COLORADO WATER CONSERVATION BOARD

ALERNATIVE AGRICULTURAL WATER TRANSFER METHODS COMPETITIVE GRANT PROGRAM

GRANT APPLICATION FORM

Lower South Platte Water Cooperative Operational Development of Alternative Agriculture Water Transfer Methods	South Platte River
Program/Project Name	**River Basin Name**
$260,477	$29,500
Amount of Funds Requested	Amount of Matching Funds

*** The deadline for Grant Applications is November 26, 2010 for consideration at the January 2011CWCB meeting.** It is anticipated that there will be one round of application submittals, yet if funds are not exhausted, the Board will determine when it will consider the next round of grant applications at their January 2011 meeting.

* In completing the application you may attach additional sheets if the form does not provide adequate space. If additional sheets are attached please be sure to reference the section number of the application that you are addressing (i.e., A.1. etc.).

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 Todd Doherty of the Water Supply Planning Section (Colorado Water Conservation Board) for assistance, at (303) 866-3441 x3210 or email at todd.doherty@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 Todd 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 South Platte Water Conservancy District

Mailing address: 100 Broadway Plaza
Suite 12
Sterling, Colorado 80751

Taxpayer ID#: 84-0562269 Email address: jmfrank@lspwcd.org

Phone Numbers: Business: (970) 522-1378
Home: (970) 520-0628 (cell)
Fax: (970) 522-0848

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

Name: Joe Frank

Position/Title General Manager

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

N/A

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 South Platte Water Conservancy District (LSPWCD) is a public agency created in 1964 under the 1937 Water Conservancy Act (C.R.S. 37-45-101) for conserving, developing and stabilizing supplies of water for domestic, irrigation, power, manufacturing and other beneficial uses. For purposes of this application, the contact person is Joe Frank, General Manager, 100 Broadway Plaza Suite 12, Sterling, Colorado 80751, (970) 522-1378.

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.

LSPWCD currently owns, operates and manages infrastructure and water rights in Sedgwick County for augmentation within the area. LSPWCD also assists numerous water users in the District with augmentation, recharge and small-scale storage project development and technical assistance.

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.

LSPWCD has significant history and experience in grant administration, particularly in projects that involve water related activities and collaboration with other vested industry partners.

LSPWCD maintains a staff of three full time employees and contracts services with up to 3 additional individuals or entities depending on project need and intensity of workload. The staff also manages and administers various projects and responsibilities for: District 64 Reservoir Company, Inc., South Platte Water Related Activities Program, Inc., Ducks Unlimited and South Platte Lower River Group.

Most significantly, however, are the resources brought to this project by a wide variety of key collaborators in this proposal which are listed in Tables 1 and 2 below. Table 1 consists of organizations and individuals contributing current cash matching funds towards this project and grant application. Completed pledge forms for each entity listed in Table 1 are attached with this application in Appendix A. Table 2 lists various organizations which have contributed past cash funding, past in-kind and consulting services, and/or which are projected to contribute future funding, and future in-kind or consulting services towards the advancement of the proposed Lower South Platte Water Cooperative.

Table 1
Collaborating Partners Contributing Cash Matching Funds for
Lower South Platte Water Cooperative
Operational Development of Alternative Agriculture Water Transfer Methods

#	Organization	Pledge Amt.	Contact
1	Lower South Platte Water Conservancy District	$ 3,000.00	Joe Frank
2	Northern Colorado Water Conservancy District	$ 10,000.00	Eric Wilkinson
3	Ft. Morgan Reservoir and Irrigation Company	$ 500.00	Cindy Vassios
4	Jackson Lake Reservoir and Irrigation Company	$ 500.00	Cindy Vassios
5	Riverside Irrigation District	$ 500.00	Donald Snider
6	Riverside Land Company	$ 500.00	Donald Snider
7	Prewitt Reservoir Operating Committee	$ 1,000.00	Jim Yahn
8	North Sterling Irrigation District	$ 1,000.00	Jim Yahn
9	Logan Well Users, Inc.	$ 1,000.00	Kevin Vollmer
10	Sublette	$ 500.00	Rick Sandquist
11	Bijou Irrigation District	$ 500.00	Denice Wagner
12	Bijour Irrigation Company	$ 500.00	Denice Wagner
13	Lower Platte and Beaver Canal Company	$ 500.00	Allyn Wind
14	Upper Platte and Beaver Canal Company	$ 500.00	Steve Kalous
15	Morgan County Quality Water District	$ 500.00	Mark Kokes
16	Central Colorado Water Conservancy District	$ 3,000.00	Tom Cech
17	Deuel and Snyder Ditch Company	$ 500.00	Brad Kembel
18	Pioneer Irrigation Company	$ 500.00	Allyn Wind
19	Weldon Valley Ditch Company	$ 500.00	Rick Lorenzini
20	Lower Logan Well Users, Inc.	$ 500.00	Brad Stromberger
21	Putman Ditch Company	$ 250.00	Kent Kingsbury
22	H-R-R Farms Augmentaion	$ 250.00	Robert Geisick
23	Geisick Brothers Farms Augmentation	$ 250.00	Robert Geisick
24	Washington County	$ 500.00	David Foy
25	Weimer Brother Farms	$ 250.00	Mike Baessler
26	Baessler Farms	$ 250.00	Mike Baessler
27	Morgan County Farm Bureau	$ 400.00	Foy Chapin
28	Springdale Ditch Company	$ 250.00	Leon Fritzler
29	Lowline Ditch Company	$ 500.00	Steve Kaiser
30	Jensen & Teague Augmentation	$ 500.00	Gary Teague
31	22 Ranch Limited Partnership	$ 100.00	Tom Gill
	Total	**$ 29,500.00**	

Table 2
Collaborating Partners Contributing Past Cash Funding, In-Kind and Consulting Services
for
Lower South Platte Water Cooperative

