colorado Parks & Wildlife, who will be providing expert assistance for this project component to ensure that it meets all criteria to successfully support fish populations. The fish passage structure will consist of a series of stepped pools tied into the diversion dam to provide fish passage while not compromising the integrity of the diversion dam. Pools will be constructed of rock and installed through heavy equipment and manual labor. This project work will be conducted by an experienced contractor and overseen by an engineer with experience working with these structures. Project partners, particularly Trout Unlimited local chapter staff, irrigators, and Colorado Parks & Wildlife, will work closely with the contractor to fine-tune and provide project oversight for project component installation.

**Project Component 6 – Fish Habitat Structures**

Fish habitat structures (cross-vanes, J-Hook vanes) will be installed to improve fish habitat in the project area, as well as to stabilize currently eroding riverbanks, and improve flows into the Baca-Picketwire headgate. We will be installing four fish habitat structures, consisting of a
mixture of cross-vanes and J-Hooks above and below the diversion dam. Specifically, we will be installing two structures above the dam, and two structures below. The cross-vane installation above the dam will be strategically located to help direct water towards the headgate. The J-Hook vanes will be installed strategically above and below the dam at critical locations where there is significant ongoing bank erosion. Structures will be constructed of large rock and installed in-stream using heavy equipment. This project work will be conducted by an experienced contractor and overseen by an engineer with experience working with these structures. Project partners, particularly Trout Unlimited local chapter staff and irrigators, will work closely with the contractor to fine-tune placement of fish habitat structures based on extensive local knowledge of the river as well as needs around water movement into the headgate.

Project Component 7 – Woody Invasive Species Management & Associated Active Revegetation

Woody invasive species management (and associated active revegetation efforts) will be conducted throughout the project area to provide multiple benefits including improving water delivery, reducing potentially catastrophic flooding impacts on property and infrastructure, accomplishing fuels mitigation, improving overall forest health and wildlife habitat, and improving river access and public safety. Woody invasive species management efforts will be conducted through a combination of a contractor (Mile High Youth Corps) and volunteer labor through the Purgatoire River Vegetation Management Crew. The City of Trinidad is providing in-kind contributions of a front-end loader and a dump truck to pick up woody invasive debris resulting from work and transporting it off-site to the dump. Active revegetation efforts in the project area will be conducted through a Volunteer Stewardship Day, conducting seeding and planting after woody invasive species management is complete.

Project Manager/Watershed Coordinator

The Watershed Coordinator will serve as the Project Manager. Watershed Coordinator activities in support of this project will include:

- Project coordination of all project partners, stakeholders, and contractors
- Ensuring all project tasks are completed and project is completed successfully
- Conducting regular meetings with all project partners and all interested stakeholders to ensure project is proceeding to satisfaction of partners and stakeholders, and discussing and resolving any project issues to ensure project success
- Conducting public outreach and community engagement to address any other public issues and ensure ongoing community support of project
- Conduct and coordinate pre-project monitoring efforts with partners for tracking project success
- Conduct and coordinate additional preparation for post-project monitoring with partners (e.g. marking fish for tracking movement through fish passage)
- Work with partners to hire contractors to implement project work and conduct engineering oversight
• Hold initial meeting with hired contractors and all project partner staff providing critical oversight on project to ensure clear contractor understanding of project designs, functionality needs, requirements for water rights protection, and adherence to all other relevant regulations and guidelines; also to establish clear lines/means of communication for all parties to consult with each other and watershed coordinator as needed; and to determine contractor estimated timeline and to schedule check-ins/meetings with contractors to track progress and address any issues.
• Conduct all project tracking and reporting
• Work with Project Engineer to address any issues with project
• Work with Partner staff conducting oversight of project to ensure all relevant project components are being completed correctly and in full alignment with partner needs and associated water rights and regulations
• Work with all partners and contractors to ensure successful implementation and completion of project components
• Work with partners and Project Engineer to conduct final signoff on all relevant project components
• Conduct and coordinate with partners for post-project monitoring for tracking project success (not funded through this grant)
• Develop and submit final report

Project Partner Oversight

As we have a diverse set of project partners, we also have a diverse set of partner needs, associated water rights concerns, and different rules and regulations that must be complied with for this project. As such, this will require significant oversight and participation from project partners to ensure that all needs are met and all rules and regulations are complied with. Project partners have committed staff time to this project (see in-kind contributions) to guarantee that staff will be available to provide critical project oversight to ensure all relevant project components are being completed correctly and in full alignment with partner needs and associated water rights and regulations.

An additional important note about partner labor contributions is that important staff time that is being committed through in-kind contributions from project partners Coalitions & Collaboratives. As our watershed group is still a young and growing organization, we currently work closely with Coalitions & Collaboratives (COCO), with this much larger and more experienced non-profit providing critical guidance and support. COCO has generously agreed to continue to provide this critical support for our watershed group on this project, including being able to connect us to additional resources if unexpected issues or needs arise (COCO has stated their in-kind contribution commitment in their Letter of Support and Commitment).
IV. Performance Measures

All applicants are required to propose a method (performance measure) of quantifying the benefits of their proposed project once it is implemented. Quantifying project benefits is an important means to determine the relative effectiveness of various water management efforts, as well as the overall effectiveness of the project.

The applicant has developed multiple methods (performance measures) to quantify the benefits of our proposed project once it is implemented. The watershed coordinator will work with relevant project partners to conduct pre-project monitoring as well as post-project monitoring, recognizing that program funding cannot be used to measure performance after project construction is complete.

Please see ‘Evaluation Criterion E – Performance Measures’ section below for a detailed explanation of our proposed performance measures.

V. Evaluation Criteria

Evaluation Criterion A – Project Benefits

The proposed project addresses water supply needs, water quality concerns, and restoration needs for the Purgatoire River and riparian system within our watershed, as well as benefitting multiple water uses including agricultural, municipal, environmental, and recreational in our watershed. There are many expected benefits of the proposed project, with significant geographic extent and magnitude.

Will the project make more water available to meet water needs, or make water available at a more advantageous time or location? If so, how and to what extent?

The project will make more water available to meet water needs, as well as making more water available at a more advantageous time and location. It will accomplish this through significant irrigation infrastructure improvements, installation of fish habitat structures, and removal of woody invasive species that currently block efficient water transport downstream. Specifically, installing the diversion dam cap will make more water available to irrigators by allowing them to access their entire appropriated water right for the ditches at times of low water. Up until now, irrigators have not been able to pick up the full release amount of water from Trinidad Reservoir (which is their right) when flows are low. This diversion dam cap will allow movement of the full water right into the Baca-Picketwire headgate and out to the ditches. Additionally, installation of the trash diversion device will significantly improve the accuracy and functionality of water movement into the headgate, as it is currently a common occurrence for river trash to get sucked into the headgate and compromise the functionality of the headgate. The installation of the smooth concrete erosion protection wall will increase the efficiency of water movement
into the headgate, as compared to the current rough eroding riverbank and historic rock/discarded concrete debris chunks that are there now. The installation of the automated headgate and security fencing to protect it will ensure significantly increased functionality and accuracy of water delivery and make more water available at the correct times for irrigators, as well as increasing the accuracy of water delivery downstream to other water users.

Installation of the cross-vane fish habitat structures will provide benefits for fish, but as well will be installed for maximum benefit for water delivery to the headgate, as there is a slight bend in the river above the diversion dam, and this fish habitat structure will better direct the water into the headgate. We will be able to quantify improvements in water delivery to the headgate and ditch through the monitoring gage associated with the headgate and ditch. Finally, removal of dense woody invasive species in the project area along the river will have multiple benefits, including improving water delivery to the diversion dam as well as improving water delivery downstream. The geographic extent and magnitude of these benefits extends all the way downstream to Kansas, as per the interstate Arkansas River Compact between Colorado and Kansas that requires the Arkansas River (and its tributaries including the Purgatoire River) to deliver to Kansas the water owed to it by Colorado. The Arkansas River and its tributaries are carefully monitored to ensure maximum water delivery to Kansas; as such all actions that can be taken on the Purgatoire River to improve the efficiency, accuracy, and volume of water delivery downstream is incredibly important.

**Will the project result in long-term improvements to water quality? For example, will the project decrease sediment or nutrient pollution, improve water temperature, or mitigate impacts from floods or drought? If so, how and to what extent?**

The project will result in long-term improvements to water quality, including decreasing sediment pollution, improving water temperature, and mitigating impacts from flooding. Specifically, the installation of the erosion protection wall will provide significantly improved bank stabilization and a reduction in erosion/sediment pollution into the system. It will also provide significantly improved flood protection for the irrigation headgate. With the current situation, high flood waters can easily erode behind the poorly protected riverbank and compromise the integrity of the headgate. The installation of fish habitat structures both upstream and downstream will improve water temperature for fish (providing more deep-water pools with cooler temperatures). These structures will also provide riverbank protection and reduce the current bank erosion/sediment pollution that we are seeing at several locations in the project area. These structures also help to maintain river stability and dissipate excess water energy, which helps to mitigate impacts from flooding and further protect against erosion.

**Will the project benefit aquatic or riparian ecosystems within the watershed? For example, will the project reduce flood risk, reduce bank erosion, increase biodiversity, or preserve native species? If so, how and to what extent?**

The project will benefit aquatic and riparian ecosystems within the watershed, including improving channel/floodplain connectivity, improving wildlife habitat, mitigating unnecessary
fire risk, reducing flood risk, reducing bank erosion, and increasing biodiversity. Specifically, the removal of woody invasive species in the project area will benefit these systems. Currently, woody invasive species (particularly Russian olive) are a dominant component of the vegetative composition of our project area. Their presence has significantly contributed to an ‘armoring’ of the riverbank, resulting in riverbank ‘downcutting’ and an increasing disconnect between the channel and its floodplain. As well, wildlife do not thrive in an invasive-species dominated system, and the domination of the area by these invasive trees/shrubs has resulted in limited biodiversity of both flora and fauna. Stakeholders are excited to remove these woody invasives to make way for a return to increased native vegetative biodiversity (through active revegetation and natural regeneration and spread) that will also provide more habitat and opportunity for an increased biodiversity of wildlife. As well, because we have many desirable mature cottonwoods in the overstory in the project area, it has been deemed important by stakeholders to remove the woody invasive vegetation to reduce unnecessary fire risk (especially in this urban river corridor where the potential threat of human-started fire is higher), as cottonwoods are not fire-adapted and their loss to fire would be a setback for the restoration of the project area. Stakeholders are also concerned about the risk of flooding resulting from these dense, overgrown invasive species infestations that easily trap large debris floating downstream during flood conditions and could quickly form a large debris ‘jam’ presenting a catastrophic threat to property and infrastructure. Installation of the fish habitat structures in the project area will improve fish habitat, but (as mentioned above) also reduce erosion through providing river bank protection and stabilization.

**Will the project benefit specific species and habitats? If so, describe the species and/or type of habitat that will benefit. How and to what extent will the project benefit the species or habitat? Please explain the status of species and habitat that will benefit (e.g., native species, game species, federally threatened or endangered, state listed, and whether critical habitat has been designated).**

The project will benefit specific species and habitat; in particular the project is designed to benefit native and sport fish species, although the project will certainly benefit other native vegetative species as well as native wildlife species. Specifically, the incorporation of fish passage into the diversion dam, as well as the installation of fish habitat structures above and below the dam will benefit native and sport fish species. The Baca-Picketwire diversion dam was built in the early 1900’s and since that time it has prevented all fish movement upstream of the diversion. By incorporating fish passage into the diversion dam, it will allow downstream native and sport fish access to upstream habitat that they could not previously access. Incorporating fish passage into the project will provide an additional 3.25 miles of habitat upstream to the base of Trinidad Lake. The Purgatoire River at this location is what is considered to be a transition zone for cool and cold-water fish species such as trout to more warm-water native fish downstream. These fish need to be able to migrate up and downstream as water temperatures and conditions fluctuate during the year. Specifically, downstream of the currently impenetrable Baca-Picketwire diversion dam, the Purgatoire River has a diverse native fish assemblage that includes flathead chub (a species of special concern) and suckermouth minnow (state endangered), among many other native cyprinid species. Flathead chub are also known historically in the vicinity of the project site. The Purgatoire River is unique in that it is less impacted from anthropogenic disturbance than many other rivers in the state, but still presents opportunities for protecting
existing species and their habitat. The river's uniqueness and importance to native aquatic species is recognized by experts. Through this project, we are excited to help protect these species and enhance their habitat. Colorado Parks & Wildlife samples different river locations upstream and downstream of the project site and we will be able to quantify project benefits for fish through these efforts.

Through these in-stream efforts as well as our woody invasive species management efforts in the project area, we expect to benefit a host of additional native vegetative species, and wildlife and bird species. Wildlife species that commonly utilize the river corridor in and around the project area include black bear, elk, deer, mountain lion, and beaver. Game species that utilize the river corridor in the project area include elk, deer, upland birds, and waterfowl. Common species observed by birders in and around the project area include the belted kingfisher, great blue heron, northern flicker, red-winged blackbird, yellow warbler, red-tailed hawk, western kingbird, great horned owl, Bullock’s oriole, mallard duck, cliff swallow, yellow-breasted chat, lazuli bunting, broad-tailed hummingbird, and wild turkey. As we improve our local fishery through the above efforts, this will also benefit the bird and wildlife species that utilize fish in their diet.

**Will the project benefit multiple water uses within the watershed (e.g., agricultural, municipal, tribal, environmental, recreation uses)? If so, how and to what extent?**

The project will benefit multiple water uses within the watershed, including agricultural, municipal, environmental, and recreational uses. A diverse group of partners are directly involved in this project, as well as being supported by a large number of stakeholders who have worked collaboratively to develop and prioritize this important project. Agricultural water uses will be benefitted within the watershed through project components including installation of the erosion protection wall, the trash diversion device, the diversion dam cap, and the automated headgate security fencing. We have multiple project partners including the Purgatoire River Water Conservancy District, Baca Ditch Company, and the Picketwire Ditch Company who will see direct agricultural benefit from these project components through improved functionality and efficiency of irrigation infrastructure and improved water delivery that will directly benefit the farms and ranches reliant on this infrastructure. As well, this project will reduce loss out of the system for all ditches within the Purgatoire River Water Conservancy District as it will prevent loss out of the Trinidad Lake Project, which should also be of interest to Reclamation.

There are also multiple environmental benefits associated with this project including the benefits from woody invasive species management and revegetation efforts including reduction of invasive species, increase in native vegetation, improved bird and wildlife habitat, improved aquatic habitat that will not only benefit fish but also other aquatic life, new upstream fish passage that has not been possible since the early 1900’s, improved channel/floodplain connectivity, improved riverbank stabilization and reduced erosion, improved water quality by reducing sediment input into the system and creating new cooler temperature pools for fish, and improved fire mitigation protection for the benefit of the local ecosystem.

Recreational users will significantly benefit from this project through the enhanced fishery to support fishing enthusiasts, as well as improved river access and view-scapes for community
members who utilize the river corridor and the directly adjacent Riverwalk. Project partner Trout Unlimited has been working with PWP and Colorado Parks & Wildlife to improve the local trout fishery to enhance recreational fishing opportunities within the project area as well as upstream and downstream. It is estimated that there will also be increased birding and wildlife viewing opportunities as a result of the enhanced habitat. Public safety – a big priority for stakeholders within the project area - will also significantly improve through the important security fencing installed as part of this project, as well as improved line of sight along the Riverwalk (with woody invasive species removal) that stakeholders (both community members and law enforcement officials) have been asking for. The project area is also a commonly used spot for enjoying the river through tubing and through kids (and adults) playing in the river directly in and around the diversion dam; this project should significantly improve recreational enjoyment in this area not only because of improved public safety but also through improved aesthetics (e.g. improved views, removed invasive species, increased native vegetation). While hunting is not allowed within the stretch of urban wildlife corridor that the project is located in, this project will indirectly benefit recreational and sustenance hunting through improving wildlife habitat in this riparian corridor that wild game utilize regularly for sustenance as well as as a travel corridor to connect with other priority habitat within the watershed.

Municipal and associated local businesses (including project partners the City of Trinidad and the Downtown Trinidad Development Group [DTDG]) will see multiple direct benefits from this project. Valuable City-owned and private business lands and associated infrastructure will benefit through increased bank stabilization and reduced flood and fire risk, and as well these partners are very supportive of all public safety improvements (e.g. security fencing) being conducted to protect community members. Both the City and the DTDG are also excited to see the cumulative improvements that this project will bring for improved environmental health of the river, recreational opportunities, and generally improved project area aesthetics as that is important to both of these partners to provide an enhanced experience and level of enjoyment for community members as well as visitors (a new restaurant and hotel are being developed by DTDG directly adjacent to the project area).

**Will the project benefit watershed stakeholders in ways not addressed in the preceding questions? If so, how? Will the project reduce water conflicts within the watershed? Will the project increase resiliency to drought? Will the project provide benefits to other water uses not mentioned above? If so, how and to what extent?**

The project will benefit watershed stakeholders in multiple ways not directly addressed in the questions above. As mentioned above, public safety, increased tourism, and increased economic benefit for a town (Trinidad) that has historically relied on a boom and bust economy for sustenance are all important additional benefits for stakeholders. This project will also reduce water user conflicts within the watershed in several ways. It is important to recognize that the partners on this project represent a very diverse group of entities who have not always seen eye to eye in the past. That this group of partners have come together to work on this multi-component project for the benefit of all is incredibly important to recognize. This project will serve as the focal point for continued conversations and improved understanding between these diverse stakeholders, which, while not always easy, will most definitely result in increased
understanding and improved collaboration moving forward. The project is also being designed to reduce water user conflicts by (for example) installing security fencing to keep recreational water users and community members away from irrigation infrastructure (irrigators currently have issues with vandals and other water users getting too close to irrigation infrastructure resulting in equipment injury as well as liability concerns). The installation of the fish passage into the diversion dam will also build new positive bridges between agriculture and recreation. The project will increase resiliency to drought because it is saving water in the system, which is incredibly important now more than ever as our region continues to experience prolonged drought.

