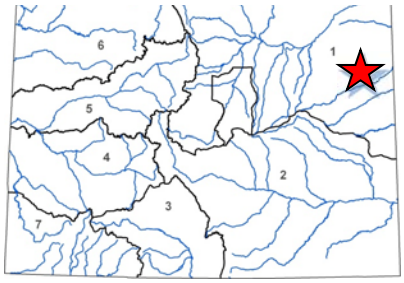
COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Water Plan Grant Application

Colorado Master Irrigator Program – Republican River Basin
Colorado Master Irrigator

November 2019 Board Meeting



LOCATION
County/Counties: Cheyenne, Kit Carson, Yuma, Washington, Sedgwick, Logan, Philips, and Lincoln
Drainage Basin: Republican (South Platte)

DETAILS	
Total Project Cost:	$299,600
Water Plan Grant Request:	$149,800
Recommended Amount:	$149,800
Other CWCB Funding:	$46,675
Other Funding Amount:	$103,125
Applicant Match:	$0
Project Type(s): IPP, Education	
Project Category(Categories): Agricultural	
Measurable Result: Agricultural water efficiency, engagement of agricultural producers	

Communities living in northeastern Colorado's Republican River Basin have access to little surface water and therefore depend heavily on using the Ogallala (High Plains) aquifer. Agriculture, and irrigated agriculture, in particular is the region's primary economic driver, supporting extensive crop and livestock production (mainly corn, sorghum, wheat, potatoes, sunflowers, soybeans, alfalfa, and cattle) and many agriculture-related businesses. Crop and livestock commodity sales in this Basin's counties are considerably increased due to irrigation, surpassing $6.2 billion in 2017. The region is experiencing significant groundwater declines due predominantly to agricultural-related withdrawals that greatly exceed natural recharge through precipitation. Farmers in the region are working to find ways to reduce their consumptive water use in order to extend agriculturally productive use of the Ogallala aquifer resource longer into the future, help ensure their communities' economic viability and drought resilience, and meet interstate Republican River compact obligations.

CWP Grant funding will support the delivery of an annual, four-day "Colorado Master Irrigator" classroom-based program designed to equip northeastern Colorado farmers with science-backed information on strategies and tools primarily relevant to crop management that they can use to remain profitable while reducing on-farm consumptive water use. Colorado Master Irrigator will also prioritize peer-to-peer exchange and partnerships critical for broader management and mindset shifts to take place that increase water and energy conservation/use efficiency, thus helping sustain this region's agriculture-dependent communities given significant Ogallala aquifer declines.

Each class of 25 participants will represent approximately 24,000 irrigated acres. Through in-person and online communications, Colorado Master Irrigator will also reach a broader audience across the state and beyond. A 35-member program advisory committee assists the program coordinator with curriculum design and delivery, program communications, and recruiting participants and sponsors, and developing partnerships. To graduate, participants must complete all 32-course hours, engage with classmates and instructors, and consider committing to using certain management strategies or tools covered by the program. With their consent, Colorado Master Irrigator will track graduates' commitment-related progress for three years. Overall, Colorado Master Irrigator aims to increase long-term regional economic and drought-related resilience, support state compact compliance, and provide management-oriented alternatives to mandatory well curtailment.

Staff recommends Board approval of the full grant amount requested. This project furthers several of Colorado's Water Plan critical action goals relating to agriculture, including encouraging agriculture efficiency and resiliency while promoting agricultural productivity. The program can also be a potential model for other regions of the state working to manage groundwater sustainably.

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Colorado Water Conservation Board
Water Plan Grant Application

Instructions

To receive funding for a Water Plan Grant, applicant must demonstrate how the project, activity, or process (collectively referred to as "project") funded by the CWCB will help meet the measurable objectives and critical actions in the Water Plan. Grant guidelines are available on the CWCB website.

If you have questions, please contact CWCB at (303) 866-3441 or email the following staff to assist you with applications in the following areas:

Water Storage Projects	Anna.Mauss@state.co.us
Conservation, Land Use Planning	Kevin.Reidy@state.co.us
Engagement & Innovation Activities	Ben.Wade@state.co.us
Agricultural Projects	Alexander.Funk@state.co.us
Environmental & Recreation Projects	Chris.Sturm@state.co.us

FINAL SUBMISSION: Submit all application materials in one email to *waterplan.grants@state.co.us* in the original file formats [Application (word); Statement of Work (word); Budget/Schedule (excel)]. Please do not combine documents. In the subject line, please include the funding category and name of the project.

Water Project Summary

Name of Applicant	Colorado Master Irrigator
Name of Water Project	Colorado Master Irrigator Program – Republican River Basin
CWP Grant Request Amount	$149,800
Other Funding Sources WSRF Grant	$46,675
Other Funding Sources Plains GWMD & CO Water Center	$5,480
Republican Water Conservation District	$24,000
Other Funding Sources In-Kind Services	$73,645
Applicant Funding Contribution	$
Total Project Cost	$299,600

Applicant & Grantee Information

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Name of Grantee(s): Colorado Master Irrigator
Mailing Address: 21502 Cty Rd 47, Burlington, CO 80807
FEIN: 84-2551760
Organization Contact: Brandi Baquera
Position/Title: Program Coordinator
Email: coloradomasterirrigator@gmail.com
Phone: (719) 343-0099
Grant Management Contact: Brandi Baquera
Position/Title: Program Coordinator
Email: coloradomasterirrigator@gmail.com
Phone: (719) 343-0099
Name of Applicant (if different than grantee)
Mailing Address
Position/Title
Email
Phone

Description of Grantee/Applicant
Provide a brief description of the grantee's organization (100 words or less).
Colorado Master Irrigator is a non-profit organization that will deliver an annual, 4-day intensive educational program focused on equipping producers in northeastern Colorado with information and a peer-to-peer network they need to successfully implement water and energy conservation- and efficiency-oriented practices on their farms. A ~35-member program advisory committee consisting of local producers, CSU Extension staff, groundwater management district leaders, and others lend ongoing expertise (accounting, fundraising, farming, etc.) to help design and deliver the Colorado Master Irrigator curriculum, guide the messaging of public-facing communications, recruit participants and program sponsors and partners, and support productive, conservation-oriented conversation at local, state, and regional levels.