Organization	Contact
Groves Farms	Mike Groves
Lower South Platte Water Conservancy District	Joe Frank
Lower South Platte Water Conservancy District	Ken Fritzler
North Sterling Irrigation District	Jim Yahn
Northern Colorado Water Conservancy District	John Rusch
Pioneer Irrigation Company	Allyn Wind
Vranesh and Raisch, LLP	Mike Shimmin
Brown and Caldwell	Matt Lindburg
Brown and Caldwell	Don Ament
Colorado Division of Water Resources	Brent Schantz
Colorado Division of Water Resources	Scott Cuthbertson
Ft. Morgan Reservoir and Irrigation Company	Cindy Vassios
Riverside Irrigation District	Don Chapman
Central Colorado Water Conservancy District	Randy Ray
Colorado Open Lands	Dieter Erdman
Colorado Water Resources Research Institute - CSU	James Pritchett
Harvey Economics	Ed Harvey
Colorado Corn Growers Association	Mark Sponsler

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

LSPWCD is a public agency created in 1964 and encompasses approximately 406,000 acres in portions of Morgan, Washington, Logan and Sedgwick counties. LSPWCD was originally formed for conserving, developing and stabilizing supplies of water for domestic, irrigation, power, manufacturing and other beneficial uses with an emphasis on design, construction and management of the Narrow's Dam and Reservoir.

Recent changes in water policy have caused the need for an adaptive mission for LSPWCD. The current mission statement for LSPWCD is: *to conserve, protect and enhance waters flowing in the South Platte River and its tributaries within the District boundaries; and to participate in water-related projects that will embody protection of water rights, thoughtful conservation, responsible growth, and beneficial water usage within the Lower South Platte Valley.*

LSPWCD is currently participating in various augmentation, recharge and small-scale storage projects. In addition, LSPWCD provides technical and water accounting assistance to water users within the District, actively participates in programs and projects associated with the Platte River Recovery Implementation Program, and participates in Basin-wide, State-wide and Federal water policy and planning on behalf of water users in the District.

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

LSPWCD has no TABOR limits on revenue.

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.

For nearly two years, a small group of water users and water professionals began to discuss the possibility of organizing a water co-op in the area of Water Districts 1 and 64 in the lower South Platte River, to create a mechanism for moving augmentation credits from plans with excess credits into plans with replacement deficits. Initial feasibility and analysis of excess augmentation water, exchange potential and potential efficiency improvements was completed as part of previous work conducted under this grant program through the Colorado Corn Growers Association, in partnership with Ducks Unlimited the City of Aurora, and the Lower South Platte Water Cooperative (the CCGA Team). This preliminary review of recent augmentation accounting indicated that there may be somewhere between 15,000 and 30,000 acre feet per year of excess credits from existing augmentation plans available, and recent river conditions indicate that this amount will likely increase over time.

Early on during discussions with various water users, it became very apparent that some groups were also interested in leasing percentages of excess augmentation water along with other potential available water (including direct flow and reservoir water rights and newly stored junior water rights) to

municipal, industrial and other end users. It appears that there are two types of groups looking to lease water: 1) those who are interested in leasing only excess augmentation credits locally to primarily agricultural end users and 2) those who would like to lease various types of water both locally to agriculture end users and to municipal and industrial end users (both locally and along the metropolitan front range).

During the months of January through April, 2010, steering committee members met with numerous ditch and reservoir companies, irrigation districts, augmentation groups and conservancy districts to discuss whether there was sufficient interest in organizing the Water Cooperative. The response was generally quite positive, and although there were questions and issues raised which need to be addressed, the steering committee became optimistic that the Water Cooperative could become a reality. Since responses to the Water Cooperative idea were positive and in order to research and address issues raised, the steering committee decided to prepare a work plan to outline a course of action. The primary goals of the work plan were to: 1) work on an organizational structure for the Water Cooperative, 2) develop a detailed draft operational plan, and 3) request necessary funding to accomplish this work.

Work under a recently approved grant thru the Water Supply Reserve Account titled *Lower South Platte Water Cooperative Organizational Analysis* focuses primarily on an organizational structure for the Water Cooperative while work under this grant will focus primarily on developing an operations plan for the Water Cooperative. This project will analyze and address: 1) technical issues such as identifying, quantifying and determining reliability of long term water supplies, (from alternative transfer methods, excess augmentation water and newly developed water rights) as well as implementing accounting and data management needs in order to exchange, retime and store such water on a daily basis; 2) legal issues such addressing third party and internal water rights and injury concerns; and 3) economic issues such as individual farmer and individual organizational financial assessment for potential Water Cooperative members as well as financial considerations for a new water marketing / leasing organization such as the Water Cooperative. In addition, substantially more technical, institutional, legal and economic analysis will be conducted as part of this project to develop an operations plan and assist in detailing an organizational structure for a potential new organization (See Statement of Work).

Finally, it should be noted that feedback from the initial round of meetings with water users made it clear that the success of the Water Cooperative will be directly related to two key issues: 1) the organizational structure chosen to govern and operate the Water Cooperative must be fair, open and transparent; and 2) the operational plan for the Water Cooperative must be able to function within the existing system of water right decrees, and be done so that no injury to existing water rights occurs. All work done in analyzing and developing a potential Water Cooperative will strive to incorporate both of these key issues listed above.

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.

In general the study / service area of agricultural water rights for this project are within Water Districts 1 and 64 of Division 1 (South Platte River Basin). However, potential municipal and industrial end users of water are located within most areas of the South Platte Basin below Chatfield Reservoir. In addition, future agricultural, environmental and recreational water rights owners and end users of water may also be located in all areas of the South Platte Basin below Chatfield Reservoir.

The initial and current focus of the Lower South Platte Water Cooperative is to analyze specific agricultural water rights within Districts 1 and 64 (Kersey to Colorado-Nebraska state line) in order to lease and retime a portion of this water for agricultural, municipal and industrial water users within Districts 1 and 64 and a portion of this water for demands further upstream along the front range.

