Conejos River Partnership Project - Phase 2

Bureau of Reclamation WaterSMART Cooperative Watershed Management Program: Phase 2 Grant Application

November 2020

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EXECUTIVE SUMMARY

Project Title: Conejos River Conejos River Partnership Project – Phase 2 **Project Location:** The Conejos River from the Fox Creek confluence to the Rio

Grande confluence near Los Sauces, Colorado.

Date: November 16, 2020

Applicant Name: Colorado Rio Grande Restoration Foundation

Applicant Address: 623 Fourth Street Alamosa, CO 81101

Alamosa County, Colorado

Grant Request: \$285,000 Matching Funds: \$303,640 Total Project Budget: \$588,640

Project Summary:

The Conejos River Partnership Project – Phase 2 (CRPP – Phase 2) will result in the rehabilitation of two surface water diversion structures and the restoration of adjacent aquatic and riparian habitat on the Conejos River in southern Colorado's San Luis Valley. The Conejos River faces issues of aging and increasingly inefficient irrigation structures as well as degraded river health and function. To address these issues, the diversion dams and headgates for the Mecitos Ditch and the William Stewart Company Irrigation Ditch will be replaced with improved structures to increase irrigation efficiency, reduce maintenance needs, and mitigate river impacts. To address streambank erosion, floodplain disconnection, and degraded aquatic and riparian habitat, bank stabilization structures will be installed and riparian areas will be revegetated. As a result, water quality will be improved, aquatic and riparian habitat will be enhanced, and river function will be restored. Project activities will provide multiple benefits, including healthier fisheries, decreased sediment accumulation at irrigation structures, and increased irrigation efficiency, which will aid in the administration of water rights and the Rio Grande Compact. These projects were identified and prioritized in the Conejos River Stream Management Plan (SMP), a stakeholderdriven watershed planning effort. Project partners include ditch companies and their shareholders, private and federal landowners, state and federal agencies. local water districts, land trusts, and environmental groups. The partners, led by the Colorado Rio Grande Restoration Foundation, will see the project to completion.

Project Timeline:

The CRPP – Phase 2 is expected to be completed over a two-year period, with an expected completion date of August 2023. Construction activities are expected to begin in October 2022. The project timeline is described in more detail under the *Readiness to Proceed* section.

Federal Nexus: Project activities will take place on both private and Bureau of Land Management (BLM) land.

PROJECT LOCATION

The CRPP – Phase 2 is located in Conejos County at two sites along the Conejos River between the river's confluence with Fox Creek and its confluence with the Rio Grande near Los Sauces, Colorado. The Mecitos Ditch is located approximately nine miles southwest of Antonito, Colorado. Its latitude is 37°3'5"N and longitude is -106°9'7"W. The William Stewart Company Irrigation Ditch is located approximately six miles northeast of Sanford, Colorado. Its latitude is 37°17'50"N and longitude is -105°48'4"W.

Figure 1: Map of the Conejos River Conejos River Partnership Project – Phase 2 Locations

TECHNICAL PROJECT DESCRIPTION

CRPP – Phase 2 involves the rehabilitation of two irrigation diversion structures on the Conejos River and restoration of adjacent riparian and aquatic habitat. The Conejos River faces issues of aging and inefficient irrigation infrastructure, degraded aquatic and riparian habitat, increasingly scarce water supply, and bank erosion and sediment pollution concerns. To address these issues, the project will include in the following activities:

- Replacement and improvement of the diversions and headgates servicing the Mecitos and William Stewart Co. Irrigation ditches;
- 2. Streambank stabilization and riparian restoration surrounding each diversion structure.
- 3. Enhancement of aquatic habitat adjacent to the Mecitos Ditch through increased pool depth for fish habitat resulting from the new diversion dam and enhancement of aquatic habitat surrounding the William Stewart Co. Irrigation Ditch through channel shaping and rock features.

Mecitos Ditch Watershed Stressors and Restoration Needs

The Mecitos Ditch is unable to divert its decreed water right during low streamflow conditions due to inadequate head pressure created by the diversion dam (see Figure 2, below). This results in less water available to irrigators, especially during the late summer when crop irrigation water requirement is relatively high. There is a sluice gate adjacent to the point of diversion, which is intended to transport sediment and debris downstream. However, it does not function effectively due to the orientation of the diversion dam, causing a disruption in the river's natural sediment transport regime and woody debris accumulation in the Mecitos Ditch feeder channel. Additionally, accelerated bank erosion and upstream of the diversion results in sediment accumulation in the ditch and degrades downstream aquatic habitat.



Figure 2: Mecitos Ditch diversion dam on the Conejos River.

The Mecitos Ditch headgate was damaged during a flooding event in spring 2019 (see Figure 3). Water users are unable to fully close the headgate, resulting in leakage and increased maintenance needs. This also negatively impacts overall Conejos River water administration.



Figure 3: Erosion adjacent to the Mecitos Ditch headgate with temporary tarp installed to prevent leakage.

William Stewart Co. Irrigation Ditch Watershed Stressors and Restoration Needs Similar to the Mecitos Ditch, the William Stewart Co. Irrigation Ditch is unable to divert its full decreed water right during low streamflow conditions due to the lack of a functional diversion structure (see Figure 4, below). A lack of riparian vegetation has led to significant bank erosion, channel instability, and lack of floodplain access, particularly upstream of the ditch's point of diversion. Bank erosion has led to increased ditch maintenance needs and degraded aquatic habitat downstream. Figure 4 shows the ditch's point of diversion, the location of its headgate, and approximate location of severe bank erosion.

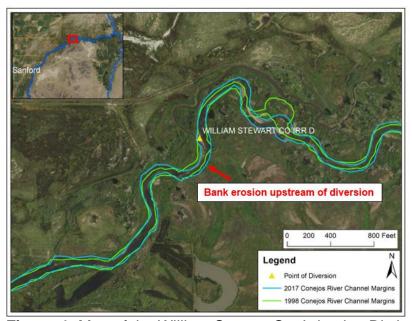


Figure 4: Map of the William Stewart Co. Irrigation Ditch diversion, showing the location of stream bank erosion.

No formal diversion dam exists for the ditch. Instead, river sediment consisting of sand and small cobbles is built up during the irrigation season to create adequate head pressure for the ditch. This presents a significant maintenance requirement for water users and negatively impacts aquatic habitat and water quality. Figure 5 shows the diversion dam in summer 2019 and illustrates these issues.



Figure 5: Poorly functioning diversion dam for the William Stewart Co. Irrigation Ditch.

Additionally, the ditch's headgate functions poorly and needs to be replaced to increase efficiency and improve the ability of water managers to administer Conejos River water rights. See Figure 6, below.



Figure 6: Poorly functioning William Stewart Co. Irrigation Ditch headgate.

Technical Project Description and Approach:

The watershed stressors and restoration needs described above will be addressed through the following project tasks:

- 1. Project Management, Administration, and Monitoring: The project applicant, the CRGRF, will be the CRPP Phase 2 project manager and led. In this role, the CRGRF will coordinate project partners and landowners and perform project oversight; making certain implementation is timely and in accordance with project goals. The CRGRF will work with project partners and BOR staff to complete all necessary environmental and regulatory compliance. In addition, the CRGRF will oversee project administration, completing all necessary contracts, status reports, expense tracking, and internal and external documents. Finally, the CRGRF will work with partners to complete project monitoring to ensure project activities are meeting the stated outcomes and performance measures. The CRGRF will complete oversee the project and complete all project activities in collaboration with the CRPP Phase 2 Technical Advisory Team (TAT), which is made up of the following agencies and partners:
 - a. Conejos Water Conservancy District
 - b. Colorado Division of Water Resources (DWR)
 - c. Colorado Parks and Wildlife (CPW)
 - d. San Luis Valley Water Conservancy District (SLVWCD)
 - e. Bureau of Land Management (BLM)
 - f. US Fish and Wildlife Service (USFWS)
 - a. Trout Unlimited (TU)
 - h. Shareholders on the Mecitos Ditch
 - i. Shareholders on the William Stewart Company Irrigation Ditch
 - j. Project landowners

- 2. Project Design and Engineering. The CRGRF will hire an engineer to complete project designs. The engineer will be selected by the TAT based on the engineer's experience in multi-purpose river projects. The selected engineer will complete site surveys and project designs. Project designs will be reviewed by the TAT to ensure they address the watershed restoration needs described above. The project engineer will assist the CRGRF and TAT in securing all required permits and approvals. Finally, the project engineer will complete construction oversight, making sure project construction is completed as designed. Project design and engineering is planned to take place between May 2021 and May 2022.
- 3. Project Construction at Mecitos Ditch: A qualified contractor will be selected by the TAT and hired by the CRGRF to construct a new diversion dam and headgate for the Mecitos Ditch. The selected contractor will mobilize the necessary equipment, likely including backhoes and skid steers, to construct a new stacked rock diversion dam and steel headgate. The diversion will create adequate head pressure to divert the ditch's full decree while also serving as a fish habitat structure and allow for fish passage. The contractor will also install bank stabilization structures upstream of the diversion dam and revegetate the streambank with native riparian vegetation, including willow clump plantings and grass and forb seeding.
- 4. Project Construction at William Stewart Co. Irrigation Ditch: A qualified contractor will be selected by the TAT and hired by the CRGRF to construct a new diversion dam and headgate for the William Stewart Irrigation Ditch. The selected contractor will mobilize the necessary equipment, likely including backhoes and skid steers, to construct a new grouted rock diversion dam and steel headgate. The diversion will create adequate head pressure to divert the ditch's full decree and allow for fish passage. The contractor will install bank stabilization structures upstream of the diversion dam, which will also function as aquatic habitat features. The contractor will re-shape a portion of the streambank to create a bankfull bench, reconnecting the river to its floodplain. The contractor will also revegetate the streambank with native riparian vegetation to mitigate erosion.

Project Outcomes:

The project activities and tasks will result in the following outcomes:

- Improved irrigation efficiency and reduced maintenance by replacing aging diversions and headgates servicing the Mecitos Ditch and William Stewart Co. Irrigation Ditch;
- Improved water rights administration by local water managers;
- Improved water quality by reducing erosion and sediment inputs and increasing stream shading;

- Improved riparian condition by stabilizing 935 feet of streambank and restoring riparian vegetation throughout the project area;
- Improved aquatic habitat through the construction of bank stabilization structures and channel shaping, which will provide habitat complexity for fish species;
- Increased sediment transport capacity on the Conejos River.

