COLORADO WATER CONSERVATION BOARD

ALERNATIVE AGRICULTURAL WATER TRANSFER METHODS COMPETITIVE GRANT PROGRAM

GRANT APPLICATION FORM

Rotational Fallowing – Leasing Catlin Canal Pilot Project Implementation and Operations Program in the Arkansas River Basin

Program/Project Name

River Basin Name

$173,781.50

Amount of Funds Requested

$19,310.00

Amount of Matching Funds

Instructions: This application form must be submitted in electronic format (Microsoft Word or Original PDF). The application can be emailed or a disc can be mailed to the address at the end of the application form. The Alternative Agricultural Water Transfer Methods Competitive Grant Program, Criteria and Guidelines can be found at http://cwcb.state.co.us/LoansGrants/alternative-agricultural-water-transfer-methods-grants/Pages/main.aspx. **The criteria and guidelines must be reviewed and followed when completing this application**. You may attach additional sheets as necessary to fully answer any question, or to provide additional information that you feel would be helpful in evaluating this application. Include with your application a cover letter summarizing your request for a grant. If you have difficulty with any part of the application, contact Craig Godbout of the Water Supply Planning Section (Colorado Water Conservation Board) for assistance, at (303) 866-3441 x3210 or email at craig.godbout@state.co.us. Generally, the applicant is also the prospective owner and sponsor of the proposed program/project. If this is not the case, contact Craig before completing this application.

Alternative Agricultural Water Transfer Methods – Grant Application Form
October 2010

Part A. - Description of the Applicant(s) (Program/Project Sponsor);

1. Applicant Name(s): **Lower Arkansas Valley Water Conservancy District**

Mailing address: **801 Swink Ave.**
Rocky Ford, CO 81067

Taxpayer ID#: **481298144** Email address: **jwinner@centurytel.net**

Phone Numbers: Business: **719-254-5115**
Home: **719-469-8935**
Fax: **719-254-5150**

2. Person to contact regarding this application if different from above:

Name: **Peter Nichols/Leah Martinsson, Berg Hill Greenleaf Ruscitti**

Position/Title **Special Counsel to the Lower Ark District**

Email: **pdn@bhgrlaw.com and lkm@bhgrlaw.com**

3. If the Contracting Entity is different then the Applicant, please describe the Contracting Entity here.

Not Applicable.

4. Provide a brief description of your organization. The applicant may be a public or private entity. Given the diverse range of potential applicants, not all of the following information may be relevant. Where applicable and relevant the description should include the following:

    a) Type of organization, official name, the year formed, and the statutes under which the entity was formed, a contact person and that person's position or title, address and phone number. For private entities, a copy of the Articles of Incorporation and By-laws should be appended to the application.

The Lower Arkansas Valley Water Conservancy District (the "Lower Ark District") is a water conservancy district established in 2002 pursuant to Colorado law, C.R.S. § 37-45-101, et seq.

Contacts: ***Jay Winner, General Manager, LAVWCD***
801 Swink Ave.
Rocky Ford, CO. 81067
719-469-8935
or

Peter Nichols/Leah Martinsson
Special Counsel, LAVWCD
Berg Hill Greenleaf & Ruscitti, LLP
1712 Pearl Street
Boulder, CO 80302
303-402-1600

    b) For waters suppliers, information regarding the number of customers, taps, service area, and current water usage, and future growth plans, water related facilities owned or used, funding/revenue sources (existing service charges, tap fees, share assessments, etc.), the number of members or shareholders and shares of stock outstanding or a description of other means of ownership.

Not applicable.

    c) For other entities, background, organizational size, staffing and budget, and funding related to water that is relevant in determining whether the applicant has the ability to accomplish the program/project for which funding is sought.

The Lower Ark District encompasses most of the Lower Arkansas River Basin, from above Pueblo Reservoir to the Kansas state line, including Pueblo and John Martin Reservoirs, and Pueblo, Otero, Crowley, Bent and Prowers Counties.

The Lower Ark District has a general fund budget of approximately $1.9 million per year, funded primarily by a 1.5 mill levy on real property within the District. All of the budget is spent on water-related activities, as described in more detail below.

The full-time staff of four includes the General Manager, Jay Winner; Conservation Program Manager, Bill Hancock; Staff Engineer: Jack Goble; Financial Officer, Brenda Fillmore; and Office Manager, Carla Quezada. In addition, the District extensively uses the services of its outside General Counsel, Bart Mendenhall, and Special Counsel, Peter Nichols, as well as the services of consulting engineers such as Martin and Wood Water Consultants, Inc.

d) A brief history of the Applicant(s).

The Lower Ark District was formed by a vote of the electorate in 2002 to conserve water resources for their greatest beneficial use within the District, essentially the Lower Arkansas Valley. The District has been active in five primary program areas since its formation:

1. ***Development of alternatives to the permanent dry-up and transfer of irrigation water rights for use outside the Lower Valley;***

2. ***Education and research to promote improved financial returns from irrigated agriculture;***

3. ***Development of so-called Rule 10 Compact Compliance Plans to facilitate the operation of existing and installation of new irrigation improvements to support irrigated agriculture;***

4. ***Preservation of irrigated agriculture through conservation easements and as purchaser-of-last-resort of irrigated farms and ranches in the Lower Valley;***

5. ***Purchase of strategic water rights for use in the Lower Valley, such as augmentation water; and***

6. ***Lease of water for augmentation use in the Lower Valley and to repay Colorado's water debt to Kansas.***

The Lower Ark District is the recognized leader in Colorado in developing a fallowing-leasing program to meet the water needs of Front Range municipalities while preserving irrigated agriculture and the economic future of rural Colorado. This work began in 2003 and has grown over time leading to the recent approval obtained by the Lower Ark District to operate a rational fallowing-leasing pilot project, as described in more detail below.

e) Please include any relevant Tabor issues relating to the funding request that may affect the Contracting Entity.