**Will the project address multiple issues of concern within the watershed (e.g., both water supply and fish habitat issues)?**

The project will address multiple issues of concern within the watershed. Issues of concern that are being addressed include water delivery-related issues where improved agricultural infrastructure is needed to improve functionality and efficiency and increase water availability, the need for improved protection and stabilization of riverbanks and reduced erosion, and the desired improvement of channel/floodplain connectivity for environmental benefit as well as for protection against catastrophic flood impacts (improved access to the floodplain spreads out the river at higher flows and can help dissipate the energy of the flows). The installation of the erosion protection wall and the removal of woody invasive species also serve to address concerns around catastrophic flood (protecting valuable infrastructure with the wall, removing dense woody growth out of the river corridor that could block high flows) and the need to improve water delivery downstream (woody invasive species removal). The project also addresses environmental and recreational concerns around the need for improved fish habitat and fish passage for the benefit of fish as well as recreationists. As mentioned above, public safety is a big concern within the project area – stakeholders want their kids protected from dangerous irrigation infrastructure (security fencing) and want all dense woody invasive vegetation removed so that (among other reasons) fire mitigation concerns are addressed, attractive illegal camping spots are removed (homeless individuals like to camp in the Russian olive), and so that they have good line of sight/visibility for an increased sense of security as well as (in the case of law enforcement) increased personal safety and enforcement. Installation of the agricultural trash diversion device is also going to address a significant irrigator safety concern, as the constant work to remove trash from the headgate can be life threatening at higher river flows. As mentioned above, this project also addresses water quality concerns by reducing sediment loads, and providing cooler temperature water for fish.

**Evaluation Criterion B – Watershed Restoration Planning**

Describe your watershed restoration plan.

When was the restoration plan prepared and for what purpose?
Our watershed restoration plan is entitled the Purgatoire River Management Plan and it began development in 2020. It was developed for the purpose of developing a clear path forward to address management issues along the river that had collaborative support from stakeholders.

What types of watershed management issues are addressed in the plan? For example, does the restoration plan address water quantity issues, water quality issues, and/or issues related to ecosystem health or the health of species and habitat within the watershed?

The management issues of concern and determined associated needs include: agricultural infrastructure improvements, measures to protect property and infrastructure against catastrophic flooding, fishery development and aquatic habitat improvement, installation of fish passage, improved water quality (e.g. reduced sediment loads, improved temperature for fish), stabilization of actively eroding banks, woody invasive species removal and riparian forest thinning, removal/mitigation of jetty jacks, improved trails and river access, improvements related to river tubing, improved public safety, and improved public amenities and aesthetics for enhanced enjoyment of the river and associated areas.

Who was involved in preparing the plan? Was the plan prepared with input from stakeholders with diverse interests (e.g., water, land or forest management interests, and agricultural, municipal, tribal, environmental, recreation uses)? What was the process used for interested stakeholders to provide input during the planning process?

The plan was developed collaboratively by a host of watershed stakeholders with diverse interests (e.g. agricultural, environmental, municipal, recreational, property and rural economic development) focused on addressing multiple issues related to water resources and management priorities. In-person group meetings, interviews, informal conversations, and many conference calls went into the development of the plan and were the methods through which interested stakeholders provided input to the planning process. Please note: we are still finalizing this plan through our BOR WaterSMART Phase I funding, but stakeholders have already prioritized their top project – the proposed project we are submitting. Our plan will be finalized at the latest by April 2021 (although likely much sooner).

If the restoration plan was prepared by an entity other than the watershed group, explain why the watershed group did not prepare its own plan. In cases where the applicant did not prepare the restoration plan, the applicant must provide documented support for the proposed project by the entity that authored the plan.

We (the watershed group) prepared our own plan.

Describe how the existing restoration plan provides support for your proposed watershed management project.

Does the proposed project implement a goal or need identified in the restoration plan?
Our proposed project was prioritized collaboratively by stakeholders as a top priority in our watershed restoration plan. As such, our proposed project implements highly prioritized, multiple needs within the restoration plan. These needs include protection and stabilization of eroding riverbanks, improvement of water quality through reduced erosion (sedimentation) and improved water temperature for fish, improved functionality and efficiency of irrigation infrastructure for improved water delivery, providing fish passage, removing woody invasive species and restoring native vegetation cover in its place, improving fish habitat and aquatic conditions for fish and aquatic life, improving channel/floodplain connectivity, improving public safety, addressing fire and flood concerns, improving wildlife habitat, improving overall river health and function.

Describe how the proposed project is prioritized in the referenced restoration plan.

Our proposed project is the top priority in the referenced restoration plan.

**Evaluation Criterion C – Stakeholder Support**

This project has a significant level of stakeholder support and will only complement, and not duplicate, other ongoing efforts in the watershed. This project was developed and prioritized through a collaborative process of a diverse set of stakeholders and is documented in and supported by our watershed restoration plan (Purgatoire River Management Plan).

Please describe the level of stakeholder support for the proposed project.

This project is supported by Letters of Support and Commitment from all project partners including City of Trinidad, Purgatoire River Water Conservancy District, Baca Ditch Company, Picketwire Ditch Company, Colorado Parks & Wildlife, Trout Unlimited, Downtown Trinidad Development Group, Spanish Peaks-Purgatoire River Conservation District’s Purgatoire Watershed Weed Management Collaborative, and Coalitions & Collaboratives. The Arkansas Basin Roundtable has also provided a Letter of Support, which is an important entity to have secured project support from in our region. All project partners are providing some level of cash or in-kind matching contributions for this project. The exception is Colorado Parks & Wildlife, who very much supports this project, but agency staff are temporarily operating under restrictions prohibiting them from promising/committing any cash or in-kind match to projects at this time.

Please explain whether the project is supported by a diverse set of stakeholders (appropriate given the types of interested stakeholders within the watershed and the scale, type and complexity of the proposed project).

This project is supported by entities representing agricultural, municipal, environmental, and recreational uses. First and foremost, this project was developed and is supported by an extensive number of stakeholders representing agricultural, municipal, environmental, and recreational
uses. Secondly, this project is being implemented by a similarly diverse group of project partners who also represent all of these water uses, including the local water conservancy district, two ditch companies, our Basin Roundtable, a state recreation and wildlife oriented agency (Colorado Parks & Wildlife), a local conservation district supporting environmental and agricultural improvements, a local business/development group, a local environmental and recreational group (Trout Unlimited local chapter), the City of Trinidad, and a regional environmental non-profit (Coalitions & Collaboratives).

**Is the project supported by entities responsible for the management of land, water, recreation, or forestry within the watershed? Is the project consistent with the policies of those agencies?**

This project is supported by entities responsible for the management of land, water, recreation, and forestry within the watershed. This includes Colorado Parks & Wildlife and the City of Trinidad – each of whom are responsible for these management activities on the lands they own/manage. This also includes the Purgatoire River Water Conservancy District who works together with the City of Trinidad, ditch companies, and other local and regional entities to ensure proper water management in the watershed. This project is consistent with the policies of Colorado Parks & Wildlife, City of Trinidad, and the Purgatoire River Water Conservancy District.

**Will the proposed project complement other ongoing watershed management activities by state, Federal, or local government entities, non-profits or individual landowners within the watershed? Please describe other relevant efforts, including who is undertaking these efforts and whether they support the proposed project. Explain how the proposed project will avoid duplication or complication of other ongoing efforts.**

The proposed project complements other ongoing watershed management activities by state, local government entities, non-profits, and individual landowners within the watershed. These other relevant efforts include complementary efforts being undertaken by the state (Colorado Parks & Wildlife) to enhance the local fishery through conducting strategic stocking of desirable fish species, as well as conducting comprehensive fish monitoring within the project area as well as elsewhere in the watershed. Colorado Parks and Wildlife supports the proposed project. The City of Trinidad has also been working to address woody invasive species management and fire mitigation needs on properties near the project area as well as in the upper watershed, and they support this project. The Spanish-Peaks Purgatoire River Conservation District’s Purgatoire Watershed Weed Management Collaborative is working with private landowners throughout the watershed to conduct invasive species management (both woody and herbaceous) and restoration efforts that also fully complement this project with no overlap or complication of ongoing efforts; and they support this project. Purgatoire Watershed Partnership, as an environmental non-profit supporting all stakeholder interests continues to work with local entities to support complementary projects throughout the watershed that have no duplication or complication with this project. Trout Unlimited also works closely with Purgatoire Watershed Partnership for the
benefit of fish in the Purgatoire River; their work is only complementary and supportive to the efforts that would be conducted through this project and are in full support of this project.

Is the project completely or partially located on Federal land or a Federal facility?

This project is not located on Federal land or a Federal facility.

Is there opposition to the proposed project?

There is no opposition to this project. The project was developed through a collaborative process to ensure that all water users were supportive of project components. Throughout the implementation and completion of the proposed project, we will continue to work very closely with all project partners to ensure that the project is being implemented in a way that satisfies all partner needs.

Evaluation Criterion D – Readiness to Proceed

Describe the implementation plan for the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

Our watershed group is fully capable of proceeding with the proposed project upon entering into a financial assistance agreement.

The following Implementation Plan (see Table A provides an estimated project schedule that shows the estimated stages (phases) and duration of the proposed work - including major tasks, milestones, and dates - and who is responsible for spearheading task implementation.

Implementation Plan

The Implementation Plan for our proposed project consists of three stages (phases) at this time. Phase I will be the startup phase, Phase II will be the main Project Task implementation phase, and Phase III will be the project wrap up phase. Phase II is difficult to parcel out chronologically into sub-phases at this time because there will be multiple factors that will affect the final order that project components can be implemented in including contractor schedules (there will be multiple contractors needing to coordinate schedules), environmental factors such as weather (including air temperature which will affect critical project components such as working with concrete) and water levels, as well as other factors that may affect the timing of implementation of different project tasks. Once contractors have been hired, we will work together with our hired contractors to fine-tune the exact order that task implementation will occur in.
The Watershed Coordinator will be responsible for spearheading many of the project tasks, and will ultimately be responsible for ensuring that all tasks are completed and that the project is completed successfully and to the satisfaction of project partners and stakeholders. Other entities responsible for spearheading project tasks include hired contractors and project partners (See Table A below for details).

Planned start dates and completion dates are estimated, and build in the full amount of time available to complete tasks to allow for any project delays. It is our hope that we will be able to complete our project ahead of schedule but this may not be possible.

**Table A.** Implementation Plan for proposed project, including stages and duration of proposed work, major tasks/milestones/activities, and estimated start dates and completion dates.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Phase</th>
<th>Responsible Entity</th>
<th>Start Date</th>
<th>Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct all project coordination of project partners, stakeholders, and contractors; ensure all project tasks are completed and project is completed successfully</td>
<td>All Phases</td>
<td>Watershed Coordinator</td>
<td>September 2021</td>
<td>September 2023</td>
</tr>
<tr>
<td>Stakeholder Meetings: Conduct initial and then hold regular check-ins and meetings with all project partners and all interested stakeholders to ensure project is proceeding to satisfaction of partners and stakeholders; discuss and resolve any project issues to ensure project success; conduct public outreach and community engagement to address any issues and ensure ongoing community support of project</td>
<td>All Phases</td>
<td>Watershed Coordinator</td>
<td>September 2021</td>
<td>September 2023</td>
</tr>
<tr>
<td>Conduct pre-project monitoring for tracking project success</td>
<td>Phase I</td>
<td>Watershed Coordinator</td>
<td>September 2021</td>
<td>December 2021</td>
</tr>
<tr>
<td>Conduct additional preparation for post-project monitoring (e.g. marking fish for tracking movement through fish passage)</td>
<td>Phase I</td>
<td>Watershed Coordinator, with relevant partners</td>
<td>September 2021</td>
<td>December 2021</td>
</tr>
<tr>
<td>Hire contractors to implement project work and conduct engineering oversight</td>
<td>Phase I</td>
<td>Watershed Coordinator</td>
<td>September 2021</td>
<td>December 2021</td>
</tr>
<tr>
<td>Contractor Meetings: Hold initial meeting with hired contractors and all project partner staff providing critical oversight on project to ensure clear</td>
<td>Phase II</td>
<td>Watershed Coordinator</td>
<td>September 2021</td>
<td>September 2023</td>
</tr>
</tbody>
</table>
contractor understanding of project designs, functionality needs, requirements for water rights protection, and adherence to all other relevant regulations and guidelines; establish clear lines/means of communication for all parties to consult with each other and watershed coordinator as needed; determine contractor estimated timeline and schedule check-ins/meetings with contractors to track progress and address any issues.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Phase</th>
<th>Responsible Party</th>
<th>Start Date</th>
<th>End Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduct all project tracking and reporting</td>
<td>All Phases</td>
<td>Watershed Coordinator</td>
<td>September 2021</td>
<td>September 2023</td>
</tr>
<tr>
<td>Conduct engineering oversight of project</td>
<td>Phase II and III</td>
<td>Project Engineer</td>
<td>November 2021</td>
<td>September 2023</td>
</tr>
<tr>
<td>Partner staff conducting oversight of project to ensure all relevant project components are being completed correctly and in full alignment with partner needs and associated water rights and regulations</td>
<td>Phase II and III</td>
<td>Watershed Coordinator, with All Project Partners</td>
<td>November 2021</td>
<td>September 2023</td>
</tr>
<tr>
<td>Conduct Project Component 1: Install erosion protection wall</td>
<td>Phase II</td>
<td>Contractor 1</td>
<td>November 2021</td>
<td>March 2023</td>
</tr>
<tr>
<td>Conduct Project Component 2: Install trash diversion device</td>
<td>Phase II</td>
<td>Contractor 1</td>
<td>November 2021</td>
<td>March 2023</td>
</tr>
<tr>
<td>Conduct Project Component 3: Install automated headgate and associated security fencing</td>
<td>Phase II</td>
<td>Contractor 1</td>
<td>November 2021</td>
<td>March 2023</td>
</tr>
<tr>
<td>Conduct Project Component 4: Install diversion dam cap</td>
<td>Phase II</td>
<td>Contractor 1</td>
<td>November 2021</td>
<td>March 2023</td>
</tr>
<tr>
<td>Conduct Project Component 5: Install fish passage (will require close consultation between Contractor 1 + Contractor 2)</td>
<td>Phase II</td>
<td>Contractor 2</td>
<td>November 2021</td>
<td>March 2023</td>
</tr>
<tr>
<td>Conduct Project Component 6: Install fish habitat structures (cross-vanes, J-hooks)</td>
<td>Phase II</td>
<td>Contractor 2</td>
<td>November 2021</td>
<td>June 2023</td>
</tr>
<tr>
<td>Conduct Project Component 7: Conduct woody invasive species management &amp; associated active revegetation</td>
<td>Phase II</td>
<td>Contractor 3, plus volunteers</td>
<td>November 2021</td>
<td>June 2023</td>
</tr>
<tr>
<td>Partners complete final signoff on all relevant project components</td>
<td>Phase III</td>
<td>All Partners</td>
<td>June 2023</td>
<td>July 2023</td>
</tr>
<tr>
<td>Task</td>
<td>Phase III</td>
<td>Project Engineer</td>
<td>Start Date</td>
<td>End Date</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>-----------</td>
<td>------------------------</td>
<td>--------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Engineering final signoff on all project components</td>
<td></td>
<td>Phase III</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct post-project monitoring for tracking project success (not funded through this grant)</td>
<td></td>
<td>Watershed Coordinator</td>
<td>July 2023</td>
<td>Repeat monitoring continuing post-project</td>
</tr>
<tr>
<td>Develop and submit final report</td>
<td></td>
<td>Watershed Coordinator</td>
<td>July 2023</td>
<td>August 2023</td>
</tr>
</tbody>
</table>

**The project budget outlining costs for specific tasks (required in Section D.2.2.5. Project Budget) should identify costs associated with the tasks in your project schedule, and all contractor costs should be broken out to identify the specific tasks included in those costs.**

Our project budget outlines costs for specific tasks identifies costs associated with tasks in our project schedule, and all contractor costs are broken out to identify specific tasks included in those costs. Please see our Budget Proposal and Budget Narrative sections for our detailed budget and explanation of budget items.

**Describe any permits and agency approvals that will be required, along with the process and timeframe for obtaining such permits or approvals.**

No known permits or agency approvals are required for this project. In-stream irrigation infrastructure work is considered to be exempt from permitting through Section 404 of the Clean Water Act.

**Identify and describe any engineering or design work performed specifically in support of the proposed project, or that will be performed as part of the project. Priority will be given to projects that are further along in the design process and ready for implementation.**

Design work performed specifically in support of the proposed project includes the design work for Project Components 1-6. Our watershed partnership is currently working under a BOR WaterSMART Phase I grant to finalize all design work for this project. The design work for Project Component 1 is complete. All other design work is being finalized and will be completed by April 2021.

**Does the applicant have access to the land or water source where the project is located? Has the applicant obtained any easements that are required for the project? If so, please provide documentation. If the applicant does not yet have permission to access the project location, please describe the process and timeframe for obtaining such permission.**

Yes, the applicant has access to the land and water source where the project is located. The applicant does not need to obtain any easements for this project.
Has the applicant included an amount equal to 5 percent of the total project costs in their project budget to cover costs associated with environmental and cultural resource compliance (see Section 2.2.5. Project Budget for additional information)?

Yes, the applicant has included an amount equal to 5 percent of the total project costs in our project budget to cover costs associated with environmental and cultural resource compliance.

**Evaluation Criterion E – Performance Measures**

The applicant has developed multiple methods (performance measures) to quantify the benefits of our proposed project once it is implemented. The watershed coordinator will work with relevant project partners to conduct pre-project monitoring as well as post-project monitoring, recognizing that program funding cannot be used to measure performance after project construction is complete.

**Please describe the performance measures that will be used to quantify actual project benefits upon completion of the project. Include support for why the specific performance measures were chosen.**

The following sections describe the performance measures that will be used to quantify actual project benefits upon completion of the project, and monitor the progress and effectiveness of the project once complete.

