COLORADO WATER CONSERVATION BOARD

ALERNATIVE AGRICULTURAL WATER TRANSFER METHODS COMPETITIVE GRANT PROGRAM

GRANT APPLICATION FORM

New Cache La Poudre Water Marketing Strategy

Program/Project Name

River Basin Name

$214,957

Amount of Funds Requested

$195,013

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.

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

1. Applicant Name(s): New Cache La Poudre Irrigating Company

Mailing address: 33040 Railroad Avenue
P.O. Box 104
Lucerne, CO 80646

Taxpayer ID#: 84-0279140 Email address: dale@newcache.com

Phone Numbers: Business: 970-352-0222
Home:
Fax:

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

Name: Greg Kernohan, Ducks Unlimited

Position/Title Director, Conservation Programs

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

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 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 New Cache La Poudre Irrigating Company (New Cache) is one of the oldest mutual ditch companies on the Cache la Poudre River, a tributary to the South Platte River. Incorporated in 1898 pursuant to what is now C.R.S. 7-42-101 *et. seq*., the New Cache has water rights appropriations dating back to 1870 with priority rights starting at number 37 on the river. The contact person at New Cache is the general manager, Dale Trowbridge at the address and phone number provided on the application. The Articles of Incorporation and By-laws have been appended to the application.

   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.*

   New Cache, in cooperation and coordination with its sister reservoir company (the Cache La Poudre Reservoir Company) as well as several lateral ditch companies (including The Cooke Irrigating Company and the Union Lateral Irrigating Company) delivers irrigation water to more than 32,000 acres of agricultural land north of the Cache La Poudre River and generally east of Fort Collins and North of Greeley for 330 shareholders. There are 2,499.69 outstanding shares of New Cache direct flow rights and 3,000 shares in the Cache La Poudre Reservoir Company.

   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.*

   NA

   d) *A brief history of the Applicant(s).*
   The first organizational meeting of the Union Colony of Colorado occurred in New York City on December 23rd, 1869. Horace Greeley, then editor of the *New York Tribune* newspaper, was appointed chairman of that meeting. At that meeting the "Constitution and By-Laws of the Union Colony, No. 1" was adopted and Nathan C. Meeker appointed its first president. On April 13th, 1870, the Union Colony filed a certificate of organization under newly created law by Territorial legislature for the Union Colony of Colorado. That certificate of organization set forth a proposal for a series of four ditches from the Cache la Poudre and Big Thompson rivers. Minutes of the Union Colony in 1870 and 1871 reflect an eagerness to commence construction of the No. 2 and No. 3 canals.

   Construction of the No. 2 ditch commenced in the fall of 1879, and was completed by members of

the Union Colony employed for such work. Construction continued into the spring of 1871, and about 2,000 acres of crops were put into cultivation in the summer of 1871. After encountering financial difficulties in completing the No. 2 canal, and turning the expense therefore in part over to the farmers themselves under the ditch, two enlargements and an extension of the canal were completed in 1874 and 1877, bringing the total length of the canal to about 26 miles.

The contractual obligations to supply water to the early settlers in the Union Colony were assumed by the Cache la Poudre Irrigation Company in 1878 when the Union Colony turned operation and ownership of the Greeley Canal No. 2 over to the farmers under it, who incorporated as the "Cache la Poudre Irrigation Company" on January 25, 1878. In 1898, the company was incorporated perpetually as the "New" Cache La Poudre Irrigating Company. Since this time, the New Cache company has been managing irrigation deliveries for its shareholders, and has been proactive in responding to the unique and ever-changing water management and administration challenges of each generation. The potential dry-up of agricultural ground within the company's service area is one of the most daunting challenges facing the current generation, and the company continues to be proactive in identifying solutions.

e) Include any relevant Tabor issues relating to the funding request affecting the Contracting Entity.
None

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.

   The New Cache, in association with our team, will develop a framework and process whereby it will market the temporary use of cooperating shareholders water rights to third parties, including municipal water suppliers. The framework will include long-term operating, management, and monitoring rules, bylaws and contracts to execute temporary water trades to non-agricultural water users, without losing agricultural ownership and control of water rights. The exact scale of our proposed water marketing strategy will be determined during the project, but the project team has identified municipalities who could benefit from entering lease agreements with New Cache. Our expectation is that this project will, within two years, have developed functioning water sharing agreements that will eventually lead to the sharing of water in the range of 1,000 to 2,000 acre-feet per year, and establish a strategy that will be adopted by others in the future.

   Our team including New Cache staff, Ducks Unlimited, and WestWater Research, along with New Cache's contract attorneys and engineers, who are knowledgeable about the New Cache system and water rights, are very experienced in studying water market structures and executing water trades and transactions. With a clear vision and an experienced team, funds from the Colorado Water Conservation Board will assure a successful project.

   Following nearly a decade of research and study on flexible water markets, there remains a void of actual water lease transactions/trades, despite the emphasis placed on "alternative transfer mechanisms" in the state water plan. Specificity is now needed to replace generalizations; actual transactions in place of theory. This project intends to fill the void, by not only building and implementing a water marketing strategy, and the underlying framework and legal structure, but also actually completing and implementing temporary water transfers, through New Cache la Poudre Irrigating Company (New Cache) ditch system and its water rights.

   From New Cache's perspective, it wishes to develop this strategy to create more diversified income streams for its shareholders, who remain primarily agricultural producers. The team's overall goal is to utilize the existing New Cache ditch system, and its (willing) shareholder's water rights and existing legal mechanisms to provide temporary water supplies to meet non-agricultural water needs, and in the process, sustaining agriculture while temporarily sharing water with municipalities, and other non-agricultural water users, supporting rural economic development, and helping wildlife habitat. The CWCB grant will be used to support outreach and partnership building with municipal and industrial stakeholders to educate and encourage participation in a water market strategy and use of available water market studies from Colorado and the western United States to structure a water market.

   Technical and legal elements of the proposed water marketing strategy will focus on water rights, and how to

accomplish a water lease using the existing direct flow, storage, and augmentation water rights held by New Cache. It might be necessary to file changes to these existing decrees, or file new decrees, to allow the water leasing activity to take place. Beyond the water rights, technical aspects of the project include analysis of wet-water conveyance and delivery to lease partners, and the development of decreed recharge and augmentation sites. Institutional elements of the proposed water marketing strategy include the potential formation of a separate company to operate the water lease, comprised of New Cache shareholders. The institutional aspects of the project will build upon the FLEX Market studies which were completed under previous ATM grant projects.

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 summary of the results of previous studies and how they will be utilized.