PERFORMANCE MEASURES

Project performance will be measured using a set of monitoring protocols developed specifically for multi-benefit projects such as this. The CRGRF will track metrics and oversee all monitoring for the project. Project monitoring will include pre- and post-construction monitoring of the following: riparian vegetation, standard water quality parameters, photo points, and river channel geomorphology using cross sectional surveys. Pre-construction, post-construction, and long-term surveys will map locations of the streambanks and the conditions of the diversions over time. Photographic documentation will be used to track conditions of the riparian plant communities, bank stabilization, and overall visual condition of the project area. Following construction and after the WaterSMART Phase 2 grant period, the sites and structures will continue to be monitored annually for 5 years to document the condition before and after project implementation and ensure project activities are meeting the needs of the irrigators and have improved water quality and aquatic and riparian habitat.

The project activities will result in rehabilitated diversion structures, revegetated riparian areas, restored stream channels and streambanks, and improved ditch efficiencies. Project outcome metrics for each diversion structure are outlined below, in Table 1.

Table 1: Project outcome metrics.

		William Stewart	
	Mecitos	Co. Irrigation	
Metric	Ditch	Ditch	Totals
Diversion Structures			
Rehabilitated	1	1	2
Irrigation Headgates			
Replaced	1	1	2
Riparian Land			
Revegetated (acres)	0.5	2	2.5
Stream Miles Restored			
(linear feet)	313	622	935
Improved Ditch Efficiency			
(cfs)	5	3	8

Project benefits will be quantified using these monitoring protocols and long term monitoring will determine success of project activities.

EVALUATION CRITERIA

Evaluation Criterion A—Project Benefits (30 points)

The Conejos River Partnership Project Phase 2 will result in agricultural, environmental, recreation, and water administration benefits for the Conejos River watershed. Expected benefits of project activities are as follows:

- Increased Water Availability: Due to a lack of head pressure provided by their diversion dams during low streamflow conditions, the Mecitos Ditch is estimated to lose approximately 5 cubic feet per second (cfs) of its decreed water right and the William Stewart Co. Irrigation Ditch is estimated to lose approximately 3 cfs. The replacement and improvement of irrigation diversions and their corresponding headgates will increase irrigation infrastructure efficiency and enable water users to divert their full decreed water rights during all streamflow conditions. This will benefit the shareholders on each of the ditches and their agricultural operations. Irrigation structures will require less maintenance and ditch shareholders will have more reliable irrigation water. As a result, water managers will be able to administer water rights more effectively and can plan ahead for changes in streamflow with greater certainty. More efficient water administration, in turn, provides water managers with increased flexibility in water management, such reservoir release schedules, which can benefit aquatic habitat. For example, increased efficiency and flexibility may allow water managers to augment streamflow during low flow conditions by releasing water stored in Platoro Reservoir.
- Long-term Water Quality Improvements: The project will result in long-term improvements to water quality by reducing sediment pollution and buffering water temperature and will mitigate the impacts of flooding and drought conditions. By increasing bank stability and revegetating riparian areas, sediment production will be reduced significantly. Additionally, riparian revegetation will increase stream shading and improve water temperature. Floodplain reconnection and riparian revegetation will allow flood flows to spread out and be temporarily stored on the river's floodplain, thereby decreasing flows and reducing the impact of flooding events. During high flows these floodplain areas with intact riparian vegetation become saturated and act as a "sponge." In late summer, water stored in these "sponges" is slowly released, resulting in the augmented baseflow and the mitigation of drought impacts. Increased baseflow will also result in improved water temperature.
- Riparian and Aquatic Ecosystem Benefits: The project's restoration of native riparian vegetation will result in increased bank stability, reduced erosion and sediment input, and improved aquatic and riparian ecosystems for a variety of species. A total of 935 linear feet of streambank will be stabilized and restored with bank stabilization

structures. Bank stabilization structures will provide habitat complexity for fish species and will act as refugia during high flow and pool habitat during low flow. Floodplain reconnection, in concert with bank stabilization, will temporarily store flood water, filter nutrients and contaminants, augment late summer streamflow, and improve riparian habitat for a variety of native bird species.

- Specific Species and Habitat Benefits: Improved aquatic habitat and augmented streamflow will provide significant benefits for the native Rio Grande chub and Rio Grande sucker, both of which are Tier 1 Species of Concern in Colorado and have been documented near the project sites. The combination of new habitat features, including increased pool depth. paired with augmented streamflow during dry periods, will significantly increase available habitat for these species and reduce competition with nonnative species. Improved riparian vegetation will support a number of bird species including the federally endangered southwestern willow flycatcher and threatened yellow-billed cuckoo by improving nesting sites and important migratory habitat. Critical habitat has been designated for the southwestern willow flycatcher in the San Luis Valley. Flycatchers generally breed in tall dense riparian habitat with low gradient streams. wetlands, or saturated soils nearby, while yellow-billed cuckoos use a variety of riparian habitats, including cottonwood and willow trees. Project activities will improve the condition of these habitats within the project area by revegetating 2.5 acres of riparian habitat.
- Multiple Water User Benefits: Project activities will provide benefits for multiple water uses including agricultural, environmental, and recreational uses. Project benefits include increased irrigation infrastructure efficiency, improved aquatic and riparian habitat, increased bank and river channel stability, and improved water quality. Project activities will benefit agricultural producers and water managers as a result of more efficient and functional irrigation infrastructure. Overall river health will be improved through enhanced water quality as well as riparian and aquatic habitat. As a result, Conejos River fisheries will be bolstered, providing increased recreational opportunities for anglers.
- Water Conflict Reduction through Improved Water Administration: As a result of increased irrigation infrastructure efficiency, the project will reduce water conflicts in the Conejos River watershed. Under the terms of the Rio Grande Compact of 1938 (Compact), the Conejos River is required to deliver a portion of its flow to New Mexico on an annual basis. The river's annual delivery requirement varies depending upon annual streamflow and a primary obstacle in effective administration of the Compact is inefficient and poorly functioning irrigation infrastructure, which can cause water managers to over- or under-deliver Compact flow requirements. As a result of this project's irrigation infrastructure

improvements, water managers will be better equipped to accurately and efficiently deliver water rights and more accurately meet Compact flow obligations. This will reduce conflict among water users by increasing predictive power and confidence among water managers and users alike in accurately meeting Compact flow requirements.

Increased Drought Resiliency: As mentioned above, the project will
mitigate the impact and increase resiliency to drought. Floodplain
reconnection efforts will allow high flows to spread out, causing intact
floodplains to become saturated and act as a "sponge." During dry periods
in late summer and fall, the water stored in these "sponges," or alluvial
aquifer systems, is slowly released, resulting in the augmented baseflow
and increased drought resiliency.

The project will address multiple watershed issues including limited water supply, degraded aquatic and riparian habitat, and water quality concerns. More efficient irrigation diversions will reduce consumptive use and increase water availability. Bank stabilization structures and riparian revegetation will increase habitat diversity for fish and bird species. The bank stabilization structures will provide refugia for fish during high flow and pool habitat during low flow. By addressing these watershed issues, project activities will result in benefits to agricultural, environmental, and recreation water users.

Evaluation Criterion B—Watershed Restoration Planning (30 points)

The Conejos River Partnership Project – Phase 2 was identified as a priority in the Conejos River Stream Management Plan (SMP). The SMP is a stakeholder-driven watershed restoration plan for the Conejos River completed in 2020. The SMP was completed in response to the 2015 Colorado Water Plan and local stakeholder interest. The Colorado Water Plan set a goal that 80 percent of locally prioritized rivers be covered by stream management plans by 2030. The Rio Grande Basin Roundtable also recognized the need for comprehensive assessments and management plans for locally prioritized streams in the Rio Grande Basin and selected the Conejos River as a focus area.

The purpose of the SMP was to assess stream conditions and provide this information for stakeholders to develop informed and data-driven projects and management actions to protect and enhance stream conditions. The CRGRF facilitated the planning effort, including stakeholder identification, contractor and partner coordination, community meeting facilitation, grant administration, and a portion of the data collection and report writing. To guide the process, a Technical Advisory Team (TAT) was formed and composed of state and federal agency officials, local water managers, nonprofit organizations, private landowners, and interested stakeholders.



Figure 7: Stream Management Plan stakeholder meeting.

The Conejos River SMP addresses a variety of watershed management issues. To document current river health conditions, a river health assessment was conducted. As part of the assessment, the following river health indicators and metrics were considered:

- Riparian Vegetation
- Water Quality
- Aquatic Life
- Streamflow/Hydrologic Requirements
- Irrigation Infrastructure
- Geomorphology

River health stressors caused by the degradation of the above indicators was noted in the SMP. Based on the river health assessment findings, the TAT identified and prioritized a variety of projects and initiatives designed to address or mitigate the effects of each stressor. For example, abandoned mine land reclamation projects in the upper Conejos River watershed were identified to mitigate the impact of heavy metals on water quality.

The process was guided by and reflects the interests of a Technical Advisory Team (TAT), which was composed of a diverse group of state and federal officials, local water managers, nonprofit organizations, private landowners, and other local stakeholders. Staff from the Rio Grande National Forest, BLM, USFWS, CWCD, CPW, and local government were involved. Additionally, representatives from ditch companies, farmers, ranchers, and private landowners participated in the TAT.

To gain input from interested stakeholders for the SMP planning process, the following steps were taken:

- An initial kickoff survey was distributed to document community values related to the Conejos River.
- A series of public community meetings were held to provide a forum for stakeholder engagement and to gather input.

- Regular updates were provided to the Rio Grande Basin Roundtable and several other local water districts and stakeholder groups.
- The project was described and public meetings were advertised via email newsletters, local radio programming, and social media.
- Significant outreach to individual landowners and ditch shareholders was completed.
- TAT meetings were held throughout the planning process, with a particular focus on guiding the river health assessment and the identification and prioritization of projects.

The Conejos River Partnership Project Phase 2 project activities were identified and prioritized in the Conejos River SMP. The SMP identified the primary stressors affecting the lower Conejos River:

- Aging and inefficient irrigation structures
- Degraded aquatic life and riparian areas
- Inadequate streamflow for aquatic biota
- Disruption of natural geomorphic processes, including sediment transport regimes
- Floodplain disconnection and accelerated streambank erosion
- Elevated sediment concentrations and water temperatures

Our proposed project will result in the implementation goals as well as an identified project from the plan. This project directly meets the following goals listed in the Conejos River SMP:

- Goal A: Improve function and reduce maintenance of irrigation infrastructure, both for water users and river health.
- Goal B: Maintain or improve bank and channel stability, especially near important wildlife habitat and critical infrastructure such as homes, diversion structures, roads, and bridges.
- Goal C: Maintain and improve the function of floodplains, associated alluvial aquifers, and natural channel processes.
- Goal D: Maintain and improve the extent and condition of riparian areas.
- Goal F: Maintain or improve water quality, with a focus on mine reclamation projects and compliance with state water quality standards.
- Goal G: Maintain or improve long term sustainability of Conejos River fisheries and associated aquatic habitat.