The focal study area for this project (Districts 1 and 64) include portions of Weld, Morgan, Washington, Logan and Sedgwick counties including the towns of Ft. Morgan, Brush, Sterling and Julesburg in addition to numerous smaller towns. The topography of the study area generally includes a flat valley floodplain with areas of benched irrigated lands served by direct flow irrigation ditches and off stream reservoirs filled by additional ditch systems. The alluvial aquifer of the South Platte River basin is in close hydraulic connection with the surface water of the river. The South Platte River acts as a drain, collecting return flows both above ground and underground from surface irrigation, natural precipitation, and man-made groundwater recharge facilities. In addition to surface irrigation, numerous high capacity wells pump water for irrigation, municipal and industrial uses within the South Platte alluvial aquifer both as sole and supplemental sources of water.

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.

As mentioned above, the general study / service area for this project includes agricultural water rights within Water Districts 1 and 64 of Division 1 (South Platte River Basin). A general overall map with irrigated acres of Water Districts 1 and 64 are attached with this application as Appendix B.

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.

Based on land use data from the State of Colorado's South Platte Decision Support System, the 2005 total irrigated acreage and crop types in Water Districts 1 and 64 initially analyzed as part of this project are included in Table 3 and Table 4. Crop yields and total average annual water diversions were not readily available but will be analyzed on an overall and system wide basis as part of this project.

Table 3
2005 Irrigated Acres

District	Acres
1	261,073
64	140,079
Grand Total	**401,152**

Table 4
2005 Crop Types

Row Labels	Sum of ACRES
ALFALFA	134,053
CORN	174,016
DRY_BEANS	12,557
GRASS_PASTURE	30,043
SMALL_GRAINS	29,728
SOD_FARM	2,826
SUGAR_BEETS	11,178
VEGETABLES	6,750
Grand Total	**401,152**

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.

At this time, specific information regarding the identity and location of new water use(s) is unknown. However, multiple potential end users have been identified and have shown interest in participating as a part of the ongoing feasibility efforts of this overall project. These potential end users include but are not limited to: 1) existing local agricultural water users in Water District 1 and 64, 2) existing (and potentially new) local municipal and industrial water users in Water Districts 1 and 64, 3) existing municipal and industrial within other South Platte Water Districts along the metropolitan front range, 4) existing agricultural water users within other South Platte Water Districts, and 5) environmental and recreational water users in Water Districts 1 and 64. This project will aim to further identify potential end users, analyze and quantify demands, and assess reliability of supplying various water demands with water sources in Water Districts 1 and 64.

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

The socio-economic characteristics in Water Districts 1 and 64 primarily consist of small rural communities with agriculture (crop production, livestock, dairy, greenhouses, etc.) serving as the base for the local economies. Mid-sized municipalities such as Sterling and Ft. Morgan (which each have an approximate population of 12,000 to 13,000 residents) are located within the project area. In addition numerous smaller towns are located in Water Districts 1 and 64. Other commerce and industry exists within the project area, including but not limited to: coal fired and wind powered electricity generation, ethanol production, State of Colorado correctional facilities, and local construction. In addition, amenities and enhancements such as river and floodplain lands, wetlands, reservoirs, streams, recharge facilities and upland habitat within Weld, Morgan, Logan, Washington and Sedgwick counties provide multiple benefits and opportunities for hunting, fishing, boating, camping, and wildlife viewing in addition to other environmental and recreational values.

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.

Multiple types of water transfers will be examined and potentially utilized as part of this project. New and existing water sources such as excess augmentation water and newly developed water rights will be examined in combination with alternative water transfer methods such as interruptible supply agreements, long-term agricultural land fallowing, water banks and deficit irrigation practices. The quantities of water, percent mixes of water from each source, and long-term reliability are not fully known at this time. However, this project will calculate and analyze answers to these unknowns and will develop options based on dry, average and wet year scenarios. An overall analysis of existing and potential new water rights will determine a range of transferable consumptive use within Water Districts 1 and 64 based on historic diversions, cropping patterns, hydrology, water rights and current water law. It should be noted that neither a detailed ditch-wide or on-farm consumptive use analysis will be performed as part of this project. Instead, a general overall assessment of water rights in Water Districts 1 and 64 will be performed in order to determine a feasible range of transferrable consumptive use in the region. Individual water rights and systems would be required to analyze and determine exact transferrable consumptive use water as part of a change of use to their existing water rights, should individuals and/or systems wish lease such water via a water marketing / leasing organization such as the Water Cooperative. However, the Water Cooperative could play a role in assisting with such changes of water rights in the future but will not do so as part of this grant funded project. Finally, maintenance of return flows is essential to all water users in the lower South Platte basin, including both potential members of the Water Cooperative and third parties. Operations associated with the Water Cooperative will strive to maintain such return flows. This project will analyze overall needs to do so such as: 1) improvements to accounting and data management for daily operations, 2) improvements and utilization of existing infrastructure to retime and store water needed to maintain return flows, 3) identifying and assessing new infrastructure needs in order to retime and store water needed to maintain return flows, and 4) identifying and analyzing legal requirements to protect water users via return flow maintenance (See Statement of Work).

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.

Substantial legal and engineering work will be done to analyze potential water rights issues with both third party water rights holders in the South Platte Basin and potential members of a new Water Cooperative organization. Existing decree terms and conditions as well as existing water law will be followed and careful consideration for potential future junior water rights filings, exchange filings and change of use filings will be taken to avoid injury to existing water rights.

In addition, this project and the potential Water Cooperative organization remain committed to making such an organization and leasing program strictly voluntary with open participation, making it a separate option to the purchase and dry-up of irrigated farm ground. Irrigators will continue to have the ability to sell their water rights, hereby protecting their property rights into the future.

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.

Table 1 in Part A, Section 4 (c) above lists entities that may be willing to lease / transfer a portion of their water as well as entities that could use the transferred water. In many cases the entities listed could both lease / transfer water and receive water depending on a variety of conditions including but not limited to: hydrologic, financial /economic, physical location, infrastructure availability and other conditions. This study in combination with the *Lower South Platte Water Cooperative Organizational Analysis* funded by a Water Supply Reserve Account grant also aims to analyze and determine both potential entities to lease water and potential entities to use transferred water. This project will study both local entities within Water Districts 1 and 64 and end users along the front range of Colorado within the South Platte River basin.