The Lower Ark District's 1.5 mill property tax levy is exempt from TABOR pursuant to the election that formed the District in 2002.

The Lower Ark District formed a Water Activity Enterprise in 2003 to manage the District's water assets and provide services to the Lower Ark District on a reimbursable basis. The Lower Arkansas Valley Water Enterprise Fund would be the contracting entity for this project.

Part B. - Description of the Alternative Water Transfer Program/Project –

1. Purpose of the Program/Project

   Please provide a summary of the proposed program/project, including a statement of what the program/project is intended to accomplish, the need for the program/project, the problems and opportunities to be addressed, the expectations of the applicant(s), and why the program/project is important to the applicant(s). The summary must include a description of the technical, institutional (i.e., how the program/project will be organized and operated), and legal elements that will and/or have been addressed by the applicant and proposed program/project. The summary should also discuss relevant project history, if applicable, and any other relevant issues.

   Previous Studies
   To the maximum extent possible, the results of any previous studies and investigation should be utilized and incorporated into the proposed program/project. The application for funding should include a brief summary of the results of previous studies and how they will be utilized.

Project Intent. ***Broadly, the proposed Rotational Fallowing – Leasing Catlin Canal Pilot Project Implementation and Operations Program ("Operations Program") is aimed at demonstrating, through actual operation of the Catlin Pilot Project, that rotational land fallowing - municipal leasing is a viable alternative to historical "buy-and-dry" of irrigation water rights for M&I uses. The Catlin Pilot Project is intended to provide on-the-ground "proof of concept" of rotational fallowing – leasing by making irrigation water rights available for municipal use while preserving irrigated agriculture. Preserving irrigated agriculture is critical to the future of rural communities in the Lower Arkansas Valley, which depend on agriculture as their economic lifeblood. More specifically, the Operations Program will provide support needed to undertake the day-to-day operations and adminstration of the Catlin Pilot Pilot.***

Project Need. ***On January 27, 2015, the CWCB approved the first Rotational Fallowing Leasing Pilot Project under HB 13-1248 (codified at C.R.S. § 37-60-115(8)), with the Lower Ark District and the Lower Arkansas Valley Super Ditch Company, Inc. as co-applicants. The approved Catlin Pilot Project is a ten-year pilot project that will involve the rotational fallowing of approximately 1,200 acres irrigated under the Catlin Canal in the Arkansas River Basin to generate up to 500 acre-feet of water available for lease to three municipal participants (Fowler, Fountain, and Security Water District).***

The conditions of CWCB's January 27, 2015 approval for the Catlin Pilot Project (the "Pilot Project Approval") are extensive and include 60 terms and conditions to which the District and Super Ditch must comply in operating the project. A copy of the Pilot Project Approval is included as an attachment to this application. That approval requires, for example:

- ***Calculation of consumptive use credits, return flow obligations, and disposition of consumptive use credits and return flow water with numerous accounting elements on a daily basis***
- ***Daily recharge accounting, including daily content measurements, daily precipitation, and daily evaporation***
-
- ***Weekly submittal of accounting for the first 75 days***

- ***Recharge pond monitoring for vegetation, seeps, overtopping or inducement of elevated ground water tables***
- ***Periodic monitoring of dry-up parcels for compliance with dry-up requirements***
- ***Annual report preparation (to include a comprehensive summary of year's operations, accounting summary, information on all costs associated with operations, a description of any obstacles to operation encountered, evaluation of erosion prevention and noxious weed control, any proposed operational modifications for the upcoming year, and any potential additional terms and conditions needed to prevent material injury to other water rights)***
- ***Annual mapping of parcels to be fallowed***
- ***Annual identification of how/where nonparticipating shares will be used, including location of irrigated lands***
- ***Identification of water supplies that will be used on non fallowed portions of participating farms***

The Catlin Pilot Project was the first application to be submitted and approved through the CWCB HB 1248 pilot program. This meant that the Catlin Pilot Project application was the first to go through the process established in the CWCB's Criteria and Guidelines and was also the first to conduct an analysis using the Lease-Fallowing Tool that was developed by the Division of Water Resources. As a result, the process of putting together the Catlin Pilot Project application, working through the comments of nine parties, preparing a joint conference report with those commenting parties on proposed terms and conditions, obtaining the Pilot Project Approval and then complying with the "conditions precedent" to 2015 operations that were set out in that approval was an arduous one that involved significant commitment of time and financial resources by the Lower Ark District. It is estimated that the Lower Ark District has invested over $3.0 million in investigating and addressing legal, technical, and institutional issues associated with the concept of leasing fallowing, and over $200,000 alone in putting together and obtaining approval for the Catlin Pilot Project.

The Operations Program will provide funding to support on-the-ground staffing and equipment needs for the first two years of the Pilot Project's operations to ensure continued implementation of the Catlin Pilot Project during its ten-year term. Adequate funding for on-the-ground implementation is critical for compliance with the terms and conditions of the Pilot Project approval described above. Many of these terms and conditions are more onerous than would be found even in a water court decree, but are intended to demonstrate to interested parties through careful operations and detailed accounting that rotational fallowing-leasing can occur without injury to other water rights. This on-the-ground experience will assist in evaluating opportunities and challenges in operating future rotational leasing fallowing projects. In addition, it will provide funding to identify additional recharge site locations. Use of recharge in the Arkansas River Basin is currently limited, but use of recharge will need to be expanded to replace return flow obligations owed from alternative transfer methods such as rotational fallowing-leasing. While it is anticipated that operations will be streamlined and simplified over time, having adequate support during the first years of operations is critical to the Pilot Project's success.