To address growing water shortages in Colorado, Ducks Unlimited (DU), Colorado State University, Colorado Water Conservation Board (CWCB), WestWater Research, and many others have been studying water marketing strategies for several years, including strategies that allow farmers to temporarily trade water to municipal and industrial entities while maintaining ownership of the water right in agriculture. In this way, flexible water leasing markets help sustain agriculture by permitting temporary transfers of water to municipal, industrial, and environmental water uses during times of shortage and allowing water to return to agricultural productivity when market demand is low. Our program will build on the tremendous volume of studies and the experience of established sale markets and water transfer policies to develop the first flexible water leasing market in Colorado's Northern Front Range.

FLEX Market Study

The CWCB previously funded a FLEX Market study under the ATM grant program. Through various meetings and then a final summit, the FLEX study team determined that willingness to pay depended on market structure, price point, and firm yield. The study concluded that farmers with irrigation water to supply markets wanted to own the asset, manage water and infrastructure, and manage the market. Surprisingly, municipalities agreed. If municipalities had access to a market capable of providing firm water yields at a reasonable price, then municipalities, in theory, would participate. However, farmers along the Front Range replied that they would seek between $500 and $1,000 per acre-foot to lease water and although agriculture would still own the water rights, expected shared (cost) responsibility with municipalities and industry for adjudicating water rights through water court and developing needed infrastructure. These potential lease terms are not seen as attractive to the municipal sector. It also needs to be noted that overwhelmingly 90% of participants identified transaction costs associated with water court as one of the biggest barriers to market development.

Agriculture User Survey

A similar survey of potential market participants was conducted by the Ag Water Network for Colorado Cattlemen's Association and the Colorado Ag Water Alliance (CAWA) in 2016, and revealed similar interest from the agricultural community to lease water. Overall, about 50% of respondents (n=249) from across the state including Weld County, were moderately to strongly interested in water lease agreements, especially in situations where the farmer's leasable water was derived from reduced deliveries to the farm and allowed the farmer to determine how to manage the farm under reduced water. Farmers interested in lease programs are not too concerned about how the leased water is used, but they are very concerned that changes in water management will not negatively impact wildlife habitat. For farmers interested in leasing opportunities, diversifying and increasing income is a driving factor. Farmers want to have alternative income choices to maximize their land and water assets. However, price point for leasing water is an important consideration. Like lease rates reported by WestWater, the Ag Water Network determined that 40% of respondents would lease water from between less than $100 per acre-foot to $500 per acre foot with only 20% of respondents seeking more than $500 per acre-foot. However, a considerable number (40%) didn't know what price would be appealing. Finally, the market structure is important to farmers. When asked, who should administer a water lease market, respondents overwhelmingly supported irrigation companies, individuals, or state agencies, with little support for private companies, trade associations, or farm cooperatives. When asked who they trust for advice, respondents supported attorneys/consultants, irrigation company, and agricultural organizations.

EDF Study on ATMs

A recent report was prepared by the Environmental Defense Fund (EDF) in conjunction with WestWater Research, on the financial perspective of municipal water providers as the buyer in an ATM type of transaction. The report concluded that flexible water marketing strategies could provide cost savings, or be cost competitive, with traditional buy and dry water acquisition approaches. The Town of Windsor was one of the case studies in the report, which is relevant to the New Cache delivery system and proposed market strategy. Although a more flexible water acquisition framework might make financial sense, the study recognized that municipalities place a premium on the certainty of having firm yield water supplies. The desire to fulfill the maximum expected water need during shortages, rather than acquire sufficient water to cover most needs, is an obstacle that will need to be overcome. The study recommends that efforts focus on encouraging and educating the market demand-side, consisting of municipalities, industrial water users, and environmental organizations, and to motivate parties through incentives and programs that reduce demand-side cost and uncertainty.

Project Team Experience in Developing ATMs

On Colorado's Front Range, WestWater has assisted clients in the acquisition of mutual ditch company shares and CBT units, and has provided extensive water rights valuation and asset management services. WestWater's experience with irrigated agriculture, M&I water uses, and environmental flows has enabled the firm to structure innovative water transfer agreements that provide mutual benefits to multiple sectors. New Cache is also experienced in executing successful water lease agreements, as evidenced by the fact that the company has leased sufficient water since 2013 to not have to issue assessments on its shareholders to operate and maintain the ditch system. Ducks Unlimited has conducted dozens of conservation-minded land and water transactions in Colorado and has a team of professionals experienced in unique and innovative transactions.

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.

New Cache is located very close to the fastest growing populations in Colorado and wishes to cooperate with municipalities to assure that their water needs are met without permanently removing water from agriculture. New Cache has begun to experience significant interest from municipalities to purchase company shares. Recent purchases of land for New Cache water rights by East Cherry Creek Valley Water and Sanitation District, Arapaho County Water and Wastewater Authority, and the City of Greeley indicate that the municipal "take over" already undergone by many other ditch and irrigating companies in the area is now targeting the New Cache system. In the past, permanent water right sales from New Cache shareholders to municipalities have largely been limited to units in the CBT Project. Municipalities now own more than 70% of the 310,000 CBT units, and at average transfer rates, individually-owned CBT units will likely be largely in municipal hands in the next decade.