**Project Component 1 – Erosion Protection Wall**

Monitoring the progress and effectiveness of the installed erosion protection wall will involve taking pre- and post-project photos to document the improved protection and stabilization of the riverbank and reduction of erosion, as well as improved public safety and flood protection. Stakeholders are also excited about the significantly improved aesthetics of the project area that will result through this project component, that includes the removal of discarded concrete debris providing poor, makeshift erosion protection. This method and performance measure was selected as it appeared to be the most effective in demonstrating pre versus post project benefit. *We also believe that this new, smooth, erosion protection wall will contribute to improved water delivery into the headgate, but it may be difficult to exactly quantify the additional water delivery contribution made by this project component.*

**Project Component 2 – Trash Diversion Device**

Monitoring the progress and effectiveness of the installed trash diversion device will involve calculating the pre-installation and post-installation average number of times per month that trash
lodged in headgate structure and affected headgate functionality. This method/performance measure was chosen because it will be the most direct measure of the success of this device.

**Project Component 3 - Automated Headgate Security Fencing**

Monitoring the effectiveness of the installed automated headgate security fencing will involve calculating the average number of times per month that the newly installed automated headgate infrastructure is vandalized (hopefully zero). This method/performance measure was chosen because it is the most direct measure of the success of this installed security fencing. However, we will also be interviewing stakeholders to determine their increased sense of public safety as they work and play near the structure as well. As noted previously, an automated headgate will be installed as part of this project, but because Federal funding will be used to fund the purchase and installation of the automated headgate itself, it could not be used as match for this project and it was our understanding that we could not directly count the automated headgate installation as one of our official project components because of this Federal funding component. However, if we are allowed to ‘count’ the installation of the automated headgate itself as part of our project, we will quantify the water delivery effectiveness of the new automated headgate by tracking the data gathered on the nearby water monitoring gage.

**Project Component 4 – Diversion Dam Cap**

Monitoring the progress and effectiveness of the installed diversion dam cap will include pre- and post-project photos being taken, as well as water quantity measurements being tracked using the associated water gage to measure improved water delivery into the headgate. The installation of the diversion dam cap is predicted to demonstrate a sizeable benefit in water delivery. In particular, we are interested in documenting the improved water inflow into the headgate during low flows, as currently irrigators are not able to capture their full water allotment at low flows. We will be able to quantify the success of the new diversion dam cap installation by tracking water movement into the headgate particularly at low flows. If (for example) 20 cfs is released from Trinidad Dam for the Baca-Picketwire Ditch, and we observe all 20 cfs being picked up by the headgate, we will be able to clearly demonstrate project success. This method and performance measures were chosen because they were determined to be our best method for quantifying project component success.

**Project Component 5 - Fish Passage Monitoring.**

Monitoring the progress and effectiveness of the installed fish passage will involve a fish monitoring technique where fish are marked by clipping a portion of the fish's fin or inserting a sub-cutaneous dye under the skin that can be easily seen with ultraviolet light. A number of fish sizes and species will be marked below the diversion dam/installed fish passage. Biologists will capture a good baseline of sampling data pre-construction then return after project completion and capture fish above the structure to document sizes and species of marked fish that were able to successfully move through the structure. This method and performance measures were chosen
because it will provide a comprehensive picture of the success of the fish passage and is a cost-effective strategy that can be implemented without a lot of expensive equipment.

Project Component 6 - Fish Habitat Structure Monitoring.

Monitoring the progress and effectiveness of the installed fish habitat structures will be tied in with fish monitoring efforts being conducted for fish passage monitoring. Fish monitoring is already being conducted by Colorado Parks & Wildlife on the Purgatoire River to capture and track important fish data including age, weight, size, and speciation. This monitoring will continue, and become an annual occurrence, with the installation of this project. Monitoring will include investigation of fish habitat directly associated with the structures to capture usage information. This monitoring strategy was chosen because it is a robust and straightforward method for quantifying project success, and is a method that is already in place through Colorado Parks & Wildlife, being conducted by professional biologists. As well, the fish habitat structures themselves will be photo monitored pre- and post-project to track structure integrity and stability over time (e.g. track whether structures hold up to high flows and other disturbance over time). We also believe that strategic placement of the fish habitat structures will contribute to improved water delivery into the headgate, but it may be difficult to exactly quantify the additional water delivery contribution made by this project component.

Project Component 7 - Woody Invasive Species Management (and associated active revegetation efforts)

Monitoring the progress and effectiveness of the woody invasive species management and active revegetation efforts conducted will include establishing photo points to capture pre- and post-project site conditions, and presence of wildlife noted. As well, all active revegetation efforts will be quantified (e.g. amount of seed and area seeded, number of native plantings installed) at the time of installation, and the success of active revegetation efforts tracked (e.g. survival rate of native plantings).

**Evaluation Criterion F – Department of the Interior and Bureau of Reclamation Priorities**

Up to 10 points may be awarded based on the extent that the proposal demonstrates that the project supports the Department and Reclamation priorities. Please address those priorities that are applicable to your project. It is not necessary to address priorities that are not applicable to your project.

The following describes how our project supports the Department and Reclamation priorities.

**Department of the Interior Priorities**

1. Creating a conservation stewardship legacy second only to Teddy Roosevelt
a. Utilize science to identify best practices to manage land and water resources and adapt to changes in the environment

We will be utilizing good science to gather data to document project component success, and then utilizing our findings to identify best practices to better manage land and water resources associated with our project and our watershed, and adapt to changes in the environment.

e. Foster relationships with conservation organizations advocating for balanced stewardship and use of public lands

Our project directly serves to foster and improve relationships with conservation organizations advocating for balanced stewardship and use of public lands (e.g. Colorado Parks & Wildlife, Trout Unlimited) through directly engaging these organizations as project partners and working together for mutual project benefit.

3. Restoring trust with local communities

b. Expand the lines of communication with governors, state natural resource offices, Fish and Wildlife offices, water authorities, county commissioners, tribes, and local communities

Our project directly serves to expand the lines of communication with governors, state natural resource offices, Fish and Wildlife offices, water authorities, county commissioners, and local communities through our direct engagement with partners and stakeholders on this project representing these groups, as well as through our local and regional outreach efforts that will be conducted as part of this project to share project success and ensure ongoing community support for the project.

Bureau of Reclamation Priorities

1. Increase Water Supplies, Storage, and Reliability under WIIN and other Authorities

Our project will directly increase water supply and water reliability for agricultural water users, particularly at low flows through the installation of the diversion dam cap. Other project components will also contribute to increased water supply and water reliability including through the installation of the trash diversion device, the erosion protection wall, and the fish habitat structures (particularly the cross-vanes). As noted earlier, we are also installing a new automated headgate and associated security fencing as part of this project, although at the time of grant submittal we are unclear as to how much we can discuss the direct benefits of the automated headgate itself in this grant proposal as separate Federal funds will be used to pay for the headgate itself.

3. Leverage Science and Technology to Improve Water Supply Reliability to Communities
Our project will directly leverage science and technology to improve water supply reliability to our agricultural community through the installation of a new automated headgate as part of this project, although at the time of grant submittal we are unclear as to how much we can discuss the direct benefits of the automated headgate itself in this grant proposal as separate Federal funds will be used to pay for the headgate itself.

4. Address Ongoing Drought

Our project addresses ongoing drought by directly increasing water supply and water reliability for agricultural water users, particularly at low flows through the installation of the diversion dam cap. Other project components also contributing to increased water supply and water reliability include the installation of the trash diversion device, the erosion protection wall, and the fish habitat structures (particularly the cross-vanes).

6. Improve Water Supplies for Tribal and Rural Communities

Our project will directly improve water supplies for rural communities, as our entire watershed is comprised of rural agricultural communities surrounding our one ‘big city’ of Trinidad (population less than 10,000).
PROJECT BUDGET

Funding Plan and Letters of Commitment

The non-Federal share of project costs will be obtained through project partners and project funding provided by sources other than the applicant are supported through Letters of Commitment (combined in some cases with Letters of Support). All Letters of Commitment identify the amount of funding commitment, the date the funds will be available to the applicant, any time constraints on the availability of funds, and any other contingencies associated with the funding commitment. All Letters of Commitment have been combined into one section with the Letters of Support, and can be found as an attachment.

Our budget proposal does not include any project costs that will be incurred prior to the grant award.

Budget Proposal

Our total project cost is the sum of all allowable items of costs, including all required cost sharing and voluntary committed cost sharing, including third-party in-kind contributions, that are necessary to complete the project. See Table 1 for our Total Project Costs.

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>AMOUNT</th>
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<tbody>
<tr>
<td>Costs to be reimbursed with the requested Federal funding</td>
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<td>TOTAL PROJECT COST</td>
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</table>

Our Budget Proposal table (Table 2) and Cost Sharing Entities table (Table 3) identify all costs that will be contributed as non-Federal cost share by the applicant (required and voluntary) and project partners, as well as third-party in-kind contributions and those costs that will be covered using the funding requested from Reclamation. We are not requesting any pre-award costs. All additional details associated with the Budget Proposal and Cost Sharing Entities can be found in the Budget Narrative.
Table 2. Budget Proposal Table

<table>
<thead>
<tr>
<th>BUDGET ITEM DESCRIPTION</th>
<th>COMPUTATION</th>
<th>Quantity</th>
<th>TOTAL COST</th>
</tr>
</thead>
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<tr>
<td><strong>Salaries and Wages</strong></td>
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<td>Watershed Coordinator (2-years)</td>
<td>$34.00</td>
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<td><strong>Supplies and Materials</strong></td>
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<td>Native revegetation plant materials</td>
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<td><strong>Contractual/Construction</strong></td>
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<td>Project Engineer - Implementation &amp; Oversight</td>
<td>$165.00</td>
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<td><strong>Third Party In-Kind</strong></td>
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<td>$2,176.00</td>
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# Table 3. Cost Sharing Entities Table

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<th>Purgatoire Watershed Partnership</th>
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<th>Downtown Trinidad Development Group</th>
<th>Baca &amp; Picketwire Ditch Companies</th>
<th>SPPRCD - PWWM C</th>
<th>Trout Unlimited</th>
<th>COCO/ARWC</th>
<th>BoR - Water SMART Grant</th>
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<td>$15,000.00</td>
<td>$161,585.60</td>
<td>$323,181.68</td>
</tr>
</tbody>
</table>
Budget Narrative

Salaries and Wages
The Project Manager is the Watershed Coordinator and is the one paid employee of Purgatoire Watershed Partnership.

Watershed Coordinator Salary
$34.00 x 800 hours = $27,200

Fringe Benefits
Watershed Coordinator Fringe
$11.90 x 800 hours = $9,520

Travel
No funding for travel is being requested through this grant.

Equipment
No equipment will be purchased for this project. All other equipment associated with this project is described below under the Contractual section or the In-Kind Contributions section.

Materials and Supplies
All materials and supplies for this project are described below under the Contractual section.

Contractual
This section describes all work to be accomplished by hired contractors including engineers, construction contracts, and a woody invasive species management contractor.

I. Project Engineer

Project Engineer – Implementation and Oversight
$165.00 x 125 hours = $20,625.00

II. Construction Contracts

There will be two Construction Contracts.

The following table outlines all of the estimated costs for Construction Contract 1.
## Table X. Total Costs Construction Contract 1 – Components 1-4

<table>
<thead>
<tr>
<th>BUDGET ITEM DESCRIPTION</th>
<th>COMPUTATION</th>
<th>TOTAL COST ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$/Unit</td>
<td>Quantity</td>
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<tr>
<td><strong>LABOR COSTS</strong></td>
<td>cost per hour ($)</td>
<td>total hrs</td>
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<tr>
<td>Contractor Doing Work (hrs x hourly rate)</td>
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</tr>
<tr>
<td>Component 1 - Erosion Protection Wall</td>
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</tr>
<tr>
<td>Forming, Steel Tying, Concrete Placing Crew</td>
<td>565.00</td>
<td>29</td>
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<tr>
<td>Foreman w/ Truck</td>
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<td>60</td>
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<tr>
<td>Superintendent</td>
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<tr>
<td>Component 2 – Trash Diversion Device</td>
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<tr>
<td>Forming, Steel Tying, Concrete Placing Crew</td>
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<tr>
<td>Laborers</td>
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<tr>
<td>Subcontract Core Drilling</td>
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<td>Component 3 – Automated Headgate Security Fencing</td>
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<td>Installation Subcontract Labor</td>
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<td>Component 4 – Diversion Dam Cap</td>
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<td>Skid Steer Operator</td>
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<td>Superintendent</td>
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<tr>
<td>Reinforcing Steel – Grade 60</td>
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<td>Reinforcing Steel – Grade 60, Epoxy coated</td>
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<td>Concrete – 4000 psi, ready-mix</td>
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<tr>
<td>Task 2 – Debris and Watercraft Diversion Device</td>
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<tr>
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<tr>
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<td>5/8x12 Wedge Anchor Bolts</td>
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</table>

| Task 3 - Security Fencing | Posts, Fabric and Concrete Mix | 15.00 | 60 | Lineal Feet | 900.00 |

| Task 4 – Irrigation Diversion Structure Cap | Reinforcing Steel – Grade 60, Epoxy coated | 1.48 | 3390 | Pounds | 5,017.20 |
| Concrete – 4000 psi, ready-mix | 155.00 | 38 | Cubic Yards | 5,890.00 |
| Bonding Agent | 32.00 | 10 | Gallons | 320.00 |

**EQUIPMENT**

| Task 1 - Erosion Protection Wall | Generator and Power Tools |  |  |
| Skid Steer Loader | 35.00 | 12 | Hours | 420.00 |
| Dry Prime Pump | 35.00 | 24 | Hours | 840.00 |
| Pumper Truck - Subcontract |  |  |  |
| -2 Trips mobilization, pumping and demobilization | 136.00 | 16 | Hours | 2,176.00 |
| -Pumping | 3.11 | 29 | Cubic Yards | 90.19 |

| Task 2 – Debris and Watercraft Diversion Device | Pumper Truck - Subcontract |  |  |
| -Pumping | 136.00 | 1 | Hours | 136.00 |
| -Pumping | 3.11 | 1.4 | Cubic Yards | 4.35 |

| Task 3 - Security Fencing | Equipment | 0.75 | 60 | Lineal Feet | 45.00 |

<p>| Task 4 – Irrigation Diversion Structure Cap |  |  |  |
| Trackhoe w/Breaker | 76.00 | 16 | Hours | 1,216.00 |
| Skid Steer Loader | 35.00 | 16 | Hours | 560.00 |
| Tandem Dump Truck | 65.00 | 8 | Hours | 520.00 |</p>
<table>
<thead>
<tr>
<th>BUDGET ITEM DESCRIPTION</th>
<th>COMPUTATION</th>
<th>TOTAL COST ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contractual/Construction – Components 1-4</td>
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<tr>
<td>LABOR COSTS</td>
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<tr>
<td>Contractor Doing Work (hrs x hourly rate)</td>
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<td>Component 5 – Fish Passage</td>
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<td>Component 6 – Fish Habitat Structures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rock</td>
<td>36.00</td>
<td>336</td>
</tr>
<tr>
<td>EQUIPMENT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Component 5 – Fish Passage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-Stream Heavy Equipment</td>
<td>75.00</td>
<td>55</td>
</tr>
</tbody>
</table>

The following table outlines all of the estimated costs for Construction Contract 2.
### Component 6 – Fish Habitat Structures

<table>
<thead>
<tr>
<th>In-Stream Heavy Equipment</th>
<th>75.00</th>
<th>80</th>
<th>Hourly</th>
<th>6,000</th>
</tr>
</thead>
</table>

**TOTAL COSTS**

$40,000

---

**III. Woody Invasive Species Management Contractor – Project Component 7**

We would like to use Mile High Youth Corps as our woody invasive species management contractor. Their rate is $8,300 per week for one week. *We will also be conducting an additional week of woody invasive species management with a local volunteer crew – see In-Kind Contributions below for that labor, as well as donated equipment from the City of Trinidad in support of this work.*

**Third-Party In-Kind Contributions**

The following third-party in-kind contributions are being provided in support of this project:

- **City of Trinidad Manager Project Advisor and Oversight**
  $75.00 x 120 hours = $9,000.00

- **City of Trinidad Watershed Manager Project Advisor and Oversight**
  $75.00 x 120 hours = $9,000.00

- **Purgatoire River Water Conservancy District Manager Project Advisor and Oversight**
  $120.00 x 80 hours = $9,600.00

- **Baca Ditch Company Volunteer Staff Project Advisor and Oversight**
  $27.20 x 80 hours = $2,176.00

- **Picketwire Ditch Company Volunteer Staff Project Advisor and Oversight**
  $27.20 x 80 hours = $2,176.00

- **Trout Unlimited Volunteer Staff Project Advisor and Oversight**
  $27.20 x 80 hours = $2,176.00

- **Purgatoire Watershed Weed Management Collaborative Technical Advisor and Oversight - Invasive Species Management**
  - $31.41 x 106 hours = $3,329.46 Hourly Rate
  - $15.47 x 106 hours = $1,639.82 Fringe

**Coalitions & Collaboratives Staff Consulting Support**

37
• $75.00 \times 120 \text{ hours} = $9,000.00
• $50.00 \times 120 \text{ hours} = $6,000.00

Purgatoire River Vegetation Management Volunteer Crew - Invasive Species Management & Associated Manual Woody Debris Removal
$27.20 \times (10 \text{ people} \times 40 \text{ hours}) = $10,880.00

Volunteer Stewardship Day - Active Revegetation
$27.20 \times (20 \text{ people} \times 6 \text{ hours}) = $3,264.00

City of Trinidad Front Loader plus operator - Invasive Species Management debris removal
$95.00 \times 80 \text{ hours} = $7,600.00

City of Trinidad Dump Truck plus operator - Invasive Species Management debris removal
$55.00 \times 80 \text{ hours} = $4,400.00

**Environmental and Regulatory Compliance Costs**
We have included a line item in the project budget for compliance, using 5 percent of the total project costs as the estimated amount that will be cost-shared by the recipient and Reclamation.

Total Cost = $15,389.60
Reclamation Portion = $7,694.80
Application Portion = $7,694.80

**Indirect Costs**
We are requesting indirect costs of $4,000.00 to cover watershed administrative support.

$50.00 \times 80 \text{ hours} = $4,000.00
ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

Purgatoire Watershed Partnership and project partners recognize that all projects being considered for award funding will require compliance with NEPA, and that compliance with all applicable state, Federal and local environmental, cultural, and paleontological resource protection laws and regulations is also required. We recognize that no ground disturbing activities may occur until environmental compliance is complete and a notice to proceed is issued by the awarding Grants Officer.