<u>Problem and Opportunities</u>. Success of the Catlin Pilot Project is important to the Lower Ark District because it would reflect the first "proof of concept" for rotational land-fallowing municipal leasing as a viable alternative to the permanent buy and dry of agricultural lands, which is a key mission of the Lower Ark District and a critical component of the State Water Plan. As explained above, however, because the Catlin Pilot Project is the very first of its kind, it faced skepticism and has been subjected to somewhat excessive requirements for operations and accounting. The Lower Ark District is hopeful that by running a successful pilot project, this skepticism will be replaced with enthusiasm.

Alternative Transfer Methods ("ATMs") such as rotational fallowing – leasing have been identified as a critical means of addressing the State's identified water gap. The Statewide Water Supple Initiative estimates that by 2050, Colorado may lose 500,000 to 700,000 acres of currently irrigated lands to meet municipal water demands if alternatives to meeting those demands are not aggressively pursued. Both the LBCC and the basin Roundtables have concluded that the continued buy-and-dry is contrary to the vision of our state being a great place to live and work. Rotational fallowing-leasing has been identified as an ATM with significant potential to avoid the permanent dry-up of agricultural lands while providing additional supplies for M&I demands.

The Operations Program in support of the Catlin Pilot Project provides an excellent opportunity to build on years of efforts undertaken by the Lower Ark District, the CWCB, and other stakeholders to advance rotational fallowing-leasing. The Lower Ark District has undertaken extensive investigations into the technical, financial, and legal viability of rotational fallowing-leasing (discussed below) and now we have the chance to put that work to the test. The Operations Program to support the Catlin Pilot Project will further the purpose of HB 1248 to test the efficacy of using the streamlined approach of the LFT for determining critical technical components of rotational fallowing-leasing plans, and will also provide an opportunity to identify further opportunities for streamlined approaches and methodologies, whether technical, institutional, or administrative/operational, for use in future pilot projects.

Importance to and Expectations of Lower Ark District. The Lower Ark District was "established for the purposes of conservation of the water resources within the District, [and] for their greatest beneficial use." Case No. 02CV793 (Pueblo County, Colo. Dist. Court, 2002). The District has spearheaded efforts to development and implement rotational fallowing – leasing, including development of the Super Ditch Company as a vehicle for testing rotational fallowing-leasing for several reasons:

1. ***Alternative transfer methods such as rotational fallowing and leasing furthers the primary mission that the voters in SE Colorado mandated to the Lower District.***

2. ***An alternative to historical buy-and-dry is urgently needed to provide owners of irrigation water rights an economically viable and attractive alternative to selling their water rights outright.***

3. ***Land fallowing and water leasing has been discussed in water circles and academia for decades, has been successfully tested and implemented in California in a much simpler institutional and legal setting, but has yet to be proven in Colorado.***

4. ***The complexity and resources required to develop a rotational fallowing-leasing pilot project were beyond the capacity of individual shareholders, ditch companies, and potential water users/lessees, and the District has both volunteered and committed to the challenge.***

The Lower Ark District anticipates that through operating the Catlin Pilot Project, it will be demonstrated that rotational fallowing-leasing is a viable alternative to permanent buy-and-dry. In addition, it is anticipated that means of streamlining operations and administration for this and future rotational fallowing-leasing pilot projects will be identified, potential barriers to participation in rotational fallowing-leasing will be overcome, and more widespread interest in undertaking rotational fallowing-leasing will take hold. As indicated above, the Lower Ark District has invested significant time and financial resources in support of rotational fallowing – leasing and now the Lower Ark District seeks to find out whether rotational fallowing-leasing can be made to work in Colorado.

Previous Studies. ***In prior years, the Lower Ark District focused significant efforts to identify an appropriate vehicle for farmers to participate in rotational fallowing – leasing and address various legal and institutional aspects of rotational fallowing - leasing. This led to creation of the Lower Arkansas Valley Super Ditch Company, which was established to provide a vehicle for Lower Valley irrigators a voluntary alternative to improve the economic use of their water – this has remained the number one priority of the Board of Directors of the Lower Ark District. Special counsel, staff and board members of the Lower District have been working on this concept for nearly five years. In furtherance of this effort, the Lower District has expended roughly $3,000,000 to date on technical, institutional, and legal analyses to further the Super Ditch Company and rotational fallowing - leasing. After all of this study, the Lower Ark District has moved into the implementation phase with the Catlin Pilot Project, which will represent the first fallowing-leasing program to provide water supplies to municipal water users through the Super Ditch.***

The Lower District evaluated the feasibility of a Lower Valley water leasing program, to prove the concept, and to address essential antecedent issues to the formation of the Super Ditch Company and answer questions associated with rotational fallowing and leasing. Principle studies and investigations completed to date include:

a. ***Technical proof of concept. HDR Engineering; Inc., "Lower Arkansas Valley Water Leasing Potential Preliminary Feasibility Investigation," Aug. 2006. This engineering investigation confirmed that adequate water rights would be available for lease in the Lower Valley to meet the demands of water users. For example, approximately 250,000 acre feet of water would be available for lease in an average year, and over 100,000 acre-feet in an exceptionally dry year, like 2002.***

b. ***Preliminary water engineering for water leasing program. HDR Engineering, Inc., "Rotational Land Fallowing-Water Leasing Program Engineering and Economic Feasibility Analysis, Final Report," Nov. 2007. This engineering study refined yield estimates of potential water available for lease and also analyzed exchange, storage and water quality issues. In addition, the study included a macro-economic analysis of water leasing, including water pricing, lease payments, and third party impacts.***