Type of Eligible Entity (check one)	
	Public (Government): Municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
	Public (Districts): Authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises.
	Private Incorporated: Mutual ditch companies, homeowners associations, corporations.
	Private Individuals, Partnerships, and Sole Proprietors: Private parties may be eligible for funding.

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X	**Non-governmental organizations (NGO):** Organization that is not part of the government and is non-profit in nature.
	Covered Entity: As defined in Section 37-60-126 Colorado Revised Statutes.

Type of Water Project (check all that apply)	
	Study
	Construction
X	Identified Projects and Processes (IPP)
X	Other: Program implementation

Category of Water Project (check the primary category that applies & include relevant tasks)		
	Water Storage - Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those projects identified in basin implementation plans to address the water supply and demand gap.. *Applicable Exhibit A Task(s):*	
	Conservation and Land Use Planning - Activities and projects that implement long-term strategies for conservation, land use, and drought planning. *Applicable Exhibit A Task(s):*	
	Engagement & Innovation - Activities and projects that support water education, outreach, and innovation efforts. Please fill out the Supplemental Application on the website. *Applicable Exhibit A Task(s):*	
X	Agricultural - Projects that provide technical assistance and improve agricultural efficiency. *Applicable Exhibit A Task(s):* Tasks 1-4	
	Environmental & Recreation - Projects that promote watershed health, environmental health, and recreation. *Applicable Exhibit A Task(s):*	
	Other	Explain:

Location of Water Project	
Please provide the general county and coordinates of the proposed project below in **decimal degrees**. The Applicant shall also provide, in Exhibit C, a site map if applicable.	
County/Counties	Cheyenne, Kit Carson, Yuma, Washington, Sedgwick, Logan, Philips, and Lincoln
Latitude	

Longitude	

Water Project Overview
Please provide a summary of the proposed water project (200 words or less). Include a description of the project and what the CWP Grant funding will be used for specifically (e.g., studies, permitting process, construction). Provide a description of the water supply source to be utilized or the water body affected by the project, where applicable. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, and area of habitat improvements, where applicable. If this project addresses multiple purposes or spans multiple basins, please explain. The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, Other Funding Sources/Amounts and Schedule.
CWP Grant funding will support delivery of an annual, four-day "Colorado Master Irrigator" classroom-based program designed to equip northeastern Colorado farmers with science-backed information on strategies and tools primarily relevant to crop management that they can use to remain profitable while reducing on-farm consumptive water use. Colorado Master Irrigator will also prioritize peer-to-peer exchange and partnerships critical for broader management and mindset shifts to take place that increase water and energy conservation/use efficiency, thus helping sustain this region's agriculture-dependent communities given significant Ogallala aquifer declines. Each class of 25 participants will represent ~24,000 irrigated acres (eight 120-acre crop circles/participant). Through in-person and online communications, Colorado Master Irrigator will also reach a broader audience across the state and beyond. A ~35-member program advisory committee assists the program coordinator with curriculum design and delivery, program communications, and recruiting participants and sponsors, and developing partnerships. To graduate, participants must complete all 32 course hours, engage with classmates and instructors, and consider committing to using certain management strategies and/or tools covered by the program. With their consent, Colorado Master Irrigator will track graduates' commitment-related progress for three years. Overall, Colorado Master Irrigator aims to increase long-term regional economic and drought-related resilience, support state compact compliance, and provide management-oriented alternatives to mandatory well curtailment.

Measurable Results	
To catalog measurable results achieved with the CWP Grant funds, please provide any of the following values as applicable:	
	New Storage Created (acre-feet)
See other, below	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
	Existing Storage Preserved or Enhanced (acre-feet)
	Length of Stream Restored or Protected (linear feet)
See other, below	Efficiency Savings (indicate acre-feet/year OR dollars/year)

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	Area of Restored or Preserved Habitat (acres)	
	Quantity of Water Shared through Alternative Transfer Mechanisms	
	Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning	
See other, below	Number of Coloradans Impacted by Engagement Activity	
X	Other	Explain: Each Colorado Master Irrigator class cohort will have 25 participants, representing ~24,000 irrigated acres (about 1/20th) of the Republican River Basin's total irrigated acres. Through peer-to-peer exchange, network building, and outreach efforts, the program is expected to reach hundreds of people each year, potentially influencing many more irrigated acres within and beyond the region. Each class of Colorado Master Irrigator participants will be asked to share some key water-use data for their operations, for example, crop production reported in bushels produced/acre-inch of water applied. At the conclusion of the course, each participant will be asked to define a target goal (or goals, e.g. increasing water use efficiency, learning to use irrigation scheduling, interpreting soil moisture probe data, efforts that will be made to improve soil health, etc.) that will demonstrate their application of knowledge gained or refined due to participating in this program. Master Irrigator program staff will track the progress that program graduates make related to these commitments on an annual basis for the next three growing seasons, cataloging a wide variety of quantitative and qualitative data (that can be anonymized) if necessary to understand and share information such as: producer perspectives related to management and mindset shifts; how farmers determine the value of water, energy use efficiency, and conservation; reductions in consumptive water use; and/or how to increase profitability for each acre-inch of applied irrigation water pumped from the aquifer.

Water Project Justification
Provide a description of how this water project supports the goals of Colorado's Water Plan, the most recent Statewide Water Supply Initiative, and the applicable Roundtable Basin Implementation Plan and Education Action Plan. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