Environmental and Cultural Resource Considerations

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, Purgatoire Watershed Partnership has provided responses to the following list of questions focusing on the NEPA, ESA, and NHPA requirements.

Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area.

Our project will generally only provide benefits - not injury - to the soil, air, water, and animal habitat within the project area. Our project is designed to improve water quality (e.g. reduce erosion) and improve aquatic conditions for fish, as well as improve wildlife habitat on land by removing woody invasive species and conducting native plant revegetation. Earth-disturbing work will be minimal and include on-site foot traffic to remove woody invasive species, in-stream installation of rock to create fish habitat structures, and in-stream work to install the erosion protection wall and trash diversion device.

Project partners and other relevant entities will also ensure that no water rights are injured through these project efforts. We will be working closely with Purgatoire River Water Conservancy District on this project who will be ensuring strict adherence to water rights, and as well we will be working with our Colorado Division of Water Resources water commissioner to ensure compliance. In working with the Arkansas Basin Roundtable to secure a Letter of Support for this project, they requested that we include the following language in our grant application as an additional layer to demonstrate that we are considering and ensuring water rights protection through our project.

ARKANSAS BASIN ROUNDTABLE STATEMENT OF PROTECTION OF WATER RIGHTS
Consistent with C.R.S. 37-75-102, et seq. of the “Colorado Water for the 21st Century Act”, project proponents who seek support or grants from the Roundtables or the Colorado Water Conservation Board whose project(s) have the potential to change the historic availability of water to decreed water rights by time, amount or location through alterations of the stream flow regime, geomorphology of a natural stream channel, increasing the surface area of a stream, or the expansion of riparian vegetation will evaluate these impacts by undertaking a water rights impact analysis. Such analysis will be conducted by a qualified registered water resource engineer familiar with the subject
water body and drainage basin. This analysis will be conducted prior to implementing any of the tasks identified in the project/grant scope of work. The analysis may be part of the identified project costs. Any mitigation required to prevent negative impacts to water rights may also be included in the project costs.

In summary, we have determined through discussion with interested Arkansas Basin Roundtable members that because our project already includes multiple project partners with a mandate and clear interest in ensuring water rights protection, the only additional action required to ensure protection of water rights will be to ensure project compliance with our Colorado Division of Water Resources water commissioner.

Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

The impacts of our work will not impact the surrounding environment outside the project area.

Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

We are not aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as “Waters of the United States?” If so, please describe and estimate any impacts the proposed project may have.

We will be working in and around the Purgatoire River, but we estimate that this proposed project will have minimal negative impacts. We will also be working on an irrigation structure, with permitting covering approved impacts associated with irrigation infrastructure work.

When was the water delivery system constructed?

It is unknown exactly when the original diversion dam was installed, but it is estimated to have occurred in the early 1900’s. However, the more recent irrigation structures are estimated to have been installed approximately 50 years ago.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.
The proposed project will result in improved water delivery to the headgate. For the diversion dam, the previous modifications are estimated to have been conducted approximately 50 years ago. For the current manual headgate, modifications occurred two years ago (e.g. the pouring of a concrete floor for the entrance to the current manual headgate, installation of a large woody debris bar). However, the installation of the proposed project components in this grant proposal will not modify current infrastructure, only provide new functionality and efficiency to complement pre-existing infrastructure.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

Not that we are aware of.

Are there any known archeological sites in the proposed project area?

No there are not.

Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?

No it will not.

Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?

No it will not.

Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

Our proposed project will accomplish the reduction of invasive species in this area through woody invasive species removal.
REQUIRED PERMITS OR APPROVALS

Purgatoire Watershed Partnership will adhere to all Federal, state, territorial, tribal, and local laws, regulations, and codes, as applicable, and shall obtain all required approvals and permits. Recipients shall also coordinate and obtain approvals from site owners and operators. No known additional permits or approvals are required for this project.

DOCUMENTATION IN SUPPORT OF APPLICANT ELIGIBILITY

Certification and Membership List
The Purgatoire Watershed Partnership self-certifies that we are a watershed group that meets the definition of a “Watershed Group,” as defined in Section 6001(5) of the Cooperative Watershed Management Act. We are a grass-roots, non-regulatory entity that addresses water availability and quality issues within the relevant watershed, make decisions on a consensus basis, represent a diverse group of stakeholders, and are capable of promoting the sustainable use of water resources in the watershed.

Please include a list of the members of the watershed group. We currently have 234 engaged stakeholders in our watershed group. We cannot provide a public list of the actual stakeholder names participating in our watershed group for privacy reasons, but if Reclamation requires this evidence we will work with Reclamation to provide the necessary evidence without compromising stakeholder privacy. However, we can share that our members represent a diverse group of stakeholders and represent livestock grazing, timber production, land development, recreation and tourism, irrigated agriculture, the environment, municipal water supplies, private property owners, and Federal, state and local governments. We do not have any tribes or hydroelectric producers in our watershed.

Articles of Incorporation and Bylaws
Please see attached for a copy of Purgatoire Watershed Partnership’s Articles of Incorporation, and for a copy of our Bylaws.

Mission Statement
Please see attached for a copy of our mission statement.

Meetings
The Purgatoire Watershed Partnership self-certifies that our watershed group holds regular meetings (monthly meetings).

Watershed Management/Restoration Plan
We have completed the sections of our watershed management/restoration plan relevant for this grant submittal and attached the document as an appendix (see attached document: Purgatoire River Management Plan). We are currently working with stakeholders to finalize this watershed
management/restoration plan by March 2021 through our current BOR WaterSMART Phase I funding.

LETTERS OF PROJECT SUPPORT & COMMITMENT

We have included letters from interested stakeholders supporting the proposed project. Most of these stakeholders are also committing cash match and/or in-kind contributions to this project, and as such we have attached all Letters of Support and Letters of Support/Commitment in one section as an appendix.

Please note: We have one Letter of Commitment still outstanding. The Purgatoire River Water Conservancy District could not officially approve their cash match of $5,000.00 until their December 2020 Board Meeting. We will send that Letter of Commitment immediately following that Board Meeting.

OFFICIAL RESOLUTION

The Purgatoire Watershed Partnership Board has included an official resolution adopted by our Board of Directors. We have attached this Official Resolution as an appendix.
Arkansas Basin Roundtable  
November 13, 2020

Via Electronic Mail: jknudson@purgatoirepartners.org

Bureau of Reclamation  
Financial Assistance Operations  
Attn: Mr. Edmund Weakland  
Mail Code: 84-27814  
P.O. Box 25007  
Denver, CO 80225

Re: Bureau of Reclamation WaterSMART Cooperative Watershed Management Program Phase II grant application for Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project

Dear Mr. Weakland,

The Arkansas Basin Roundtable (Roundtable) submits this Letter of Support for the Purgatoire Watershed Partnership’s Bureau of Reclamation WaterSMART Cooperative Watershed Management Program Phase II grant application entitled *Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project*. The Roundtable is a water user group in the Arkansas River Basin of Colorado that meets monthly and is engaged in issues of interest to water users in the Arkansas River Basin within Colorado and related statewide water planning. The Roundtable represents all water users in the Basin including agricultural, municipal, and environmental and recreational water users. The Roundtable fully supports the effort of the Purgatoire Watershed Partnership and the work they are doing on the Purgatoire River. The grant funds requested will allow the Partnership to implement this on-the-ground watershed management project that will protect and stabilize stream and riverbanks, reduce erosion, improve channel/floodplain connectivity, improve water delivery systems to increase efficiency and address water supply needs, remove invasive species and restore desirable vegetation, influence water temperature and water pooling to improve aquatic conditions, and improve public safety. This project clearly supports the goals identified in the Arkansas Basin Implementation Plan and in the Colorado State Water Plan.

Thank you for your consideration,

Mark Shea, Chair
Ron Arant  
Baca Ditch Company  
14800 County Road 28.7  
Trinidad, Colorado 81082

November 12, 2020

Bureau of Reclamation  
Financial Assistance Operations  
Attn: Mr. Edmund Weakland  
Mail Code: 84-27814  
P.O. Box 25007  
Denver, Colorado 80225

Dear Mr. Weakland,

I am writing this letter in support and to encourage the Purgatoire River Baca/Picketwire Diversion Dam Complex Restoration Project proposal as submitted to the U.S. Bureau of Reclamation’s WaterSMART Cooperative Watershed Management Program Phase II grant.

The Baca Ditch will greatly benefit from this project with improved water delivery and efficiency, stabilizing the stream and riverbanks, help with erosion, improving channel flow, removal of invasive species, and improvement of public safety in and around our headgate.

The Baca Ditch Company will commit to providing a $1000 cash match, as well as providing in-kind contribution for this project valued at $2,176 in the form of Baca Ditch Company personnel providing project consulting and oversight for the project. If the project is funded the cash match would be available as of September 2021, for the duration of the project.

Sincerely,

Ron Arant

Ron Arant, President of the Baca Ditch Company
November 13, 2020

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
Mail Code: 84-27814
P.O. Box 25007
Denver, CO 80225

Dear Mr. Weakland,

This Letter of Support and Commitment is submitted by the City of Trinidad in strong support of the Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project proposal being submitted to the U.S. Bureau of Reclamation’s WaterSMART Cooperative Watershed Management Program Phase II grant opportunity.

The City of Trinidad strongly supports this project along the Purgatoire River and Trinidad Riverwalk because of the significant beneficial restoration and enhancement efforts that this project provides that will benefit the City. In particular, these efforts will provide improved protection and stabilization of the riverbanks that will protect City property from further erosion; will improve the efficiency and consistency of water delivery downstream through instream agricultural infrastructure improvements and woody invasive species removal that currently hinder water transport; and will significantly improve public safety through additional security and protection measures being installed around the irrigation infrastructure. The City also supports the ecological benefits that this project provides, and is excited to see the strong collaboration of this diverse set of partners on this multi-component project that benefits municipal, ecological, agricultural, and recreational needs.

The City of Trinidad commits to providing $20,000 of cash match to this project, as well as providing in-kind contributions for this project valued at $30,000 in the form of City of Trinidad personnel providing on-the-ground labor for project components, as well as providing project consulting and oversight for project components representing City interests and ensuring relevant City regulations and requirements are followed. If the project is funded, the cash match would be available as of September 2021, for the duration of the project.

The City looks forward to working on this project for the mutual benefit of the river, project partners, and our community.

Respectfully,

Michael A. Valentine
City Manager
November 15, 2020

Bureau of Reclamation, Financial Assistance Operations
Attn: Mr. Edmund Weakland
Mail Code: 84-27814
P.O. Box 25007
Denver, CO 80225

RE: Purgatoire Watershed Partnership application to the Bureau of Reclamation’s WaterSMART Cooperative Watershed Management Program Phase II grant opportunity

Dear Mr. Weakland:

This Letter of Support and Commitment is submitted by Coalitions & Collaboratives (COCO) in full support of the Purgatoire River “Baca-Picketwire Diversion Dam Complex Restoration Project” proposal being submitted to the U.S. Bureau of Reclamation’s WaterSMART Cooperative Watershed Management Program Phase II grant opportunity.

This is an important project on the Purgatoire River that addresses multiple critical water user needs and has been determined by stakeholders to be a high priority project that will serve to stabilize riverbanks and reduce erosion, provide fish passage and improved aquatic habitat, improve wildlife habitat through woody invasive species management and native revegetation, improve channel/floodplain connectivity, and improve water delivery systems to increase efficiency and address water supply needs through agricultural infrastructure improvements.

COCO commits to providing in-kind contributions for this project valued at $15,000 in the form of COCO personnel providing expert consulting and support to the Purgatoire Watershed Partnership for this project. If the project is funded, this in-kind match would be available as of September 2021, for the duration of the project.

Sincerely,

Carol Ekarius.
CEO
November 11, 2020

Bureau of Reclamation
Attn: Mr. Edmund Weakland
P.O. Box 25007
Denver, CO 80225

Mr. Weakland,

Colorado Parks and Wildlife (CPW) would like to offer strong support for the Baca-Picketwire diversion improvements and the grant they are seeking from the WaterSMART Cooperative Watershed Management Program Phase II.

We are encouraged and fully support that they are seeking to incorporate fish passage into their project. Incorporating fish passage into the project would provide an additional 3.25 miles of habitat upstream to the base of Trinidad Lake. The Purgatoire River at this location is what we consider a transition zone from more cold-water fish such as trout to more warm-water native fish downstream. These fish need to be able to migrate up and downstream as water temperatures and conditions fluctuate during the year.

I am very excited about this project and intend to be heavily involved with this project to ensure the fish passage structure is designed and installed correctly. CPW will monitor the success of the project by installing fish passage monitoring equipment and/or marking fish to see if they can successfully navigate through the structure.

I appreciate your time and encourage your favorable consideration.

Regards,

[Signature]
Joshua B. Nehring
Senior Aquatic Biologist
November 12, 2020

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
Mail Code: 84-27814
P.O. Box 25007
Denver, CO 80225

RE: PWP BOR WaterSMART Cooperative Watershed Management Program Phase II grant application

Dear Mr. Weakland,

The Downtown Trinidad Development Group submits this Letter of Support and Commitment in full support of Purgatoire Watershed Partnership’s (PWP) grant application requesting funding for the Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration project.

The Downtown Trinidad Development Group is excited about this project that will serve to improve the ecological health, agricultural efficiency, recreational opportunities along the Purgatoire River, and municipal needs along the river, as well as significantly enhancing an important section of the Purgatoire River that, once properly enhanced and restored, will economically benefit our local businesses as well as our community members and visitors. In particular, we are very supportive of the new Security Fencing that will be installed around the irrigation headgate to protect public safety, as well as the multiple benefits that the installation of the Erosion Protection Wall will bring including significantly improved public safety and bank stabilization. We are also enthusiastic about working with this diverse group of partners on this project that serves so many different water user interests, for the benefit of all.

The Downtown Trinidad Development Group commits to providing $20,000 of cash match to this project. This cash match would be available as of September 2021, for the duration of this project.

Sincerely,

Gina Cimino
President
November 12, 2020

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
Mail Code: 84-27814
P.O. Box 25007
Denver, CO 80225

Dear Mr. Weakland,

This Letter of Support and Commitment is submitted by the Picketwire Ditch Company in strong support of the Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project proposal being submitted to the U.S. Bureau of Reclamation’s WaterSMART Cooperative Watershed Management Program Phase II grant opportunity.

Our ditch company will benefit from this project through improved water delivery and efficiency, stabilization of stream and riverbanks, reduction of erosion, improved channel/floodplain connectivity, removal of invasive species, and improvement of public safety in and around irrigation infrastructure.

The Picketwire Ditch Company commits to providing in-kind contributions for this project valued at $2,176 in the form of Picketwire Ditch Company personnel providing project consulting and oversight for project components associated directly with ditch company interests and functionality, as well as contributing $1000 of cash match to this project. If the project is funded, the cash match would be available as of September 2021, for the duration of the project.

Sincerely,

Jim Jolly
Ditch President
Picketwire Ditch Company

[Signature]
PUGA TOIRE RIVER WATER CONSERVANCY DISTRICT
3590 East Main Street, Suite 3
Trinidad, Colorado 81082

(719) 846-7285

November 10, 2020

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
Mail Code: 84-27814
P.O. Box 25007
Denver, CO 80225

Re: Purgatoire Water Partnership’s Purgatoire River Baca-Picketwire-El Moro Diversion Dam
   Complex Restoration Project proposal

Dear Mr. Weakland,

This Letter of Support and Commitment is submitted by the Purgatoire River Water
Conservancy District (“District”). The District wishes to express its strong support of the
Purgatoire Water Partnership’s Purgatoire River Baca-Picketwire-El Moro Diversion Dam
Complex Restoration Project proposal being submitted for the U.S. Bureau of Reclamation’s
WaterSMART Cooperative Watershed Management Program Phase II grant opportunity. The
District is the entity responsible for repayment to Reclamation for the irrigation related costs
associated with the construction of the Trinidad Project and sees this proposal as a means of
continuing improvements to the irrigation infrastructure within the Trinidad Project.

The District strongly supports this project proposal located at the Picketwire/Baca/El Moro Ditch
diversion structure. This proposal includes additional protection for this irrigation infrastructure
from riverbank erosion, floating trash, removal of invasive plant species which reduce project
irrigation water supplies and delivery efficiencies and includes enhancement to the river
diversion structure for these three District irrigation ditches. This diversion structure
enhancement will directly prevent the waste of Trinidad Project waters during low flow river
conditions and during non-irrigation season livestock water deliveries to these ditches.

The District is currently finalizing its budgets for 2021. Although the District cannot commit to
a specific cash commitment to this project at this time, a commitment is anticipated prior to the
end of this current calendar year. If committed, this cash match would be available as of
September 2021 and for the duration of the project. The District has also pledged to the
Purgatoire Water Partnership necessary in-kind technical assistance and construction oversight
regarding the irrigation infrastructure aspects of the proposal. This in-kind contribution is valued
at $9,600.
The District has been working closely with the Purgatoire Water Partnership on this proposal and looks forward to this continued partnership.

Sincerely,

Steven J. Kastner
General Manager, PRWCD
November 14, 2020

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
Mail Code: 84-27814
P.O. Box 25007
Denver, CO 80225

RE: Purgatoire Watershed Partnership BOR WaterSMART Cooperative Watershed Management Program Phase II grant application

Dear Mr. Weakland,

The Purgatoire Watershed Partnership provides this Letter of Commitment for the Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration project.

The Purgatoire Watershed Partnership commits to providing cash match of $33,354.80 and in-kind contributions valued at $14,144 in the form of the Purgatoire River Vegetation Management Volunteer Crew (community volunteers organized and led by Purgatoire Watershed Partnership) providing 400 hours (40 hours x 10 crew members) of woody invasive species and associated woody debris management, plus a Volunteer Stewardship Day focused on active revegetation post-invasive species removal conducting seeding and planting of native species (community volunteers organized and led by Purgatoire Watershed Partnership) providing 120 hours (6 hours x 20 volunteer crew members) of work. If the project is funded, the cash match would be available as of September 2021.