The Conejos River SMP identified and prioritized projects which will help meet the SMP goals. Several irrigation structures in need of improvement were prioritized, including our proposed project. Our proposed project will address the needs of two of the prioritized structures, which will further the SMP goals. In addition to the physical improvement of irrigation infrastructure, the project has multiple river improvement benefits and will help meet the goals listed above. Relevant sections of the Conejos River SMP can be found in **Appendix C**.

Evaluation Criterion C—Stakeholder Support

This project is supported by local, state, and federal stakeholders, all of whom were involved in the Conejos River SMP process. As evidenced by the letters of support attached to this application in Appendix A, a diverse set of stakeholders are in full support of the proposed project and some are contributing through cost-share and in-kind contributions. The following groups provided letters of support:

- Rio Grande Basin Roundtable
- Conejos Water Conservancy District
- Bureau of Land Management (San Luis Valley Field Office)
- Colorado Division of Water Resources
- San Luis Valley Water Conservancy District
- Colorado Open Lands
- Rio Grande Headwaters Land Trust
- Colorado Parks and Wildlife

The Conejos Water Conservancy District and Colorado Rio Grande Restoration Foundation are supporting the project through cost-share contributions. In addition, the stakeholders listed above will assist with project design review and implementation.

Collectively, the diverse group of stakeholders who support this project represent agricultural, environmental, and recreational water uses and interests.

The project is supported by The Conejos Water Conservancy District, which operates Platoro Reservoir and provides water for the farms and ranches and an augmentation program on the Conejos River. In addition, the project is supported by the Colorado Division of Water Resources, the state agency responsible for administering water rights and the Rio Grande Compact. The project is also supported by the Bureau of Land Management, which manages its land for multiple uses, including recreation. The project is well aligned with the policies and efforts of these agencies, nonprofits, and other groups.

This project builds upon and directly complements the Conejos River Partnership Project – Phase 1 (CRPP – Phase 1). CRPP – Phase 1, which is currently being implemented. CRPP – Phase 1 will result in the improvement of five irrigation diversion structures and the restoration of aquatic and riparian habitats. In addition, the Conejos Water Conservancy District has implemented projects to improve the condition of gaging and

diversion structures throughout the river system, resulting in improved flow management. This project directly benefits CWCD's efforts.

This project also complements the Conejos Meadows Resilient Habitat project, which is currently being implemented by Trout Unlimited. The Conejos Meadows Resilient Habitat project was also prioritized in the Conejos River SMP, with a goal of increasing ecological function and resiliency below Platoro Reservoir. It will result in improved and well-connected habitat, as well as improved streamflow conveyance during low-flow time periods. Improved conveyance during low flows will benefit water rights associated with the same diversion structures addressed in the Conejos River Partnership Project. Together, the CRPP – Phase 2 project and Conejos Meadows Resilient Habitat project work toward the larger goal of improving river health and function for multiple uses, including aquatic species and agricultural producers.

Finally, CWCD partners with Colorado Parks and Wildlife and Trout Unlimited on the Conejos River Flow Program, which increases the winter flows from Platoro Reservoir for the benefit of downstream fisheries. This project also complements the benefits provided by the Winter Flow Program.

Evaluation Criterion D—Readiness to Proceed

Upon entering into a financial assistance agreement, the CRGRF and their partners will be prepared to proceed with the proposed project activities. The CRGRF has significant experience and a successful track record of managing projects with diverse stakeholder groups, partners, and funding sources. Previous projects have prepared the applicant to successfully manage and complete the project in a timely manner.

The project is expected to be completed over a roughly two-year period, with an expected completion date of August 2023. Construction activities are expected to begin in October 2022. The project timeline is described in more detail in Table 2, below.

Table 2. Conejos River Partnership Project – Phase 2 timeline

Project Task	Timeline				
	October 2021 -				
Environmental Compliance	May 2022				
	May 2021 - May				
Final Design and Engineering	2022				
	October 2022 -				
Project Construction	April 2023				
Project Monitoring &	October 2022 -				
Evaluation of Outcomes	August 2023				

The project's implementation plan, budget, and permitting is described in detail in other sections of this proposal and is summarized below.

Environmental Compliance and Permitting: Environmental Compliance and Permitting will take place from October 2021 to May 2022 and will result in final approval and required permits for all project components. We anticipate obtaining permits from the Army Corps of Engineers. Environmental compliance will be completed in coordination with BOR staff and other partner agencies. The project budget includes \$30,000 for these activities.

<u>Design and Engineering:</u> Project engineering will take place from May 2021 to May 2022 and will result in final designs for all project components. Design review will be completed by the project's TAT. The project budget includes \$28,800 for these activities.

<u>Construction:</u> Project construction will take place from October 2022 to April 2023 and will result in the replacement of diversion dams and headgates serving the Mecitos and William Stewart Co. Irrigation ditches and surrounding streambank restoration. Construction review will be completed by a hired contractor. The project budget includes \$500,100 for these activities.

<u>Project Management, Administration, and Monitoring:</u> Project management, administration, and monitoring will take place from October 2022 to August 2023 and will be completed by the CRGRF in collaboration with project partners. The project budget includes \$20,740 for these activities.

The CRGRF is working in partnership with landowners and ditch shareholders at each project site and has permission to access the land involved.

Evaluation Criterion E—Performance Measures

Project performance will be measured using a set of monitoring protocols developed specifically for multi-benefit projects such as this. The CRGRF will track metrics and oversee all monitoring for the project. Project monitoring will include pre- and post-construction monitoring of the following: riparian vegetation, standard water quality parameters, photo points, and river channel geomorphology using cross sectional surveys. Pre-construction, post-construction, and long-term surveys will map locations of the streambanks and the conditions of the diversions over time. Photographic documentation will be used to track conditions of the riparian plant communities, bank stabilization, and overall visual condition of the project area. Following construction and after the WaterSMART Phase 2 grant period, the sites and structures will continue to be monitored annually for 5 years to document the condition before and after project implementation and ensure project activities are meeting the needs of the irrigators and have improved water quality and aquatic and riparian habitat.

The project activities will result in rehabilitated diversion structures, revegetated riparian areas, restored stream channels and streambanks, and improved ditch efficiencies. Project outcome metrics for each diversion structure are outlined below, in Table 1.

Table 1: Project outcome metrics.

	Mecitos	William Stewart Co. Irrigation	
Metric	Ditch	Ditch	Totals
Diversion Structures			
Rehabilitated	1	1	2
Irrigation Headgates			
Replaced	1	1	2
Riparian Land			
Revegetated (acres)	0.5	2	2.5
Stream Miles Restored			
(linear feet)	313	622	935
Improved Ditch Efficiency			
(cfs)	5	3	8

Project benefits will be quantified using these monitoring protocols and long-term monitoring will determine success of project activities.

Evaluation Criteria F—Department of the Interior and Bureau of Reclamation Priorities

This project is well aligned with Department of the Interior and Bureau of Reclamation priorities in several ways.

Department of the Interior Priorities

The project supports and furthers Department of the Interior priorities in several ways.

Utilize science to identify best practices to manage land and water resources and adapt to changes in the environment

The projects included in this proposal were identified as priorities in the Conejos River SMP, which was based on scientific assessments of river conditions. The SMP river health assessment utilized scientific protocols to measure river health indicators. Prioritized projects in the SMP, including the ones included in this proposal, are intended to improve river health and mitigate the stressors identified in the river health assessment. In addition, project monitoring and performance measures will allow project partners to further develop best practices for managing land and water resources in the future.

Restoring trust with local communities

This project brings together a diverse group of partners to implement holistic river restoration and infrastructure improvement projects. These partners have existing relationships, and this project will expand their capacity to work with one another into the future. This project will expand upon existing relationships between private landowners, state and federal agencies including U.S. Fish and Wildlife, state and local water management authorities, conservation groups, and local land and natural resource groups. The project is supported by private landowners, ditch shareholders, the Conejos Water Conservancy District, and the Bureau of Land Management. Throughout the project, these groups will be in direct communication and will further develop their working relationships.

Striking a regulatory balance

This project will reduce the burden of regulatory processes and strike a regulatory balance for project partners. The project will help ensure state water quality standards continue to be met by improving water quality conditions in the Conejos River. By protecting and improving habitat for the southwestern willow flycatcher and yellow-billed cuckoo, both of which are listed as federally endangered species, the project helps demonstrate that agricultural production is compatible with these species and will help producers avoid any regulatory action. Additionally, project activities will help meet the long-term goals and requirements of the San Luis Valley Regional Habitat Conservation Plan (HCP). Finally, increased efficiency of irrigation structures will enable water managers to

more effectively meet annual deliveries to the New Mexico state line, as required by the Rio Grande Compact.

Modernizing Our Infrastructure

This project will result in modern, more efficient irrigation infrastructure. Improved diversion structures and headgates will use modern technology and engineering practices to ensure each structure functions properly. This private/public partnership will remove obstacles for private ditch shareholders and facilitate the process of upgrading irrigation infrastructure.

Bureau of Reclamation Priorities

The project also supports and furthers Bureau of Reclamation priorities, as outlined below.

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

The project will increase irrigation infrastructure efficiency, enabling water users to divert their full decreed water rights at all flows. As a result, water managers will be able to administer water rights more effectively and can plan ahead for changes in streamflow with greater certainty. This will afford water managers more flexibility and efficiency in water storage and reservoir release schedules.

Streamline Regulatory Processes and Remove Unnecessary Burdens to Provide More Water and Power Supply Reliability

This project will streamline regulatory processes for project partners. The project will help ensure state water quality standards continue to be met by improving water quality conditions in the Conejos River. By protecting and improving habitat for the southwestern willow flycatcher and yellow-billed cuckoo, both of which are listed as federally endangered species, the project helps demonstrate that agricultural production is compatible with these species and will help producers avoid any regulatory action. Additionally, project activities will help meet the long-term goals and requirements of the San Luis Valley Regional Habitat Conservation Plan (HCP). Finally, increased efficiency of irrigation structures will enable water managers to more effectively meet annual deliveries to the New Mexico state line, as required by the Rio Grande Compact.

Leverage Science and Technology to Improve Water Supply Reliability to Communities

This project will leverage cutting edge science and technology to maximize irrigation infrastructure efficiency and environmental benefits of restoration work. For example, newly installed irrigation structures will utilize the best available science to ensure each irrigation diversion structure is passable by fish. Project partners will consult with the project engineer to ensure each structure is highly efficient. By utilizing the best available science and technology, this project will improve water supply reliability to local communities.

Address Ongoing Drought

The project will mitigate the impacts of ongoing drought conditions experienced in the Conejos River Watershed. The Conejos River is at risk of experiencing extended periods of elevated water temperature. By revegetating riparian areas stream shading will increase and improve water temperature. Floodplain reconnection and riparian revegetation will allow flood flows to spread out and be temporarily stored on the river's floodplain, thereby decreasing flows and reducing the impact of flooding events. During high flows these floodplain areas with intact riparian vegetation become saturated and act as a "sponge." In late summer, water stored in these "sponges" is slowly released, resulting in the augmented baseflow and the mitigation of drought impacts. Increased baseflow will also result in improved water temperature.