The proposed water project shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan Framework for State of Colorado Support for a Water Project (CWP, Section 9.4, pp. 9-43 to 9-44;)
Communities living in northeastern Colorado's Republican River Basin have access to little surface water and therefore depend heavily on using the Ogallala (High Plains) aquifer. Agriculture, and irrigated agriculture in particular, is the region's primary economic driver, supporting extensive crop and livestock production (mainly corn, sorghum, wheat, potatoes, sunflowers, soybeans, alfalfa, and cattle) and many agriculture-related businesses. Crop and livestock commodity sales in this Basin's counties are considerably increased due to irrigation, surpassing $6.2 billion in 2017 (NASS 2017 Ag Census). The region is experiencing significant groundwater declines due predominantly to agricultural-related withdrawals that greatly exceed natural recharge through precipitation. Farmers here must find ways to reduce their consumptive water use if they are to extend agriculturally productive use of the Ogallala aquifer resource longer into the future, help ensure their communities' economic viability and drought resilience, and meet interstate Republican River compact obligations. (2019 CWP Technical Update 4.8.1, 4.8.4). CWP Water Plan grant funds requested in this proposal will support the delivery of a new "Colorado Master Irrigator" program, which will: a) offer a high-quality, in-person, 4-day (32-hour) interactive educational course once a year that has been designed expressly to encourage the understanding and use of profitable, conservation-oriented and water/energy-use efficient management tools and strategies (CWP Table 6.3.1-1 5b, 6.3.4); and b) engage a wide range of partners from across the state and beyond, thus fostering the collaborative capacity and encouraging dialogue required to spur wider and faster adoption of conservation and water/energy-use efficient practices in the region. Even small improvements in agricultural water management can translate into significant savings of acre-feet of aquifer water left in the ground for future use, thus helping to maintain Colorado's agricultural economy, limit permanent dry-up of some irrigated acres, address the gap between "future water needs and available water provisions" identified for the South Platte Basin, and support compliance with interstate water compact requirements (CWP 6.2, 6.4, 6.5.1, 6.5.2; SPBR BIP 1.9.1 measurable outcomes 1-4, 4.6.2, 5.5.3, 5.4.4, SPBR 5.4). Colorado Master Irrigator is a locally adapted replication of a highly successful program offered since 2016 in Texas by the North Plains Groundwater Conservation District (NPGCD): (http://northplainsgcd.org/conservationprograms/communityedu/master-irrigator/). With 83 graduates and over 260,000 acres influenced to date in the northern Texas Panhandle, an area that also overlies and depends upon the Ogallala aquifer, NPGCD's Master Irrigator program has proven to be a successful model for irrigation conservation

education. In 2018, this program received the Texas Environmental Excellence Award, the highest environmental honor in the state.

Since Fall 2018, Colorado Master Irrigator has been in development ("Phase 1"). Supported thus far by funds provided through the Water Preservation Partnership, the Republican River Water Conservation District, the Colorado Water Center, and a recently awarded Water Reserve Supply Fund grant through the South Platte Basin Roundtable), Colorado Master Irrigator is preparing for "Phase 2", the launch and delivery of its inaugural 32-hour course in early 2020. This course will provide instruction to a class cohort of 25 students, covering a range (simple to advanced, low to higher cost) conservation- and irrigation efficiency-related management tools and techniques, such as but not limited to: irrigation scheduling, deficit irrigation, the use of energy audits to optimize the function of irrigation and pumping systems, planting less water-demanding crops and crop varieties, learning to interpret and trust data from soil moisture probes, adding telemetry to pivots, and strategies for improving soil health (CWP 6.5.2; SPBR BIP 5.3.2). The course curriculum will be taught by highly knowledgeable, dynamic, and effective instructors from Colorado and adjacent states including farmers, university academic and Extension staff, state and Federal agency personnel, representatives from different ag industries, crop consultants, and others. Colorado Master Irrigator program developers, teachers and class members represent "principal targeted audiences" within the South Platte Basin Roundtable including agricultural, academic, and Roundtable stakeholders (SPBR)/Metro 2019 Education Action Plan (EAP) who represent a diverse and important network to engage to support Colorado's Water Plan goals (CWP Technical Update 2019 5.3.5.).

Throughout the delivery of the Colorado Master Irrigator curriculum, discussion of practical economics regarding how to maintain or increase market advantage and support yields and profitability even if/as less water is applied through irrigation will be prioritized. The course will also provide an overview of regional hydrology--past, present, and anticipated future conditions that account for climate change related pressures--that will help participants contextualize and evaluate the potential benefits of participating in regional state and Federally supported programs that aim to reduce consumptive water use. Overall, Colorado Master Irrigator aims to increase participants' understanding of how their land-use and water management decisions will impact their operations and the aquifer over the short- and long-term, and encourage their active collaboration in proactive management of the current and projected water gaps they face (CWP 2019 Technical Update, 4.2.1). Course content and related conversations, for example, will assist producers in evaluating where and whether it makes sense to retire certain wells, and the short- and long-term return on investment potential of different water- and energy-use efficiency and conservation focused practices for their operations.

CO Master Irrigator participants will be asked to come prepared to share information on water use and target yield goals for the operations on which they work, and to reflect on

their current management practices in light of the material covered during the course. The course format will encourage social norming (CWP 6.3.1) by fostering peer-to-peer exchange among classmates and with farmer instructors who will share their insights they've gained through steps they've taken to increase water and energy-use efficiency and conservation on their operations. The curriculum will also feature topical, interactive games that will require participants to work together to pencil out the impacts (on a farm's bottom line, on the aquifer) of different management decisions given different hypothetical scenarios. Colorado Master Irrigator's flexible, creative, and engaging approach will accommodate and recognize differences among operations in terms of pumping capacity, soil type, and producers' engagement to date with integrating conservation and efficiency-oriented tools and practices. By "meeting producers where they are at," the program can effectively arm them with information they need and a knowledgeable social network on which they can rely as they sort out which tools and strategies might be doable, affordable, and specifically relevant to their production goals.

A highly engaged and collaborative, ~35-member program advisory committee (PAC) of Basin stakeholders representing local producers, crop and ag tech consultants, groundwater management district representatives, Colorado State University Extension, state and Federal agency staff and others supports the Colorado Master Irrigator program coordinator, working to ensure the program will offer a worthwhile, high-quality learning experience that ultimately encourages wider social acceptance with regard to water conservation and builds local expertise necessary for the region to address the serious water-related challenges it currently faces (CWP 6.3, 9.5; SPBR BIP S5.9). The PAC provides input during monthly meetings and via emails related to curriculum and program design, public-facing communications, and encouraging community "buy-in" to this innovative program through recruitment of program participants and sponsors (CWP 6.2).