Sincerely,

Julie Knudson
Executive Director/Watershed Coordinator
Purgatoire Watershed Partnership
November 12th, 2020

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
Mail Code: 84-27814
P.O. Box 25007
Denver, CO 80225

RE: PWP grant application to the Bureau of Reclamation’s WaterSMART Cooperative Watershed Management Program, Phase II

Dear Mr. Weakland:

The Spanish Peaks-Purgatoire River Conservation District (SPPRCD), through their Purgatoire Watershed Weed Management Collaborative (PWWMC) program, submits this Letter of Support and Commitment in full support of the Purgatoire Watershed Partnership’s (PWP) grant application to the Bureau of Reclamation’s WaterSMART Cooperative Watershed Management Program Phase II grant opportunity for the Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project.

This project aligns in particular with SPPRCD/PWWMC priorities for improving the ecological health of our watershed through woody invasive species management. Additionally, other WaterSMART project components that align closely with SPPRCD/PWWMC’s priorities include those that will protect and stabilize stream and riverbanks, reduce erosion and improve channel/floodplain connectivity. SPPRCD/PWWMC works collaboratively with PWP on projects throughout the watershed to improve riparian and upland health, and we look forward to working with PWP and other project partners on this exciting project.

The PWWMC Coordinator commits to providing $5,000 of in-kind contributions for this project through providing technical expertise and oversight for the woody invasive species management efforts associated with this project: Match will be available as of September 2021 for the duration of the project.

Sincerely,

[Signature]

Shelly L. Simmons, Coordinator
Purgatoire Watershed Weed Management Collaborative
Noxious Weed Program of the Spanish Peaks-Purgatoire River Conservation District
November 14, 2020

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Edmund Weakland
Mail Code: 84-27814
P.O. Box 25007
Denver, CO 80225

RE: Purgatoire Watershed Partnership BOR WaterSMART Cooperative Watershed Management Program Phase II grant application

Dear Mr. Weakland,

The Trout Unlimited Local Chapter/Purgatoire River Anglers submits this Letter of Support and Commitment in strong support of the Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration project submitted in this grant application by the Purgatoire Watershed Partnership.

Trout Unlimited is very excited to support this project that will significantly and directly benefit native and sport fish in the Purgatoire River through improving aquatic conditions and fish habitat and providing fish passage. As well, this project will help protect and stabilize the riverbanks and reduce erosion, remove woody invasive species for improved wildlife habitat and overall river health, improve water delivery functionality and efficiency for irrigators, improve public safety, and support and enhance recreational opportunities through fishing. Trout Unlimited sees this as an important collaborative project bringing together a diverse set of partners/water users (agricultural, municipal, environmental, and recreational) who are working together for mutual benefit on this project.

Trout Unlimited commits to providing in-kind contributions for this project valued at $2,176 in the form of Trout Unlimited volunteer staff providing project consulting and oversight for the fish-related components of this project, as well as contributing $1000 of cash match to this project. If the project is funded, the cash match would be available as of September 2021, for the duration of the project.

Sincerely,

[Signature]

Howard Lackey
Trout Unlimited
Articles of Incorporation for a Nonprofit Corporation
filed pursuant to § 7-122-101 and § 7-122-102 of the Colorado Revised Statutes (C.R.S.)

1. The domestic entity name for the nonprofit corporation is Purgatoire Watershed Partnership, Inc.
   (Caution: The use of certain terms or abbreviations are restricted by law. Read instructions for more information.)

2. The principal office address of the nonprofit corporation’s initial principal office is

   Street address 3590 East Main Street
   (Street number and name)

   Trinidad CO 81082
   (City) (State) (ZIP/Postal Code)

   United States
   (Province – if applicable) (Country)

   Mailing address
   (leave blank if same as street address)

3. The registered agent name and registered agent address of the nonprofit corporation’s initial registered agent are

   Name
   (if an individual)
   Tortorelli Jonnalea
   (Last) (First) (Middle) (Suffix)

   OR

   (if an entity)
   (Caution: Do not provide both an individual and an entity name.)

   Street address 3590 East Main Street
   (Street number and name)

   Trinidad CO 81082
   (City) (State) (ZIP Code)
Mailing address    ______________________________________________________  
(Street number and name or Post Office Box information)  
______________________________________________________  
__________________________     CO      ____________________.
(City)                     (State)                 (ZIP Code)  
(The following statement is adopted by marking the box.)

✔ The person appointed as registered agent above has consented to being so appointed.

4. The true name and mailing address of the incorporator are

Name  
(if an individual)    ____________________ ______________ ______________ _____  
(Last)             (First)             (Middle)      (Suffix)  
OR
(if an entity)     ______________________________________________________  
(Caution: Do not provide both an individual and an entity name.)

Mailing address    3590 East Main Street  
(Street number and name or Post Office Box information)  
______________________________________________________  
__________________________    ____    ____________________.
(City)                     (State)            (ZIP/Postal Code)  
_______________________   ______________.  
(Province  – if applicable)                     (Country)  
(If the following statement applies, adopt the statement by marking the box and include an attachment.)

☐ The corporation has one or more additional incorporators and the name and mailing address of each additional incorporator are stated in an attachment.

5. (If the following statement applies, adopt the statement by marking the box.)

✔ The nonprofit corporation will have voting members.

6. (The following statement is adopted by marking the box.)

✔ Provisions regarding the distribution of assets on dissolution are included in an attachment.

7. (If the following statement applies, adopt the statement by marking the box and include an attachment.)

✔ This document contains additional information as provided by law.

8. (Caution: Leave blank if the document does not have a delayed effective date. Stating a delayed effective date has significant legal consequences. Read instructions before entering a date.)

(If the following statement applies, adopt the statement by entering a date and, if applicable, time using the required format.)

The delayed effective date and, if applicable, time of this document is/are __________________________.
(mmdyy hour:minute am/pm)  

Notice:

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This perjury notice applies to each individual who causes this document to be delivered to the Secretary of State, whether or not such individual is named in the document as one who has caused it to be delivered.

9. The true name and mailing address of the individual causing the document to be delivered for filing are

<table>
<thead>
<tr>
<th>Last</th>
<th>First</th>
<th>Middle</th>
<th>Suffix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nelson</td>
<td>Pamela</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

122 West First Street

(Street number and name or Post Office Box information)

Trinidad CO 81082

(City) (State) (ZIP/Postal Code)

United States

(Province – if applicable) (Country)

(If the following statement applies, adopt the statement by marking the box and include an attachment.)

☐ This document contains the true name and mailing address of one or more additional individuals causing the document to be delivered for filing.

Disclaimer:

This form/cover sheet, and any related instructions, are not intended to provide legal, business or tax advice, and are furnished without representation or warranty. While this form/cover sheet is believed to satisfy minimum legal requirements as of its revision date, compliance with applicable law, as the same may be amended from time to time, remains the responsibility of the user of this form/cover sheet. Questions should be addressed to the user’s legal, business or tax advisor(s).
ARTICLES OF INCORPORATION

OF

PURGATOIRE WATERSHED PARTNERSHIP, INC.

These articles of incorporation are filed pursuant to Sections 7-90-301 *et seq.* and 7-122-101, C.R.S., and establish a nonprofit corporation pursuant to the Colorado Revised Nonprofit Corporation Act.

ARTICLE I.

NAME

The name of the corporation is Purgatoire Watershed Partnership, Inc.

ARTICLE II.

DURATION

The corporation shall have perpetual existence.

ARTICLE III.

PURPOSES AND POWERS

Section 3.1 Purposes. The corporation is organized and shall be operated exclusively for charitable, scientific and educational purposes within the meaning of section 501(c)(3) of the Internal Revenue Code. The general purpose is to protect the ecological health and water quality of the Purgatoire River Watershed through the cooperative efforts of watershed stakeholders, with emphasis on education, community values and economic sustainability. Subject to the foregoing, the specific purposes and objectives of the corporation shall include but not be limited to the following:

a.) Protect the Purgatoire watershed to support beneficial uses.

b.) Identify and recommend management practices for nonpoint pollution sources that may include, but are not limited to, grazing, forestry,
transportation corridors, mining, erosion, nutrient and sediment loading, development, and septic systems.

c.) Mitigate conflict in the watershed by building trust amongst stakeholder groups by forming consensus and making collaborative decisions.

d.) Address water quality impacts related to water quantity management while also promoting water conservation.

e.) Bring understanding and general knowledge to the community about industry practices in the watershed, the limitations of the Kansas Compact, and water rights connected to available surface and groundwater on the Purgatoire River Watershed.

f.) Minimize the impacts from catastrophic events through preventive planning and activities.

g.) Reduce/ remove invasive species.

h.) Protect land and wildlife, improve land values and preserve/promote healthy forests.

i.) Provide a vehicle for citizens, other nonprofit entities, and local government entities to address local concerns with local solutions.

Section 3.2 Powers. In furtherance of the foregoing purposes and objectives (but not otherwise) and subject to the restrictions set forth in Section 3.3, the corporation shall have and may exercise all of the powers now or hereafter conferred upon nonprofit corporations organized under the laws of Colorado and may do everything necessary or convenient for the accomplishment of any of the corporate purposes, either alone or in connection with other organizations, entities or individuals, and either as principal or agent, subject to such limitations as are or may be prescribed by law.

Section 3.3 Restrictions On Powers.

(a) No part of the net earnings of the corporation shall inure to the benefit of or be distributable to any member of the corporation which is not then an exempt organization described in section 501(c)(3) of the Internal Revenue Code, or any director or officer of the corporation or any other individual (except that reasonable compensation may be paid for services rendered to or for the benefit of the corporation affecting one or more of its purposes). No member of the corporation which is not then an exempt organization described in section 501(c)(3) of the Internal Revenue Code, and no director or officer of the corporation or any other individual shall be entitled to share in any distribution of any of the corporate assets on dissolution of the corporation or otherwise.

(b) No substantial part of the activities of the corporation shall consist of carrying on propaganda or otherwise attempting to influence legislation. However, if the corporation is an organization to which section 501(h) of the Internal Revenue Code applies and the corporation has effectively elected to have such section apply, the corporation shall have power to carry on the activities permitted
by such section, but only to the extent such activities shall not result in the denial of exemption under such section. The corporation shall not participate or intervene in (including the publishing or distribution of statements) any political campaign on behalf of or in opposition to any candidate for public office.

(c) Upon dissolution of the corporation, all of the corporation's assets remaining after payment of or provision for all of its liabilities shall be paid over or transferred to and among one or more exempt organizations described in section 501(c)(3) of the Internal Revenue Code, contributions to which are deductible under section 170(c)(2) of the Internal Revenue Code, and/or governmental units within the meaning of section 170(b)(1)(A)(v) of the Internal Revenue Code for exclusively public purposes. The organizations or governmental units to receive such property, and their respective shares and interests, shall be determined by the board of directors.

(d) Notwithstanding any other provision of these articles of incorporation, the corporation shall not carry on any activities not permitted to be carried on by a corporation exempt from federal income tax as an organization described in section 501(c)(3) of the Internal Revenue Code, or by a corporation, contributions to which are deductible under section 170(c)(2) of the Internal Revenue Code, and, if at any time the corporation is a "private foundation" as defined in section 509(a) of the Internal Revenue Code, then during such period of time:

1. The corporation shall not engage in any act of "self-dealing," as defined in section 4941(d) of the Internal Revenue Code, so as to give rise to any liability for the tax imposed by section 4941 of the Internal Revenue Code;

2. The corporation shall make distributions for each taxable year at such time and in such manner so as not to become subject to the tax imposed by section 4942 of the Internal Revenue Code;

3. The corporation shall not retain any "excess business holdings," as defined in section 4943(c) of the Internal Revenue Code, so as to give rise to any liability for the tax imposed by section 4943 of the Internal Revenue Code;

4. The corporation shall not make any investments that would jeopardize the carrying out of any of the exempt purposes of the corporation, within the meaning of section 4944 of the Internal Revenue Code, so as to give rise to any liability for the tax imposed by section 4944 of the Internal Revenue Code; and

5. The corporation shall not make any "taxable expenditure," as
defined in section 4945(d) of the Internal Revenue Code, so as to give rise to any liability for the tax imposed by section 4945 of the Internal Revenue Code.

(e) All references in these articles of incorporation to provisions of the Internal Revenue Code are to the provisions of the Internal Revenue Code of 1986, as amended, and to the corresponding provisions of any subsequent federal tax laws.

ARTICLE IV.

OFFICES, AGENTS AND INCORPORATORS

Section 4.1 Principal Office. The street and mailing address of the initial principal office of the corporation is: 3590 E. Main St., Trinidad, CO 81082.

Section 4.2 Registered Office and Agent. The street and mailing address of the initial registered office of the corporation is: 3590 E. Main St., Trinidad, CO 81082. The name of the corporation's initial registered agent at the initial registered office is Jonnalea Tortorelli.

Section 4.3 Incorporators. The name and address of the incorporator is as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonnalea Tortorelli</td>
<td>3590 E. Main St.</td>
</tr>
<tr>
<td></td>
<td>Trinidad, CO 81082</td>
</tr>
</tbody>
</table>

ARTICLE V.

MEMBERS

The corporation shall have such classes of voting and nonvoting members as may from time to time be prescribed by its bylaws or by the board of directors. The designation and voting powers of each class of members and their respective manner of election or appointment, qualifications, tenure, terms of membership, rights, limitations and obligations shall be as provided from time to time in the bylaws of the corporation or by the board of directors. Voting powers may be denied to any class either generally or in any limited way. The corporation shall have no capital stock. However, the corporation may issue certificates evidencing membership.

ARTICLE VI.
BOARD OF DIRECTORS

Section 6.1 General. The management of the affairs of the corporation shall be vested in a board of directors, except as otherwise provided in the Colorado Revised Nonprofit Corporation Act, these articles of incorporation or the bylaws of the corporation. The number of directors, their classifications, if any, their terms of office and the manner of their election or appointment shall be as provided from time to time in the bylaws of the corporation.

Section 6.2 Liability of Directors. No director shall be personally liable to the corporation or to its members for monetary damages or for breach of fiduciary duty as a director, except that the foregoing shall not eliminate or limit liability of a director to the corporation or to its members for monetary damages for the following: (a) any breach of the director’s duty of loyalty to the corporation or to its members, (b) acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (c) acts specified in C.R.S. Section 7-128-403, as it now exists or hereafter may be amended, or (d) any transaction from which the director directly or indirectly derived an improper personal benefit. If the Colorado Revised Nonprofit Corporation Act hereafter is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of the corporation, in addition to the limitation on personal liability provided herein, shall be further eliminated or limited to the fullest extent permitted by the Colorado Revised Nonprofit Corporation Act. Any repeal or modification of this Section 6.2 shall be prospective only and shall not adversely affect any right or protection of a director of the corporation existing at the time of such repeal or modification.

Section 6.3 Initial Board. There will be nine initial temporary directors. The temporary directors are as follows:

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Karen Salapich</td>
<td>21698 Co. Rd. 37.7 Aguilar, CO 81020</td>
</tr>
<tr>
<td>2. Karen Brown</td>
<td>1401 17th St., Suite 1200 Denver, CO 80202</td>
</tr>
<tr>
<td>3. Stephanie DiBetitto</td>
<td>6060 Broadway c/o River Watch</td>
</tr>
<tr>
<td></td>
<td>Denver, CO 80221</td>
</tr>
<tr>
<td>4. Mack Louden</td>
<td>80641 Co. Rd. 6.5 Branson, CO 81027</td>
</tr>
<tr>
<td>5. JD McElhaney</td>
<td>21603 Highway 12</td>
</tr>
</tbody>
</table>
ARTICLE VII.

BYLAWS

The initial bylaws of the corporation shall be as adopted by the board of directors. Except to the extent limited by the Colorado Revised Nonprofit Corporation Act, the board of directors shall have power to alter, amend or repeal the bylaws from time to time in force and adopt new bylaws. The voting members at any time and from time to time may also amend the bylaws, or may repeal the bylaws and adopt new bylaws. The bylaws of the corporation may contain any provisions for the managing and regulating of the affairs of the corporation that are not inconsistent with law or these articles of incorporation, as these articles may from time to time be amended. However, no bylaw shall have the effect of giving any member of the corporation which is not then an exempt organization described in section 501(c)(3) of the Internal Revenue Code, or any director or officer of the corporation or any other individual any proprietary interest in the corporation's property, whether during the term of the corporation's existence or as an incident to its dissolution.
AMENDMENTS

The board of directors shall have the power and authority at any time and from time to time to amend these articles of incorporation without member approval to the extent provided in the Colorado Revised Nonprofit Corporation Act. In addition, these articles of incorporation may be amended in any other respect at any time and from time to time by action of the board of directors and voting members in the manner and to the extent provided by the Colorado Revised Nonprofit Corporation Act.

The name and mailing address of the person causing this document to be delivered for filing is: Pamela Nelson, 122 West First Street, Trinidad, Colorado 81082.

DATED this 21st day of December, 2012.
BYLAWS

OF

PURGATOIRE WATERSHED PARTNERSHIP, INC.

ARTICLE I.

OFFICES

Section 1.1 Business Offices. The initial principal office of the corporation shall be as stated in the articles of incorporation. The corporation may at any time and from time to time change the location of its principal office. The corporation may have such other offices, either within or outside Colorado, as the board of directors may designate or as the affairs of the corporation may require from time to time.

Section 1.2 Registered Office. The registered office required by the Colorado Revised Nonprofit Corporation Act (the "Act") to be maintained in Colorado may be changed from time to time by the board of directors or by the officers of the corporation, or to the extent permitted by the Act by the registered agent of the corporation, provided in all cases that the street addresses of the registered office and of the business office or home of the registered agent of the corporation are identical.

ARTICLE II.

PURPOSE

Section 2.1 Purposes. The corporation is organized and shall be operated exclusively for charitable, scientific and educational purposes within the meaning of section 501(c)(3) of the Internal Revenue Code. The general purpose is to protect the ecological health and water quality of the Purgatoire River Watershed through the cooperative efforts of watershed stakeholders, with emphasis on education, community values and economic sustainability. Subject to the foregoing, the specific purposes and objectives of the corporation shall include but not be limited to the following:

a.) Protect the Purgatoire watershed to support beneficial uses.
   b.) Identify and recommend management practices for nonpoint pollution sources that may include, but are not limited to, grazing,
forestry, transportation corridors, mining, erosion, nutrient and sediment loading, development, and septic systems.
c.) Mitigate conflict in the watershed by building trust amongst stakeholder groups by forming consensus and making collaborative decisions.
d.) Address water quality impacts related to water quantity management while also promoting water conservation.
e.) Bring understanding and general knowledge to the community about industry practice in the watershed, the limitations of the Kansas Compact, and water rights connected to available surface and groundwater on the Purgatoire River Watershed.
f.) Minimize the impacts from catastrophic events through preventive planning and activities.
g.) Reduce/ remove invasive species.
h.) Protect land and wildlife, improve land values and preserve/promote healthy forests.
i.) Provide a vehicle for citizens, other nonprofit entities, and local government entities to address local concerns with local solutions.