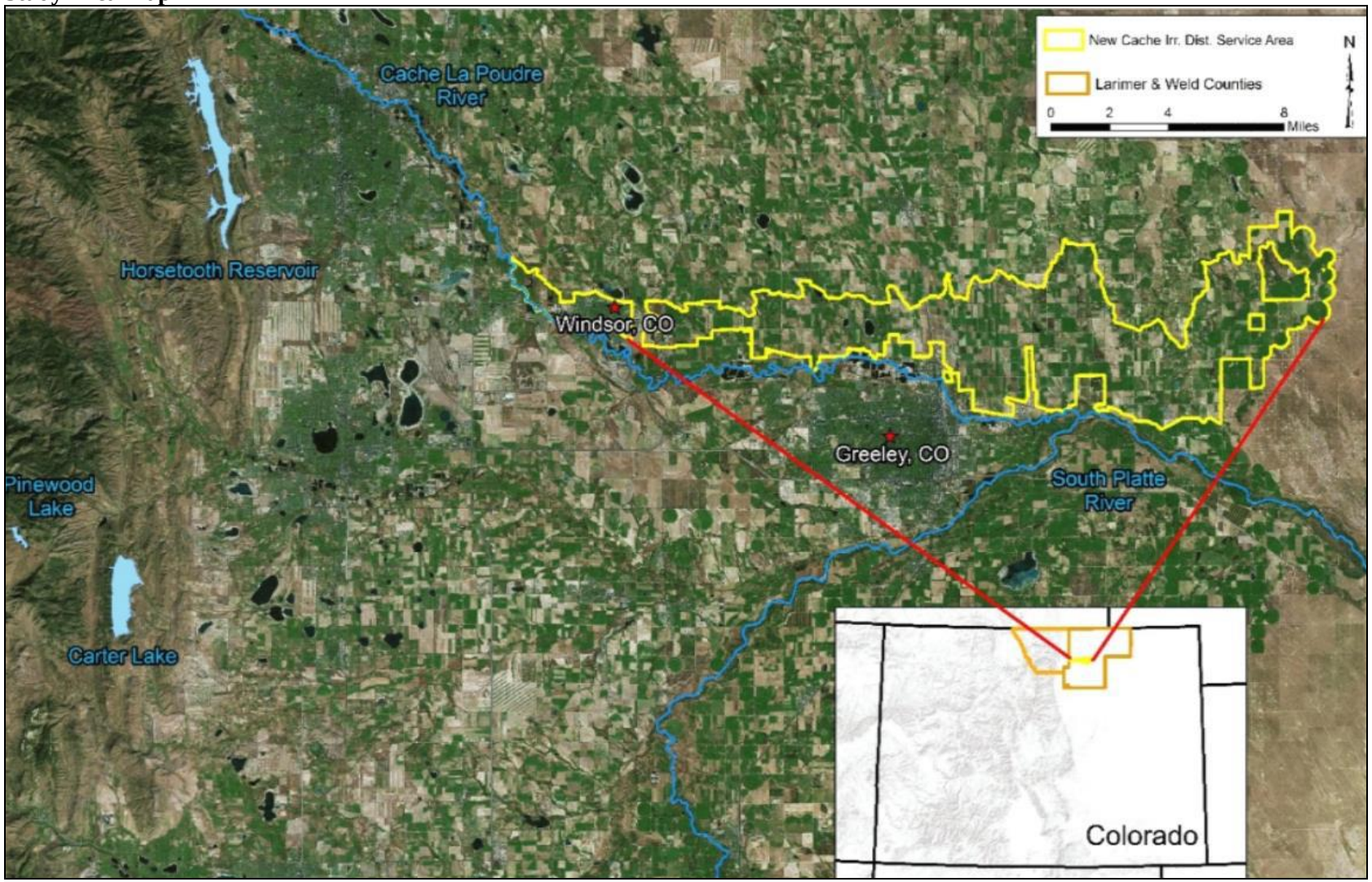
b) An area map showing each of the items above, as well as the locations of existing facilities, proposed project facilities and boundaries of lands involved in the proposed program/project.

See below

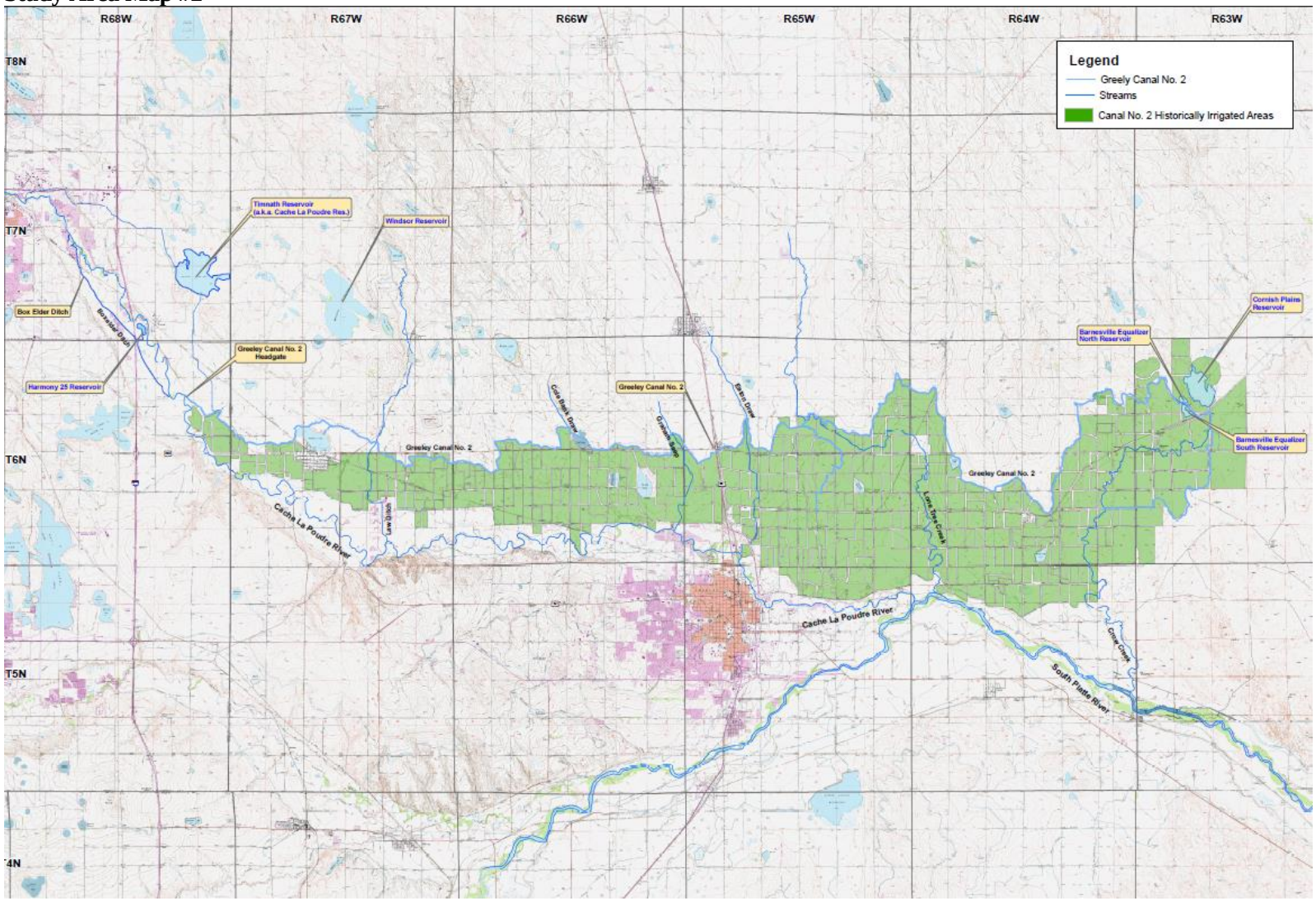
c) *Information regarding the irrigated lands that are involved in the program/project. This must include a tabulation of total irrigated acreage, description of cropping types, crop yields, and total average annual water diversions for existing agricultural lands.*

The New Cache is an authorized water provider in northern Colorado's Front Range responsible for delivering water for irrigation to more than 32,000 acres of agriculture for 330 shareholders. The primary crop is corn (approximately 18,000 acres), with sugar beets, dry beans, alfalfa, wheat, carrots, onions and other vegetables also grown. Several water sources are used to satisfy irrigation demands, as described previously. The New Cache operates the total 2,499.69 shares of New Cache direct flow rights and 3,000 shares in Timnath Reservoir for agricultural irrigation. New Cache operates the system based on daily water requests from individual farms and conducts deliveries utilizing multiple sources to best manage deliveries and reservoir operations. Individual farms are assessed deliveries against their share accounts for the various river and reservoir rights, although on a given day the actual water delivered may be from one or several different sources. Since 1950, combined water deliveries averaged 44,062 acre-feet annually or about 17.62 acre-feet per share average. An additional 16,685 acre-feet are delivered from Windsor, Timnath, and Fossil Creek reservoirs on average. Other New Cache water sources are not anticipated to be included as part of the marketing strategy, as they are mostly made up of CBT units that are quickly transferring to municipal ownership.