PROJECT BUDGET

Funding Plan and Letters of Commitment

The total budget for the project is \$588,640; project partners are requesting \$285,000 from the BOR WaterSMART Cooperative Watershed Management Grant Program Phase II. Project partners will secure the remaining \$303,640 from non-Federal sources to make up 52% of the total project cost. The non-Federal share of the project cost will be obtained from the following sources:

- Colorado Water Conservation Board (CWCB) \$264,640: The CRGRF has requested \$264,640 in non-Federal funding from CWCB through their Colorado Water Plan Grant Program. This pending funding request will be reviewed at CWCB's March 2021 board meeting at which time the board will vote on the request. In the unlikely instance that requested funds are not awarded to the project, partners will work together to secure an equivalent amount of non-Federal funding from state and private funders. A commitment letter for these funds will be submitted upon the grant award in March 2021.
- Project Applicant, Colorado Rio Grande Restoration Foundation (CRGRF) - \$25,000: The CRGRF is committed to contributing \$25,000 in funding to support project costs. These funds will be made up of contributions from project landowners and ditch shareholders. A commitment letter for these funds is included in Figure 8.
- Conejos Water Conservancy District (CWCD) \$5,000: The CWCD has committed to contributing \$5,000 in funding to support project costs. A commitment letter for these funds is included in Figure 9.
- CRPP Technical Advisory Team \$9,000: The project Technical
 Advisory Team is committed to providing in-kind services valuing \$9,000
 towards project implementation. The Technical Advisory Team, which is
 made up of individuals from local, state, and Federal agencies, will provide
 at least 200 hours of support valued at \$45 per hour.



Conejos Water Conservancy District P. O. Box 550 Manassa, CO 81141 cwcd1971@hotmail.com Phone 719-843-5261 fax 5452

November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Phase 2 Conejos River Partnership Project - Phase 2

Dear Application Review Committee,

I am writing on behalf of the Conejos Water Conservancy District (CWCD) to express our support and commitment to participate in the Conejos River Partnership Project – Phase 2. CWCD operates Platoro Reservoir, which provides water to farms and ranches on the Conejos River. We have facilitated projects to improve the condition of gaging and diversion structures throughout the river system, resulting in improved flow management. In recent years, we have partnered with Colorado Parks and Wildlife and Trout Unlimited to increase winter flows from Platoro Reservoir for the benefit of downstream fisheries.

The Conejos River Partnership Project – Phase 2 was identified in the Conejos River Stream Management Plan (SMP), which CWCD has played an active role in. This project, which is the second phase of a larger restoration effort on Conejos River, brings together a diverse group of stakeholders to pair irrigation ditch rehabilitation with river restoration efforts. The restoration will directly benefit the shareholders of each ditch by improving diversion efficiency and reducing maintenance by replacing aging diversion dams and headgates. The project will also enhance water quality by reducing sediment input, improve riparian condition, and improve aquatic habitat.

The project will work in concert with CWCD's past and present work with landowners, water rights holders, and state and federal agencies on Conejos River. Ultimately, this project works toward the larger goal of improving river health and function for multiple uses, including aquatic species and agricultural producers. CWCD is excited to work with the Rio Grande Headwaters Restoration Project as a partner on this project and will provide in-kind support throughout the project for design review and project implementation. In addition, the CWCD has committed \$5,000 in cash match to the success of this project. We hope this contribution speaks to our investment in the project and its benefits to the Conejos River. The funds will be available to the applicant beginning in January 2021.

Sincerely,

Nathan Coombs, Manager

NHL Comba

Figure 8: Conejos Water Conservancy District Letter of Commitment

Colorado Rio Grande Restoration Foundation Rio Grande Headwaters Restoration Project 623 Fourth Street Alamosa, CO 81101 (719) 589-2230



November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Phase 2 Conejos River Partnership Project - Phase 2

To the WaterSMART Cooperative Watershed Management Program – Phase 2 Review Committee,

I am writing to document the Colorado Rio Grande Restoration Foundation's (CRGRF) financial support of the "Conejos River Partnership Project – Phase 2." As such, the CRGRF has committed \$25,000 in cash match to the success of this project. Funds will be composed of contributions from project landowners and ditch shareholders. In addition, the Conejos River Partnership Project – Phase 2 Technical Advisory Team will provide in-kind services totaling \$9,000 towards project design and implementation. The CRGRF will track these contributions for grant reporting purposes.

Signed,

Emma Reesor

Emma Peur

Executive Director, RGHRP

Figure 9: Colorado Rio Grande Restoration Foundation Letter of Commitment

Budget Proposal **Table 3:** Total Project Cost Table

FUNDING SOURCE	AMOUNT		
BOR WaterSMART CWMP Phase II Funding (Requested)	\$	285,000.00	
CWCB Colorado Water Plan Grant (Pending)	\$	264,640.00	
Project Applicant, Colorado Rio Grande Restoration Foundation (Secured)	\$	25,000.00	
Conejos Water Conservancy District (Secured)	\$	5,000.00	
Technical Advisory Team (In-kind)	\$	9,000.00	
TOTAL PROJECT COST	\$	588,640.00	

Table 4: Project Budget Proposal

DUDGOD	,	tivoi i ait	петэпір	Project - P	IIa	oc z Daag	C.					
							Source of Funds					
Budget Item Description		st per Unit	Quantity	Quantity Type		TOTAL COST	BOR WaterSMART Grant (Requested)		Non-Federal Cash Match		In-Kind Contribution	
Contractual												
Project Design, Engineering and Permitting												
Mecitos Ditch Project Site	\$	120.00	120	Hour	\$	14,400	\$	5,000	\$	9,400	\$	-
William Stewart Irrigating Ditch Project Site	\$	120.00	120	Hour	\$	14,400	\$	5,000	\$	9,400	\$	ā
Project Construction - Mecitos Ditch Project Site*												
Rock and gravel riprap, placed	\$	120.00	1000	CY	\$	120,000	\$	65,000	\$	55,000	\$	
Grouted rock and grout, placed	\$	360.00	100	CY	\$	36,000	\$	18,000	\$	18,000	\$	=
Steel fabrication and installation	\$	4.00	8000	Lbs	\$	32,000	\$	16,000	\$	16,000	\$	8
Channel shaping/earthwork	\$	10.00	800	CY	\$	8,000	\$	4,000	\$	4,000	\$	
Riparian revegetation	\$	5,000.00	0.5	Acre	\$	2,500	\$	2,000	\$	500	\$	-
Equipment and labor	\$	400.00	100	Hour	\$	40,000	\$	20,000	\$	20,000	\$	2
Project Construction - William Stewart Irrigating D	itch	Project Site	*									
Rock and gravel riprap, placed	\$	120.00	1100	CY	\$	132,000	\$	75,000	\$	57,000	\$	9
Grouted rock and grout, placed	\$	360.00	110	CY	\$	39,600	\$	17,000	\$	22,600	\$	-
Steel fabrication and installation	\$	4.00	6000	Lbs	\$	24,000	\$	12,000	\$	12,000	\$	-
Channel shaping/earthwork	\$	10.00	1200	CY	\$	12,000	\$	6,000	\$	6,000	\$	8
Riparian revegetation	\$	5,000.00	2	Acre	\$	10,000	\$	5,000	\$	5,000	\$	~
Equipment and labor	\$	400.00	110	Hour	\$	44,000	\$	20,000	\$	24,000	\$	-
Environmental and Regulatory Compliance												
Environmental Compliance Costs	\$	30,000.00	1	Lump Sum	\$	30,000	\$	15,000	\$	15,000	\$	-
Salaries and Wages												
Emma Reesor, Executive Director	\$	24.76	380	Hour	\$	9,409	\$	-	\$	9,409	\$	-
Daniel Boyes, Program Manager	\$	24.04	380	Hour	\$	9,135	\$	-	\$	9,135	\$	19
Fringe Benefits				v.			0.00					
Emma Reesor, Executive Director	\$	2.93	380	Hour	\$	1,113	\$	-	\$	1,113	\$	5.
Daniel Boyes - Program Manager	\$	2.85	380	Hour	\$	1,083	\$	-	\$	1,083	\$	
Third-Party In-Kind Contributions											su:	
Design Review and Project Support Technical Advisory Team	\$	45.00	200	Hour	\$	9,000	\$	-	\$	-	\$	9,00
				TOTAL	\$	588,640	\$	285,000	\$	294,640	\$	9,000

Budget Narrative

The total budget for the project is \$588,640. The majority of project expenses are contractual (\$528,900) and the remaining includes environmental compliance costs (\$30,000), salary and wages (\$18,544), fringe benefits (\$2,196), and third-party in-kind contributions (\$9,000). Project expense details are described below.

Contractual Costs:

Contractual costs include project design and engineer and project construction. A description the work completed by each contractor is listed below:

- Project Design and Engineering: The project applicant, the CRGRF, will work with the TAT to hire an engineer to complete project design, engineering, and permitting. The cost of these services was calculated based on a rate of \$120 per hour, which is comparable to engineering services provided in the area. The CRGRF estimates that the selected consulting engineer will spend 120 hours to complete site surveys, preliminary and final designs, and assist with project permitting for each of the two project sites. The TAT will complete a design review with the project engineer to ensure that designs best address the agricultural, environmental, and water administration needs facing the Conejos River.
- **Project Construction:** The project applicant, the CRGRF, will work with the TAT to hire a contractor to complete project construction at each site as designed by the project engineer. The CRGRF will work with the TAT to select a contractor through a competitive bid process. The hired contractor will complete project construction based on a lump sum bid amount, however, the budget proposal provides detailed costs for estimating purposes. The quantities and unit rates listed in Table 4: Project Budget Proposal were based off of several recently complete river restoration and irrigation infrastructure projects completed by the CRGRF. At each project site, the hired contractor will remove the old diversion and headgate structures, clear and shape the channel, and enact pollution control. The contractor will then complete grade preparations, build a grouted rock diversion, and install headgates. The contractor will implement streambank stabilization measures, which may include bank shaping, channel reconfiguration, rock or log structure installation, and riparian habitat improvements. Riparian improvements will include willow clump plantings and grass and forb seeding. Upland areas disturbed during onsite activities will be reseeded with appropriate species. Estimated unit costs and quantities for this work can be found in Table 4.

Environmental and Regulatory Compliance Costs

The CRGRF will work with the Bureau of Reclamation to ensure compliance with Federal environmental and cultural resources laws and other regulations. The budget allocates \$30,000, approximately 5% of the total project cost, to support costs associated with environmental compliance.