ARTICLE III.

MEMBERS

Section 3.1 Classification, Qualification, Privileges and Election of Members. The corporation shall have one class of voting members. Each voting member shall be entitled to vote in an election of directors and on any other matter requiring membership approval under the Act, the articles of incorporation or these bylaws. Any person, who pays their membership dues, may be a voting member.

Section 3.2 Dues. The board of directors may establish such membership initiation fees, periodic dues and other assessments, and such rules and procedures for the manner and method of payment, the collection of delinquent dues and assessments and the proration or refund of dues and assessments in appropriate cases, as the board of directors shall deem necessary or appropriate.

Section 3.3 Suspension and Termination of Membership. A member who fails to pay any dues or other assessment within ten days after written notice of such failure to pay is delivered to such member shall be automatically suspended from membership until all such dues and assessments are fully paid, at which time such member shall be automatically reinstated. During any period of suspension a member shall not be entitled
to exercise the rights and privileges of membership, including without limitation the right to vote. A member who has been suspended shall be liable to the corporation for dues, assessments or fees as a result of obligations incurred or commitments made prior to expulsion or suspension. A member may only resign if the member has paid all dues and assessments then payable as specified in Section 3.2 above.

Section 3.4 Transfer of Membership. Membership in the corporation is not transferable. Members shall have no ownership rights or beneficial interests of any kind in the property of the corporation.

Section 3.5 Annual Meeting of Members. An annual meeting of the voting members shall be held at the time and place, within the watershed, as determined by the board of directors, for the purpose of electing directors and for the transaction of such other business as may come before the meeting. Failure to hold an annual meeting as required by these bylaws shall not work a forfeiture or dissolution of the corporation or invalidate any action taken by the board of directors or officers of the corporation.

Section 3.6 Special Meetings. A special meeting of the voting members for any purpose or purposes may be called by the chair and shall be called by the chair upon the written request of voting members having at least 25 percent of the votes entitled to be cast at such meetings. The chair may present business for consideration at a special meeting regardless of whether the business pertains to a purpose described in the notice of such meeting.

Section 3.7 Place of Meeting. Each meeting of the members shall be held at such place, within the watershed, as may be designated in the notice of meeting, or, if no place is designated in the notice, at the principal office of the corporation in Colorado. Any or all members may participate in any meeting through the use of any means of communication by which all persons participating in the meeting may hear each other during the meeting.

Section 3.8 Notice of Meeting. Except as otherwise prescribed by statute, written notice of each meeting of the members stating the place, date and time of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called, shall be delivered no fewer than ten days (or if notice is mailed by other than first class, certified or registered mail, no fewer than thirty days) nor more than sixty days before the date of the meeting, either personally, by mail or private carrier, or by facsimile, electronic transmission or any other form of wire or wireless
communication, by or at the direction of the chair, or the secretary, or the other officer or person calling the meeting, to each member entitled to attend such meeting. If mailed, such notice shall be deemed delivered when deposited in the United States mail, addressed to each member at such member's address as it appears in the records of the corporation, with postage thereon prepaid. If delivered by private carrier, such notice is deemed delivered upon deposit with the carrier. If transmitted by facsimile, electronic transmission or by any other form of wire or wireless communication, such notice shall be deemed to be given when the transmission is complete. If the foregoing methods of personal notice are impracticable, notice may be communicated by a newspaper of general circulation in the area where published. Any member may waive notice of any meeting before, at or after such meeting. The attendance in person or by proxy of a member at a meeting shall constitute a waiver of notice of such meeting, unless the member at the beginning of the meeting objects to holding the meeting or transacting business at the meeting because of lack of notice or defective notice. A member's attendance at a meeting also waives objection to consideration of a particular matter at the meeting that is not within the purpose or purposes described in the meeting notice, unless the member objects to considering the matter when it is presented.

Section 3.9 Quorum and Action of the Members. Except as otherwise required by the Act or the articles of incorporation, 25 percent of the voting members entitled to vote on a matter shall constitute a quorum of the members with respect to such matter. With respect to all matters other than the election of directors, action is approved if a quorum exists and if the votes cast in favor of the action exceed the votes cast in opposition to the action, unless otherwise required by the Act. In an election of multiple directors, that number of candidates equaling the number of directors to be elected, having the highest number of votes cast in favor of their election, are elected to the board of directors. When only one director is being voted upon, the affirmative vote of a majority of the members represented at a meeting at which a quorum is present shall be required for election to the board of directors. If less than a quorum of the members are represented at a meeting, a majority of the members so represented may adjourn the meeting from time to time for a period not to exceed sixty days at any one adjournment without further notice other than an announcement at the meeting. At such adjourned meeting, at which a quorum shall be represented, any business may be transacted which might have been transacted at the meeting as originally notified.

Section 3.10 Voting Rights: Proxies.

(a) Each voting member is entitled to one vote on each
matter submitted to a vote of the voting members. Cumulative voting shall not be allowed, except that voting members may cumulate votes for directors as provided in C.R.S. Section 7-127-208.

(b) At each meeting of the voting members, a member entitled to vote there at may vote by proxy executed in writing by the member or by such member's duly authorized attorney in fact. Such proxy shall be delivered to the corporation before or at the time of the meeting in any manner permitted by C.R.S. Section 7127-203. No proxy shall be valid after eleven months from the date of its execution, unless otherwise provided in the proxy.

(c) The right to vote of any member which is a corporation or unincorporated association may be exercised by such officer, agent or proxy as the bylaws, constitution or other governing instrument of such corporation or association may prescribe or, in the absence of such provision, as the board of directors or other governing body of such corporation or association may determine.

(d) The board of directors is not required to prepare a members' list in connection with any meeting of the members.

(e) Members may vote pursuant to a voting agreement only if such agreement is filed with the secretary of the corporation prior to such vote.

Section 3.11 Committees. The board of directors or the voting members at any time and from time to time may establish one or more committees of members for any appropriate purposes and may dissolve any such committee. The members of the committee shall elect a chair who shall preside at all meetings of the committee and generally supervise the conduct of the committee's affairs. Rules governing procedures for meetings of any such committee and for the conduct of such committee's affairs shall be the same as those set forth in these bylaws or the Act for the board of directors unless the voting members or the committee itself determines otherwise.

Section 3.12 Action Without a Meeting. Any action required or permitted to be taken at a meeting of the members or any committee thereof may be taken without a meeting either by unanimous written consent or by written ballot. Action by unanimous written consent is taken when consent in writing, setting forth the action to be taken, is signed by all of the voting members entitled to vote with respect to the subject matter thereof. Such consent (which may be signed in counterparts) shall
have the same force and effect as a unanimous vote of the members entitled to vote thereon. Action by written ballot may be taken as provided under the Act. A written ballot may not be revoked.

ARTICLE IV.

BOARD OF DIRECTORS

Section 4.1 General Powers. Except as otherwise provided in the Act, the articles of incorporation or these bylaws, all corporate powers shall be exercised by or under the authority of, and the business and affairs of the corporation shall be managed by, its board of directors.

Section 4.2 Qualifications, Number, Classes, Classification, Election and Tenure.

(a) Qualifications. Each director must be a natural person who is eighteen years of age or older. A director need not be a resident of Colorado.

(b) Number. The initial board of the corporation shall consist of eleven directors. Thereafter, the corporation shall have a board consisting of not less than seven directors and not more than nineteen directors. The number of directors may be fixed or changed from time to time within the range by the voting members of the corporation.

(c) Classes. The board should consist of members from the classes of stakeholders listed below. The Board will take reasonable steps to assure that there is at least one member representing each class of membership.

1. Landowners
2. Water Right Holders
3. Municipal Government
4. County Government
5. Local Industry
6. Water Conservancy District
7. Local Conservation Entities
8. Environmental community
9. Recreation community
10. Army Corp of Engineers
11. Pinion Canyon Maneuver Site
12. Interested Individuals

(d) Classification. At the first meeting of the board of directors, classification of the directors shall be made by dividing them into
three classes, each class to be as nearly equal in number as possible. The term of office of the directors of the first class shall expire at the end of the first annual meeting of the voting members held after such classification; the term of office of the directors of the second class shall expire at the end of the second annual meeting of the voting members thereafter; and the term of office of the directors of the third class shall expire at the end of the third annual meeting of the voting members thereafter.

(e) **Election and Tenure.** Directors shall be elected by the voting members at each annual meeting of the members for a term of two years. Each director so elected shall hold office until such director's term expires and thereafter until such director's successor shall have been elected and qualified, or until such director's earlier death, resignation or removal.

Section 4.3 **Resignation: Removal: Vacancies.** Any director may resign at any time by giving written notice to the chair of the board, to the president or to the secretary of the corporation. A director's resignation shall take effect at the time specified in such notice, and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective. A director shall be deemed to have resigned in the event of such director's incapacity as determined by a court of competent jurisdiction. Any director may be removed at any time, with or without cause, in the manner provided by the Act. Any vacancy of an elected director may be filled by the voting members. However, if the vacant office was held by a director elected by a voting group of voting members, only that voting group is entitled to vote to fill the vacancy. A director elected, to fill a vacancy shall hold the office for the unexpired term of such director's predecessor in office. Any directorship to be filled by reason of an increase in the number of directors shall be filled by the affirmative vote of a majority of the directors then in office, or by an election at a meeting of the members called for that purpose, and a director so chosen shall hold office until the next election and thereafter until such director's successor shall have been elected and qualified, or until such director's earlier death, resignation or removal. A vacancy that will occur at a specific later date may be filled before the vacancy occurs, but the new director may not take office until the vacancy occurs.

Section 4.4 **Regular Meetings.** A regular annual meeting of the board of directors shall be held immediately after and at the same place as the annual meeting of the members, or as soon as practicable thereafter at the time and place, within the watershed, determined by the board, for the purpose of electing officers and for the transaction of such other business as may come before the meeting. The board of directors may provide by
resolution the time and place, within the watershed, for the holding of additional regular meetings.

Section 4.5 **Special Meetings.** Special meetings of the board of directors may be called by or at the request of the chair of the board, the president or any directors. The person or persons authorized to call special meetings of the board of directors may fix the time and place, either within or outside Colorado, for holding any special meeting of the board called by them.

Section 4.6 **Notice of Meetings**

(a) **Requirements.** Notice of each special meeting of the board of directors stating the date, time and place of the meeting shall be given to each director at such director's business or residential address at least ten days prior thereto by the mailing of written notice by first class, certified or registered mail, or at least two days prior thereto by personal delivery or private carrier of written notice or by telephone, facsimile, electronic transmission or any other form of wire or wireless communication (and the method of notice need not be the same as to each director). If mailed, such notice shall be deemed delivered when deposited in the United States mail, addressed to each member at such member's address as it appears in the records of the corporation, with postage thereon prepaid. If delivered by private carrier, such notice is deemed delivered upon deposit with the carrier. If transmitted by facsimile, electronic transmission or by any other form of wire or wireless communication, such notice shall be deemed to be given when the transmission is complete.

(b) **Waiver of Notice.** A director may waive notice of any meeting before or after the time and date of the meeting stated in the notice. Except as otherwise provided in this Section 4.6(b), the waiver shall be in writing and signed by the director entitled to the notice. Such waiver shall be delivered to the corporation for filing with the corporate records, but such delivery and filing shall not be conditions of the effectiveness of the waiver. A director's attendance at or participation in a meeting waives any required notice to that director of the meeting unless: (i) at the beginning of the meeting or promptly upon the director's later arrival, the director objects to holding the meeting or transacting business at the meeting because of lack of notice or defective notice and does not thereafter vote for or assent to action taken at the meeting; or (ii) if special notice was required of a particular purpose pursuant to the Act or these bylaws, the director objects to transacting business with respect to the purpose for which such special notice was required and does not thereafter vote for or assent to action taken at the meeting with respect to such purpose.
Section 4.7 Deemed Assent. A director of the corporation who is present at a meeting of the board of directors when corporate action is taken is deemed to have assented to all action taken at the meeting unless (i) the director objects at the beginning of the meeting, or promptly upon the director's arrival, to holding the meeting or transacting business at the meeting and does not thereafter vote for or assent to any action taken at the meeting; or (ii) the director contemporaneously requests the director's dissent or abstention as to any specific action taken be entered in the minutes of the meeting; or (iii) the director causes written notice of the director's dissent or abstention as to any specific action to be received by the presiding officer of the meeting before the adjournment thereof or by the corporation promptly after the adjournment of the meeting. Such right of dissension or abstention is not available to a director who votes in favor of the action taken.

Section 4.8 Quorum and Voting. A majority of the directors in office immediately before a meeting begins shall constitute a quorum for the transaction of business at any meeting of the board of directors, and the vote of a majority of the directors present in person at a meeting at which a quorum is present shall be the act of the board of directors, unless otherwise required by the Act, the articles of incorporation or these bylaws. If less than a quorum is present at a meeting, a majority of the directors present may adjourn the meeting from time to time without further notice other than an announcement at the meeting, until a quorum shall be present.

Section 4.9 Voting by Proxy. For purposes of determining a quorum with respect to a particular proposal, and for purposes of casting a vote for or against a particular proposal, a director may be deemed to be present at a meeting and to vote if the director has granted a signed written proxy to another director who is present at the meeting, authorizing the other director to cast the vote that is directed to be cast by the written proxy with respect to the particular proposal that is described with reasonable specificity in the proxy. Except as provided in this Section 4.9 and as permitted by Section 4.13, directors may not vote or otherwise act by proxy.

Section 4.10 Compensation. Directors shall not receive compensation for their services as such; however, the reasonable expenses of directors of attendance at board meetings may be paid or reimbursed by the corporation. Directors shall not be disqualified to receive reasonable compensation for services rendered to or for the benefit of the corporation in any other capacity.

Section 4.11 Advisory Boards. The board of directors may from
time to time form one or more advisory boards, committees, auxiliaries or other bodies composed of such members, having such rules of procedure, and having such chair, as the board of directors shall designate. The name, objectives and responsibilities of each such advisory board, and the rules and procedures for the conduct of its activities, shall be determined by the board of directors. An advisory board may provide such advice, service, and assistance to the corporation, and carry out such duties and responsibilities for the corporation as may be specified by the board of directors; except that, if any such committee or advisory board has one or more members thereof who are entitled to vote on committee matters and who are not then also directors, such committee or advisory board may not exercise any power or authority reserved to the board of directors by the Act, the articles of incorporation or these bylaws. Further, no advisory board shall have authority to incur any corporate expense or make any representation or commitment on behalf of the corporation without the express approval of the board of directors or the president of the corporation.

Section 4.12 Meetings by Telephone. Members of the board of directors or any committee thereof may participate in a regular or special meeting by, or conduct the meeting through the use of, any means of communication by which all directors participating may hear each other during the meeting. A director participating in a meeting by this means is deemed to be present in person at the meeting.

Section 4.13 Action Without a Meeting.

(a) Any action required or permitted to be taken at a meeting of the board of directors or any committee thereof may be taken without a meeting if each and every member of the board or committee in writing either: (i) votes for such action; (ii) votes against such action; or (iii) abstains from voting. Each director or committee member who delivers a writing described in this Section 4.13(a) to the corporation shall be deemed to have waived the right to demand that action not be taken without a meeting.

(b) Action is taken under this Section 4.13 only if the affirmative vote for such action equals or exceeds the minimum number of votes that would be necessary to take such action at a meeting at which all of the directors then in office were present and voted.

(c) No action taken pursuant to this Section 4.13 shall be effective unless writings describing the action taken and otherwise satisfying the requirements of Section 4.13(a), signed by all directors and not revoked pursuant to Section 4.13(d), are received by the corporation. Any such writing may be received by the corporation by electronically transmitted
facsimile or other form of wire or wireless communication providing the corporation with a complete copy of the document, including a copy of the signature on the document. Action taken pursuant to this Section 4.13 shall be effective when the last writing necessary to effect the action is received by the corporation unless the writings describing the action taken set forth a different effective date.

(d) Any director who has signed a writing pursuant to this Section 4.13 may revoke such writing by a writing signed and dated by the director describing the action and stating that the director's prior vote with respect thereto is revoked, if such writing is received by the corporation before the last writing necessary to effect the action is received by the corporation.

(e) Action taken pursuant to this Section 4.13 has the same effect as action taken at a meeting of directors and may be described as such in any document. All signed written instruments necessary for any action taken pursuant to this Section 4.13 shall be filed with the minutes of the meetings of the board of directors.

ARTICLE V.

OFFICERS AND AGENTS

Section 5.1 Designation and Qualifications. The elected officers of the corporation shall be a chair of the board, one or more vice-chairs, a secretary and a treasurer. The board of directors may also appoint, designate or authorize such other officers, assistant officers and agents, including an executive director, a chief financial officer, a controller, assistant secretaries and assistant treasurers, as it may consider necessary or useful. One person may hold more than one office at a time. Officers must be directors of the corporation. All officers must be natural persons who are eighteen years of age or older.

Section 5.2 Election and Term of Office. The board of directors, or an officer or committee to which such authority has been delegated by the board of directors, shall elect or appoint the officers at or in conjunction with each annual meeting of the board of directors. If the election and appointment of officers shall not be held at or in conjunction with such meeting, such election or appointment shall be held as soon as convenient thereafter. Each officer shall hold office from the end of the meeting at or in conjunction with which such officer was elected or appointed until such officer's successor shall have been duly elected or appointed and shall have

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qualified, or until such officer's earlier death, resignation or removal.