In addition to outreach (in person and online) activities, Colorado Master Irrigator program is designed to encourage participation in a few other ways. The course cost will be $100-200 (TBD), an amount that requires a certain commitment by participants yet is modest/non-prohibitive. Another key feature of the program, for which CWP funds are being requested in particular, is a "participation stipend" of $2000 per operation to be offered to program graduates. To graduate from Colorado Master Irrigator, participants MUST complete and actively engage in all 32 hours of the course. This stipend idea, which originated with Republican River Basin producers serving on the PAC, has received strong support by the PAC at-large. The logic for offering a stipend is as follows: time is money, and farmers are likely to hesitate to devote family or staff time away from the farm to something new like Colorado Master Irrigator if they aren't sure what value will come from it to their operations. A participation stipend, to be awarded after graduation, defines a clear value that compensates producers for their time dedicated to the program that compliments the in-depth professional development experience offered through this course.

The PAC is confident that offering a participation stipend will do more than just help eliminate the producer hesitancy to enroll; it will also likely help with the recruitment of individuals that represent some of the region's most influential farms. Successful program establishment and quicker diffusion of the practices/concepts covered by Master Irrigator depends on engaging these kinds of participants, whose actions carry a lot of weight in the region's communities. People are likely to follow these influencers' lead if they see economic and practical advantages in doing so. PAC members also aim to recruit younger farmers, who may be more amenable to making certain kinds of management shifts and system upgrades if improving their agricultural water management will lend them an economic edge, especially given tight margins, high production costs, finicky markets, and the fact that they are faced with keeping their farms viable for decades to come even as the water resource they depend upon is dwindling, a situation expected to be exacerbated by climate change (CWP Technical Update 2019 Planning Scenarios Key Drivers Figure ES.1)

A key PAC responsibility and program activity will be to engage in and foster dialogue with regional partners, for two reasons. First, as a non-regulatory entity that involves the collaboration of a diverse group of water management focused stakeholders, the Colorado Master Irrigator organization has the social connections and learning-oriented mission necessary to support conversations about finding ways to combine and boost the impact of activities by individuals and groups in the region that currently operate rather independently even if their goals of sustaining farming in this region very much align. The second goal of this kind of engagement with partners will be to try to organize a range of externally-supported opportunities and incentives that can encourage Colorado Master Irrigator graduates pursue and realize their energy and water-use efficiency and/or conservation-oriented goals (CWP 6.2, 9.4), such as:

- Offering access to other professional development and training opportunities
- Setting up discounts available through local dealers for inputs, tools, and irrigation system upgrades, and/or favorable terms with ag lenders
- Enhancing eligibility of program graduates for state and Federal grants, loans, and cost-share programs
- Exploring with local and state organizations the possibilities of establishing a) a rebate on Republican River Water Conservation District irrigated acreage fees that rewards producers for management shifts that lead to demonstrable water savings/conservation; b) state-supported conservation-oriented agreements that eliminate (perceived or justified) "use it or lose it" risks related to reducing consumptive water that may affect transferable yields, thus reducing disincentives to adopt less water-use intensive practices such as deficit irrigation (CWP 6.3.4, 6.4); and c) new pathways that incentivize the retirement of non-active wells and/or that reduce excessive pumping performed only to maintain well yield production history rather than to produce or benefit crops.

When participants graduate from Colorado Master Irrigator, they will be asked to evaluate the strengths and weaknesses of the program and offer suggestions for improvement. Their input will be used to update and improve the program each year. Graduates will also be encouraged to identify a commitment (or commitments) based on information covered during the course which they are interested in pursuing on their operations and about which they are willing to share information about their actions/progress for the following three years by Colorado Master Irrigator staff. These commitments will generate qualitative and/or quantitative insights that can be anonymized if needed and will be of interest to individuals and groups (farmers, groundwater management districts, academics, state and Federal agency staff, crop consultants, tech industry and commodity group representatives, etc.) that seek to encourage and deeply understand what leads to successful integration of conservation and efficiency-oriented agricultural practices (CWP 6.3, SPBR/Metro 2019 EAP). Graduates will also be offered an opportunity to compete for a special cash payout of up to $2000 (supported through funds other than those from the CWP) that will be awarded by the PAC to the farmer or two who submits a written bid deemed to represent an especially significant commitment to making management shifts that can lead to reduced consumptive use along with a willingness to share lessons learned with others.

Looking ahead, the collection of Colorado Master Irrigator graduates' commitment-related data could help inform policy development that aims to "reduce uncertainty for water managers and supports the development of basin-specific models" applicable to compact-related obligations (CWP 6.4, 5.2; SPBR BIP 5.3.2). It is also the hope of the Colorado Master Irrigator PAC and staff that if commitments monitored by Colorado Master Irrigator lead to greater, demonstrable water savings within the Republican River Basin that the well retirements needed to satisfy compact compliance could be reduced.

Colorado Master Irrigator will be offered once a year to participants from the Republican River Basin area. Class size will be limited to 25 people to maximize exchange and in-depth engagement. Beyond the three initial years of the program, Colorado Master Irrigator could be offered more than once per year according to demand; this program could also potentially serve as a pilot example that could be adapted for delivery in other Colorado Basins. Overall, this program's outreach efforts (in-person, print, website, and social media) and messaging will also help reach diverse audiences across the state and beyond (SPBR 5.5.9; SPBR/Metro 2019 EAP), including through Colorado Master Irrigator's ongoing participation in a multi-state working group active since 2018 that is focused on adapting and replicating this program format and launching programs in other states.

Switching to more efficient water use practices in response to shrinking water supplies is absolutely necessary to stem and/or avoid future economic disruption in the Republican River Basin. Current and anticipated market- and climate-change pressures demand faster and broader implementation of strategies and tools that can help producers stay profitable and that build a long-term regional foundation for economic resilience and community

viability. As a non-regulatory entity, Colorado Master Irrigator will have the unique ability to foster new collaborative partnerships, constructive discussion, and the testing and implementation of creative management-oriented ideas that can reduce consumptive water use, including the development of new state-sanctioned pathways and/or policy mechanisms aimed at supporting compact compliance that go beyond fallowing land and retiring wells, representing actualization of the "Cooperative Growth" and "Adaptive Innovation" scenarios described in the 2019 CWP Technical Update. By supporting the development of peer network which will champion and demonstrate what successful profitable conservation-oriented practices look like, the impacts of Colorado Master Irrigator are likely to reach and resonate with agricultural communities elsewhere in Colorado and other states and benefit municipalities, industry groups, and wildlife populations that also depend on the Ogallala aquifer resource (CWP Technical update 2019, Table 4.8.2). Planning for the future will be served by investing in the professional development of producers and facilitating social and formal connections that prioritize and incentivize conservation. By doing so, economic disruption related to water limitations can be dampened, and other efforts to sustain agriculture in this region, including developing new markets and processing capacity for higher value crops that may need less water to grow can be pursued.