c. ***Economic analyses of regional water markets, alternative leasing structures, ditch company and shareholder revenues, and regional economic impacts. George Oamek, Honey Creek Resources, Jan. 2008. This study built upon the programmatic economic analyses in the Feasibility Analysis, developing specific scenarios for leases by ditch, compared to selling out and continuing farming. The Steering Committee used this information to reach decisions on operational and organizational aspects of the Super Ditch Company.***

d. ***Legal analysis of alternative forms of Super Ditch Company (Anthony van Westrum, LLC, Jan. 2007). This report reviewed all of the potential legal structures available for the Super Ditch Company with regard to essential operational and organizational issues. Most options were eliminated because they could not meet one or more critical objectives of the irrigators, leaving a for-profit Colorado corporation as the leading candidate.***

e. ***Draft articles of incorporation and bylaws for Lower Arkansas Valley Super Ditch Company (van Westrum; July 2007 – March 2008, on-going). Following review of initial drafts of articles of incorporation and bylaws, several subsequent drafts have been developed to respond to concerns and to refine organizational and operational objectives of the Steering Committee.***

f. ***Legal analysis of the ditch companies' articles of incorporation and bylaws with regard to water leasing. Trout, Raley, Montaño, Witwer & Freeman, PC, Oct. 2006. This was a review of the existing restrictions in***

the articles of incorporatoin and bylaws of the ditch companies whose shareholders are interested in water leasing. Two ditch companies clearly would allow water leasing under their current organizational documents, a third has historically allowed the use of water outside the company's service area although the organizational documents are not entirely clear concerning a shareholder's right to do so, while the shareholders of four other ditch companies would need to amend their organizational documents to permit water leasing. Trout, Raley, Montaño, Witwer & Freeman subsequently developed model language to permit water leasing, and identified the procedures for shareholders to make such changes.

g. Legal analysis of 1041 land use permitting requirements. Trout, Raley, Montaño, Witwer & Freeman, P.C., Aug. 2006. Water leasing would trigger so-called 1041 permitting requirements in up to four counties where irrigators may wish to participate in water leasing, including Bent, Otero, Prowers and Pueblo.

h. Legal investigation of municipal authority to work with the Super Ditch Company. Kelly McMullin, Esq. and Mark Shea, Esq., Colorado Springs Utilities, Moey Hammond, Esq., Carlson, Hammond & Paddock, David Robbins, Esq., Hill & Robbins, Anthony van Westrum, LLC, and Trout, Raley, Montaño, Witwer & Freeman, P.C. on-going. This joint effort has focused on legal impediments to municipal water leasing and the development of solutions to identified issues.

i. Preliminary engineering report for pipeline from Lower Arkansas Valley to northeast El Paso County. Boyle Engineering, under contract to Pikes Peak Regional Water Authority, Lower Ark WCD, and Morley Investments, draft expected fall 2008. This engineering analysis was commissioned to look at the feasibility of combining four planned pipelines into one pipeline. Specifically, PureCycle, Morley Investments and the Pikes Peak Regional Water Authority, in addition to the Lower Ark District for the Super Ditch Company, plan pipelines to deliver water from the Lower Arkansas River to northeast El Paso County. This study is to examine the feasibilty of a single pipeline project that would meet the needs of all four entities, although it would include branches to serve specific needs of the individual participants.

j. Antitrust Implications of Plan by Lower Arkansas Valley Super Ditch Company to Collectively Lease Water Rights. Thomas P. McMahon, Esq., Jones & Keller (July 15, 2008). This legal analysis was commissioned at the request of the CWCB to address potential antitrust issues of the water leasing program. The analysis concluded that the courts would likely consider the Super Ditch Company a "new product" that would pass legal muster.

k. Alternative Water Transfers Methods – Task B, Storage Faciliteis, AEOCM, April 5, 2010.

l. Draft Report A Proposed Method for Incorporating Rural Population-Business Thresholds, or "Tipping Points," in Water Transfer Evaluations, Honey Creek Resources et al., May 2010.

m. Key study results, memorandum from George Oamek of Honey Creek Resources to Peter Nichols, Super Ditch legal counsel, dated June 2, 2010.

n. Alternative Water Transfer Methods – Task F, Conveyance Alternatives and Task G, Water Quality, AECOM, June 17, 2010.

o. Draft Report Rotational Land Fallowing Water Leasing Program Lower Arkansas Valley Super Ditch Company, Aqua Engineering, Inc., July 2, 2010.

p. Development of Land Fallowing – Water Leasing in the Lower Arkansas Valley, Trout, Raley, Montano,

Witwer, & Freeman, P.C., June 30, 2011. This reports on the development from 2002 to 2011 of rotational land-fallow-water leasing in the Lower Akrasans Valley and reviews various issues and technical investigations the Lower Ark District undertook to foster fallowing-leasing, which faciliated negotiated term sheets and pilot programs to move fallowing-leasing from concept to reality.

2. Study Area/Service Area Description

The study area/service area is generally the geographic area that is the subject of the proposed program/project (include both the source of supply and location and type of new use). The description should include the following items:

a) A narrative description of the study area/service area including: the county, the location of towns or cities, topography, and locations of major surface and ground water features.

The study area for the Operations Program mirrors that of the Catlin Pilot Project and generally includes the Lower Arkansas Valley within Otero County to the terminus of the Catlin Canal on Crooked Arroyo upstream into Pueblo County to Pueblo Reservoir and up Fountain Creek into El Paso County. The Catlin Pilot Project utilizes approximately 30% annually of the approximately 1100 Catlin Canal Company shares associated with the irrigation of just under 1,000 acres, all of which are a part of the study area. Additional information regarding participating farms and participating municipalities are set forth in items c) and d), below.