Study Area Map #1



Study Area Map #2



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 location of the New Cache system along with the established exchanges, storage facilities, and decreed recharge and augmentation plans provide a unique opportunity to market lease water supplies to non-agricultural water users in Northern Colorado. The project team has identified several buy-side entities that will likely be interested in, and benefit from, the proposed project. These include: Town of Windsor, Fort Collins-Loveland Water District, East Larimer County Water District, Town of Severance, City of Evans, City of Greeley, and North Weld Water County Water District, and Central Weld County Water District. Combined, these municipal entities have a projected additional water demand of over 23,000 acre-feet by the year 2030. Many (but not all) of these specific municipalities are participating in the Northern Integrated Supply Project (NISP) which would meet most of their projected water demands over the next several decades. But, NISP will likely not come online until 2030 and these rapidly-growing municipalities will need temporary supplies much sooner. Agricultural water leasing agreements, such as those proposed under the New Cache water marketing strategy, are sensible short-term solutions for many of these municipalities.

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

Urban population growth and associated development drives the anticipated water shortage gap. The population in Colorado is expected to double by 2050, adding between 3.5 and 5.5 million people (CWCB, 2015). Colorado's Front Range, established along the South Platte River, will experience most of the population increase, expecting between 2.3 and 3.1 million people by 2050. Specifically, the greatest growth will occur in Weld and Larimer counties, which expect a combined population growth of nearly 1.5 million people (HDR, 2015). According to a 2016 report by Weld County government using data from the State Demography Office and the U.S. Census, Weld Counties has an average per capita income of $38,664 (2014), which falls far below the State-wide average of $50,410. Irrigated agricultural lands account for fully 1/3 of Weld Counties land base with the vast remainder dedicated to ranching and dry land farming. In fact, Weld County is the premier ag producer by market value in the state with annual sales of $1.8 billion annually; nearly 25% of all State sales. Surprisingly, farming, fishing, and forestry only employs about 1.26% of the population.

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.

Part of our marketing strategy will evaluate the best structure to facilitate water transfers, including the most appropriate transfer methods. Most ATM frameworks can be divided into two components: (1) an agricultural water supply component which determines how agricultural operations will be modified to provide water for transfer, and (2) a transfer component which describes the transfer mechanism or agreement structure. Although we may change direction, we expect that the transfer component will involve water leases structured as interruptible supply plans and substitute water supply plans, and including the potential change of a portion of the New Cache water rights to the new Colorado Water Protection Water Right to facilitate long-term flexible water trades. We will not likely use a "water bank" as defined in Colorado Statute due to the complex requirements to work through a water district to request the SEO to develop rules, but the outcome may look like a water bank. The agricultural component may include the use of temporary rotational fallowing, long-term following, and potentially increased irrigation efficiency. These agricultural methods have been expressed by shareholders as options for providing water.

Quantifying the transferable consumptive use is much easier with New Cache than many other ditch companies because New Cache completed a ditch-wide analysis in 2010. Most ditch and irrigation companies are reluctant to complete ditch-wide consumptive use analyses due to the high costs, as well as concerns that such an analysis may expose water rights to unnecessary scrutiny and risks. New Cache's ditch-wide analysis is a detailed, farm-by-farm analysis that allows New Cache to readily identify water rights available for the marketing project. The identified farms and appurtenant water rights will be analyzed for legal requirements and constraints and specific plans will be developed to avoid impacts to downstream water users. Obviously, having the consumptive use analysis completed is a huge time and cost savings. Any additional work required will be conducted by New Cache staff and consultants.

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.

A significant project element is dedicated to constructing the legal mechanisms for structuring a water marketplace including establishing the bylaws and rules for the governing body and water transfer agreements and contracts that will adhere to existing laws to facilitate trades.

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.

This project was developed by and with the support of the New Cache governing board. Therefore, this application is evidence of a willingness to develop a water marketing strategy and transfer water from the agricultural sector. A general call to the New Cache shareholders asking for participation will be made and then further filtered based on both level of interest and transferable consumptive use considerations. On the demand side, the project team has identified a number of potential users of the water transferred through the water market strategy, but specific entities have not signed up to participate. These potential users are described previously in this 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 third element of our scope of work directly addresses the technical, institutional, and legal requirements of transferring water. Specifically, the team will develop a written strategy document that describes the approach to establish a new water market. The documents will include:

- A draft implementation plan will be developed that describes water market operations, address long-term management and financial sustainability, the administrative structure, and institutional components, participants, water rights, and infrastructure needed, and transaction accounting.
- The entity responsible for managing the market will need to develop by-laws and rules governing water marketing activities.
- Specific contracts and agreements supporting water marketing development and transfers will be developed. The FLEX Market Model Study developed several templates to provide a foundation.
- New Cache will develop a transaction accounting system to monitor water marketing activities.
- Based on work conducted in Element 2, New Cache will determine which if any existing tools provide more reliability than a custom designed tracking system.

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.*

Attorney costs are budgeted to be about $65,750; about 17% of the total project cost. Our attorney, Dan Brown, will be responsible for drafting the documents mentioned in section (c).

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).*

The project team is committing 48% in match with the clear majority coming from cash match and only about $2,063 as in-kind from DU indirect charges.

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 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 proposed project builds on many former ATM efforts and addresses key areas to assure we successfully implement a water marketing strategy. Much has been learned about ATM's since the referenced 2012 ATM report. Several aspects of our scope of work rely on the 2015 CWCB-funded FLEX Water Market study, the 2016 Colorado Agriculture Water Alliance survey, the 2016 Environmental Defense Fund (EDF) report on Alternative Water Transfers in Colorado (2016), and the Colorado Water Plan and South Platte Basin Implementation Plan. A summary description of what these past studies and efforts have taught us is provided previously in Section B.1. The project team is committed to developing a water marketing strategy that is: financially viable to both buyer and seller and based on supported information, legally doable within Colorado water law (including more flexible arrangements that have become law since the 2012 ATM report), targeted at specific municipal and industrial water users, and supported by the agricultural water users.

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.

Again, we are referencing updated reports, which the proposed project directly adopts and addresses many key recommendations of the FLEX study and the EDF report:

1) *Focus on efforts to implement ATM's by starting on the demand side.* A significant task within the project is to focus on communicating, educating and influencing municipalities to consider short-term leases as part of their portfolio.