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.

Technical, institutional and legal elements of alternative methods of agricultural water transfers will all be analyzed and studied as part of this Operational Development of the Lower South Platte Water Cooperative. All three of these elements are more thoroughly described in Part B, Section 1

and the attached Statement and Scope of Work.

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.

A portion (24%) of the grant monies in this application are proposed for legal assistance and do not exceed 40% of the total grant request (See attached Budget). These legal funds will specifically be oriented towards advancing the knowledge of alternative agricultural water transfer methods and techniques and to collaboratively address issues and concerns related to these transfers. Legal funds will not be used for preparation of a specific water court case or to solely advance the cause of the project proponents (See attached Statement and Scope of Work).

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 minimum of 10% cash match of the total project cost is committed for this project (See Table 1 in Part A, Section 4 (c) and attached Budget).

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 <u>each</u> 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 (e.g. reduced transaction costs, presumptive consumptive use, and verification/administration issues). For more detailed information on this work, please refer to the draft technical memorandum, "*Alternative Agricultural Transfer Methods Grant Program Summary of Key Issues Evaluation," July 16, 2010.*

This proposed project builds off of various portions of the *Development of Practical Alternative Agricultural Water Transfers Measures for Preservation of Colorado Irrigated Agriculture* grant received by the Colorado Corn Growers Association and studies the specific identified key areas of reducing transaction costs and

verification and administration issues (See attached Statement and Scope of Work).

b) 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.

Total cash match for this grant is $29,500 which equals 10.2% of the total grant work of $289,977 ($260,777 from CWCB). In addition, previous cash and in-kind contributions within three months of this applications total $10,450, and current in-kind services equal $12,409 (See attached Budget).

c) 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.

Preliminary results of the excess augmentation accretions and exchange analysis from the *Development of Practical Alternative Agricultural Water Transfers Measures for Preservation of Colorado Irrigated Agriculture* grant show approximately 15,000 to 30,000 ac-ft of excess augmentation water during certain times of the year that may be available for lease, retiming, or exchange. This project will further analyze this potential water supply listed above and will analyze potential amounts and locations from senior direct flow and reservoir water supplies. In addition, the capturing and retiming of new junior water rights to supplement and enhance existing water supplies will be analyzed as part of this project. Also, note that personnel from the Colorado Division of Water Resources (See Table 2 in Part A, Section 4 c) have been involved with the Water Cooperative steering committee and are supportive of the concept of this project at this time.

d) 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).

All information produced from this project would be transferrable and transparent to the other water users in the State. The information could be used as a template for interested parties and will be analyzed such that either a large or small cooperative effort could be organized to implement alternative transfer methods.

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

The water activities associated with this project primarily help address agricultural, municipal and industrial needs within both the South Platte Basin Roundtable area and the Metro Roundtable area. In addition, environmental and recreational enhancements will be developed thru water activities associated with this project. For example, Ducks Unlimited has been very active in the South Platte River basin developing wetlands that have a dual purpose of habitat enhancement and alluvial aquifer recharge. These types of facilities could be very useful to the Water Cooperative in retiming

and managing water. It is anticipated that mutually beneficial projects could be developed with Ducks Unlimited or other conservation groups for habitat enhancement, recreation (i.e. water fowl hunting), and water management.

This project will be done is combination with the *Lower South Platte Water Cooperative Organizational Analysis* funded by a Water Supply Reserve Account and approved by both the South Platte Basin Roundtable and the Colorado Water Conservation Board.

f) 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.

While this project does not aim to specifically preserve high value agricultural lands it does analyze costs, benefits and risks to agricultural water users. Members of the Lower South Platte Water Cooperative Steering Committee believe that irrigated farmers within the South Platte Basin are excellent stewards of the land and that by presenting them with risk analysis, lease options and other information they will make decisions in their best interest which often involves the preservation of high value agricultural land. In addition, the protection of existing water rights and return flow patterns of the South Platte River valley may lend itself to provide additional areas of open space and wildlife habitat through the creation of wetlands, recharge basins and small storage reservoirs.

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

This project does not specifically address water quality issues in a direct manner. However indirectly, the use of exchanges into recharge basins and upstream storage coupled with the additional retiming of excess water lower on the river during higher flows will help with potential water quality issues. Additional areas of open space, wetlands and wildlife habitat may also be created as described above in section 5 (f) which add both environmental and water quality benefits.

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

A large component of this project is to financially analyze the costs of a new Water Cooperative organization which would include institutional, legal, technical, and third party costs / impacts. In addition, individual and water users' organization costs, benefits and risks will be analyzed as part of this project (See Task 7 of the attached Statement and Scope of Work).

i) 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.

The proposed project / program aims to provide options to both water rights owners and potential end users of water in the form of alternative agriculture water transfers (See Statement and Scope of Work). The proposed project / program if implemented will be strictly voluntary allowing others to pursue traditional transfers of their rights if they so choose. In addition, the proposed project / program will only rely on sources of water committed to the Water Cooperative and will maintain historic return flow patterns so as to not adversely affect other sources of water in the basin.

j) 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.

The proposed project / program aims to provide a long term water supply for new and existing users that have inadequate water supplies. A large component of this project is to assess long term viability of water for new and existing water uses from a potential Water Cooperative organization (See Statement and Scope of Work). Length of water supply commitments, along with water reliability, accessibility and potential water yield improvements will be analyzed as part of this project. A large goal of the potential Water Cooperative organization is to provide long term alternatives to traditional water transfer methods for local agricultural producers. If successful, the Water Cooperative organization may help in sustaining local / rural economies in Water Districts 1 and 64.

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

See Part B, Section 5 c).

In addition, the overall water produced by the proposed Water Cooperative to address water supply needs will be analyzed as part of this project and ultimately will remain unknown and ever changing as details of the Water Cooperative become memorialized and potential agreements become final. However, with such a large geographic area and portfolio of water rights potentially interested in participating, the ability of a potential Water Cooperative organization to supply larger quantities of long term water supply to various entities is very likely.