Related Studies

Please provide a list of any related studies, including if the water project is complementary to or assists in the implementation of other CWCB programs.

1. 2018 Ogallala Aquifer Summit Summary report. Details activities (including Master Irrigator) that >200 water management stakeholders in the eight Ogallala states identified at a May, 2018 summit in Garden City, KS as being actionable and worth prioritizing/replicating due to their potential benefit to Ogallala communities and the aquifer: http://ogallalawater.org/ogallala-summit-summary-report/
2. 2014-2017; "Economic Analysis and Design of Policies to Reduce Groundwater Use in the Northern High Plains Ground Water Basin." **Colorado Water Conservation Board** grant, $159,882. Related research article: RA Hrozencik, DT Manning, JF Suter, C Goemans, and RT Bailey (2017). The Heterogeneous Impacts of Groundwater Management Policies in the Republican River Basin of Colorado. Water Resources Research (53) 12: pp 10757-10778.
3. 2015-2016; Water Irrigation Scheduler for Efficient Application (WISE) online tool promotion and improvement in Colorado. **Coca-Cola Company**, $25,000.
4. 2013-2016; Decision Support Tools, Drought Tolerance, and Innovative Soil and Water Management Strategies to Adapt Semi-arid Irrigated Cropping Systems to Drought; PI Dr. Neil Hansen and 6 other co-PIs; **USDA-NRCS Conservation Innovation Grant**, $882,924, including $58,000 for an interdisciplinary engagement/demonstration project to monitor the field water balance under different irrigation strategies, and demonstrate irrigation scheduling techniques and precision irrigation)
5. 2013-2015; Implementation of Deficit Irrigation Regimes: Demonstration and Outreach; PI Dr. José L. Chávez; **Colorado Water Conservation Board**, Alternative Agricultural Water Transfer Methods Competitive Grant Program.
6. 2011-2015; Mobile Irrigation Water Management System Using eRAMS Cloud Computing Infrastructure; co-PI Dr. Mazdak Arabi; **USDA-National Institute of Food and Agriculture**, $365,000. (Interdisciplinary research and engagement project; Project director coordinating web-based and mobile app irrigation management software development and extension activities for irrigating producers)
7. 2012-2014; Agricultural weather data delivery improvements to Uncompahgre Valley irrigators; PI Denis A. Reich; co-PIs Troy A. Bauder and Nolan J. Doesken; Colorado Water Conservation Board, $112,000. (Interdisciplinary engagement project that included work on providing irrigation scheduling and water balance algorithms for an online irrigation scheduling tool.
8. 2013; Demonstration and Validation of an Online Irrigation Scheduling Tool for use in Sugarbeet Production in Northern Colorado. PI Erik Wardle; co-PI's Troy Bauder and Joel Schneekloth; **Western Sugar Cooperative**, $9,752. (Field validation of an online irrigation scheduler on 4 sugar beet fields in north east Colorado)
9. 2009-2012; Using the ASCE Standardized Reference Evapotranspiration Equation and Appropriate Crop Coefficients for Irrigation Management in Colorado; co-PIs Dr. José L. Chávez and Troy Bauder; **USDA-NRCS Conservation Innovation Grant**, $74,617. (Interdisciplinary engagement/demonstration project; Project director supervising field and lab activities to estimate crop ET and irrigation requirements)

10. NL Klocke, JP Schneekloth, SR Melvin, RT Clark, JP Payero (2004). Field scale limited irrigation scenarios for water policy strategies. Applied Engineering in Agriculture 20 (5): 623-631. Study partially funded by the **U.S. Department of the Interior, Bureau of Reclamation**.
11. 2016-2020; "Sustaining agriculture through adaptive management to preserve the Ogallala aquifer under a changing climate." **USDA-National Institute of Food and Agriculture** Award # 2016-68007-25066. $10,000,000. Co-PIs Meagan Schipanski and Reagan Waskom, hosted at Colorado State University; involves 40 collaborating faculty members based at 9 institutions in 6 Ogallala states.

Previous CWCB Grants, Loans or Other Funding

List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order; 6) Percentage of other CWCB funding for your overall project.

1) Colorado Master Irrigator
2) Colorado Master Irrigator - Northern High Plains Basin
3) South Platte Basin Roundtable
4) **Pending
5) **Pending CWCB approval
6) 22%

Taxpayer Bill of Rights

The Taxpayer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect your application.

N/A

Submittal Checklist

	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract.
Exhibit A	
X	Statement of Work(1)
X	Budget & Schedule(1)

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	Engineer's statement of probable cost (projects over $100,000)
X	Letters of Matching and/or Pending 3rd Party Commitments(1)
Exhibit C	
X	Map (if applicable)(1)
	Photos/Drawings/Reports
X	Letters of Support (Optional)
	Certificate of Insurance (General, Auto, & Workers' Comp.) (2)
	Certificate of Good Standing with Colorado Secretary of State(2)
	W-9(2)
	Independent Contractor Form(2) (If applicant is individual, not company/organization)
Engagement & Innovation Grant Applicants ONLY	
	Engagement & Innovation Supplemental Application(1)

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

Last Updated: November 2018

ENGAGEMENT & INNOVATION GRANT FUND SUPPLEMENTAL APPLICATION

Introduction & Purpose

Colorado's Water Plan calls for an outreach, education, public engagement, and innovation grant fund in Chapter 9.5.

The overall goal of the Engagement & Innovation Grant Fund is to enhance Colorado's water communication, outreach, education, and public engagement efforts; advance Colorado's water supply planning process; and support a statewide water innovation ecosystem.

The grant fund aims to engage the public to promote well-informed community discourse regarding balanced water solutions statewide. The grant fund aims to support water innovation in Colorado. The grant fund prioritizes measuring and evaluating the success of programs, projects, and initiatives. The grant fund prioritizes efforts designed using research, data, and best practices. The grant fund prioritizes a commitment to collaboration and community engagement. The grant fund will support local and statewide efforts.