2) *The potential pool of ATM participants along the Front Range is somewhat limited.* By following the recommendations of the FLEX study and only engaging 3-5 participants, the potential for success is very high and as recommended by the EDF report, the number of participants is small enough that each of the municipalities could be analyzed for ATM water transfer potential.

3) *Water supply risk is believed to be a significant roadblock to municipal acceptance of ATM's.* To the extent possible, water leaders should educate the municipal water community about water leasing opportunities and support pilot projects where needed to begin to build greater comfort and an informed perspective on future water supply options. The Water Marketing Strategy spends a significant amount of time and effort educating municipal water providers as described in our communication and outreach strategy. In addition, the project team will work to minimize the water supply risks associated with the water marketing strategy, such that the municipal sector can rely upon the leases with comfort.

4) *As per the Colorado Water Plan, approximately 50,000 acre-feet of water will be provided through ATM's by 2050.* Although our project starts small as a proof of concept, once the water marketing strategy is in place, the potential to encourage participation and replicate the process with other irrigating companies could be expansive.

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.

The project is providing a full 48% match with most match being secured through a grant provided by the BOR received by New Cache in September 2017.

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 proposed project will adhere to all existing laws to produce a reliable water supply providing certainty in yield and availability to municipalities. New Cache currently owns and manages several sources of decreed water rights including irrigation, augmentation, and storage. Unlike many ATM concepts, infrastructure should not be a limiting factor in development of this water marketing strategy. In addition, the project team will seek to develop water transfer mechanisms with which the State Engineer is familiar.

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).

The information developed will be available to the public to further inform the legal, technical, and institutional structures of water markets and thereby provide a potential template for similar structures. Specifically, the water marketing strategy includes the development of an implementation plan, monitoring plan, and contract documents which can be referenced by other ATM efforts. The project will result in a final report to CWCB, which will also be available to the public.

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

The proposed project exhibits many elements capable of directly addressing every priority of the South Platte Basin Implementation Plan, which are:

- *Develop or advance multi-purpose water supply projects:* The project works directly through several legal water mechanisms to provide leasable water for municipal, industrial, and environmental entities. Existing infrastructure including reservoir storage, recharge and augmentation, ditch conveyance.
- *Improve municipal and industrial water efficiency:* Ultimately, our efforts will work directly with municipalities to educate and influence their decisions to be more efficient in drought planning efforts; only leasing water in shortage periods instead of over-purchasing water rights to be sure all water demands are covered. If successful, we believe water rights purchased by municipalities could be cut by 50% and lease water could be needed only 30% of the time he time, leaving a significant portion of the irrigated lands in production well into the future.
- *Sustain irrigated agriculture:* As mentioned above, if we can save half of the landscape for irrigated agriculture and only 30% of those farms are needed for water leases during shortages, agriculture will be sustained to the greatest extent possible well into the future. This project alone will not achieve these goals, but it is an important step in that direction.
- *Protect and enhance the environment and water-based recreation:* By using existing laws that protect return flows and utilizing multi-purpose project approaches, such as DU has accomplished through recharge wetlands for augmentation, the environment is sufficiently protected and may be enhanced.
- *Promote education and outreach that emphasizes the South Platte Basin Implementation Plan priorities:*

Presentation Material and Media

As described in the background data, several studies have convened stakeholders to survey their understanding of water markets, to educate the public about potential, and gauge interest in further developing these programs. We believe the tremendous work has established a system whereby the project team can access stakeholders and better educate and increase enthusiasm for flexible water markets. Our team will develop presentations for several established venues such as conferences and meetings as well as conduct several one-on-one meetings with non-agricultural water lessees to encourage participation. We will publish articles regarding the project in local newspapers and publish an article in Ducks Unlimited's national magazine and other media outlets.

Municipal Outreach and Relationship Building

As identified in the West Water study recommendations, water markets require increased interest and participation from the demand side (non-agricultural lessees). A significant portion of the budget will focus on regularly meeting with identified municipalities and industries to communicate the advantages of flexible water marketing strategies and improve demand for water market solutions. Target participants currently include the Town of Windsor, and their many regionally important partner municipal and water conservancy districts of the Northern Integrated Supply Project. Through one-on-one meetings and presentations to the NISP participants we will seek to build trusting relationships that lead to successful partnerships and programs. As such, New Cache will work with Ducks Unlimited to organize and facilitate quarterly meetings. Meetings will include a mix of presentations to senior management and field staff managing municipal water portfolios and providing tours of the New Cache system.

South Platte Basin Roundtable

Fortunately, stakeholders from around Colorado's Northern Front Range have been involved with several forums where water marketing strategies have been discussed and funded. One of the most effective water stakeholder forums is the South Platte Basin Roundtable. The basin roundtables were created through Colorado Water for the 21st Century Act to assist the CWCB in thinking through water supply needs in relation to growth and development. The roundtables bring more than 300 citizens from across the state into broad-based, collaborative water management discussions. Legislatively designated, each roundtable membership consists of a representative from each county and a municipality from each county, a member from each water conservation and conservancy district, two legislative appointees, and 10 at large members representing national environmental organizations, agriculture, industry.

The South Platte Basin Roundtable is populated by 56 members from around the region that are directly impacted by this marketing strategy. In fact, three team members are committee members on the roundtable. By far, the South Platte Roundtable is the most efficient way to access the water policy and development stakeholders across the basin. Our team will organize and facilitate regular semi-annual presentations to the roundtable and consider incorporating volunteers to contribute to technical documents on a bi-monthly basis. The roundtable regularly convenes subcommittees to assist with water shortage related strategic planning.

Colorado Ag Water Alliance
We will also present to CAWA at their annual Ag Water Summit and encourage feedback and participation through the South Platte Basin Roundtable.

Colorado Water Congress
Finally, we will pursue opportunities to present to the Colorado Water Congress at their annual summer conference and annual convention. The Colorado Water Congress is the leading voice for initiating and advancing programs for the conservation, development, administration, and protection of water resources in Colorado. Many members are attorneys and engineers that are relied upon to provide dependable advice to potential water marketing participants. Project team members are all members of the Water Congress.

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.

It is our goal to use the New Cache ditch system, reservoirs, water rights and existing legal mechanisms to provide temporary water to non-agricultural needs through a strategy that sustains agriculture while sharing water with municipalities, supports rural economic development, and helps wildlife habitat.

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

Although not a direct benefit of the program, sustaining agriculture on the landscape will maintain the numerous benefits to the environment. As has been documented, the South Platte was a dry river much of the time until irrigated agriculture increased return flows to the river, which in turn spurred incredible

economic development around recreation and the environment. There could be additional benefits from developing wetlands for recharge as additional recharge facilities. New Cache has 43 decreed and unconstructed facilities that could provide augmentation credits to partially support the market. Wetlands have been well documented for mitigating nutrients such as reducing total nitrogen by 35% and phosphorus by 50% or more. Although anecdotal, accounting for improved water quality is increasingly important.