The Catlin Canal diverts from the Arkansas River approximately 44 miles, as the crow flies, downstream of Pueblo Reservoir, or nearly 61 miles as a stream distance. The canal is approximately 35 miles long, diverting from the Arkansas River 4.1 miles east of the Town of Fowler and terminating on Crooked Arroyo about 5.4 miles west-southwest of the City of La Junta. The following table describes the water rights owned by the Catlin Canal Company, all of which are decreed for irrigation use:

Catlin Canal Company Water Rights

Water Right	*Priority No.*	*Appropriation Date*	*Adjudication Date*	*Amount (c.f.s.)*
Catlin Canal	*2*	*04/10/1875*	*04/08/1905*	*22.0*
Catlin Canal	*5*	*12/03/1884*	*04/08/1905*	*226.0*
Catlin Canal	*7*	*11/14/1887*	*04/08/1905*	*97.0*

The Catlin Canal also diverts water attributable to the Winter Water Program decreed in Case No. 84CW179. It also diverts Frying Pan-Arkansas Project water (Fry-Ark Project Water), but that Fry-Ark Project water is not included in the Pilot Project.

b) An area map showing each of the items above, as well as the locations of existing facilities, proposed project facilities and boundaries of lands involved in the proposed program/project.

A project map is attached.

c) Information regarding the irrigated lands that are involved in the program/project. This must include a tabulation of total irrigated acreage, description of cropping types, crop yields, and total average annual water diversions for existing agricultural lands.

The Catlin Pilot Project uses shares historically used to irrigate lands located on the Schweizer, Diamond A West, Hirakata, Hancock, Diamond A East, and Hanagan Farms (see Catlin Canal Pilot Project Area Map). As described below, the Participating Farms currently use a total of 1046.83 shares to irrigate 911.3 acres. Irrigated acreage approved for fallow as a part of the Catlin Pilot Project and the lands to be fallowed for 2015 operations are summarized in the following table:

Participating Farmer	Legal Description of Historically Irrigated Lands	Irrigated Acres	Acres Fallow for 2015	Total Number of Shares	Shares Fallow for 2015
Schweizer	Portions of the S½ of the NW¼ and the S½ of Section 32, T22S, R57W of the 6th P.M., Otero County, Colorado	191.0	30.6	194	31.09
Diamond A West	Portions of the E½ of Section 33 and the W½ of Section 34, T22S, R57W, and the NE¼ of Section 4, T23S, R57W, all of the 6th P.M., Otero County, Colorado	126.7	36.1	223.3	48.53
Hirakata Farms	Portions of the SW¼ of Section 27 and the S½ of Section 28, all in T23S, R56W of the 6th P.M., Otero County, Colorado	143.5	42.8	151	45.04
Hancock	S½ SE¼ of Section 7, T24S, R56W of the 6th P.M., Otero County, Colorado	74	22.7	80	24.52
Diamond A East	Portions of the W½ of Section 11, T24S, R56W of the 6th P.M., Otero County, Colorado	259.5	76.3	278.53	76.01
Hanagan	NE¼ of Section 36, T23S, R56W of the 6th P.M., Otero County, Colorado	116.7	32.8	120	33.69
Total		911.3	241.2	1046.83	258.88

As shown in the attached map, the Schweizer Farm and Diamond A West Farm are, respectively, located about 3.3 miles and 4.6 miles south east of the Town of Manzanola along State Highway 50, the Hirakata Farm is about 3.4 miles southeast of the Town of Rocky Ford, the Hancock Farm is located about 5.5 miles south of the Town of Rocky Ford, the Hanagan Farm is located ¼ mile east of Town of Swink, and the Diamond A East Farm is located approximately 3 miles southwest of the Town of Swink.

Cropping types, crop yields, and total average water diversions were all calculated consistent with the requirements of the Criteria and Guidelines for Rotational Fallowing Leasing Pilot Projects (Approved Nov. 19, 2013) and are set out in the Catlin Pilot Project Application dated September 25, 2014 and available at: http://cwcb.state.co.us/water-management/water-projects-programs/Pages/Fallowing-LeasingPilotProjects.aspx.

d) Information regarding the location of the new water use(s) that will be served by transferred water including the estimated number of users/taps and/or uses served.

The Catlin Pilot Project will provide additional water supplies to three municipal participants from the water made available from the rational fallowing of approximately 30% of the lands included in the project. These municipal participants include the Town of Fowler, the City of Fountain, and the Security Water District.

Fowler is a small community of approximately 1,200 residents located in Otero County, Colorado within the Lower Arkansas River Valley. Fowler is located approximately 33 miles east of Pueblo. Fowler has seen a small population decline during with 2000s and has a median income of approximately $25,000. Fowler's municipal water supply is derived from the operation of 12 wells. Fowler is enrolled in a Rule 14 Plan, approved pursuant to the Arkansas River Amended Rules and Regulations Governing the Diversion and Use of Tributary Ground Water in the Arkansas River Basin, Colorado (Case No. 02-95CW211) and provides for the replacement of out-of-priority stream depletions to senior water rights in Colorado resulting from junior well pumping. Fowler's wells provide the only source of water supply available to meet all municipal water demands arising within Fowler's water service area. Fowler's allocation of Fry-Ark Project municipal water has been severely reduced in recent years, resulting in the need to drastically curtail outdoor water use by all of its customers. Fowler has leased up to approximately 250 acre-feet of water for 2015 through operation of the Catlin Pilot Project for use in its system in an effort to allow for some relaxation of its watering restrictions.