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.

Statement of Work

WATER ACTIVITY NAME - Lower South Platte Water Cooperative, Operational Development of Alternative Agriculture Water Transfer Methods

GRANT RECIPIENT – Lower South Platte Water Conservancy District

FUNDING SOURCE - The Alternative Agricultural Water Transfer Methods Competitive Grant Program

INTRODUCTION AND BACKGROUND
Provide a brief description of the project. (Please limit to no more than 200 words; this will be used to inform reviewers and the public about your proposal)

The Colorado Corn Growers Association, in partnership with Ducks Unlimited the City of Aurora, and the Lower South Platte Water Cooperative steering committee (the CCGA Team), identified several impediments to conducting alternative agricultural water transfers during previous work conducted under this grant program. One of the impediments was the lack of a marketing framework for water that could be made available for transfer using alternative means. A new organization such as the Water Cooperative has great potential in providing this marketing mechanism. Previous work conducted by the CCGA team also explored the potential to exchange water in key areas where the Cooperative may initially operate. Results of the exchange analysis showed sufficient exchange capacity in certain reaches of the South Platte River to warrant additional research into potential organizational structures and operational plans for the Water Cooperative.

The Water Cooperative recently initiated a project to research potential organizational structures and to lay some concepts for an operational plan via the *Lower South Platte Water Cooperative Organizational Analysis* funded thru the Water Supply Reserve Account. The work to be funded under this Alternative Agricultural Water Transfer Methods Grant will continue this work and will focus on the development and refinement of the operational plan.

OBJECTIVES

List the objectives of the project

The objectives of this project are as follows:

- Develop an operational plan that identifies water supplies (including direct flow and/or storage water transferred through alternative means, excess recharge credits, new junior water rights, etc.), demands, and the means and infrastructure needed to provide water when and where it is needed.
  - Identify existing and potential infrastructure that could help increase the ability of the Cooperative to match supplies with demands.
- Obtain feedback from stakeholders on the operational plan.
- Identify specific data, water measurement, and accounting needs and work with potential Cooperative members on developing data transfer methods.
- Gain a general understanding of options for funding the operation of the Cooperative.

TASKS

Provide a detailed description of each task using the following format

TASK 1 – Develop Operational Plan

Description of Task

Under this task, a long term operational plan will be developed. The long term operational plan will serve as a strategy and planning document for the Cooperative. The operational plan will combine estimates of supply quantity, location, and reliability with estimates of demand quantity, location, and reliability requirements. Based on the potential portfolio of water rights to be included in the Cooperative, strategies will be developed for reliably providing water to potential users (or customers).

This task builds upon work that will be conducted under the Water Supply Reserve Account (WSRA) grant project that is currently being initiated. In the WSRA grant project, supplies and demands are going to be quantified. In this project the reliability of water supplies and the reliability requirements on the demand side will be assessed. In addition, the ability to meet demands by exchanging water and usage of existing infrastructure (storage facilities, pumps/pipelines, recharge facilities, etc.) will be assessed. Finally, strategies for enhancing the reliability of the Cooperative's overall water supply portfolio will be developed. Strategies may include prioritizing different types of water supplies for potential inclusion in the Cooperative, proposed new infrastructure to help enhance reliability (i.e. new storage or recharge facilities), etc.

Method/Procedure

Specific work item to be conducted and proposed methods to be used under this task are described below.

1. Analyze the reliability of sources of water that might be included in the Cooperative.

   This will involve a statistical analysis of the various types of water that could be marketed through Cooperative. Water sources will include direct flow rights made available via alternative transfer, lease, or sale; excess recharge accretions; storage rights; etc. Potential sources in Districts 1 and 64 will be assessed. An estimate of the amount and frequency of water availability will be made for the different types of water that might be included in the Cooperative. The resulting reliability assessments will include considerations of both wet/dry/normal year and seasonal availability.

   Spatial considerations of supply quantity and reliability will be assessed by incorporating the results of the statistical analysis into a GIS layer(s). The GIS layer(s) will be used to assess and graphically display locations along the South Platte River where supply is plentiful or not plentiful and reliable or not reliable.

   In addition, water law issues associated with various water sources will be assessed. Additional work needed to address potential problems will be identified.

2. Assess the need for supply reliability, timing, and quantity from the demand side.

   Meetings with potential cooperative members or customers will be a key component of this assessment. Note that several meetings will be also carried out under the WSRA grant. The purpose of the meetings will be to gain an understanding of specific amounts, locations, and reliability requirements of water demands. Water demand amounts and reliability requirements will be framed in a similar way as supplies (i.e. wet/dry/normal year and seasonal demands).

   The locations, amounts, and reliability requirements of demands will be mapped in GIS. The resulting GIS layer(s) will be used to assess the locations and amounts of demands and to compare this information with the location of supplies. The supply and demand GIS layers will important tools for developing strategies to move/deliver water.

3. Assess ability to move water from sources of supply to demands.

   The CCGA Team, in association with members of the Cooperative Steering Committee, developed a spreadsheet-based daily exchange/point flow analysis tool in a previous Alternative Agricultural Water Transfer Methods Grant. This tool will be used to assess the ability to exchange water between locations of supply and demand.

   The GIS layers describing location and reliability of supplies and locations and reliability requirements of demands will be used to develop inputs or scenarios for potential exchanges that will be assessed using the exchange/point flow tool.

Existing infrastructure for enhancing exchange/delivery identified in Task 5 of this project and additional new infrastructure identified in the WSRA grant project will be considered in this assessment as well. New infrastructure identified in the WSRA grant project will serve to enhance exchange and delivery in locations where there is inadequate existing infrastructure available.

Potential costs for new infrastructure will be estimated. It is assumed that cost for recently constructed existing infrastructure will be the primary source of information regarding potential construction costs.