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.

We are tackling all the proposed issues to have an executable understanding of institutional, technical, and legal mechanisms to effectively trade water through ATM's. We are also spending significant time quantifying water demand needs for participating municipalities and industries and should be able to report on the cost to develop the water marketing strategy at a larger scale than just the proposed project.

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.

The proposed project will in no way limit or adversely affect access to water or impede on shareholders wishing to pursue other avenues for optimizing their water rights. Our goal is to increase the value of shareholders assets by providing an additional option for maximizing their 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.

If successful, the enterprise will establish a functional marketplace capable of providing water in perpetuity. Of course, the entire effort is striving to sustain the area's economy through sustained agriculture and potentially increased recreation through improved and increased wetlands on the landscape. The project team will work to develop and then market a long-term lease water supply to municipal and industrial water users.

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

There is inherent uncertainty in the volume of water that will actually be contracted through lease agreements, and this uncertainty lies in the ability to secure relationships with municipal and industrial water users. The project team is committed to developing 1,000 to 2,000 acre-feet annually of new ATM water transfers. Based on our initial analyses, this estimated annual volume represents the low end of the projected municipal water supply needs in the coming decade. We also know through conversations with oil and gas enterprises that water lease needs are already much higher and could be a significant, short-term market.

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

As stated, we are working with a diverse team including a dedicated water provider (New Cache) and our attorney and engineers, Ducks Unlimited, and a noted water market engineer and economist (WestWater). We plan to conduct significant outreach to municipalities and industries as well as present the project through numerous avenues.

6. Statement of Work

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.

See below

Statement of Work

WATER ACTIVITY NAME - New Cache la Poudre Water Marketing Strategy

GRANT RECIPIENT – New Cache la Poudre Irrigating Company

FUNDING SOURCE - Alternative Transfer Methods (ATM) Grant

MATCHING SOURCE – Bureau of Reclamation Water Marketing Strategy Grant, Ducks Unlimited

INTRODUCTION AND BACKGROUND

This project intends to build and implement a water marketing strategy through the New Cache la Poudre Irrigating Company (New Cache) ditch system which will provide wet-water leases through flexible market frameworks. The New Cache is an authorized water provider in northern Colorado's Front Range responsible for delivering water for irrigation to more than 32,000 acres of agriculture for 330 shareholders. The primary crop is corn. New Cache wishes to develop a water marketing strategy as a new business plan that may diversify income streams for its shareholders, who remain primarily agricultural producers. It is our goal to use the New Cache ditch system, reservoirs, water rights and existing legal mechanisms to provide temporary water to non-agricultural needs through a strategy that sustains agriculture while sharing water with municipalities, supports rural economic development, and helps wildlife habitat. The project specifically will support outreach and partnership building with municipal and industrial stakeholders to educate and encourage participation in a water market strategy and use of available water market studies from Colorado and the western United States to structure a water market strategy. Our goal is to have a structure that includes long-term operating, management, and monitoring rules and bylaws and contracts that will be used to execute trades.

ELEMENTS

1. Increase Outreach and Partnership Building to Municipalities and Industry
2. Scoping and Planning – Financial, Social, Hydrological, and Environmental Analysis
3. Develop Water Marketing Strategy – Technical, Institutional, and Legal Framework

TASKS
Provide a detailed description of each task using the following format

TASK 1 – Work Plan

Description of Task
New Cache will work with Ducks Unlimited to develop a work plan that specifies how the three project elements will be performed, along with a detailed work schedule, responsibilities of the recipient and other stakeholders.

Method/Procedure
Ducks Unlimited will convene the team members to develop a detailed work plan with a kick-off meeting in January 2018. The goal will be to develop a detailed work schedule, outline roles and responsibilities, and review the timeframe.

Deliverable
A draft work plan will be submitted to CWCB.

TASK 2 – Communication and Outreach Plan

Description of Task
As part of the Project work plan, the recipient will develop a communication and outreach plan that explains how shareholders and other stakeholders and the public as appropriate, will be involved in the planning process, including input on the drafting of the water marketing strategy and providing feedback to the recipient and any Project partners.

Method/Procedure
As part of the work plan above, a detailed communication and outreach plan will be drafted to direct our efforts in informing New Cache shareholders, presentations to municipal and industrial lessees, and the public as well as methods for submitting comments to the plan.

Deliverable
A written communication plan submitted as part of the Work Plan to CWCB.

TASK 3 – Outreach and Partnership Building

Description of Task
We will use the body of information included in the cited documents to educate and remind stakeholders of the looming threats to irrigated agriculture caused by growth and development and use the information, including responses to surveys, and other relevant information to develop grassroots support for engagement in water marketing strategies.

Methods
Presentation Material and Media
As described in the background data, several studies have convened stakeholders to survey their understanding of water markets, to educate the public about potential, and gauge interest in further developing these programs. We believe the tremendous work has established a system whereby the project team can access stakeholders and better educate and increase enthusiasm for flexible water markets. Our team will develop presentations for several established venues such as conferences and meetings as well as conduct several one-on-one meetings with non-agricultural water lessees to encourage participation. We will publish articles regarding the project in local newspapers and publish an article in Ducks Unlimited's national magazine and other media outlets**.**

Municipal Outreach and Relationship Building

As identified in the West Water study recommendations, water markets require increased interest and participation from the demand side (non-agricultural lessees). A significant portion of the budget will focus on regularly meeting with identified municipalities and industries to communicate the advantages of flexible water marketing strategies and improve demand for water market solutions. Target participants currently include the Town of Windsor, and their many regionally important partner municipal and water conservancy districts of the Northern Integrated Supply Project. Through one-on-one meetings and presentations to the NISP participants we will seek to build trusting relationships that lead to successful partnerships and programs. As such, New Cache will work with Ducks Unlimited to organize and facilitate quarterly meetings. Meetings will include a mix of presentations to senior management and field staff managing municipal water portfolios and providing tours of the New Cache system.

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Colorado Ag Water Alliance
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Deliverable
Ducks Unlimited will provide updates and findings from communication and outreach efforts as part of the semi-annual and final reports.

Task 4 – Scoping and Planning

Description of Task
This task includes studies and analysis to support water marketing strategy development.

Method
Financial or Economic Analysis
The WestWater report presents a thorough examination of the Town of Windsor's water needs through 2045 and offers sound economic justifications for pursuing several water acquisition

strategies. However, the report also identifies a pool of municipalities with the potential to be candidates for water marketing strategies due to their water supply positions and their possible use of temporary water supplies. Through Element 1, Outreach and Partnership Building, the project team will identify a subset of additional market participants and further analyze the water supply and demand positions of these select municipalities for water marketing potential. The project team will also evaluate non-municipal opportunities, such as water for the oil and gas development within the New Cache service area, as well as environmental flow markets.