The City of Fountain is a community of approximately 27,000 residents that is located along Fountain Creek approximately 30 miles north of Pueblo. Fountain's population has grown significantly through the 1990s and 2000s, and its population is approximately 25% minority with a median income of approximately $42,000. Fountain receives the majority of its water from the Fry-Ark Project, which is delivered to Fountain from Pueblo Reservoir via the Fountain Valley Conduit. Fountain may also deliver water to its system through the Southern Delivery System, once it is operational. Fountain also obtains a portion of its water supply from four groundwater wells that pump water from the Fountain Creek Alluvium. Fountain has leased up to 125 acre-feet of water annually through operation of the Catlin Pilot Project for use in its water system to supplement its existing water supplies, which will be delivered at Pueblo Reservoir.

The Security Water District ("Security") is located in unincorporated El Paso County, encompassing an area of approximately 5 square miles east of Fountain Creek. Approximately 25% of the population of the Security-Widefield is minority, and the median income is around $48,000. Security provides a water supply to a population of approximately 18,000. Its water supply is obtained from numerous groundwater wells and supplemented by Fry-Ark Project water delivered through the Fountain Valley Conduit. Security may also deliver water to its system through the SDS, once it is operational. Security has leased up to 125 acre-feet of water annually through operation of the Catlin Pilot Project for use in its water system to supplement its existing water supplies, which will be delivered at Pueblo Reservoir.

e) Socio-economic characteristics of the area such as population, employment and land use.

The Lower Valley is disproportionately dependent upon farming employment compared to the state as a whole. In addition, the Lower Valley is older, poorer, and has more Latino residents than Colorado overall.

	Pueblo	Otero	Crowley	Bent	Prowers	Colorado
Population	161,451	18,703	5,322	5,688	12,291	5,268,367
Median Age	38.7	40.9	38.9	39.8	36.7	34.3
Latino %	42.3%	41.5%	29.6%	31.1	36.3%	21.0%
Median Income	$41,777	$33,848	$31,477	$37,340	$34,391	$58,433
Unemployment %	9.4	8.2	10.2	6.8	5.3	4.2
Poverty % (Est.)	20.2%	23.1%	51.2%	31.7%	21.9%	13.0%

Source: 2010 and 2013 Census Data for Colorado; 2012 Census of Agriculture (USDA); Bureau of Labor Statistics, Period Jan. 2014 – Feb. 2015

	Pueblo	Otero	Crowley	Bent	Prowers	Colorado
Irr. Ag acres	18,564	43,552	5,857	31,472	79,896	2,516,785
Total acres	1,528,832	808,256	504,960	968,060	1,049,920	66,385,432
Pct Ag	1.2	5.3	1.15	3.3	7.6	3.8

Information regarding the socio-economic characteristics of the place of temporary municipal use of water made available from operation of the Catlin Pilot Project is provided in d), above.

3. Description of the Alternative Water Transfer Method

   Please describe the type(s) of water transfers that will be examined/utilized (i.e., conceived transfer methods include, but are not limited to: 1) interruptible water supply agreements; 2) long-term agricultural land fallowing; 3) water banks; 4) reduced consumptive use through efficiency or cropping changes while maintaining historic return flows; and 5) purchase by end users with leaseback under defined conditions). In addition, please describe how the transferable consumptive use will be calculated and quantified, and how return flow patterns will be addressed/maintained.

The approved Catlin Pilot Project that will be supported by the Operations Program is a rotational land fallowing – municipal leasing project authorized by the CWCB as a part of the Rotational Fallowing Leasing Pilot Program established by HB 13-1248. A comprehensive description of the Catlin Pilot Project is included in the Project documents, available at: http://cwcb.state.co.us/water-management/water-projects-programs/Pages/Fallowing-LeasingPilotProjects.aspx.

4. Program/Project Eligibility

   Please describe how the proposed program/project meets each of the following eligibility requirements (please see Criteria and Guidelines for additional information regarding the alternative water transfer methods/strategies that qualify for funding). Note: If these requirements are addressed in other parts of the application you may simply reference the applicable section(s).

a) A description of how, if implemented, the proposed program/project will protect property and water rights.

Participation in the Catlin Pilot Project is voluntary, and each participating farm and municipality elected to participate. Since water leasing is voluntary, the current protections provided by Colorado law for property and water rights will apply. In addition, the Catlin Pilot Project will operate within existing law, including all requirements applicable to approved Rotational Fallowing Leasing Pilot Program as set out in C.R.S. § 37-60-115(8), the Criteria and Guidelines, and the terms and conditions of the Catlin Approval, and as such will not supersede, abrogate or otherwise impair the current system of water allocation within Colorado.

b) Identified group(s) of agricultural users that are or may be willing to transfer a portion of their water and identified entity(s), group(s) or area(s) where the transferred water could or would be put to the new use and a description of the new use.

The participating agricultural users in the Catlin Pilot Project are Bill Hancock, Ken Schweizer, Eric Hanagan, Diamond A West Farms, Diamond A East Farms, and Hirakata/K2 Farms. The water made available from operation of the Catlin Pilot Project will be leased to Fowler, Fountain and Security for municipal use, as described in detail in other portions of this application and in the Catlin Pilot Project Application.

c) The program/project must at a minimum conceptually describe the technical, institutional, and legal elements of the water transfer. Grant monies may be used to address one or more of these elements. If grant monies are not requested for all three elements, the grant applicant must describe how the applicant has or intends to address the elements, which are not included in the grant request, through other efforts.