Section 5.3 Compensation. The compensation, if any, of each officer shall be as determined from time to time by the board of directors, or by an officer or a committee to which such authority has been delegated by the board of directors. To the extent reasonably feasible, the person or persons determining compensation shall obtain data on the compensation of officers holding similar positions of authority within comparable organizations, shall set the compensation based on such data and an evaluation of the officer's performance and experience as related to the requirements of the position, and shall document the basis for the determination, including the comparison data used, the requirements of the position, and the evaluation of the officer's performance and experience. No officer shall be prevented from receiving a salary by reason of the fact that the officer is also a director of the corporation. However, no payment of compensation (or payment or reimbursement of expenses) shall be made in any manner so as to result in the imposition of any liability under either section 4941 or section 4958 of the Internal Revenue Code.

Section 5.4 Removal. Any officer or agent may be removed by the board of directors at any time, with or without cause, but removal shall not affect the contract rights, if any, of the person so removed. Election, appointment or designation of an officer or agent shall not itself create contract rights.

Section 5.5 Vacancies. Any officer may resign at any time, subject to any rights or obligations under any existing contracts between the officer and the corporation, by giving written notice to the president or to the board of directors. An officer's resignation shall take effect upon receipt by the corporation unless the notice specifies a later effective date, and unless otherwise specified therein, the acceptance of such resignation shall not be necessary to make it effective. An officer shall be deemed to have resigned in the event of such officer's incapacity as determined by a court of competent jurisdiction. A vacancy in any office, however occurring, may be filled by the board of directors, or by any officer or committee to which such authority has been delegated by the board of directors, for the unexpired portion of the term. If a resignation is made effective at a later date, the board of directors may permit the officer to remain in office until the effective date and may fill the pending vacancy before the effective date with the provision that the successor does not take office until the effective date, or the board of directors may remove the officer at any time before the effective date and may fill the resulting vacancy.
Section 5.6 Authority and Duties of Officers. The officers of the corporation shall have the authority and shall exercise the powers and perform the duties specified below and as may be additionally specified by the president, the board of directors or these bylaws, except that in any event each officer shall exercise such powers and perform such duties as may be required by law.

(a) Chair of the Board. The chair of the board shall (i) preside at all meetings of the members and of the board of directors; (ii) see that all resolutions of the members and of the board of directors are carried into effect; and (iii) perform all other duties incident to the office of chair of the board and as from time to time may be assigned to the chair by the board of directors.

(b) Vice-Chairs. The vice-chair or vice-chairs shall assist the chair of the board and shall perform such duties as may be assigned to them by the chair or by the board of directors. The vice-chair (or if there is more than one, then the vice-chair designated by the board of directors, or if there be no such designation, then the vice-chairs in order of their election) shall, at the request of the chair, or in the chair's absence or inability or refusal to act, perform the duties of the chair and when so acting shall have all the powers of and be subject to all the restrictions on the chair.

(c) Secretary. The secretary shall (i) keep the minutes of the proceedings of the members, the board of directors and any committees of the members or the board; (ii) see that all notices are duly given in accordance with the provisions of these bylaws or as required by law; (iii) be custodian of the corporate records and of the seal of the corporation; (iv) keep at the corporation's registered office or principal place of business within or outside Colorado a record containing the names and addresses of all members; and (v) in general, perform all duties incident to the office of secretary and such other duties as from time to time may be assigned to such office by the president or by the board of directors. Assistant secretaries, if any, shall have the same duties and powers, subject to supervision by the secretary.

(d) Treasurer. The treasurer shall (i) be the principal financial officer of the board of directors with general responsibility for the oversight of the financial affairs of the corporation; (ii) present financial reports to the board of directors as the board may request from time to time; (iii) serve as the chief financial officer, in the event there is no separate chief financial officer; and (iv) perform all other duties incident to the office of treasurer and such other duties as from time to time may be assigned to the treasurer by the chair of the board or the board of directors. Assistant
treasurers, if any, shall have the same powers and duties, subject to supervision by the treasurer.

Section 5.7  Surety Bonds. The board of directors may require any officer or agent of the corporation to execute to the corporation a bond in such sums and with such sureties as shall be satisfactory to the board, conditioned upon the faithful performance of such person's duties and for the restoration to the corporation of all books, papers, vouchers, money and other property of whatever kind in such person's possession or under such person's control belonging to the corporation.

ARTICLE VI.

FIDUCIARY MATTERS

Section 6.1  Indemnification.

(a)  Scope of Indemnification. The corporation shall indemnify each director, officer, employee and volunteer of the corporation to the fullest extent permissible under the laws of the State of Colorado, and may in its discretion purchase insurance insuring its obligations hereunder or otherwise protecting the persons intended to be protected by this Section 6.1. The corporation shall have the right, but shall not be obligated, to indemnify any agent of the corporation not otherwise covered by this Section 6.1 to the fullest extent permissible under the laws of the State of Colorado.

(b)  Savings Clause: Limitation. If any provision of the Act or these bylaws dealing with indemnification shall be invalidated by any court on any ground, then the corporation shall nevertheless indemnify each party otherwise entitled to indemnification hereunder to the fullest extent permitted by law or any applicable provision of the Act or these bylaws that shall not have been invalidated. Notwithstanding any other provision of these bylaws, the corporation shall neither indemnify any person nor purchase any insurance in any manner or to any extent that would jeopardize or be inconsistent with the qualification of the corporation as an organization described in section 501(c)(3) of the Internal Revenue Code, or that would result in the imposition of any liability under either section 4941 or section 4958 of the Internal Revenue Code.

Section 6.2  General Standards of Conduct for Directors and Officers.

(a)  Discharge of Duties. Each director shall discharge the director's duties as a director, including the director's duties as a
member of a committee of the board, and each officer with discretionary authority shall discharge the officer's duties under that authority (i) in good faith; (ii) with the care an ordinarily prudent person in a like position would exercise under similar circumstances; and (iii) in a manner the director or officer reasonably believes to be in the best interests of the corporation.

(b) Reliance on Information, Reports, Etc. In discharging duties, a director or officer is entitled to rely on information, opinions, reports or statements, including financial statements and other financial data, if prepared or presented by: (i) one or more officers or employees of the corporation whom the director or officer reasonably believes to be reliable and competent in the matters presented; (ii) legal counsel, a public accountant or another person as to matters the director or officer reasonably believes are within such person's professional or expert competence; or (iii) in the case of a director, a committee of the board of directors of which the director is not a member if the director reasonably believes the committee merits confidence. A director or officer is not acting in good faith if the director or officer has knowledge concerning the matter in question that makes reliance otherwise permitted by this Section 6.2(b) unwarranted.

(c) Liability to Corporation or Its Members. A director or officer shall not be liable as such to the corporation or its members for any action taken or omitted to be taken as a director or officer, as the case may be, if, in connection with such action or omission, the director or officer performed the duties of the position in compliance with this Section 5.2.

(d) Director Not Deemed to Be a "Trustee." A director, regardless of title, shall not be deemed to be a "trustee" within the meaning given that term by trust law with respect to the corporation or with respect to any property held or administered by the corporation including, without limitation, property that may be subject to restrictions imposed by the donor or transferor of such property.

Section 6.3 Conflicts of Interest

(a) Definition. A conflict of interest arises when any "responsible person" or any "party related to a responsible person" has an "interest adverse to the corporation." A "responsible person" is any individual in a position to exercise substantial influence over the affairs of the corporation, and specifically includes, without limitation, directors and officers of the corporation. A "party related to a responsible person" includes his or her extended family (including spouse, ancestors,
descendants and siblings, and their respective spouses and descendants), an estate or trust in which the responsible person or any member of his or her extended family has a beneficial interest or a fiduciary responsibility, or an entity in which the responsible person or any member of his or her extended family is a director, trustee or officer or has a financial interest. "An interest adverse to the corporation" includes any interest in any contract, transaction or other financial relationship with the corporation, and any interest in an entity whose best interests may be impaired by the best interests of the corporation including, without limitation, an entity providing any goods or services to or receiving any goods or services from the corporation, an entity in which the corporation has any business or financial interest, and an entity providing goods or services or performing activities similar to the goods or services or activities of the corporation.

(b) Disclosure. If a responsible person is aware that the corporation is about to enter into any transaction or make any decision involving a conflict of interest, (a "conflicting interest transaction"), such person shall: (i) immediately inform those charged with approving the conflicting interest transaction on behalf of the corporation of the interest or position of such person or any party related to such person; (ii) aid the persons charged with making the decision by disclosing any material facts within the responsible person's knowledge that bear on the advisability of the corporation entering into the conflicting interest transaction; and (iii) not be entitled to vote on the decision to enter into such transaction.

(c) Approval of Conflicting Interest Transactions. The corporation may enter into a conflicting interest transaction provided either:

(i) The material facts as to the responsible person's relationship or interest and as to the conflicting interest transaction are disclosed or are known to the board of directors or to a committee of the board of directors that authorizes, approves or ratifies the conflicting interest transaction, and the board or committee in good faith authorizes, approves or ratifies the conflicting interest transaction by the affirmative vote of a majority of the disinterested directors on the board or committee, even though the disinteresteded directors are less than a quorum; or

(ii) The material facts as to the responsible person's relationship or interest and as to the conflicting interest transaction are disclosed or are known to the members, and the conflicting interest transaction is specifically authorized, approved, or ratified in good faith by a vote of the members entitled to vote thereon; or

(iii) The conflicting interest transaction is fair as
to the corporation.

Section 6.4 Liability of Directors for Unlawful Distributions.

(a) Liability to Corporation. A director who votes for or assents to a distribution made in violation of the Act or the articles of incorporation of the corporation shall be personally liable to the corporation for the amount of the distribution that exceeds what could have been distributed without violating the Act or the articles of incorporation if it is established that the director did not perform the director's duties in compliance with the general standards of conduct for directors set forth in Section 6.2.

(b) Contribution. A director who is liable under Section 5.4(a) for an unlawful distribution is entitled to contribution: (i) from every other director who could be liable under Section 6.4(a) for the unlawful distribution; and (ii) from each person who accepted the distribution knowing the distribution was made in violation of the Act or the articles of incorporation, to the extent the distribution to that person exceeds what could have been distributed to that person without violating the Act or the articles of incorporation.

Section 6.5 Loans to Directors and Officers Prohibited. No loans shall be made by the corporation to any of its directors or officers. Any director or officer who assents to or participates in the making of any such loan shall be liable to the corporation for the amount of such loan until the repayment thereof.

ARTICLE VII.

RECORDS OF THE CORPORATION

Section 7.1 Minutes, Etc. The corporation shall keep as permanent records minutes of all meetings of the members and board of directors, a record of all actions taken by the members or board of directors without a meeting, a record of all actions taken by a committee of the board of directors in place of the board of directors on behalf of the corporation, and a record of all waivers of notices of meetings of the members and of the board of directors or any committee of the board of directors.

Section 7.2 Accounting Records. The corporation shall maintain
appropriate accounting records.

Section 7.3 Membership List. The corporation, or its agent, shall maintain a record of the members in a form that permits preparation of a list of the names and addresses of the members in alphabetical order, by class, showing the number of votes each member is entitled to vote.

Section 7.4 Records In Written Form. The corporation shall maintain its records in written form or in another form capable of conversion into written form within a reasonable time.

Section 7.5 Records Maintained at Principal Office. The corporation shall keep a copy of each of the following records at its principal office:

(a) The articles of incorporation;

(b) These bylaws;

(c) Resolutions adopted by the board of directors relating to the characteristics, qualifications, rights, limitations and obligations of the members or any class of the members;

(d) The minutes of all meetings of the members, and records of all action taken by the members without a meeting, for the past three years;

(e) All written communications within the past three years to the members generally as the members;

(f) A list of the names and business or home addresses of the current directors and officers;

(g) A copy of the most recent corporate report delivered to the Colorado secretary of state;

(h) All financial statements prepared for periods ending during the last three years that a member of the corporation could have requested under section 7.6(c);

(i) The corporation’s application for recognition of exemption and the tax-exemption determination letter issued by the Internal Revenue Service; and

(j) All other documents or records required to be maintained by the corporation at its principal office under applicable law or
regulation.

Section 7.6 Inspection of Records by Members.

(a) **Records Maintained at Principal Office.** A member (including a beneficial owner whose membership interest is held in a voting trust and any other beneficial owner of a membership interest who establishes beneficial ownership) shall be entitled to inspect and copy, during regular business hours at the corporation's principal office, any of the records of the corporation described in Section 7.5, provided that the member gives the corporation written demand at least five business days before the date on which the member wishes to inspect and copy such records.

(b) **Other Records.** A member is entitled to inspect and copy, during regular business hours at a reasonable location specified by the corporation, any other records of the corporation, provided that the member gives the corporation written demand at least five business days before the date on which the member wishes to inspect and copy such records, and satisfies the following requirements:

(i) The member has been a member for at least three months immediately preceding the demand to inspect or copy or is a member holding at least five percent of the voting power as of the date the demand is made;

(ii) The demand is made in good faith and for a proper purpose reasonably related to the demanding member's interest as a member;

(iii) The member describes with reasonable particularity the purpose and the records the member desires to inspect; and

(iv) The records are directly connected with the described purpose.

If the member demands to inspect the record of members pursuant to this Section 7.6(b), the corporation may comply with such demand by furnishing to the member a membership list that complies with Section 7.3 and that was compiled no earlier than the date of the member's demand.

(c) **Financial Statements.** Upon the written request of
any member, the corporation shall mail to such member its most recent annual financial statements, if any, and its most recently published financial statements, if any, showing in reasonable detail its assets and liabilities and results of its operations.

(d) **Membership List.**

(i) **Preparation of Membership List.** After fixing a record date for a notice of a meeting or for determining the members entitled to take action by written ballot, the corporation shall prepare an alphabetical list of the names of all members who are entitled to notice of, and to vote at, the meeting or to participate in such action by written ballot. The list shall show the address of each member entitled to notice of, and to vote at, the meeting or to take such action by written ballot and the number of votes each member is entitled to vote at the meeting or by written ballot.

(ii) **Right of Inspection.** If prepared in connection with a meeting of the members, the membership list shall be available for inspection by any member entitled to vote at the meeting, beginning the earlier of ten days before the meeting for which the list was prepared or two business days after notice of the meeting is given and continuing through the meeting, and any adjournment thereof, at the corporation's principal office or at a place identified in the notice of the meeting in the city where the meeting will be held. The corporation shall make the membership list available at the meeting, and any member entitled to vote at the meeting is entitled to inspect the list at any time during the meeting or any adjournment. If prepared in connection with action to be taken by the members by written ballot, the membership list shall be available for inspection by any member entitled to cast a vote by such written ballot, beginning on the date that the first written ballot is delivered to the members and continuing through the time when such written ballots must be received by the corporation in order to be counted, at the corporation's principal office. A member entitled to vote at the meeting or by such written ballot is entitled upon written demand to inspect and, subject to the requirements of Section 7.6(b) and the provisions of Sections 7.6(e)(i) and (ii), to copy the list, during regular business hours, at the member's expense, and during the period it is available for inspection.

(iii) **Limitation on Use of Membership List.** Without consent of the board of directors, a membership list or any part thereof may not be obtained or used by any person for any purpose unrelated to a member's interest as a member. Without limiting the generality of the previous sentence, without the consent of the board of
directors a membership list or any part thereof may not be: (i) used to solicit money or property unless such money or property will be used solely to solicit the votes of the members in an election to be held by the corporation; (ii) used for any commercial purpose; or (iii) sold to or purchased by any person.

(e) **Scope of Members' Inspection Rights.**

(i) **Agent or Attorney.** The member's duly authorized agent or attorney has the same inspection and copying rights as the member.

(ii) **Right to Copy.** The right to copy records under this Article VI includes, if reasonable, the right to receive copies made by photographic, xerographic, electronic or other means.

(iii) **Reasonable Charge for Copies.** Except for requests for financial statements pursuant to Section 7.6(c), the corporation may impose a reasonable charge, covering the costs of labor and material, for copies of any documents provided to a member. The charge may not exceed the estimated cost of production and reproduction of the records.

(iv) **Litigation.** Nothing in this Article VI shall limit the right of a member to inspect records to the same extent as any other litigant if the member is in litigation with the corporation, or the power of a court to compel the production of corporate records for examination.

**ARTICLE VIII.**

**AMENDMENT OF BYLAWS**

Section 8.1 **Amendment of Bylaws by Board of Directors.** Subject to the specific requirements for amendment of certain bylaws as set forth herein, the board of directors may amend the bylaws at any time to add, change, or delete a provision, unless:

(a) The Act or the articles of incorporation reserve such power exclusively to the members in whole or part; or

(b) A particular provision of these bylaws expressly prohibits the board of directors from doing so; or

(c) Such addition, change or deletion would result in a change of the rights, privileges, preferences, restrictions or conditions of a
membership class as to voting, dissolution, redemption or transfer or by changing the rights, privileges, preferences, restrictions or conditions of another class of members.

Section 8.2 Amendment of Bylaws by Members. Subject to the specific requirements for amendment of certain bylaws as set forth herein, the members may amend the bylaws even though the bylaws may also be amended by the board of directors. In such an instance, the amendment shall be adopted as follows:

(a) **Proposal.** The board of directors may propose an amendment to the bylaws for submission to the members, or twenty-five percent of the members may propose an amendment on their own initiative.

(b) **Procedure for Adoption.**

(i) **Recommendation by Board of Directors.** The board of directors shall recommend the amendment to the members unless the amendment is proposed by the members or unless the board of directors determines that, because of conflict of interest or other special circumstances, it should make no recommendation and communicates the basis for its determination to the members with the amendment.

(ii) **Approval by Members.** Proposals recommended by the board of directors pursuant to Section 8.2(b)(i) and proposals made by the members shall be submitted to the members for action. The members may approve, reject or take no action on the proposed amendment.

(iii) **Conditions.** The proposing board of directors or the proposing members may condition the effectiveness of an amendment to the bylaws on any basis.

(iv) **Notice.** The notice of the meeting of the members at which the amendment will be proposed shall state that the purpose, or one of the purposes, of the meeting is to consider the amendment, and the notice shall contain or be accompanied by a copy or a summary of the amendment.