Assessing and enhancing the ability to exchange or move water sources within Districts 1 and 64 to demands in Districts 1 and 64 will be further analyzed. The CCGA Team conducted an exchange feasibility analysis that focused on exchanging water from the lower parts of District 1/upper parts of District 64 to the upper parts of District 1. The analysis to be conducted in this project will include previous work and will not only enhance the previous analysis but will also extend the detailed assessment of exchange to the whole of District 64.

4. Based on results of the above analyses, assess overall reliability in meeting demands

   Using the analyses described above, the overall reliability in meeting demands will be assessed. Reliability in meeting demands will be described using statistical terms and will be relative to different geographic areas of the South Platte River. The results of this analysis will be summarized in a technical memorandum and descriptive maps. These materials will be used for presentation of results to the Steering Committee and to potential Cooperative members/customers and other stakeholders.

5. Assess times/locations when reliability or needed supply isn't adequate.

   It is likely that the analyses described above will identify times and locations when/where the reliability of supplies or exchange capacity is not adequate to meet the demand requirements of potential customers. These times and locations of inadequate supply will be assessed and mapped in GIS. Strategies to increase supply reliability will be developed. These strategies may include the following:
   - Identification of additional, more reliable sources of supply to be acquired or marketed through the cooperative.
   - Development of recharge sites to retime water when supply exceeds demand
   - Development of storage sites to retime water when supply exceeds demand

6. Present draft results to Steering Committee.

   The results of the above analyses will be presented to the Steering Committee for their review and comment. Note that this task is a formal presentation of draft results. Informal meetings with the Steering Committee will be conducted during the analyses described above.

7. Incorporate Steering Committee comments into analysis.

   Comments from the Steering Committee will be incorporated into the analysis. It is

anticipated that comments may include input on proposed strategies for enhancing reliability, format of information to be presented to customers or other stakeholders, etc.

8. Develop long term operational plan document.

   A draft document (including descriptive maps) will be written to describe the operational plan. The operational plan will describe wet/dry/normal year strategies for moving water between supplies and demands based on the reliability and location of supplies and the reliability requirements and locations of demands. The plan will also include strategies for long term enhancement to exchange and water delivery via the installation of new infrastructure. An internal review will be conducted on the draft operational plan prior to submittal to the Steering Committee. The review will include QA/QC of calculations, language, and strategies.

   In addition, information and strategies regarding protection of senior water rights and for addressing third party, downstream impacts will be included. Meetings with stakeholders (Task 2) will be valuable for understanding and addressing concerns from senior water right holders and third party, downstream impacts.

   Legal counsel will be consulted to identify potential legal issues surrounding the operational plan. Ways to mitigate potential legal issues will be identified and incorporated or described in the operational plan. Note that work conducted under Task 1 will be coordinated with legal counsel throughout.

9. Send draft operational plan document to Steering Committee.

   The draft operational plan document will be reviewed with the Steering Committee. Comments made by the Steering Committee will be incorporated into the final operational plan document.

10. Alterations to operational plan and document may need to be made based on feedback from stakeholders (see Task 2).

    Depending on feedback from potential Cooperative members, customers, and other stakeholders, changes may need to be made to the operational plan. Potential changes to the operational plan based on feedback will be coordinated and approved by the Steering Committee.

11. Finalize the operational plan.

    The operational plan will be finalized. Hard and electronic copies of the plan will be provided to Steering Committee members and the CWCB. Electronic copies of the plan will be available to potential Cooperative members, customers, and other stakeholders upon request.

Deliverable

Deliverables associated with this task are as follows:

- Spreadsheets with statistical analyses and analyses of exchange.
- GIS layers and maps associated with analyses described above.
- Draft operational plan.
- Final operational plan in hardcopy and electronic format.

TASK 2 – Meetings with Stakeholders

Description of Task

Meetings with potential Cooperative participants, customers, and other stakeholders will be conducted to describe the draft operational plan. Stakeholders include potential Cooperative participants and outside parties such as municipalities, ditches, or water districts that may be concerned about potential impacts to their water rights. It is anticipated that these meetings will address both technical and legal issues/concerns about the draft operational plan.

Method/Procedure

Specific work item to be conducted and proposed methods to be used under this task are described below.

1. Presentation materials (i.e. handouts, display boards, etc.) will be developed.
2. Meeting times and places will be identified. Potential participants will be contacted and invited.
3. Meetings with stakeholders (assume 8 meetings).
4. Meeting notes will be developed.

Deliverable

Deliverables associated with this task are as follows:

- Handouts and other meeting materials
- Meeting notes

TASK 3 – Data and Measurement Needs

Description of Task

Under this grant, the project team will expand upon the data and measurement needs identified in the work to be conducted in the WSRA grant. The WSRA grant work includes a general identification of data and measurement needs for the operation of the Cooperative. Under this grant, additional detail will be

developed regarding these needs. For example, if the need for a gaging station was identified under the WSRA grant, the project team will identify costs, specific location, etc. for that gaging station under this grant. In addition, the team will work with potential cooperative participants to set up a means to exchange data that will serve as inputs into accounting.

Feedback on data/measurement needs will be sought from potential Cooperative members, customers, and other stakeholders during Task 2. Potential changes to data and measurement needs based on feedback will be coordinated and approved by the Steering Committee.

Method/Procedure

Specific work item to be conducted and proposed methods to be used under this task are described below.

1. The project team will work with Water Commissioners to identify specific measurement locations and technologies.
2. Construction costs for measurement structures will be estimated. This task may include field visits to various sites.
3. The project team will work with ditch companies who are interested in participating in the cooperative regarding their water measurement needs.
4. The project team will also work with augmentation groups to set up data exchange needs.
5. A draft technical memorandum describing data and measurement needs will be written. An internal review of the draft technical will be performed
6. The draft technical memorandum will be delivered to the Steering Committee. A meeting will be conducted with the Steering Committee to review the data and measurement requirements in the draft technical memorandum. Additional data and measurement needs identified during interactions with potential Cooperative members, customers, or other stakeholders will be discussed with the Steering Committee. Steering Committee approval will be sought for the inclusion of these additional needs.
7. Steering Committee comments will be incorporated into the final technical memorandum. The technical memorandum will be incorporated into the final project report.