The grant fund is divided into two tracks: engagement and innovation. The Engagement Track supports education, outreach, communication, and public participation efforts related to water. The Innovation Track supports efforts that advance the water innovation ecosystem in Colorado.

Application Questions
*The grant fund request is referred to as "project" in this application.
Overview (answer for both tracks)
In a few sentences, what is the overall goal of this project? How does it achieve the stated purpose of this grant fund (above)?
Who is/are the target audience(s)? How will you reach them? How will you involve the community?
Describe how the project is collaborative or engages a diverse group of stakeholders. Who are the partners in the project? Do you have other funding partners or sources?
Describe how you plan to measure and evaluate the success and impact of the project?

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What research, evidence, and data support your project?
Describe potential short- and long-term challenges with this project.

Please fill out the applicable questions for either the Engagement Track or Innovation Track, unless your project contains elements in both tracks. If a question does not relate to your project, just leave it blank. Please answer each question that relates to your project. Please reference the relevant documents and use chapters and page numbers (Colorado's Water Plan, Basin Implementation Plan, PEPO Education Action Plan, etc.).

Engagement Track
Describe how the project achieves the education, outreach, and public engagement measurable objective set forth in Colorado's Water Plan to "significantly improve the level of public awareness and engagement regarding water issues statewide by 2020, as determined by water awareness surveys."
Describe how the project achieves the other measurable objectives and critical goals and actions laid out in Colorado's Water Plan around the supply and demand gap; conservation; land use; agriculture; storage; watershed health, environment, and recreation; funding; and additional.
Describe how the project achieves the education, outreach, and public engagement goals set forth in the applicable Basin Implementation Plan(s).
Describe how the project achieves the basin roundtable's PEPO Education Action Plans.

Innovation Track
Describe how the project enhances water innovation efforts and supports a water innovation ecosystem in Colorado.
Describe how the project engages/leverages Colorado's innovation community to help solve our state's water challenges.
Describe how the project helps advance or develop a solution to a water need identified through TAP-IN and other water innovation challenges. What is the problem/need/challenge?
Describe how this project impacts current or emerging trends; technologies; clusters, sectors, or groups in water innovation.

Last Updated: November 2018

Colorado Water Conservation Board
Water Plan Grant - Exhibit A

Statement Of Work	
Date:	**August 1, 2019**
Name of Grantee:	**Colorado Master Irrigator**
Name of Water Project:	**Colorado Master Irrigator**
Funding Source:	**WSRF and CO Water Plan Grant, other match and in-kind**
Water Project Overview:	
CWP Grant funding will support delivery of an annual, four-day "Colorado Master Irrigator" classroom-based course designed to equip northeastern Colorado farmers with science-backed information on strategies and tools they can use to reduce on-farm consumptive water use, increase water and energy conservation/use efficiency, and stay profitable. Colorado Master Irrigator will also prioritize peer-to-peer exchange and partnerships critical for broader management and mindset shifts to take place that can help sustain the region's agriculture-dependent communities given significant Ogallala aquifer declines. Each class of 25 participants will represent ~25,000 irrigated acres (eight 125-acre crop circles/participant). Through in-person and online communications, Colorado Master Irrigator may reach a broader audience across the state and beyond. A ~35-member program advisory committee assists the program coordinator with curriculum design and delivery, program communications, and recruiting participants and sponsors. To graduate, participants must complete all 32 course hours, engage with classmates and instructors, and consider committing to using certain management strategies and/or tools covered by the program. With their consent, Colorado Master Irrigator will track graduates' commitment-related progress for three years. Overall, Colorado Master Irrigator aims to increase long-term regional economic and drought-related resilience, support state compact compliance, and provide management-oriented alternatives to mandatory well curtailment.	
Project Objectives:	

1. Successfully launch, run, and continue to improve a high-quality 4-day interactive educational course in early 2020, 2021, and 2022 for 25 participants each year
2. Shift mindsets and encourage/help catalyze faster adoption of water and energy conservation and efficiency oriented management practices in the Republican River Basin
3. Foster wider understanding among regional water stakeholders with regard to the potential hydrological impact (positive/negative) of different ag water management strategies on the Ogallala aquifer
4. Facilitate peer-to-peer network building and exchange among producers as well as among other local, regional, state, and Federal water stakeholders
5. Engage in collaborative conversations and partnerships with local, state, regional and Federal entities to support policy development and state-sanctioned alternatives to fallowing/well curtailment that can keep farmers farming, irrigating, and profitable.
6. Line up long-term support for Colorado Master Irrigator to extend the program beyond its initial 3-year establishment period

Tasks
Task 1 –Annual program delivery and evaluation
Description of Task:
The program coordinator, supported by the program advisory committee (PAC) will ensure smooth, effective function of the 4-day Colorado Master Irrigator program.
Method/Procedure:
a. Line up course instructors and arrange reimbursements to cover their travel costs if/as needed. b. Reserve/rent a facility in which to hold the course c. Organize refreshments for each day of the course, and coordinate with private sponsors who will cover costs for lunches d. Arrange for 4-5 PAC members to be present and assist with managing logistics for day of the course (to serve as greeters/social icebreakers and/or panelists), help with AV equipment, help lead interactive games, etc.) e. Print and compile topical information in binders (one for each day of the course) to be provided to Master Irrigator Program participants f. Distribute the program evaluation survey (printed questionnaire) at the end of the course and compile the information gathered. g. Prepare and award program graduates with their certificates of course completion that they can furnish to CWCB to be allotted their participation stipend.
Deliverable:

1. A fully staffed program curriculum involving excellent, dynamic teachers (including producers) who will present a wide range of topics
2. Binders with printed materials (digital copies will also be made available) for participants including the Colorado Master Irrigator course agenda and resource information pertinent to topics covered each day.
3. Printed survey questionnaire and a report/analysis of compiled program evaluation survey data that will be used by the PAC and program coordinator to continue to develop and improve the program.
4. Connect program graduates with CWCB