Section 8.3 Changing Quorum or Voting Requirement for Members. An amendment to the bylaws to add, change or delete a lesser or greater quorum or a greater voting requirement for the members shall meet the same quorum requirement and be adopted by the same vote and voting groups required to take action under the quorum and voting
requirements then in effect or proposed to be adopted, whichever are
greater. A bylaw that fixes a lesser or greater quorum or a greater voting
requirement for the members pursuant to this Section 8.3 shall not be
amended by the board of directors.

Section 8.4 Changing Quorum or Voting Requirement for
Directors. A bylaw that fixes a greater quorum or voting requirement for
the board of directors may be amended only by the members, if adopted by
the members, or either by the members or by the board of directors, if
adopted by the board of directors. A bylaw adopted or amended by the
members that fixes a greater quorum or voting requirement for the board
of directors may provide that it may be amended only by a specified vote
of either the members or the board of directors. Action by the board of
directors under this Section 8.4 to adopt or amend a bylaw that changes
the quorum or voting requirement for the board of directors shall meet the
same quorum requirement and be adopted by the same vote required to
take action under the quorum and voting requirement then in effect or
proposed to be adopted, whichever is greater.

ARTICLE IX.

MISCELLANEOUS

Section 9.1 Fiscal Year. The fiscal year of the corporation shall
be as established by the board of directors.

Section 9.2 Conveyances and Encumbrances. Property of the
corporation may be assigned, conveyed or encumbered by such officers of
the corporation as may be authorized to do so by the board of directors,
and such authorized persons shall have power to execute and deliver any
and all instruments of assignment, conveyance and encumbrance; however,
the sale, exchange, lease or other disposition of all or substantially all of the
property and assets of the corporation shall be authorized only in the
manner prescribed by applicable statute.

Section 9.3 Designated Contributions. The corporation may
accept any contribution, gift, grant, bequest or devise that is designated,
restricted or conditioned by the donor, provided that the designation,
restriction or condition is consistent with the corporation’s general tax-
exempt purposes. Donor-designated contributions will be accepted for
special funds, purposes or uses, and such designations generally will be
honored. However, the corporation shall reserve all right, title and
interest in and to and control over such contributions, and shall have
authority to determine the ultimate expenditure or distribution thereof in
connection with any such special fund, purpose or use. Further, the corporation shall acquire and retain sufficient control over all donated funds (including designated contributions) to assure that such funds will be used exclusively to carry out the corporation's tax-exempt purposes.

Section 9.4 References to Internal Revenue Code. All references in these bylaws to provisions of the Internal Revenue Code are to the provisions of the Internal Revenue Code of 1986, as amended, and to the corresponding provisions of any subsequent federal tax laws.

Section 9.5 Principles of Construction. Words in any gender shall be deemed to include the other gender; the singular shall be deemed to include the plural and vice versa; the words "pay" and "distribute" shall also mean assign, convey and deliver; and the table of contents, headings and underlined paragraph titles are for guidance only and shall have no significance in the interpretation of these bylaws.

Section 9.6 Severability. The invalidity of any provision of these bylaws shall not affect the other provisions hereof, and in such event these bylaws shall be construed in all respects as if such invalid provision were omitted.
BYLAWS CERTIFICATE

The undersigned certifies that [he] [she] is the Secretary of Purgatoire Watershed Partnership, Inc., a Colorado nonprofit corporation, and that, as such, the undersigned is authorized to execute this certificate on behalf of said corporation, and further certifies that attached hereto is a complete and correct copy of the presently effective bylaws of said corporation.

Dated: ________________

_______________________

Secretary
Purgatoire Watershed Partnership Mission:

Our mission is to maintain an active watershed-wide stakeholder partnership and work to restore, protect, and enhance the Purgatoire River Watershed through stakeholder engagement, collaboration, education, and on-the-ground work for the benefit of all.
Purgatoire River Management Plan

River Segment: Trinidad Dam to Highway 350/160 River Bridge

2020

Developed By:
Julie Knudson
Purgatoire Watershed Partnership
In close collaboration with all participating stakeholders and partners
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EXECUTIVE SUMMARY

This Purgatoire River Management Plan was developed collaboratively by a host of watershed stakeholders with diverse interests (e.g. agricultural, environmental, municipal, recreational, property and rural economic development) focused on addressing multiple issues related to water resources and management priorities.

This plan focuses on the section of the Purgatoire River that extends from the base of Trinidad Dam to the Highway 350/160 River Bridge. This river section flows through downtown Trinidad, Colorado (population < 10,000) but includes a diverse and complex mixture of water uses, needs, and priorities. Stakeholders residing in this area represent a diverse mix of interests including farmers and ranchers, small town urban homeowners, environmental and conservation organizations, a municipality (City of Trinidad), property developers and local businesses, and a wide variety of recreationists including fisherman, tubers, hikers, and bikers (to name a few).

Interested stakeholders worked together to develop this plan, based heavily on the findings of the Purgatoire River Assessment Report (2019-2020). Stakeholders determined the management issues of most concern, and collaboratively determined strategies to address these issues. As well, stakeholders prioritized a series of projects to address the most prioritized concerns while also ensuring that each project addressed multiple issues and would provide significant benefit for multiple types of water users (e.g. agricultural, recreational, environmental, municipal) with project implementation.

The management issues of concern and determined associated needs include: agricultural infrastructure improvements, measures to protect property and infrastructure against catastrophic flooding, fishery development and aquatic habitat improvement, installation of fish passage, improved water quality (e.g. reduced sediment loads, improved temperature for fish), stabilization of actively eroding banks, woody invasive species removal and riparian forest thinning, removal/mitigation of jetty jacks, improved trails and river access, improvements related to river tubing, improved public safety, and improved public amenities and aesthetics for enhanced enjoyment of the river and associated areas.

It is important to note that this is considered to be a living document. The river section represented in this management plan flows directly through downtown Trinidad, which in 2020 is beginning to see exponential growth, with many new residents and visitors from around Colorado as well as neighboring states being drawn to the area. The recent establishment of a new state park in the area – Fishers Peak State Park – has certainly helped to spur this growth, and combined with a growing collaborative effort to develop a new sustainable economic base around recreational tourism in the watershed (benefitting residents as well as visitors), stakeholder needs and priorities are quickly expanding. As such, we continue to engage with new stakeholders and conduct new conversations and discussions around needs and priorities along the Purgatoire River within the project area to ensure that this management plan continues to address the relevant priorities of stakeholders.
INTRODUCTION & BACKGROUND

In December 2016, the Purgatoire Watershed Partnership (PWP) with support from the Arkansas Basin Roundtable (ABRT) convened a group of diverse stakeholders to determine management priorities for a 4.5 mile stretch of the Purgatoire River as it flows from Trinidad Dam through the City of Trinidad. PWP invited stakeholders to group meetings to reflect the community of interests that rely upon the river.

Through these meetings, the working group settled on six management priorities:

1. Minimize flood risks through river modifications
2. Restoration of riparian and aquatic habitat
3. Improved recreational opportunities
4. Education, safety, and security (headgates, jetty jacks)
5. Management of winter flow releases
6. Preservation of water rights and agricultural heritage

The PWP determined that next steps towards tackling these priorities would be to conduct a Purgatoire River Assessment effort within the prioritized Project Area. The Project Area is shown below and includes a 4.5 mile stretch of the Purgatoire River beginning at the base of Trinidad Dam and flowing downstream through the center of the City of Trinidad and continuing to the Highway 350/160 bypass.
This Purgatoire River Assessment effort was conducted from 2019-2020 and focused on the following components within the Project Area:

- **Overall River Habitat & Fishery Biology Assessment** - Assessment of the effectiveness of previously installed river structures in improving fish habitat, stream channel stabilization, and overall condition of the river, and providing recommendations for future river and fishery enhancement
- **Winter Flows for Fish Assessment** - Determination of the winter flows needed to support healthy fish populations in the Purgatoire River, and development of flow recommendations
- **Storm Water Release & Municipal Infrastructure Assessment** - Determination of how best to manage the controlled release of storm water from Trinidad Reservoir with the goal of preparing for the potential maximum release of 5,000 cfs, assessment of potential flood impacts on municipal infrastructure if a 5,000 cfs release from Trinidad Reservoir were to occur, and determination of recommended improvements
- **Irrigation Infrastructure Assessment** - Assessment and documentation of irrigation infrastructure needs including those required to protect against potential flood impacts if a 5,000 cfs release from Trinidad Reservoir were to occur.
- **Bank Stability Assessment** - Assessment and documentation of significantly steep/potentially unstable river bank sections in the Project Area including those of concern if a 5,000 cfs release from Trinidad Reservoir were to occur
- **Historical Flood Control Infrastructure (Jetty Jack) Assessment** - Assessment of flooding extent into areas containing jetty jacks if a 5,000 cfs release from Trinidad Reservoir were to occur, mapping and prioritization of jetty jacks, and determination of next steps towards removal/mitigation of jetty jacks
- **Woody Invasive Species Management & Riparian Forest Thinning Assessment** - Assessment of woody invasive species management and riparian forest thinning needs to improve water delivery and reduce potentially catastrophic impacts from flooding, as well as for fuels mitigation, improvement of overall forest health and wildlife habitat, and to improve river access and public safety.
- **Recreational Improvements and Public Safety Assessment** - Assessment and documentation of stakeholder-determined recreational improvements and public safety needs interwoven with the other assessments above.

The Purgatoire River Assessment efforts included field surveys and data collection monitoring, data analyses and modeling efforts, stakeholder interviews and discussions, and summarization of results and findings. Parts 1 and 2 of the report also included the development of recommendations based on assessment findings. Part 3 of the report focused primarily on assessment and documentation of findings. These efforts were conducted by multiple partners in collaboration with stakeholders.

The Final Products resulting from this Purgatoire River Assessment effort include:

- **Purgatoire River Assessment Report** – Parts 1, 2, and 3 (and Part 1 Appendices)
- **Updated Purgatoire River Hydraulic Models (1D & 2D) for the Project Area**
- **Purgatoire River Management Plan (Watershed Restoration Plan) for the Project Area**
Interested stakeholders then worked together to develop this plan, based heavily on the findings of the Purgatoire River Assessment Report. Stakeholders determined the management issues of most concern, and collaboratively determined strategies to address these issues. As well, stakeholders prioritized a series of projects to address the most prioritized concerns while also ensuring that each project addressed multiple issues and would provide significant benefit for multiple types of water users (e.g. agricultural, recreational, environmental, municipal) with project implementation.

The management issues of concern and determined associated needs of stakeholders include:

- Agricultural infrastructure improvements to improve functionality and efficiency and improve water availability
- Measures to protect property and infrastructure against catastrophic flooding
- Fishery development and aquatic habitat improvement
- Installation of fish passage
- Improved water quality (e.g. reduced sediment loads, improved temperature for fish)
- Stabilization of actively eroding banks
- Woody invasive species removal and riparian forest thinning
- Removal/mitigation of jetty jacks
- Improved trails and river access
- Improvements related to river tubing
- Improved public safety
- Improved public amenities and aesthetics for enhanced enjoyment of the river and associated areas.
PRIORITIZED PROJECTS

Project 1 – Baca-Picketwire Diversion Dam Complex Restoration Project

The following sections presents the priorities and needs determined for the area in and around the Baca-Picketwire diversion.

Overview of Determined Priorities/Needs:
- Protection and stabilization of eroding riverbanks
- Improve water quality through reduced erosion (sedimentation) and improved water temperature for fish
- Improved functionality and efficiency of irrigation infrastructure for improved water delivery
- Provide fish passage
- Remove woody invasive species and restore native vegetation cover in its place
- Improve fish habitat and aquatic conditions for fish and aquatic life
- Improve channel/floodplain connectivity
- Improve recreational tubing safety and amenities
- Improve other recreational amenities for public
- Improve public safety
- Continue to needs around large island associated with diversion dam
- Explore potential for keeping fish out of ditch
- Improve overall river health and function
- Address fire and flood concerns
- Improve wildlife habitat

Potential Project Partners:
- City of Trinidad
- Purgatoire River Water Conservancy District
- Baca Ditch Company
- Picketwire Ditch Company
- Colorado Parks & Wildlife
- Trout Unlimited
- Downtown Trinidad Development Group
- Spanish Peaks-Purgatoire River Conservation District’s Purgatoire Watershed Weed Management Collaborative (PWWMC)
- Determine other potential partners
Project Area
Located in downtown Trinidad, Colorado along the Purgatoire River and Riverwalk trail. Behind the Toyota Dealership.

Determined Project Components:
Although will need to further discuss/assess details once ready to proceed with project

Erosion/Flood Protection Wall
Install new erosion/flood protection wall directly associated with Baca-Picketwire headgate; that extends upstream further than current historic rough ‘rock and crossbar’ structure and discarded concrete debris being used for erosion protection. This will serve to further protect and stabilize the riverbank, reduce erosion, and improve water delivery into the headgate. In addition, this will significantly improve the aesthetics of the current erosion protection wall.

Trash Diversion Device
Install trash diversion device directly associated with the Baca-Picketwire headgate to divert floating trash in river away from headgate. Currently, a significant amount of trash collects in the headgate, reducing water delivery efficiency and compromising functionality of the headgate. As well, constantly clearing trash out of the headgate requires a significant amount of labor and often results in dangerous situations for the ditch rider, who must enter the river (for example) when the water is high and dangerous to clear out trash that is being forcefully jammed against the headgate to restore functionality to the irrigation infrastructure. This will serve to improve the water delivery system, as well as improve public safety.
Automated Headgate
Install an automated headgate in addition to the current manually controlled Baca-Picketwire headgate. Currently, all movement of the headgate up and down must be conducted manually in person by the ditch rider. The constant daily and weekly manual adjustments required throughout the entire irrigation season as well as repeated follow up visits to fine-tune adjustments to ensure the correct water levels consumes an incredible amount of labor, and there can be lag times between when a determination that an adjustment is required and when the ditch rider is physically able to get to the site to adjust the headgate. Installation of an automated headgate will serve to significantly improve the water delivery system to increase efficiency and address water supply needs, and save significant labor hours for the ditch rider so that they can focus on other necessary tasks during the incredibly busy irrigation season.

Automated Headgate Security/Safety Fencing
Install security/safety fencing to protect the new irrigation infrastructure. This will help increase public safety in and around the headgate, as well as protect valuable irrigation infrastructure. This security fencing will be designed with aesthetics in mind as well, to ensure that it protects public safety while also looking nice.

Diversion Dam Cap
Currently irrigators cannot access their full legal water right at low flows. A diversion dam cap is needed to capture the full amount of water owed to the irrigators when a release occurs from Trinidad Reservoir. This is of significant concern to irrigators.

Recreational Tubing Chute (or similar)
Recreational tubing is increasing on the Purgatoire River and tubers currently float over the dam very close to the headgate. These recreational activities are only going to increase. As the dam was not originally designed to accommodate tubers traveling over the face of it, and the tubers are often not familiar with irrigation infrastructure and the potential dangers they might face if they get too close to the headgate, it is critical that a new strategy is implemented to safely guide tubers away from the irrigation headgate intake and over the dam (when the water is high enough to support tubing over the dam). The incorporation of a recreational tubing chute into the updating of other components of the diversion dam described in this project is critical to protect public safety and support the growing diversity of water users on the Purgatoire River. To the extent possible, this chute will also be designed to move debris and trash away from the top of the dam and facilitate movement of trash/debris downstream, improving the aesthetics of the river above the dam as well as significantly enhancing water movement over the dam and downstream by removing current obstacles; allowing this to be a ‘multi-purpose’ serving multiple user groups.

Fish Passage
Incorporate fish passage into the diversion dam for the benefit of sport and native fish. Currently, this diversion dam completely blocks all movement of fish upstream of the diversion dam. This project component will provide fish passage and allow fish to access different critical habitat and aquatic condition requirements as changes in life stage, water level, and seasons occur.
Fish Habitat Structures
Install four new fish habitat structures – two above the dam, and two below the dam to provide additional habitat for fish and protect and prevent further erosion of currently eroding river banks, as well as to help move water into irrigators headgate. These fish habitat structures will also influence water temperature and water pooling to improve aquatic conditions for fish.

Woody Invasive Species Management
Remove all woody invasive species in project area above and below the dam to restore vegetative wildlife habitat, improve water delivery downstream, improve channel/floodplain connectivity, and improve public safety and aesthetics. Currently, thick woody invasive vegetation (particularly Russian olive) forms dense thickets along the river corridor in the project area, resulting in degraded wildlife habitat and hindering water delivery downstream when river flows are high. Additionally, these woody invasive species ‘armor’ the river banks and result in river ‘downcutting’ that hinders channel/floodplain connectivity. Finally, Russian olives have long, dangerous thorns that inhibit local stakeholder recreation and present a public safety concern for those recreating in the project area.

Improved and Expanded Recreational Amenities, Aesthetics & Public Safety
This diversion dam has become a popular spot for river recreation for community members and visitors of all ages. Stakeholders have determined that there are a number of additional recreation-related improvements that they would like to see within the project area, including:

- Below the diversion dam
  - Kids play pool area on south side of river
  - Developed and improved recreational hangout area below the dam on the south bank
  - Additional amenities installed in this area – Bathrooms, benches, bear-proof trash cans, dog-poop baggies stand
  - Better developed trails to access river that include moving tubers away from kids pool area
  - Better developed/paved Put-In Access Trail for tubers to access river directly from Riverwalk, and associated signage to direct tubers
  - Removal of all nuisance vegetation to improve viewscape and public safety

- Above the diversion dam
  - Better developed/paved Take-Out Access Trail for tubers to access Riverwalk directly from river (when river is too low to use tubing chute), and associated signage to direct tubers
  - Removal of all nuisance vegetation to improve viewscape and public safety
Purgatoire Watershed Partnership
Official Resolution

2020 BOR WaterSMART Cooperative Watershed Management Program
Phase II Grant Application

Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project

This official resolution is adopted by the Purgatoire Watershed Partnership Board of Directors verifying that:

- The Purgatoire Watershed Partnership official with legal authority to enter into an agreement is Julie Knudson, our Executive Director/Watershed Coordinator.
- This Board of Directors has reviewed and supports the application submitted
- As the applicant, Purgatoire Watershed Partnership has the capability to provide the amount of funding and in-kind contributions specified in the funding plan
- As the applicant, Purgatoire Watershed Partnership will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement.

Tom Verquer, PWP Board Chairman

Nov 16, 2020
Date