Deliverable

Deliverables associated with this task are as follows:

- Draft and final technical memorandums.

TASK 4 – Accounting

Description of Task

This task will include the development of water accounting for transactions facilitated by the Cooperative. It is anticipated that accounting needs may vary based on the results of the operational plan and based on some of the organizational considerations developed under the WSRA grant.

Feedback on accounting needs will be sought from potential Cooperative members, customers, and other stakeholders during Task 2. Potential changes to accounting needs based on feedback will be coordinated and approved by the Steering Committee.

Method/Procedure

Specific work item to be conducted and proposed methods to be used under this task are described below.

1. Draft accounting spreadsheets will be developed. The results of the data and measurements needs task will be considered in developing the draft accounting spreadsheets.
2. The draft accounting spreadsheets will be discussed with the Steering Committee. Comments from the Steering Committee will be incorporated into the accounting. In addition, legal counsel will review and comment on the accounting.
3. The project team will meet with DWR staff to review the accounting spreadsheets. Comments from DWR staff will be incorporated into the accounting.
4. Additional accounting needs identified during interactions with potential Cooperative members, customers, or other stakeholders will be discussed with the Steering Committee. Steering Committee approval will be sought for the inclusion of these additional needs.
5. A draft technical memorandum will be written to describe the accounting needs and draft spreadsheets. An internal review will be conducted on the draft technical memorandum.
6. The draft technical memorandum will be finalized. The final technical memorandum will be incorporated into the final report.

Deliverable

Deliverables associated with this task are as follows:

- Draft accounting spreadsheets.
- Draft and final technical memorandums.

TASK 5 – Inventory of Existing Infrastructure

Description of Task

Existing infrastructure could be very useful in enhancing the reliability of exchange or delivery of water to potential customers. For example, if the Cooperative could lease space in an existing reservoir, water could be stored and delivered when needed to a potential customer. Existing recharge facilities could be used to retime excess recharge accretions so that they can be exchanged when exchange capacity is greater or when water is needed by customers. An inventory of potentially useful, existing infrastructure will be developed under this task. The results of this task will be considered in the development of the operational plan (Task 1).

Method/Procedure

Specific work item to be conducted and proposed methods to be used under this task are described below.

1. Identify and map infrastructure

   The Steering Committee and project team consists of water users, water managers, and technical staff with extensive knowledge of existing infrastructure in Districts 1 and 64. The Steering Committee and project team members will meet to discuss and develop a draft map of infrastructure that could potentially be used to enhance the reliability of exchange and water delivery. A GIS layer will be created that includes locations and categories of existing infrastructure.

2. Research existing infrastructure

   The project team will research the identified infrastructure to develop a general understanding of infrastructure capacities, diversion points into infrastructure, locations where infrastructure returns water to the river, approximate availability of space in infrastructure, etc. In addition, legal counsel will be consulted to research legal issues associated with the use of existing infrastructure. Potential benefits and costs of using existing infrastructure will be identified.

   Also, information describing construction costs for recently constructed existing infrastructure will be collected. This information will be used as a basis for estimating potential costs for constructing new infrastructure.

3. Incorporate results into the operational plan

   Results of the analysis will be incorporated into the operational plan.

Deliverable

Deliverables associated with this task are as follows:

- GIS layer with the location and other descriptive information on existing infrastructure.

TASK 6 – Assessment of Costs and Methods of Paying for Operation of the Cooperative

Description of Task

In this task, other organizations similar to the Cooperative will be researched to obtain a general understanding of the costs to operate an organization like the Cooperative. It is anticipated the organizations such as the Super Ditch or water banks will be contacted and researched to develop this understanding. In addition, methods of raising capital to cover operational costs will be researched. From this research, cost and fee structure scenarios will be developed. It is anticipated that these scenarios will be useful in discussions with potential Cooperative members in assessing potential options for organizational structures for the Cooperative. It is also anticipated that this task will compliment the work that is being conducted under the WSRA grant, in which potential organizational structures for the Cooperative will be developed and discussed with potential Cooperative members.

Feedback on costs and methods of raising operational capital will be sought from potential Cooperative members and customers during Task 2. This feedback will help in formulating scenarios for paying for the operation of the Cooperative that will be acceptable to members and customers.

Method/Procedure

Specific work item to be conducted and proposed methods to be used under this task are described below.

1. Interviews will be conducted with Super Ditch staff and others to obtain information on operational costs and methods of raising capital. Other organizations, such as water banks, will be contacted or interviewed as well. In addition, available literature on this subject will be obtained and reviewed.
2. Results of the interviews and research will be used to develop draft scenarios describing operational costs and options for raising capital to cover operational costs.
3. The draft scenarios will be discussed with the Steering Committee. Comments made by the Steering Committee will be incorporated into the scenarios.
4. A technical memorandum with an executive summary will be written to describe the research. It is anticipated that the executive summary will be a useful tool for describing the scenarios to potential Cooperative members and for soliciting feedback from potential members. An internal review of the draft technical memorandum will be conducted, and the memorandum will be finalized. The technical memorandum will be incorporated into the final report.

Deliverable

Deliverables associated with this task are as follows:

- Technical memorandum describing research results.

TASK 7 – Economic Considerations

Description of Task

The economic component of this project will focus on the economic attractiveness of agricultural transfers among ditch companies along the lower South Platte River. The subtasks envisioned will help agricultural producers understand how agricultural water transfers can, under certain circumstances, be to their financial benefit and given that financial benefit, how the Cooperative can facilitate and otherwise participate in those transfers to its mutual interests.

Method/Procedure

Specific work item to be conducted and proposed methods to be used under this task are described below.