The Operations Program is intended primarily to address technical elements associated with on-the-ground operation of the Catlin Pilot Project pursuant to the terms and conditions of the Pilot Project Approval. To date, many of the institutional and legal elements of the rotational fallowing –leasing have been investigated and studied through prior study (see item 1, above). The approval for the Catlin Pilot Project sets forth the terms and conditions within which the Catlin Pilot Project must be operated and the Operations Program will address the technical aspects of operation. Actual operations will likely result in the identification of additional technical, institutional, and legal elements that may need to be addressed in order to make rotational fallowing – leasing a viable tool for widespread use. In addition, the Operations Program will address a key institutional element for the success of ATMs –overcoming skepticism that ATMs can work and can be operated in a manner that is protective of other water rights. However, until a rotational fallowing –leasing program is actually implemented, it is impossible to foresee all elements that will need to be addressed.

d) If grant monies are proposed for use for legal assistance then the use of those funds shall be oriented toward advancing the knowledge of alternative agricultural water transfer methods and techniques; not for preparation of a specific water court case. The total requested funds for legal assistance shall not exceed 40 percent of the total grant request. In addition, grant monies proposed for use for legal assistance must be used to collaboratively address issues and concerns related to agricultural water transfer. Funds shall not be used to solely advance the cause of the project proponents.

Funds requested for legal assistance do not exceed this 40% cap and conform with this requirement. Legal assistance will primarily be provided to assist in preparing the annual reports to share information learned from pilot project operations, and also to address concerns that may arise from other interested parties with the Catlin Pilot Project through collaborative efforts. This may include minor modifications to pilot project operations and

/or terms and conditions.

e) A minimum of a 10 percent cash match of total project cost (past expenditures and "in kind" can not be counted toward the 10 percent match).

A 10% cash match is being provided. This does not include the Lower Ark District's extensive past expenditures in support of rotational fallowing – leasing generally or work performed in obtaining approval for the Catlin Pilot Project.

5. Program/Project Evaluation Criteria

The following grant evaluation criteria will be used by the CWCB to evaluate and make recommendations to fund, partially fund or not fund a grant application. The criteria are aimed at advancing alternative transfer methods from the literature and studies to actual on the ground projects/programs that provide reliable water supply and sustain key elements of the agricultural area from which the water is transferred. The applicant should fully address and explain in detail in the application how, and the extent to which, the proposed project/program meets each of the criteria. However, it should be noted that the project does not have to meet all of the criteria to be eligible to receive funding and the criteria below are not listed in any order of important or priority.

a. The proposed project/program builds upon the work of former alternative water transfer methods efforts and addresses key areas that have been identified. For more detailed information on this work, please refer to the draft report: *Alternative Agricultural Water Transfer Methods Grant Program Summary and Status Update*, November 2012.

The Operations Program directly builds upon prior ATM efforts undertaken by the Lower Ark District in the first two rounds of funding of the ATM Grant program (see section 1 on previous studies, above), as well as the Lower Ark District's ongoing efforts supported by its own budget.

b. The proposed project addresses one or more key recommendation(s) in the report: *Alternative Agricultural Water Transfer Methods Grant Program Summary and Status Update*, November 2012.

The Operations Program seeks to achieve precisely what the "Alternative Agricultural Water Transfer Methods Grant Program Summary and Status Update" (November 2012) contemplates for the next phase for the ATM Grant Program. As stated in that Summary and Status Update, "it is time to transition the ATM program to an application and integration phase that will more fully integrate the findings of the first two rounds of ATM grant funding to achieve the dual objectives of overcoming barriers to implementation and establishing realistically implementable ATM scenarios. Specifically, one of the identified goals for the Arkansas Basin in the Summary and Status Update, is to "advance the Super Ditch's efforts to implement pilot projects to lease water in 2013 using a temporary approval by the State Engineer under 73-92-308(5)." Given the legal challenges associated with using SWSP approval in 2012, the Lower Ark District and the Super Ditch instead worked in support of HB 13-1248, which created the CWCB's Fallowing-Leasing Pilot Project, which provides an alternative and longer term approval to operate fallowing – leasing pilot projects. As described above, the Catlin Pilot Project, which is to be supported by the Operations program, is the first project approved under HB 13-1248 and thus will fulfill this stated goal.

c. Preference will be given to projects that provide additional matching resources in the form of cash, past expenditures and in-kind contributions that are in addition to the required 10% cash match.

As discussed in greater detail in item 1, the Lower Ark District has dedicated years of time and hundreds of thousands of dollars to develop and support ATMs such as rotational fallowing-leasing, reflecting the Lower Ark District's commitment to determining whether rotational fallowing – leasing is a viable alternative to permanent agricultural transfers.

d. The proposed project/program has the ability/potential to produce a reliable water supply that can be administered by the State of Colorado, Division of Water Resources.

The Operations Program has not only the potential to produce a reliable water supply, but is already generating water for its municipal participants since it began operating on March 15, 2015. The terms and conditions for administration and operation of the Catlin Pilot Project are set forth in the Catlin Approval, which include administration by the Division 2 Engineer's Office. As stated in the State Engineer's January 16, 2015 Written Determination of the State Engineer's, HB 13-248 Catlin Fallowing Leasing Pilot Project, "I find that the operation and administration of the HB 13-1248 Catlin Fallowing Leasing Pilot Project will meet the standard of Section 37-60-115(8)(f) if operated according to the terms and conditions included in the Determination."

e. The proposed project/program produces information that is transferable and transparent to other users and other areas of the state (i.e., would provide an example "template" or roadmap to others wishing to explore alternate transfer methods).

Actual implementation of a multi-year rotational fallowing-leasing project will provide transferable and widely applicable lessons to other contexts and areas. For example, the Catlin Pilot Project was developed using the "Lease-Fallow Tool," an administrative tool developed by the Division of Water Resources with the support of the Arkansas Basin Roundtable, which addresses historic CU and return flows from a rotational fallowing and leasing program. If deemed successful, this tool will make the engineering aspects of future rotational fallowing – leasing projects streamlined. In addition, operation of the Catlin Pilot Project will provide significant information regarding the use of recharge in the Arkansas Basin, the appropriate accounting practices needed for project implementation, and will generate detailed information regarding project successes and challenges to inform development of future projects.

f. The proposed project/program addresses key water needs identified in SWSI 2010 or as identified in a basin's needs assessment.