Salary and Wages

The project budget includes \$18,544 to support the cost of staff time spent directly on project management and administration by CRGRF's Executive Director and Program Manager. The CRGRF's Executive Director, Emma Reesor, will be the lead project manager. The CRGRF's Program Manager, Daniel Boyes, will assist the project manager with each task. Project manager's tasks will include completing all necessary contracts, status reports, and internal and external documents. Additionally, the project manager will complete partner and landowner coordination and perform project oversight; making certain implementation is timely and in accordance with the Scope of Work. The project budget estimates that the CRGRF's Executive Director will spend 380 hours at an hourly rate of \$24.76 per hour and the CRGRF's Program Manager will spend 380 hours at a rate of \$24.04 per hour. This amount includes hours for the project manager to comply with all required BOR reporting requirements, including final project report and evaluation. The number of hours required for project management and administration was estimated based on staff time needed to manage past projects with a similar scope.

Fringe Benefits

The project budget includes \$2,196 for fringe benefits for the CRGRF staff, which include Medicare, Social Security, and Workers Compensation. These amounts total \$2.93 per hour for the CRGRF's Executive Director and \$2.85 for the CRGRF's Program Manager. These rates were calculated by the CRGRF's accountant based on 2020 tax and workers compensation costs.

Third-Party In-Kind Contributions

In-kind contributions include 200 hours (valued at \$45/hour) volunteered by technical experts, resource managers, and field staff throughout project design and implementation. These hours will be contributed by individuals from the CWCD, CPW, CDWR, BLM, SLVWCD, as well as the shareholders and landowners to complete project design review. In addition, in-kind hours will be provided these entities throughout project construction. Engagement from these stakeholders will ensure project methods meet the needs outlined in the technical project description. The CRGRF will track and report hours contributed by members of the TAT.

Required Permits and Approvals

The CRGRF will work with the project engineer and project partners to apply for and secure all required permits. Permits will be required from the U.S. Army Corps of Engineers for project construction. In addition, CRGRF will work with BOR and federal partners to ensure the project complies with environmental and cultural resource regulations.

Documentation in Support of Applicant Eligibility

The Colorado Rio Grande Restoration Foundation (Foundation) is seeking funding for the Conejos River Partnership Project – Phase 2 (Project) as an existing watershed group. The Foundation meets all the grant eligibility requirements for an existing watershed group set forth in the grant program's FOA. The Foundation is a 501(c)(3) non-profit organization located in Colorado and serves as the fiscal agent and governing body for the Rio Grande Headwaters Restoration Project (RGHRP). Formed in 2001, the RGHRP is a local watershed group with the mission "to restore and conserve the historical functions and vitality of the Rio Grande in Colorado for improved water quality, optimal agricultural water use, riparian habitat, wildlife and aquatic species habitat, recreation, and community safety, while meeting the requirements of the Rio Grande Compact." The RGHRP was formed to implement the recommendations of a restoration study completed in 2001. The 2001 Study was prompted by local stakeholders due to a realized deterioration of the historic functions of the Rio Grande, which include providing high quality water, healthy riparian areas, fish and wildlife habitat, and a functioning floodplain. The 2001 Study analyzed the condition of the riparian area and structures along a 91-mile reach of the Rio Grande and provided recommendations for improvement. In addition to the 2001 Study, the RGHRP has coordinated three other watershed planning efforts, the 2016 Lower Rio Grande Study, the 2017 Upper Rio Grande Watershed Assessment, and the Rio Grande, Conejos River, and Saguache Creek Stream Management Plans (SMPs).

The RGHRP implements the recommendations of the 2001 Study through the following programs: Riparian Restoration and Streambank Stabilization, Instream Infrastructure Improvement, Watershed Stewardship, and Outreach and Education. The program projects have resulted in improved upland and in-stream habitat, streambank stability, floodplain function, water quality, diversion efficiency, recreation, and community engagement. Most recently, the RGHRP completed two diversion dam replacement projects. The old dams were inefficient, hazardous, and impassable by boats and fish. The RGHRP worked with the irrigation companies to replace the dams with new structures that efficiently divert water for agriculture, while allowing for fish and boat passage. Additionally, the RGHRP stabilized streambanks and restored aquatic and riparian habitat surrounding the new structures, improving overall river function. Since 2001, the RGHRP has partnered with over 65 landowners and multiple ditch companies to improve the condition of over 13 miles of river in the San Luis Valley.

This project will build on the Conejos River stakeholder group's goals toward the continued effort of watershed restoration, identified in the Conejos River SMP. Because of the RGHRP's role in coordinating the Conejos River SMP and capacity as a watershed group, the RGHRP will serve as the project manager and grant applicant for the project. See Appendix C for relevant sections of the Conejos River SMP.

ARTICLES OF INCORPORATION

OF

THE COLORADO RIO GRANDE RESTORATION FOUNDATION

(A Colorado Nonprofit Corporation)

The undersigned incorporator (a natural person at least 18 years of age), hereby establishes a nonprofit corporation pursuant to the Colorado Revised Nonprofit Corporation Act, as amended, and adopts the following Articles of Incorporation:

Article I Corporate Name

The name of the Corporation is: The Colorado Rio Grande Restoration Foundation.

Article II Principal Office, Registered Office and Registered Agent

The initial principal office for the transaction of the business of the Corporation shall be located at 415 San Juan Avenue, Alamosa, Colorado 81101. The address of the initial registered office of the Corporation is 415 San Juan Avenue, Alamosa, Colorado, and the name of the registered agent at such address is Michael H. Gibson.

Article III Membership

The Corporation shall not have voting members.

Article IV Period of Duration

This Corporation shall exist in perpetuity from the date of filing these Articles of Incorporation with the Secretary of State of Colorado, unless dissolved according to law.

Article V Objects and Purposes

The Corporation is organized and shall be operated exclusively for public, charitable, or educational purposes as described in, and contemplated by, §501(c)(3) of the Internal Revenue Code of 1986 (or any successor provision) (hereinafter "Internal Revenue Code"). In furtherance of such purposes the Corporation may promote, establish, conduct, and maintain activities on its own behalf or it may contribute to or otherwise assist other corporations, organizations, and institutions carrying on such activities. The primary object and purpose of the corporation shall be to restore, improve, preserve and protect the Rio Grande, its riparian areas and related plant and animal life and other natural resources, to the benefit of users of the Rio Grande and its communities.

Article VI Powers & Limitations

In furtherance of the preceding objects and purposes, the Corporation shall have and may exercise all of the rights, powers, privileges, and immunities now or subsequently conferred upon nonprofit corporations organized under the laws of the State of Colorado.

Notwithstanding any other provision of these Articles of Incorporation, the powers of the Corporation are restricted as follows:

- (a) The Corporation shall not conduct or carry on any activities not permitted to be conducted or carried on (i) by an organization exempt from federal income taxation under §501(c)(3) of the Internal Revenue Code or (ii) by an organization the contributions to which are deductible under §\$170, 642, 2055, or 2522 of the Internal Revenue Code.
- (b) No solicitation of contributions to the Corporation shall be made, and no gift, bequest, or devise to the Corporation shall be accepted, upon any condition or limitation that in the opinion of the Corporation may cause the Corporation to lose its federal income tax exemption.

Article VII Private Inurement

No part of the income or principal of the Corporation shall inure to the benefit of, or be distributed to, any member, director, or officer of the Corporation or any other private individual.

Article VIII Political Activities

No substantial part of the Corporation's activities shall consist of propaganda or otherwise attempting to influence legislation, and the Corporation shall not participate or intervene in (including the publication or distribution of statements) any political campaign on behalf of or in opposition to any candidate for public office.

Article IX Private Foundation Status

Notwithstanding any other provision of these Articles of Incorporation, if at any time or times the Corporation is a private foundation within the meaning of § 509 of the Internal Revenue Code, then during such time or times:

- (a) The Corporation shall distribute its income for each taxable year at such time and in such manner as not to subject the Corporation to tax under § 4942 of the Internal Revenue Code;
- (b) The Corporation shall not engage in any act of self-dealing, as defined in § 4941 of the Internal Revenue Code;
- (c) The Corporation shall not retain any excess business holdings, as defined in § 4943 (c) of the Internal Revenue Code;
- (d) The Corporation shall not make any investments in such manner as to subject the Corporation to tax under § 4944 of the Internal Revenue Code; and
- (e) The Corporation shall not make any taxable expenditures as defined in § 4945(d) of the Internal Revenue Code.

Article X Dissolution

Upon any liquidation, dissolution, or winding up of the Corporation, the Board of Directors shall, after paying or adequately providing for the payment of all the obligations and liabilities of the Corporation, dispose of all the assets owned by the Corporation by transferring such assets exclusively to or for the benefit of such organization or organizations as shall at the time qualify under § 501(c)(3) of the Internal Revenue Code, as the Board of Directors shall determine. Any of such assets not so disposed of shall be disposed of by the District Court for Alamosa County, Colorado, exclusively for such exempt purposes or to such organization or organizations that are organized and operated exclusively for such exempt purposes, as such Court shall determine.

Article XI Directors

The corporate powers and management of the Corporation shall be vested in and exercised by a Board of Directors. The Board of Directors shall be composed of such number of members as may be specified in or fixed in accordance with the Bylaws. The Board of Directors may make, alter and amend the Bylaws. The names and addresses of the initial directors are:

Michael H. Gibson 415 San Juan Avenue Alamosa, Colorado 81101

Doug Messick 7411 North County Rd 2 East Monte Vista, Colorado 81144

Karla Shriver 4485 East Highway 160 Monte Vista, Colorado 81144

Kate Booth-Doyle 32995 County Road 41 Del Norte, Colorado 81132

Article XII Indemnification

The Corporation shall indemnify a person who is made a party to a proceeding because the person is or was a director of the Corporation against liability incurred in the proceeding, and shall pay for or reimburse expenses incurred in the proceeding in advance of the final disposition of the proceeding, to the maximum extent permitted by law. This indemnification shall apply if that person's conduct was in good faith, and the person reasonably believed that: in the case of conduct in an official capacity with the nonprofit corporation, the conduct was in the nonprofit corporation's best interests; and in all other cases, the conduct was at least not opposed to the nonprofit corporation's best interests. In the case of any criminal proceeding, this indemnification shall apply if the person had no reasonable cause to believe the conduct was unlawful. Any repeal or modification of this Article 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.

Article XIII Liability of Directors

The liability of the Corporation's directors for monetary damages for breach of fiduciary duty as directors shall be eliminated to the maximum extent now or hereafter permitted by applicable law. Any repeal or modification of this Article 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.

Article XIV Nondiscriminatory Policy

The Corporation shall make its services, facilities, and programs available to all persons regardless of race, color, creed, national origin, sex, sexual orientation, or handicap, and the Corporation shall not in any way discriminate against any person on the basis of race, color, creed, national origin, sex, sexual orientation or handicap.