Tasks
Task 2 – Communications
Description of Task:
The program coordinator will schedule, facilitate, and disseminate clear and regular internal and public-facing communications as needed to support Colorado Master Irrigator development and delivery.
Method/Procedure:
a. Convene and lead monthly program advisory committee meetings used to discuss and engage in creative collaboration to support program development, delivery and advertising b. Maintain transparent online documentation of the program development process using Google Drive c. Provide program instructors, consultants, partners, sponsors, and others with timely contextual information on the program's format and goals that support their effective engagement with Colorado Master Irrigator via email and printed brochures d. Advertise Colorado Master Irrigator course and registration online, through area newspapers/press releases, and at local events e. Promote Colorado Master Irrigator using social media feed (maintenance of Colorado Master Irrigator website is covered by WSRF funding) f. Organize other promotional materials that highlight the program and stories/testimonials from graduates, including large weather-proof signs celebrating program graduates that they can put up along the road somewhere on their farms g. Travel to other parts of the state/region if/as asked to share the story of the CO Master Irrigator program development process and lessons learned h. Take photos and video during the 4-day course
Deliverable:

1. Log of PAC member hours contributed, monthly/recurring meeting agendas, meeting notes and action items achieved/added to the worklist
2. Promotional materials (print/digital, field signs, PowerPoint presentations)
3. Press releases and other text provided to media outlets and other organizations as necessary to advertise the program
4. Information (text, photos and video clips) organized for use in sharing the Colorado Master Irrigator development and adaptation process with other groups within and outside of Colorado also interested in adapting/replicating the Master Irrigator program format.
5. Development of written stories, video, and testimonials featuring course participants that can be shared online (via Colorado Master Irrigator's website and social media) that break down different aspects (practical and mindset related) of adopting conservation oriented, water- and energy use efficient strategies

Tasks
Task 3– Collaborative engagement with partners
Description of Task:
The Colorado Master Irrigator program coordinator and PAC will help arrange and participate in conversations and partner with a wide range of individuals and groups to help support the program in particular and efforts regionally to sustain irrigated agriculture and increase water conservation.
Method/Procedure:
a. The PAC is responsible for outreach to program sponsors, who can support master irrigator in a variety of ways including: i) cover lunch costs for a day of the course (in exchange for a 15-minute elevator talk about their organization's product or mission- otherwise, the Colorado Master Irrigator course will try to avoid promoting specific brands or tools); ii) leveraging relationships with local dealers to set up discounts that will be made available to Colorado Master Irrigator Program graduates for inputs, tools, and irrigation system upgrades, and/or favorable terms with ag lenders. b. Pursue and cultivate relationships/conversation, grant opportunities, and creative opportunities to collaborate with local, state, regional, and Federal groups working on improving agricultural water management such as, but not limited to: The Nature Conservancy/Colorado, NRCS, Farm Service Agency, Yuma Conservation District, Republican River Water Conservation District, CWCB, Colorado commodity groups, CSU Extension, USDA-ARS Limited Irrigation Research Farm, the public-private FFAR funded Irrigation Innovation consortium and the USDA-NIFA funded Ogallala Water Coordinated Agriculture Project (both hosted at CSU).
Deliverable:

1. Lunch costs covered/sponsored by area industry/ag groups
2. A few/several discounts opportunities set up to be made available to Colorado Master Irrigator Program graduates for inputs, tools, and irrigation system upgrades, and/or favorable terms with ag lenders, which will also help improve program brand recognition in the community
3. Progress on identifying/securing funding to support Colorado Master Irrigator and continue to improve the program beyond its initial 3-year establishment period.
4. Progress towards identifying and removing knowledge-related and structural/policy related barriers that currently limit and/or disincentivize wider and faster adoption of conservation- and efficiency-oriented practices within the region.

Task 4–Monitoring CO Master Irrigator graduate mindset shifts and practice oriented commitments

Description of Task:

At the conclusion of each Colorado Master Irrigator course, graduates will be encouraged to identify a commitment (or commitments) related to information covered during the course that they are interested in and willing to pursue for their operations and about which they are willing to share information about their actions for the following three years by Colorado Master Irrigator staff.

Method/Procedure:

a. The program coordinator and PAC members will distribute a commitment form at the end of the Master Irrigator program and support graduates as needed with defining their goals and helping connect them with applicable, externally supported opportunities/incentives if available. This form will have a page on which consent will be requested for Colorado Master Irrigator staff to be in touch at least twice per year (by phone/in person/email) in order to check in to track commitment related progress. Consent will also be requested prior to sharing any certain stories, testimonials, or other information related to a program; any indication or wish for information to be kept anonymous will be respected.
b. Participants who have engaged in/completed all 32 hours of the course will receive a graduation certificate, a copy of which can be provided to CWCB to request a participation stipend.
c. Graduates will also be offered an opportunity to compete for an extra cash payout of up to $2000 (supported through funds other than those from the CWP grant) that will be awarded by the PAC to the farmer (or farmers) who submits a written bid deemed to represent an especially clear and significant investment in making management shifts that can lead to reduced consumptive use and a willingness to share lessons learned with others.
d. At least once a year for three years, the program coordinator and PAC members will follow up with graduates, using a paper survey and phone or in-person interviews to collect perspectives and other information related to mindset shifts and adoption of

new practices and/or tools that aim to increase water and/or energy conservation and use efficiency.

Deliverable:

a. All data (initial commitments and annual follow-up reviews) will be maintained in a well-organized Master Irrigator database that will include information on irrigated acres affected by the program as well as other information related to conservation/efficiency related commitments and related learning experiences of graduates, including for specific strategies, tools, techniques they decide to pursue.
b. Compiled commitment data will be analyzed to pull out key takeaways that can be used to continue to improve the program curriculum/teaching approach, and testimonials and/or evidence of program impact that can be used as part of program advertising and to support dialogue with project partners.