As discussed in detail in item 1, above, the SWSI 2010 has estimated that by 2050, Colorado may lose 500,000 to 700,000 acres of current irrigated farmland. One of the potential drivers for that loss is transfers of agricultural water to municipal use to meet the future municipal water supply gap. One of the identified means to avoid permanent buy and dry in the SWSI 2010 is to identify and implement ATMs such as rotational fallowing – leasing. This Operations Program will directly support the Catlin Pilot Project, which is designed to and aimed at demonstrating the viability to rotational fallowing – leasing to address these key water needs.

g. The proposed project/program advances the preservation of high value agricultural lands. Value can be viewed as: the value of crops produced, the value the agriculture provides to the local community, and the value the agricultural area provides for open space and wildlife habitat.

The Lower Arkansas Valley depends on irrigated agriculture for its economic base. Preservation of irrigation in the Lower Arkansas Valley thus qualifies as "high value agricultural lands." Water leasing is intended to preserve such agriculture and prevent the permanent dry-up of those lands.

h. The proposed project/program addresses water quality, or provides other environmental benefits to rivers, streams and wetlands.

The Operations Program in support of the Catlin Pilot Project does not directly address water quality. However, by providing farmers with a viable alternative from selling their water and permanently drying up their irrigated lands, water will remain in the Arkansas River and its tributaries, thus providing a general benefit to rivers and streams and wetland area that may result from agricultural tailwater flows.

i. The proposed project/program increases our understanding of and quantifies program/project costs. This could include: institutional, legal, technical costs, and third party impacts.

The Operations Program is targeted at the costs associated with operating a rotational fallowing – leasing project. While it is anticipated that operating costs will decrease over time, it is important to actually get a project up and running to see how it operates and ascertain the financial costs associated with the project. One of the terms and conditions of the Pilot Project Approval is an annual report that requires disclosure of all costs associated with operating the pilot project.

Various categories of costs associated with rotational fallowing-leasing have been addressed through a variety of prior work undertaken by the District, such as the institutional costs for operating the Super Ditch Company; third party impacts; and front-end legal costs.

j. The proposed project/program does not adversely affect access to other sources of water (not subject to/participating in the program) where owners of these water rights may wish to pursue traditional transfer of their rights to other users.

All of the participating farmers voluntarily chose to participate in the Catlin Pilot Project. There is no requirement for participation and the Operations Program in support of the Catlin Pilot Project does not adversely affect other's access to water or others' traditional transfer of their water rights.

k. The proposed project/program provides a perpetual water supply for the new and/or alternate use and preserves agricultural production and/or helps sustain the area's economy from which the transfer is occurring.

As authorized by HB 13-1248, rotational fallowing – leasing pilot projects may only be approved for up to ten years. The Catlin Pilot Project complies with this requirement and therefore does not provide a perpetual supply of water. However, by demonstrating the viability of rotational fallowing – leasing, the Catlin Pilot Project and Operations Program moves us one step closer to making rotational fallowing leasing a viable long-term alternative water supply option in the future. As discussed in item 1 above, the goal of rotational fallowing-leasing is to help sustain the Lower Arkansas Valley's agricultural economy.

l. The quantity of water produced by the proposed project/program. Preference will be given to programs that can address larger water supply needs.

The Operations Program will support the municipal leasing of up to 500 acre-feet annually to three municipalities through operation of the Catlin Pilot Project. While 500 acre-feet may be somewhat modest in size, future pilot projects may be more ambitious in both size and scope if the Catlin Pilot Project is demonstrated to be successful at moving this volume of water.

m. Applicants are encouraged to develop projects demonstrating participation and/or support from a diverse set of stakeholders and interests.

One of the eligibility criteria for the Catlin Pilot Project is that the project demonstrates cooperation among various stakeholders. The Catlin Pilot Project involves three municipal entities, 6 farms, the Catlin Canal Company, potential trades with a well augmentation group, and potential future use of intermediate storage locations. In addition, through the application process, the Lower Ark District worked through concerns raised by a wide variety of interests – industrial users, other agricultural users, municipalities, the Division of Parks and Wildlife, and the State of Kansas to name a few. The Operations Program will reflect the culmination of the cooperation among these various stakeholders to date by implementing the Catlin Pilot Project pursuant to the terms and conditions of the Pilot Project Approval.

6. Statement of Work

Provide the proposed statement of work. On the following page there is an example format for the statement of work. You can use the example format or your own format, provided that comparable information is included. The statement of work should outline by task how the proposed program/project will be accomplished. It is important that the statement of work detail the specific steps, activities/procedures that will be followed to accomplish each individual task and the overall program/project and the specific products/deliverables that will be accomplished. The statement of work must include but not be limited to: task description, key personnel, budget, schedule and deliverables and the final report/project documentation upon completion of the water activity.

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement.

Please provide a detailed statement of work using the following template. Additional sections or modifications may be included as necessary. Please define all acronyms. If a grant is awarded an independent statement of work document will be required with correct page numbers.

A Statement of Work, including a budget and schedule, is attached to this application.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of

the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to the public and help promote the development of alternative agricultural transfer methods.

Additional Information – If you would like to add any additional pertinent information please feel free to do so here.

The above statements are true to the best of my knowledge:

Signature of Applicant: Leah Martinsson

Print Applicant's Name: Leah K. Martinsson for Jay Winner
Project Title: Rotational Fallowing – Leasing Catlin Canal Pilot Project Implementation and Operations Program

Return this application to:

Mr. Craig Godbout
Colorado Water Conservation Board
Water Supply Planning Section
1313 Sherman St., Room 721
Denver, CO 80203
craig.godbout@state.co.us