Team member, WestWater Research, brings significant experience developing water market strategies and will be an asset in developing the best framework for operating a New Cache water marketing project. The WestWater report provides significant summaries of water transfer and marketing efforts from within Colorado and across the western United States. As such, the project should enjoy some cost savings by utilizing an experienced team member and building on past work efforts. Additionally, several water marketing support tools have been developed in Colorado to help facilitate and track transactions including software, databases, registries, dashboards, and others. WestWater will investigate these tools to help identify any resources that may increase efficiency and transparency of the market. WestWater will provide a section of the final technical report summarizing different marketing approaches.

Analyzing Water Rights Issues or Legal Requirements
Team member Dan Brown has been New Cache's water attorney for nearly 20 years and is very familiar with New Cache water right holdings and is uniquely capable of analyzing water rights mechanisms for transferring water and the legal constraints on existing water rights. Mr. Brown will assist the team in evaluating time and place of use requirements, title conflicts, and other constraints.

Quantifying Water Rights
Most ditch and irrigation companies are reluctant to complete ditch-wide consumptive use analysis due to the high costs, as well as concerns that such an analysis may expose water rights to unnecessary scrutiny and risks. In this regard, New Cache is an unusual and fortunate exception because New Cache completed a ditch-wide consumptive use analysis in 2010. The ditch-wide analysis is a detailed, farm-by-farm analysis that allows New Cache to readily identify water rights available for the marketing project. The identified farms and appurtenant water rights will be analyzed for legal requirements and constraints and specific plans will be developed to avoid impacts to downstream water users. Obviously, having the consumptive use analysis completed is a huge time and cost savings. Any additional work required will be conducted by New Cache staff and consultants.

PESTELI Analysis
An important component of alleviating concerns over new product or program development and policies are to conduct an analysis of the product or program's impact on political factors, economic influences, social trends, technological innovations, environmental factors, legislative requirements, and industrial factors (PESTELI). This analysis can be conducted under a simple framework to facilitate an understanding of the wider business environment that encourages the development of external and strategic thinking. The analysis can help New Cache anticipate future business threats and act to avoid or minimize their impact as well as help identify business opportunities. In this case, New Cache will analyze the potential impact of water marketing strategies. Ducks Unlimited can lead discussions with stakeholder groups, likely the South Platte Basin Roundtable, to complete the PESTELI analysis.

Hydrologic and Engineering Studies
As water rights for the planned lease market are identified, New Cache water engineers, White Sands Engineering, will investigate the use of existing infrastructure and new infrastructure requirements and the hydrologic impacts of water marketing. Additionally, New Cache has more than 43 recharge sites decreed for augmentation. Ducks Unlimited, an expert in designing and developing recharge sites, will investigate sites to identify which sites may be priority for development in implementation phases. There will be no field activities conducted that would trigger environmental and cultural resources compliance.

Deliverable
Ducks Unlimited will provide updates of findings through semi-annual and final report.

Task 5 – Development of a Water Marketing Strategy

Description
Based on the results of Elements 1 and 2, the team will develop a written strategy document that describes the approach to establish a new water market.

Methods
Implementation Plan
A draft implementation plan will be developed that describes water market operations, address long-term management and financial sustainability, the administrative structure, and institutional components, participants, water rights, and infrastructure needed, and transaction accounting.

Rules and by-laws
The entity responsible for managing the market will need to develop by-laws and rules governing water marketing activities.

Contracts and Agreements
Specific contracts and agreements supporting water marketing development and transfers will be developed. The FLEX Market Model Study developed several templates to provide a foundation.

Monitoring Plan
New Cache will develop a transaction accounting system to monitor water marketing activities.

Water Marketing Support Tools
Based on work conducted in Task 2, New Cache will determine which if any existing tools provide more reliability than a custom designed tracking system.

Deliverable
Ducks Unlimited will provide updates through semi-annual reports and 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.

Final Technical Report
Ducks Unlimited will develop a final technical report as required by the FOA that summarizes all work and provides findings and conclusions of the project results and benefits. The report will include descriptions of all planning and outreach activities, lessons learned, and any other findings and conclusions. We will also include any outstanding issues to be resolved before the market can be implemented and steps to resolve.

SCHEDULE
Provide a project schedule including key milestones for each task and the completion dates or time 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	Sub-Task	Months from date of Contract																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1. Work Plan	Work Plan	■	■																						
	Comm. Plan	■	■																						
2. Outreach and Partnership Buildling	Materials and Media			■	■	■																			
	Municipal Outreach				■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■					
	Roundtable Meetings				■						■						■						■		
	Ag Water Alliance										■	■										■	■		
	Colorado Water Congress						■				■						■						■		
3. Scoping and Planning	Financial/Economic Analysis				■	■	■	■	■	■	■	■	■												
	Water Market Approaches				■	■	■	■	■	■	■	■	■												
	Water Rights Research				■	■	■	■	■	■	■	■	■												
	Quantifying Water Rights				■	■	■	■	■	■	■	■	■												
	PESTELI Analysis										■	■	■	■	■	■	■								
	Hydrologic Studies				■	■	■	■	■	■	■	■	■												
4. Implementation	Implementation Plan																■	■	■	■	■				
	Rules Development																■	■	■	■	■				
	Contracts																■	■	■	■	■				
	Monitoring Plan																■	■	■	■	■				
	Marketing Tools																■	■	■	■	■				
5. Final Report	Final Technical Report																				■	■	■		■

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.

Total Grant and Match Summary

	CWCB Grant	Match	Total
Personnel	$ 208,000	$ 185,993	$ 393,993
Direct Expense	$ 6,957	$ 9,020	$ 15,977
Total	$ 214,957	$ 195,013	$ 409,970
Total Grant	**$ 214,957**		
Match %	**48%**		

Grant and Match Funding Sources

Funding Sources	**Amount**
Non-Federal Entities	
1. CWCB	$ 214,957
2. Ducks Unlimited	$ 2,063
Non-Federal Subtotal	$ 217,020
Other Federal Entities	
1. BOR WaterSMART	$ 192,950
Other Federal Subtotal	$ -
Requested CWCB GRANT	**$ 214,957**