Article XV Incorporator

The name and address of the incorporator is Michael H. Gibson, c/o San Luis Valley Water Conservancy District, 415 San Juan Avenue, Alamosa, Colorado 81101.

IN WITNESS WHEREOF, the above-named incorporator has signed these Articles of Incorporation on September 14th., 2004.

Michael H. Gibson

The undersigned consents to his appointment as the initial Registered Agent for The Colorado Rio Grande Restoration Foundation.

Michael H. Gibson

Michael Solar

Mission Statement

The CRGRF and RGHRP's mission statement is, "To restore and conserve the historical functions and vitality of the Rio Grande Basin in Colorado for improved water quality, agricultural water use, riparian health, wildlife and aquatic species habitat, recreation and community safety while meeting the Rio Grande Compact."

Documentation Regular Watershed Group Meetings

Colorado Rio Grande Restoration Foundation Rio Grande Headwaters Restoration Project 623 Fourth Street Alamosa, CO 81101 (719) 589-2230



November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: Watershed Group Self Certification of Regular Meetings

To the WaterSMART Cooperative Watershed Management Program – Phase 2 Review Committee,

This letter serves as a self-certification that the Rio Grande Headwaters Restoration Project (RGHRP), a watershed group, holds regular meetings. The Colorado Rio Grande Restoration Foundation is the fiscal agent and governing body for the Rio Grande Headwaters Restoration Project. As part of the RGHRP's standard operations and project coordination, the RGHRP holds regular water resources meetings with diverse stakeholders. As the lead for the Rio Grande, Conejos River, and Saguache Creek Stream Management Plans (SMPs), RGHRP held regular meetings with the SMP Technical Advisory Team and with many water user groups and other project stakeholders. The RGHRP is currently coordinating the Rio Grande Basin Implementation Pan and holds meetings as part of the planning process on a bi-monthly basis. Finally, the RGHRP plays an active administrative role in the monthly Rio Grande Basin Roundtable meetings.

Signed,

Emma Reesor

Executive Director, RGHRP

APPENDIX A – Letters of Support



November 10, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Phase II Conejos River Partnership Project – Phase II

Dear Grant Review Committee,

On behalf of the Rio Grande Basin Roundtable (Roundtable), please accept this letter of support for the Conejos River Partnership Project – Phase II (Phase II) sponsored by the Colorado Rio Grande Restoration Foundation (CRGRF). The Roundtable voted unanimously to support the CRGRF's WaterSMART Cooperative Watershed Management Program Grant for Phase II at the November 10, 2020 Roundtable meeting.

The Roundtable recognizes that the Project addresses agricultural, environmental, and water administration needs facing the Rio Grande Basin. The project will result in the replacement of aging diversions and headgates for three ditches on the Conejos River, benefiting shareholders on each ditch by improving diversion efficiency and reducing maintenance. Additionally, these efforts will include improvements to aquatic habitat and connectivity, streambank stabilization, and riparian restoration, which will improve river health, water quality, and wildlife habitat. These project methods and activities further the recommendations of the Conejos River Stream Management Plan and meet many of the Rio Grande Basin Implementation Plan Goals. In addition to meeting many of the BIP goals, the Project aligns with the Colorado Water Plan's Goals and Criteria by meeting agricultural water needs, while balancing the needs of the environment, and recreation.

Thank you for your consideration of this application.

Sincerely,

Nathan Coombs

Chair, Rio Grande Basin Roundtable

Nosh Ruls



Monte Vista Field Office 0722 S. County Road 1 East Monte Vista, CO 81144 P 719.587.6908 | F 719.587.6934

November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Phase 2 Conejos River Partnership Project - Phase 2

To the WaterSMART Cooperative Watershed Management Program Review Committee,

Please accept this letter of support for the Conejos River Partnership Project - Phase 2 on behalf of Colorado Parks and Wildlife (CPW). This project was identified in the Conejos River Stream Management Plan, which CPW participated in as a member of the Technical Advisory Team. The project will further CPW's efforts in the San Luis Valley, especially in terms of aquatic habitat restoration, by improving and increasing the connectivity of aquatic habitat. The project addresses multiple restoration needs and will provide benefits for multiple water users in the Conejos River Watershed.

The restoration activities in this project will benefit Conejos River fisheries, farmers who utilize surface water for irrigation, and the overall health and function of the Conejos River. Project activities will provide multiple benefits by improving the efficiency and function of irrigation diversion structures while also improving aquatic and riparian habitats along the Conejos River. Increased efficiency of surface water diversions allows irrigators to more effectively irrigate crops with less water. In turn, restoration efforts will improve aquatic habitat and riparian areas. Together, these restoration efforts work toward the larger goal of improving river health and function for multiple Conejos River water users.

I hope you will support this project.

Sincerely,

Estevan Vigil,

CPW Aquatic Biologist

OF COLORDO A



Conejos Water Conservancy District
P. O. Box 550
Manassa, CO 81141
cwcd1971@hotmail.com
Phone 719-843-5261 fax 5452

November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Phase 2 Conejos River Partnership Project - Phase 2

Dear Application Review Committee,

I am writing on behalf of the Conejos Water Conservancy District (CWCD) to express our support and commitment to participate in the Conejos River Partnership Project – Phase 2. CWCD operates Platoro Reservoir, which provides water to farms and ranches on the Conejos River. We have facilitated projects to improve the condition of gaging and diversion structures throughout the river system, resulting in improved flow management. In recent years, we have partnered with Colorado Parks and Wildlife and Trout Unlimited to increase winter flows from Platoro Reservoir for the benefit of downstream fisheries.

The Conejos River Partnership Project – Phase 2 was identified in the Conejos River Stream Management Plan (SMP), which CWCD has played an active role in. This project, which is the second phase of a larger restoration effort on Conejos River, brings together a diverse group of stakeholders to pair irrigation ditch rehabilitation with river restoration efforts. The restoration will directly benefit the shareholders of each ditch by improving diversion efficiency and reducing maintenance by replacing aging diversion dams and headgates. The project will also enhance water quality by reducing sediment input, improve riparian condition, and improve aquatic habitat.

The project will work in concert with CWCD's past and present work with landowners, water rights holders, and state and federal agencies on Conejos River. Ultimately, this project works toward the larger goal of improving river health and function for multiple uses, including aquatic species and agricultural producers. CWCD is excited to work with the Rio Grande Headwaters Restoration Project as a partner on this project and will provide in-kind support throughout the project for design review and project implementation. In addition, the CWCD has committed \$5,000 in cash match to the success of this project. We hope this contribution speaks to our investment in the project and its benefits to the Conejos River. The funds will be available to the applicant beginning in January 2021.

Sincerely,

Nathan Coombs, Manager

Wille Comba



November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Phase II Conejos River Partnership Project – Phase II

Dear Grant Review Committee,

Please accept this letter of support on behalf of the Colorado Division of Water Resources (DWR) for the Conejos River and Rio Grande Infrastructure and River Improvement Project. This project was born out of the Rio Grande and Conejos River Stream Management Plans (SMP) and is a partnership between the Rio Grande Headwaters Restoration Project, DWR, private landowners, ditch companies, Colorado Parks and Wildlife, and other local stakeholders. The project aims to complete a series of irrigation infrastructure improvements and river restoration efforts on the Conejos River and Rio Grande in the San Luis Valley of Colorado.

As the Division Engineer for Division 3, it is my responsibility to ensure that water in the Rio Grande Basin is administered accurately and in accordance with applicable decrees and compacts. Improvements to structures identified in this project will aid in the administration of water rights on the Conejos River and Rio Grande and the ability to meet Colorado's obligation to the Rio Grande Compact. The need for accurate water deliveries in the Rio Grande Basin is becoming increasingly crucial in the face of water shortages and prolonged drought. This project will improve water administration through the rehabilitation of multiple degraded headgates and diversion structures. These improvements will allow for improved and more efficient water administration on the Conejos River and Rio Grande.

The Conejos River and Rio Grande Infrastructure and River Improvement Project is a great opportunity to upgrade aging infrastructure in order to meet multiple water needs. These efforts will ultimately provide benefits to water administration, irrigation, and river health and function. I hope you will consider this funding request and the benefits it will have to the Rio Grande Basin.

Sincerely,

Craig W. Cotten Division Engineer, Division 3



301 Murphy Drive, Alamosa, CO 81101 P 719.589.6683 F 719.589.6685 www.oolorado.gov/water Jared S. Polis, Governor | Dan Gibbs, Executive Director | Kevin G. Rein, State Engineer/Director



United States Department of the Interior



BUREAU OF LAND MANAGEMENT San Luis Valley Field Office 1313 Highway 160 East Monte Vista, CO 81144

In Reply Refer To: 1104 (COF03-SSM)

November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Phase 2 Conejos River Partnership Project - Phase 2

Dear Application Review Committee,

I am writing on behalf of the Bureau of Land Management (BLM) San Luis Valley Field Office to express our support and commitment to participate in the "Conejos River Partnership Project (CRPP) – Phase 2." CRPP – Phase 2 was identified in the Conejos River Stream Management Plan (SMP), a planning effort which BLM participated in as a member of the SMP Technical Advisory Team. This project is the second phase of a larger restoration effort on the Conejos River and will have multiple benefits for water users and river health.

The project, which involves the rehabilitation of irrigation diversion structures paired with river restoration on the Conejos River, will directly benefit the shareholders of each ditch by improving diversion efficiency and reducing maintenance by replacing aging diversion dams and headgates. The river restoration activities will improve riparian conditions, enhance aquatic habitat, and improve water quality. The project will occur on BLM lands along the Conejos River that are important, designated Southwestern Willow Flycatcher Critical Habitat. This work will complement and expand on BLM's past and present work in riparian and river restoration in the San Luis Valley. Ultimately, this project works toward the larger goal of improving river health and function for multiple uses, including aquatic species and agricultural producers. BLM is excited to work with the Colorado Rio Grande Restoration Foundation as a partner on this project. We encourage your support of this important project and thank you for your consideration.

Sincerely,

MELISSA
GARCIA

Melissa Garcia
Field Office Manager
San Luis Valley Field Office

INTERIOR REGION 7 • UPPER COLORADO BASIN

COLORADO, NEW MEXICO, UTAH, WYOMING



November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Phase 2 Conejos River Partnership Project - Phase 2

Dear Application Review Committee,

The Rio Grande Headwaters Land Trust (RiGHT) enthusiastically supports the Conejos River Partnership Project. In the past three years, RiGHT has increased its activity in the Conejos River watershed and now has more projects in the area than any other part of the San Luis Valley. We are excited for our local partner the Rio Grande Headwaters Restoration Project (RGHRP) to also be expanding efforts along the Conejos. This particular project will directly benefit one of RiGHT's largest conservation easements, as well as a major in-process conservation project, along with helping many other local landowners and important habitat.