1. Meet with other Alternative Agricultural Water Transfer Grant recipients (specifically, the work under the Case Study analysis in Subtasks 3A and 3B of the Colorado State University grant proposal led by Dr. James Pritchett of Colorado State University, should that project be funded) to coordinate activities with respect to economic evaluations. The intent of the meeting will be to identify ways that work under the various grant projects can be best carried out to maximize the information obtained from the projects. For example, the economic evaluations and work with ditch companies under this grant could be conducted with the same ditch companies with whom Dr. Pritchett plans to work. The information from individual ditch company members obtained from this grant could be useful for Dr. Pritchett's purposes in developing ditchwide strategies for reducing agricultural producers' costs in conducting alternative transfers.
2. Working with the Cooperative Steering Committee, Harvey Economics (HE) will serve as a co-lead of a workshop with representatives from at least two ditch companies to discuss the utility of the AgLET tool and how the individual agricultural producers can use AgLET to evaluate the attractiveness of various agricultural transfers. Working with the leadership of the Steering Committee, HE will explain the AgLET tool, demonstrate how it works, and encourage the attendees to calculate the financial implications of agricultural transfers upon their individual operations. Subsequent to this workshop, leadership representatives of the Steering Committee will respond to individual producers' questions to help them work through the AgLET tool to generate transfer prices which would make an alterative transfer possible for each producer.
3. Once the agricultural producers have completed the AgLET exercise, they will be encouraged to send their results confidentially to HE for compilation and aggregation of the results. In other words, the results of the whole ditch system will be aggregated to avoid any possible identification with a single producer. In its aggregate form, this information will provide a picture of the economic circumstances which must exist for agricultural producers to provide enough water under a given agricultural transfer program.

   The Steering Committee and other project team members, will identify the water demands from municipal, industrial or other sectors, and price ranges in which they might be interested in seeking an agricultural transfer. Putting this information together in a generalized sense (not contractual

detail) will indicate the types of deals that are possible and need for the Cooperative to facilitate a transfer.

4. Once the economic information from the producers is compared with the economic information from those seeking additional supply, HE will determine whether an attractive economic circumstance exists for future transfers. Assuming the economic environment for transfers will be attractive, HE will take this information and will identify various financing mechanisms, or avenues of participation, where the District could facilitate such transfers, and help support its own operation. The identification of a role and revenue stream for the District will factor into its own organization planning.

Deliverable

Deliverables associated with this task are as follows:

- Tables and graphs summarizing the results of the analyses. This information, along with a descriptive narrative, will be incorporated into the final report.

TASK 8 – Assess Operational Considerations

Description of Task

In this task, the necessary internal operations of the cooperative will be researched. Scenarios describing potential operational protocols will be developed for use in meetings with potential Cooperative members. One of the goals of this task will be to combine the primarily legal work done by the Steering Committee under its WSRA grant concerning the organizational structure and legal framework for the Cooperative, with the primarily technical work done under this grant to develop the operational plan, so that there will be a coordinated legal and technical plan to recommend to potential Cooperative members.

Feedback on internal operational considerations will be sought from potential Cooperative members and customers during Task 2. This feedback will help in formulating operational scenarios that will be acceptable to members and customers.

Method/Procedure

Specific work item to be conducted and proposed methods to be used under this task are described below.

1. Potential operational scenarios for the Cooperative will be researched. Internal operations, marketing mechanisms, etc. for Super Ditch, water banks, and other organizations will be investigated.
2. Based on the research, potential scenarios will be developed describing how internal operations might work.
3. A meeting with the Steering Committee will be held to discuss these scenarios.

4. Legal counsel will be consulted to identify and describe how the operational plan can be combined with the preferred organizational framework, and how both can work within the framework of existing water law.
5. Two to three operational scenarios will be developed. These scenarios will be discussed and reviewed with potential water users or cooperative members.
6. A draft technical memorandum with executive summary will be developed to describe the results of this research. It is anticipated that the executive summary will serve as a useful tool in communicating the operational scenarios to potential Cooperative members. The draft technical memorandum will be reviewed and finalized. The technical memorandum will be incorporated into the final project report.

Deliverable

Deliverables associated with this task are as follows:

- Technical memorandum describing research results.

TASK 9 – Project Reports

Description of Task

Technical memoranda developed during the course of the project will be assembled to create the final project report. In addition, progress reports to the CWCB will be conducted under this task.

Method/Procedure

Specific tasks to be conducted are as follows:

1. Progress reports will be written and delivered to the CWCB every 6 months.
2. Technical memoranda written during other tasks will be incorporated into a draft project report. Legal counsel will be consulted for incorporation of legal aspects. A readability and technical review will be conducted on the draft report. The report will be finalized.
3. Hard and electronic copies of the final report will be assembled and delivered to the Steering Committee and to the CWCB.

Deliverable

Deliverables associated with this task are as follows:

- Hard and electronic copies of the final report.

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion 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 Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

BUDGET

Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, $/unit of material for construction, etc.). A detailed and perfectly balanced budget that shows all costs is required for the State's contracting and purchase order processes. Sample budget tables are provided below. Please note that these budget tables are examples and will need to be adapted to fit each individual application. Tasks should correspond to the tasks described above.

See Attached Budget (Appendix C)

SCHEDULE

Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.

Task	Start Date	Finish Date
1	Upon NTP	NTP + 540 days
2	NTP + 180 days	NTP + 540 days
3	Upon NTP	NTP + 540 days
4	Upon NTP	NTP + 540 days
5	Upon NTP	NTP + 540 days
6	NTP + 90 days	NTP + 540 days
7	NTP + 90 days	NTP + 540 days
8	NTP + 300 days	NTP + 720 days
9	NTP + 480 days	NTP + 720 days

NTP = Notice to Proceed

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: Joe Frank

Print Applicant's Name: Joe Frank, General Manager
Lower South Platte Water Conservancy District

Project Title: Lower South Platte Water Cooperative, Operational Development of Alternative Agriculture Water Transfer Methods

Return this application to:

Mr. Todd Doherty
Colorado Water Conservation Board
Water Supply Planning Section
1580 Logan Street, Suite 200
Denver, CO 80203
Todd.Doherty@state.co.us