Personnel Costs

Budget Proposal - Personnel									
		Personnel Costs							
		New Cache		Ducks Unlimited		WestWater			White Sands
	Unit	Manager	Attorney	Director	Hydologist	Engineer	Associate	Analyst	Engineer
Hourly Rate	$/hr.	$ 120	$ 250	$ 200	$ 179	$ 200	$ 220	$ 100	$ 200
Task 1 - Work Plan Development and Approval	Hours	20	4	63	8	8	0	0	8
Task 2 - Communication and Outreach Plan	Hours	12	4	23	8	12	0	0	4
SUBTOTAL	$	$ 3,840	$ 2,000	$17,200	$ 2,864	$ 4,000	$ -	$ -	$ 2,400
Task 3 - Outreach and Partnership Buildling									
Task 1 - Presentation Materials and Media	Hours	8	8	40	24	32	0	0	4
Task 2 -Municipal Meetings	Hours	64	30	128		60	0	0	24
Task 3 - South Platte Basin Roundtable Meeting	Hours	10	0	15	15	8	0	0	8
Task 4 - CAWA Presentations	Hours	0	8	16	8	8	0	0	0
Task 5 - Water Congress Presentations	Hours	8	5	8	4	8	0	0	0
SUBTOTAL	$	$ 10,800	$ 12,750	$41,400	$ 9,129	$ 23,200	$ -	$ -	$ 7,200
Task 4 - Scoping and Planning									
Task 1 - Financial/Economic Analysis	Hours	16	8	4	2	40	24	120	24
Task 2- Water Market Approaches/Tools	Hours	16	5	4	0	24	16	40	8
Task 3 - Legal Water Rights Issues	Hours	20	30	4	0	0	0	0	16
Task 4- Quantifying Water Rights	Hours	60	0	4	4	8	0	0	50
Task 5 - PESTELI Analysis	Hours	16	0	24	8	4	0	0	8
Task 6 - Hydologic and Engineering Studies	Hours	60	0	8	40	4	0	0	62
SUBTOTAL	$	$ 22,560	$ 10,750	$ 9,600	$ 9,666	$ 16,000	$ 8,800	$ 16,000	$ 33,600
Task 5 - Water Market Strategy Development (Funding Group II)									
Task 1 - Implementation Plan	Hours	40	40	8	0	16	4	0	16
Task 2 - Rules and By-laws	Hours	40	20	4	0	4	0	0	12
Task 3 - Contracts and Agreements	Hours	40	75	8	0	4	0	0	16
Task 4 - Monitoring Plan	Hours	40	10	4	0	24	0	0	32
Task 5 - Water Marketing Support Tools	Hours	40	0	4	0	24	0	0	8
SUBTOTAL	$	$ 24,000	$ 36,250	$ 5,600	$ -	$ 14,400	$ 880	$ -	$ 16,800
Semi-annual and Final Reports	Hours	24	16	48	16	24	8	16	24
SUBTOTAL	$	$ 2,880	$ 4,000	$ 9,600	$ 2,864	$ 4,800	$ 1,760	$ 1,600	$ 4,800
CATEGORICAL DIRECT PERSONNEL COST	**$**	**$ 64,080**	**$ 65,750**	**$83,400**	**$ 24,523**	**$ 62,400**	**$ 11,440**	**$ 17,600**	**$ 64,800**
CWCB Grant		**$ 208,000**							
Applicant Match		**$ 185,993**							

Direct Costs

Budget Proposal - Direct Expenses							
	Expense	Travel	Equipment	Supplies/Materials	Contracts	Meeting Expenses	Conference Fees
	Unit	$/mile	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum
	Charge	0.535					
Task 1- Work Plan Development and Approval		$ 54	$ -	$ -	$ -	$ -	$ -
Task 2 - Communication and Outreach Plan		$ 31	$ -	$ -	$ -	$ -	$ -
SUBTOTAL		$ 84	$ -	$ -	$ -	$ -	$ -
Task 3 - Outreach and Partnership Buildling							
Task 1 - Presentation Materials and Media		$ 80	$ -	$ 2,000	$ -	$ 500	$ -
Task 2 -Municipal Meetings		$ 1,883	$ -	$ -	$ -	$ -	$ -
Task 3 - South Platte Basin Roundtable Meeting		$ 128	$ -	$ -	$ -	$ -	$ -
Task 4 - CAWA Presentations		$ 171	$ -	$ -	$ -	$ -	$ 2,000
Task 5 - Water Congress Presentations		$ 257	$ -	$ -	$ -	$ -	$ 5,000
SUBTOTAL ($)		$ 2,520	$ -	$ 2,000	$ -	$ 500	$ 7,000
Task 4 - Scoping and Planning							
Task 1 - Financial/Economic Analysis		$ 27	$ -	$ -	$ -	$ -	$ -
Task 2- Water Market Approaches/Tools		$ 27	$ -	$ -	$ -	$ -	$ -
Task 3 - Legal Water Rights Issues		$ 27	$ -	$ -	$ -	$ -	$ -
Task 4- Quantifying Water Rights		$ 27	$ -	$ -	$ -	$ -	$ -
Task 5 - PESTELI Analysis		$ 128	$ -	200	500	500	$ -
Task 6 - Hydologic and Engineering Studies		$ 27	$ -	$ -	$ -	$ -	$ -
SUBTOTAL		$ 262	$ -	$ 200	$ 500	$ 500	$ -
Task 5 - Water Market Strategy Development (Funding Group II)							
Task 1 - Implementation Plan		$ 54	$ -	$ -	$ -	$ -	$ -
Task 2 - Rules and By-laws		$ 54	$ -	$ -	$ -	$ -	$ -
Task 3 - Contracts and Agreements		$ 54	$ -	$ -	$ -	$ -	$ -
Task 4 - Monitoring Plan		$ 54	$ -	$ -	$ -	$ -	$ -
Task 5 - Water Marketing Support Tools		$ 54	$ -	$ -	$ -	$ -	$ -
SUBTOTAL		$ 268	$ -	$ -	$ -	$ -	$ -
Semi-annual and Final Reports		$ 80	$ -	$ -	$ -	$ -	$ -
SUBTOTAL		$ 80	$ -	$ -	$ -	$ -	$ -
PROJECT TOTAL DIRECT COST		$ 3,214	$ -	$ 2,200	$ 500	$ 1,000	$ 7,000
Indirect Rate Charges							
Ducks Unlimited (provided as match)	14.83%	$ 477	$ -	$ 326	$ 74	$ 148	$ 1,038
Direct Expenses Total Cost by Category		**$ 3,691**	**$ -**	**$ 2,526**	**$ 574**	**$ 1,148**	**$ 8,038**
CWCB Grant Funds (50%)		**$ 1,607**	**$ -**	**$ 1,100**	**$ 250**	**$ 500**	**$ 3,500**
Applicant Match		**$ 1,607**	**$ -**	**$ 1,100**	**$ 250**	**$ 500**	**$ 3,500**
DU Match (Indirect Rate 14.83% on all charges)		**$ 477**	**$ -**	**$ 326**	**$ 74**	**$ 148**	**$ 1,038**

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 because 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:

Print Applicant's Name: Dale Trowbridge
Project Title: New Cache La Poudre Water Marketing Strategy
Date: October 6, 2017

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