The Conejos River Partnership Project - Phase 2 will involve diverse stakeholders to improve both irrigation infrastructure and the health of the Conejos River system. RGHRP and RiGHT have proven this type of multibenefit, win-win project is a highly effective way to advance conservation here in the rural San Luis Valley. The restoration will directly benefit the shareholders of each ditch by improving diversion efficiency and reducing maintenance by replacing aging diversion dams and headgates. The project will also enhance water quality by reducing sediment input, improve riparian condition, and improve aquatic habitat.

Thank you for your consideration,

Allen Law

Executive Director, Rio Grande Headwaters Land Trust

PO Box 444 Del Norte, CO 81132 (719) 657.0800 Info@riograndelandtrust.org

riograndelandtrust.org

CONSERVING OUR LAND, WATER AND WAY OF LIFE IN COLORADO'S SAN LUIS VALLEY 623 Fourth Street Alamosa, CO 81101 (719) 589-2230 Heather@slvwcd.org



November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Conejos River Partnership Program – Phase 2

Dear Application Review Committee,

I am writing to express the San Luis Valley Water Conservancy District's (SLVWCD) support for the Colorado Rio Grande Restoration Foundation's (Foundation) application to the Bureau of Reclamation's WaterSMART CWMP grant program. The SLVWCD operates an augmentation program within five counties in the San Luis Valley. Through our operations, we replace injurious depletions to the Rio Grande caused by pumping of domestic, commercial, and municipal wells. Additionally, the SLVWCD is a leader in the local and state water communities, working with partners to address timely issues such as groundwater sustainability, compliance with the Rio Grande Compact, and water supply protection. The SLVWCD partnered with the Colorado Water Conservation Board (CWCB) almost 20 years ago to complete the 2001 Study, a restoration master plan for 91 miles of the Rio Grande. This effort led to the formation of the Foundation as a watershed group. Since that time, the District has remained committed to implementation of the 2001 Study and supported efforts by the Foundation to improve river health in the Rio Grande Basin. The District was also a partner in the 2020 Conejos River Stream Management Plan that prioritized the efforts outlined in the Foundation's grant proposal.

The Foundation's proposed project will address restoration needs along the Conejos River, while benefiting agriculture and the surrounding community. Replacing aging diversion infrastructure with structures that provide fish passage and incorporate streambank stabilization will improve diversion efficiencies, reduce maintenance, improve water quality, enhance riparian habitat, and provide aquatic habitat connectivity. The implementation of collaborative, multi-benefit projects is critical to protecting the quality and quantity of Colorado's water supply in the Rio Grande Basin. The SLVWCD will be an active partner in the project by providing staff time for the technical advisory team.

I appreciate the opportunity to comment on the Foundation's application and I hope you will look fondly on their request for funding.

Sincerely,

Heather R. Dutton

Heather R. Dutton

Manager, San Luis Valley Water Conservancy District

President: Randall Palmgren, Center, CO
Vice-President: Darius Allen, Alamosa, CO; Secretary/Treasurer Marcie Schulz, Alamosa, CO;
Directors: Richard Davie, Del Norte, CO; M. Dee Greeman, Alamosa, CO; Charles Griego, Alamosa, CO;
Steve Keller, Monte Vista, CO; Tyler Neely, Del Norte, CO; Karla Shriver, Monte Vista, CO; Tuck Slane, Hooper, CO.



November 16, 2020

US Department of Interior - Bureau of Reclamation P.O. Box 25007 Denver, CO 80225

Re: BOR WaterSMART Cooperative Watershed Management Program Phase 2 Conejos River Partnership Project - Phase 2

To the WaterSMART Cooperative Watershed Management Program - Phase 2 Review Committee,

Please accept this letter of support on behalf of Colorado Open Lands (COL) for the Conejos River Partnership Project (CRPP) – Phase 2. COL works to conserve land, water, and way of life in the San Luis Valley, including within the Conejos River watershed. Having worked extensively in the San Luis Valley, we are working to expand the geographic scope and the Conejos River corridor is a focus area. The CRPP – Phase 2 supports our conservation efforts in the Conejos River corridor by improving river health and function as well as irrigation infrastructure efficiency on working farms and ranches. The project is made up of a diverse set of partner organizations, including the Conejos Water Conservancy District, the Rio Grande Headwaters Restoration Project, private landowners, ditch companies, and other local stakeholders. We have working relationships with many of these partners and we are thrilled to support their efforts on the Conejos River.

As a land trust, COL works closely with farmers and ranchers on a daily basis. Projects such as CRPP — Phase 2, which preserve the health and function of land and streams in the San Luis Valley, enhance our conservation efforts. This project will ultimately provide benefits to water administration, irrigation, and Conejos River health and function, which enhances the benefits provided by COL's conservation easements. COL is proud to partner with Rio Grande Headwaters Restoration Project whenever possible to provide a variety of local solutions to protecting land, water and other natural resources. I hope you will support this project.

Sincerely,

Judy Lopez

San Luis Valley Conservation Project Manager

Colorado Open Lands

Gudy Apply



Appendix B: Official Resolution

Colorado Rio Grande Restoration Foundation Resolution 10-2020

Title: Resolution to Apply for Funding and Comply with Requirements of the Barcou of Reclamation's WaterSMART Program

Whereas, the Bureau of Reclamation has requested proposals for the 2020 WaterSMART Program, Cooperative Watershed Management Program, Phase II;

Whereas, the Colorado Rio Grande Restoration Foundation, a Colorado non-profit 501(c)(3) organization in good standing has the legal authority to enter into an agreement with the Bureau of Reclamation;

Whereas, the Colorado Rio Grande Restoration Foundation has the authority to apply on behalf of the Rio Grande Headwaters Restoration Project and act as the fiscal agent for the acceptance and management of any funds awarded through the WaterSMART Program;

RESOLVED, that the Colorado Rio Grande Restoration Foundation will apply for funding to complete the Conejos River Partnership Project - Phase 2 and will work with the Bureau of Reclamation to meet all requirements, such as deadlines, set forth in the financial assistance agreement, if selected for funding through the WaterSMART Program;

RESOLVED, that the Colorado Rio Grande Restoration Foundation is capable of providing the amount of funding and in-kind contributions specified in the funding plan;

RESOLVED, the signature of the President of the Board of Directors signifies the review and approval of the application submitted to the Bureau of Reclamation;

Date: November 12, 2020

President, Colorado Río Grande Restoration Foundation

Witnessed by:

Date: November 12, 2020

Michael H. Gibson-Socretary/Treasurer, Colorado Rio Grande Restoration Foundation

Appendix C: Watershed Restoration Plan

The projects described in this application were identified and prioritized in the Conejos River Stream Management Plan (SMP). Excerpts from the Conejos River SMP, which describe the need for and prioritization of these projects, are below. Table 3.2 in the SMP (SMP pages 69 and 74) list irrigation diversion structure statistics and condition ratings. The Mecitos Ditch received a D- rating, and William Stewart Co. Irrigation Ditch received a C-. Pages 122 and 161 of the SMP include text descriptions of the conditions and major issues for each diversion. Finally, pages 169 and 170 list both ditches as priority projects under Goal A: "Improve function and reduce maintenance of irrigation infrastructure, both for water users and river health." If the application review committee would like to review the full SMP, please contact the project applicant.

Table 3.2: Diversion infrastructure statistics and condition listed by structure.

SMP Assessment Reach	Structure Name	Priority	Total Decreed Rate (cfs)	Water District ID (WDID)	2006 Rating	Current Structure Rating	Headgate Automation (Y/N)	Measure- ment Telemetry (Y/N)	River Miles From Rio Grande Confluence	Acres Irrigated (acres)	Amount Diverted (acre- feet)	Flood, Sprinkler, Both	% Flood/ % Sprinkler	Notes
CR07	Le Duc Ditch	78	6	2200579	Good	В	N	N	45.3	98.91	333.20	Flood	100/0	
CR07	Carpe & Reekers Canon Ditch	130	20.75	2200525	Good	В	N	N	45.1	43.15	875.72	Flood	100/0	
CR08	Bagwell Ditch	99	7	2200508	Good	В	N	N	43.6	70.79	583.15	Flood	100/0	
CR08	McCarroll Ditch	47	13.72	2200600	Good	В	N	Y	43.1	171.51	1315.06	Flood	100/0	
CR08	Angustura Ditch	65	26	2200503	N/A	C-	N	Y	42.7	60.82	2445.66	Flood	100/0	
CR08	Vega Ditch	76	11.13	2200646	Good	В	N	Y	41.7	165.81	940.18	Flood	100/0	
CR08	Canon Irrigating Ditch	22	42.68	2200626	Good	С	N	Y	41.5	1193.21	6874.81	Flood & Sprinkler	47/53	
CR08	Mecitos Ditch	26	38.99	2200524	Good	D-	N	N	41.0	1459.10	7204.27	Flood & Sprinkler	72/28	
CR08	Sanches Ditch	37	26.26	2200604	Good	С	N	Y	41.0	292.07	3081.17	Flood	100/0	
CR08	Antonito Ditch	113	139	2200504	N/A	В	N	Y	38.4	2821.17	6513.62	Flood & Sprinkler	31/69	
CR08	New JB Romero Ditch	170	17.82	2200608	N/A	F	N	Y	37.9	62.97	N/A	Flood	100/0	Amt diverted in 2016: 157.49; 2017 records not available
CR08	North Eastern Ditch	66	92.8	2200609	Fair	D	N	Y	37.9	N/A	4056.26	Flood	100/0	Irrigated acreage data not available. Services the priority 35 Bernardo Romero Ditch (ID #513), which irrigates ~350 acres.