Budget and Schedule

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

Reporting Requirements

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

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

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

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

Payment

Last Updated: November 2018

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

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

Performance Measures

Performance measures for this contract shall include the following:
(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit B. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.
(b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.
(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.
(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Colorado Water Conservation Board

Water Plan Grant - Exhibit B
Budget and Schedule

Prepared Date: July 29, 2019

Name of Applicant: Colorado Master Irrigator

Name of Water Project: Colorado Master Irrigator Program — Republican River Basin

Project Start Date: September 1, 2019

Project End Date: September 30, 2022

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1	Annual Program Delivery and Evaluation	##############	June 1, 2022	$11,800	$41,988	$53,788
2	Communications	September 1, 20	September 30, 2	$16,000	$44,313	$60,313
3	Collaborative Engagement with Partners	September 1, 20	June 1, 2022	$0	$21,000	$21,000
4	Monitoring CO Master Irrigator Graduate Min	March 1, 2020	December 31, 20	$122,000	$42,500	$164,500
	And Practice Oriented Commitments					$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
						$0
			Total	$149,800	$149,800	$299,600

From:
Dennis Coryell
Agriculturalist
54263 County Rd X
Burlington, CO 80807

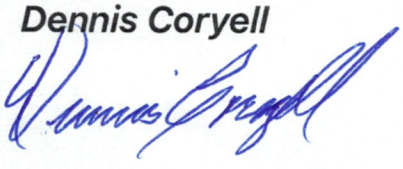
To Whom It May Concern:

It is my pleasure to write a letter in support of the Colorado Master Irrigator Program currently under development in our Republican River Basin. I strongly believe this program offers new and unique opportunities for our water users to find ways to conserve water and help sustain our depleting aquifer. Through coordination with local producers, industry representatives, CSU Extension Agents, and many others and by using examples from the original award winning program in Texas, the Colorado Master Irrigator Program promises to bring in-depth, practical irrigation management training to our area to show producers and community members how to effectively reduce water usage without economical sacrifices. This program can be shared across the state of Colorado, as well as over multiple state lines.

As a local farmer who has been involved with water issues in the Northern High Plains Basin for close to 30 years I see the need to develop a program to educate and encourage irrigators to wisely use and conserve this precious resource. I want my Son and Grandson's family to be able to use this water during their lifetime.

I am in full support of this program and am excited for the opportunities it will bring to our region.

Sincerely,
Dennis Coryell



NORTH PLAINS
GROUNDWATER
Conservation District

July 25, 2019

Alexander Funk
Colorado Water Conservation Board
1313 Sherman St, Room 718
Denver, CO 80203

Dear Mr. Funk,

On behalf of the North Plains Groundwater Conservation District, it is my pleasure to write this letter of support underway to establish a program in northeastern Colorado modeled on our Master Irrigator program. The program won the Texas Environmental Excellence Award for agriculture in 2018.

Our program has offered intensive irrigation management and technology training to farmers focused on increasing understanding of and proficiency with the latest irrigation management tools, technologies, and practices since 2016. Armed with this knowledge, producers can select tools and strategies that fit their operation that that they can implement to maximize their return on investment for every drop of water. With 83 graduates and over 260,000 acres impacted, Master Irrigator has proven to be a successful model for irrigation conservation education in the northern Texas Panhandle.

North Plains Groundwater Conservation District welcomes the development of similar, rigorous education programs. To this end, we have been actively engaging with groups in several Ogallala region states interested in replicating our program's format, sharing lessons learned and insights gained through operating our program for the past four years. For example, this past year we traveled to Colorado on more than one occasion and also hosted members of the Colorado Master Irrigator Program team at our office in Dumas, Texas to provide in-depth guidance and share key insights that gained through coordinating Master Irrigator for the past four years.

We understand that the Colorado Master Irrigator program will include the following elements that we think are important to sustain the high expectations that are now associated with the Master Irrigator brand:

- Focus on agricultural irrigation
- Advisory committee of stakeholders and local experts guiding the program
- At least 24 hours of instruction over at least 4 days
- Instruction on the following topics consistent with best management practices for local growing conditions: agronomics, irrigation scheduling, systems.

603 East 1st Street PO Box 795 Dumas, TX 79029 (806) 935-6401 Phone (806) 935-6633 Fax www.northplainsgcd.org

We are confident based on our experience that that the Colorado Master Irrigator program has tremendous beneficial potential for farmers and rural communities across northeastern Colorado.

If you need any additional information regarding our program, please contact me at my district offices or you can call me on my direct line 806-922-7402.

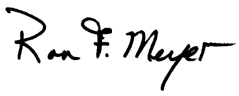
Sincerely,

Steven D. Walthour, PG
General Manager

Golden Plains Area

Kit Carson County

April 25, 2019
To: Whom it may concern
From: RF Meyer, Golden Plains Area Agronomist



Re: Letter of support for the Colorado Master Irrigation program

I am writing a support letter for the Colorado Master Irrigation program. This program offers great potential to assist not only Colorado irrigators but will have a High Plains footprint, as well. As a result of our aquifer depletions, new production strategies and education will be essential.

Colorado State University Extension will stand ready to assist this project.

Washington County
181 Birch Ave
Courthouse Annex
Akron, CO 80720
(970) 345-2287

Kit Carson County
817 15th St.
Burlington, CO 80807
(719) 346-5571

Phillips County
127 E. Denver
P.O. Box 328
Holyoke, CO 80734
(970) 854-3616

Yuma County
310 Ash, Suite B
County Courthouse
Wray, CO 80758
(970) 332-4151

Sedgwick County
315 Cedar
County Courthouse
Julesburg, CO 80737
(970) 474-3479

http://goldenplains.colostate.edu

Plains Ground Water Management District

July 25, 2019

Colorado Water Conservation Board
1313 Sherman St, Room 718
Denver, CO 80203
Attn: Alexander Funk

Dear Mr. Funk,

On behalf of the Plains Ground Water Management District Board of Directors, it is my pleasure to write this letter of support for the Colorado Master Irrigator program currently under development in the Republican River Basin. As our aquifer continually depletes, water conservation is of the upmost importance to our entire region. Showing our producers and community members how to effectively reduce their water usage without sacrificing their finances is a goal we are excited to see the Colorado Master Irrigator program achieve.

Through a grant received from the Republican River Water Conservation District, the Plains Ground Water Management District has dedicated $6,000 in funding to be used towards the development of the Colorado Master Irrigator Program. We have also contributed the equivalent of $9,500 of in-kind services through our former district manager and current program coordinator, Brandi Baquera. We strongly believe in the potential this program has to offer our district as well as the entire Republican River Basin and will continue to support its development as much as possible.

Sincerely yours,

B Mulch

Bart Mulch, President
Plains Ground Water Management District