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SMP Assessment Reach	Structure Name	Priority	Total Decreed Rate (cfs)	Water District ID (WDID)	2006 Rating	Current Structure Rating	Headgate Automation (Y/N)	Measure- ment Telemetry (Y/N)	River Miles From Rio Grande Confluence	Acres Irrigated (acres)	Amount Diverted (acre- feet)	Flood, Sprinkler, Both	% Flood/ % Sprinkler	Notes
CR11	Cottonwood Ditch	95	28.5	2200532	N/A	D	N	N	18.3	542.45	2762.02	Flood	100/0	
CR11	Christensen Ditch	190	12.25	2200528	N/A	D	N	N	16.0	227.47	0.00	Flood & Sprinkler	47/53	
CR11	Smith Bros Ditch	89	8	2200634	N/A	В	N	Y	14.5	188.53	839.02	Flood & Sprinkler	78/22	
CR11	East Bend Ditch	88	37.4	2200535	N/A	С	Y	Y	14.2	264.66	2230.84	Flood	100/0	
CR11	East Bend No 2 Ditch	88	8	2200536	N/A	D	N	N	12.1	175.64	280.67	Flood	100/0	
CR11	Los Ojos Ditch No 1	63	40.08	2200584	N/A	А-	N	Y	11.7	1213.62	2584.30	Flood	100/0	
CR11	Los Ojos Ditch No 2	58	8.53	2200585	Good	В	N	Y	10.1	336.89	355.05	Flood & Sprinkler	64/36	
CR11	Alamo Ditch	58	53.5	2200501	N/A	A-	N	Y	8.3	1471.97	4829.23	Flood	100/0	
CR11	William Stewart Co Irrigation Ditch	43	11.4	2200651	Fair	C-	N	Y	5.7	981.03	2285.59	Flood	100/0	
CR11	Los Sauces Ditch	32	88.43	2200587	Good	B-	N	Y	3.4	2245.15	10841.2	Flood	100/0	
CR11	Ball Bros Overflow No 1	80	22	2200509	N/A	В	N	Y	2.1	719.88	3897.58	Flood	100/0	

^{*}Note: Acres irrigated, amount diverted, and percent flood/sprinkler are based on 2017 records. River miles for all structures located on North Branch Conejos River (North Branch) are from the confluence of the North Branch and the mainstem Conejos River. Amounts are rounded to the nearest tenth.

should be installed above the headgate to minimize debris accumulation. Radio telemetry could be added to this structure's Parshall flume. Existing fish passage should be maintained as part of any future repairs or improvements to the diversion.

Mecitos Ditch: The river channel has undergone significant migration, including meander cutoffs, at the point of diversion and especially downstream of the diversion. A U-shaped rock weir diversion dam directs flow to the feeder channel, located on the north bank of the Conejos River. The feeder channel is approximately 820 meters long and delivers water to the Mecitos Ditch headgate. Adjacent to the headgate, a return flow structure with check boards directs unused water back to the river. This ditch has difficulty accessing its full decree during low flow conditions. During 2019 spring runoff, flood flows caused the banks adjacent to the headgate and return flow structure to fail, resulting in flows bypassing the structure completely (see photos in report card). The banks surrounding the main headgate and diversion dam need to be reinforced with solid material to prevent future failure during high flow events. Headgate automation may be considered to improve efficiency and reduce operating needs. An improved diversion dam that allows the ditch to access its decree at low flows is recommended. Additionally, adjustment capabilities for the feeder channel could be improved to better administer this structure's water rights and to minimize the impact of high flow events at the headgate. Improved adjustment capabilities may include relocating the point of diversion downstream and/or installing a headgate or other control structure on the feeder channel upstream of the headgate. If the diversion is relocated, the current river channel trajectory should be considered. If it is not relocated, the diversion dam should be improved with a stacked rock or similar structure capable of delivering the ditch's decree at a range of flows. Existing fish passage should be maintained and riparian restoration should be considered as part of any future repairs or improvements.

Sanches Ditch: For a description of the diversion structure, see Mecitos Ditch, as this structure shares a diversion dam and feeder channel with the Mecitos Ditch. Approximately 1400 ft down the feeder channel, a small diversion dam directs flow north to the Sanches Ditch. A return flow structure with check boards sits adjacent to the Sanches Ditch headgate and directs unused water back to the Mecitos Ditch feeder channel. As noted above, an improved diversion dam that allows the ditch to access its decree at low flows is recommended. For a description of recommended improvements to the diversion and feeder channel, see Mecitos Ditch. The Parshall flume needs to be repaired or improved. Debris accumulation is an issue at the headgate and return flow structure (see photo of return structure in report card). A trash rack should be installed above the headgate to minimize debris accumulation.

Antonito Ditch: This structure has no formal diversion dam off the Conejos River. Water is delivered to the headgate via a 0.4 mile feeder channel. A small stacked rock diversion dam on the feeder channel directs water to the headgate. Lateral migration is occurring at the point of diversion, and the river has experienced significant avulsion since 1998. Channel migration analysis suggests that in 1960, the river channel followed this structure's feeder channel. This channel may be recaptured in the future. Aside from monitoring channel migration, no repair needs were noted.

New JB Romero Ditch: This structure is located approximately 150 ft upstream of the North Eastern Ditch diversion which is shared with Bernardo Romero Ditch. Water is diverted off Conejos River into

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William Stewart Co Irrigation Ditch: The diversion for this structure is located between two wide meanders and is made of river sediment (sand and small gravel-dominated). It directs water to a feeder channel on the north side of the river. The sinuous feeder channel is approximately 0.46 miles long and delivers water to the headgate. On the feeder channel, a diversion made of stacked rock and debris directs water to the headgate, located on the north side of the feeder channel. This structure is located on a very flat part of the river. Significant sedimentation is occurring in the main channel of Conejos River and in the feeder channel. The main channel is modified on an annual basis in order to deliver water to the feeder channel. Significant bank erosion is occurring just upstream of the diversion dam (see photo in report card). Additionally, the main channel has migrated significantly in the past, and lateral migration and meander cutoffs are likely in the future. The main recommendation is to install an improved diversion dam and headgate designed to deliver water at various flows, reduce annual maintenance, and improve river function by enhancing sediment transport and aquatic habitat. A sluice gate adjacent to the headgate may also help reduce sedimentation and maintenance. Fish and boat passage should be considered as part of any improvements to the diversion. Riparian revegetation and bank stabilization should also be included as part of any improvements. A useful reference and potential model is the Alamo Ditch, the next structure upstream, which was recently improved and functions well.

Los Sauces Ditch: A concrete diversion dam with a sluice gate diverts water to the headgate, which is located on the east bank of the river. Lateral channel migration and meander cutoffs have occurred upstream of the structure, especially prior to 1998 (see channel migration maps in report card). Upstream of the diversion, a secondary channel is partially cut off, but still receives water at high flows. If this secondary channel is captured by the river, this structure would be cut off. Additionally, there is an island just upstream of the structure that formed when the river partially cut off a meander. The meander may eventually be completely cut off and form an oxbow lake. If this occurs, the bank on either side of the headgate will be exposed to high flows which may cause erosion issues at the structure. Three j-hooks upstream of the structure help to stabilize the bank. Sediment and woody debris accumulation is a significant issue at this structure. Debris accumulates on the diversion dam and poses a maintenance challenge, particularly when it accumulates near the sluice gate and headgate. A long term solution to the debris accumulation issue is needed. Additional bank stabilization and riparian restoration upstream of the structure would improve the function of the river by reducing erosion and sedimentation at the diversion dam and headgate as well as enhancing aquatic habitat. Fish passage should be considered if any improvements are made to the diversion dam. This structure also needs a new measurement device.

Ball Bros Overflow No 1: This structure is located approximately 1.2 miles upstream of County Rd 28 and is the last structure on the Conejos River before its confluence with the Rio Grande. It is located approximately 0.4 miles downstream of a secondary channel which receives water during high flows. If the secondary channel is captured by the river, this structure would likely be affected. Some lateral channel migration has occurred upstream of the diversion, which is located on the outside of a meander in the river, near its apex. A stacked boulder diversion dam with soil fill directs water to a short feeder channel on the south side of the channel. The diversion dam forms a barrier to fish passage, especially at low flows. It also accumulates woody debris and requires regular maintenance.

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Goal A. Improve function and reduce maintenance of irrigation infrastructure, both for water users and river health.

Target - Fully functioning, low maintenance diversion structures with little or no impairment to river function. Riparian restoration and fish habitat improvements should be considered as part of any improvements.

Performance Indicators - Continued monitoring and documentation of infrastructure function.

Justification - The diversion infrastructure assessment identified significant need for infrastructure improvements. Some structures do not function well for water users, and, in some cases, negatively affect stream health and function.

Action Item/Project	Description	Applicable Reach(es)	Additional Goals Met	Associated Benefits	Relative Cost
Conejos River Partnership Project - Phase 1	CRPP - Phase 1 will rehabilitate five irrigation structures, enhance aquatic habitat, and restore riparian and wetland habitats. The irrigation structures include the North Eastern Ditch, New JB Romero Ditch, Sabine School Section Ditch, Fuerticitos Ditch, and Elledges Ditch. The project will be integrated with existing and future restoration projects with the goal of maintaining aquatic habitat connectivity and enhancing aquatic and riparian condition.	Reaches 8 through 10	B, C, D, F, and G	Bank stabilization; enhanced aquatic habitat; improved natural channel processes, riparian vegetation condition, and water quality.	High
Angustura Ditch Improvement Project	Headgate replacement, streambank stabilization/riparian restoration upstream of diversion.	Reach 8	B, C, D, and F	Bank stabilization; improved natural channel processes, riparian vegetation condition, and water quality.	Medium
Mecitos and Sanches Ditch Improvement Project	Mecitos Ditch headgate replacement; diversion dam and carrier channel improvements for both ditches.	Reach 8	B, C, D, F, and G	Bank stabilization; enhanced aquatic habitat; improved natural channel processes, riparian vegetation condition, and water quality.	Medium

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Action Item/Project	Description	Applicable Reach(es)	Additional Goals Met	Associated Benefits	Relative Cost
Chacon Ditch No. 1 Improvement Project	Streambank stabilization/riparian revegetation, headgate replacement.	Reach 9	B, C, D, and F	Bank stabilization; improved natural channel processes, riparian vegetation condition, and water quality.	Medium
Trogillio Ditch Improvement Project	Diversion and headgate replacement, streambank & riparian restoration work between diversion and Co Rd 16 bridge.	Reach 10	B, C, D, F, and G	Bank stabilization; enhanced aquatic habitat; improved natural channel processes, riparian vegetation condition, and water quality.	Medium
Sanford Ditch Improvement Project	Streambank stabilization & hardened crossing on return channel.	North Branch Conejos River	B, C, D, and F	Bank stabilization; improved natural channel processes, riparian vegetation condition, and water quality.	Low
Cottonwood Ditch Improvement Project	Headgate replacement and diversion improvements, including bank stabilization and riparian revegetation.	Reach 11	B, C, D, F, and G	Bank stabilization; enhanced aquatic habitat; improved natural channel processes, riparian vegetation condition, and water quality.	High
East Bend Ditch Improvement Project	Trash rack, headgate, streambank stabilization/riparian revegetation.	Reach 11	B, C, D, F, and G	Bank stabilization; enhanced aquatic habitat; improved natural channel processes, riparian vegetation condition, and water quality.	High
William Stewart Co Irrigation Ditch Improvement Project	Improvements to point of diversion, including bank stabilization and revegetation.	Reach 11	B, C, D, F, and G	Bank stabilization; enhanced aquatic habitat; improved natural channel processes, riparian vegetation condition, and water quality.	High

^{*}For a detailed assessment of each ditch described above, visit this webpage: https://riograndeheadwaters.org/stream-management-plans. Additionally, although diversion structures are listed individually, infrastructure improvement projects may be grouped and completed in phases.

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