

WaterSMART Grant Application – Funding Group II

Development of Water Marketing Strategies for the Northeast Colorado Water Cooperative

Prepared by

Lower South Platte Water Conservancy District, Sterling, Colorado
April, 2017

Table of Contents

Executive Summary	1
1. Background Data	1
2. Project Description	4
Scope of Work	5
3. Evaluation Criteria	14
E.1.1. Evaluation Criterion A – Water Marketing Benefits.....	14
E.1.2 Evaluation Criterion B- Level of Stakeholder Support and Involvement (30 Points)	17
E.1.3 Evaluation Criterion C- Ability to Meet Program Requirements (20 Points)	19
E.1.4 Evaluation Criterion D- Nexus to Reclamation (10 Points)	20
4. Environmental and Cultural Resources Compliance	20
5. Required Permits or Approvals.....	20
6. Project Budget.....	21
Funding Plan and Letters of Commitment.....	21
Budget Proposal	24
Budget Narrative	25
7. Existing Analyses Contributing to the Water Marketing Strategy	31
Appendix A: Letters of Support.....	A-1
Appendix B: Official Resolution	B-1

List of Figures

Figure 1. Map of South Platte River.....	3
Figure 2. System Wide Ender User Demand and Delivery	16
Figure 3 Project Schedule	19

List of Tables

Table 1. Irrigated Acreage in Water Districts 1 and 64 in the South Platte River basin	4
Table 2. Distribution of Crop Types Districts 1 and 64 in the South Platte River Basin	4
Table 3. Summary of Non-Federal and Federal Funding Sources	23
Table 4. Budget Proposal	24
Table 5. Summary of Costs for Task 1.....	26
Table 6. Summary of In-Kind Services.....	27
Table 7. Labor Breakdown for Grant-Reimbursed Services	29

Technical Proposal and Evaluation Criteria

Executive Summary

This grant application is made by the Lower South Platte Water Conservancy District (LSPWCD or District) on behalf of the Northeast Colorado Water Cooperative (NECWC) and its members and is submitted on April 19, 2017.

The LSPWCD, headquartered in Sterling, Colorado, is a public agency created in 1964 under the 1937 Water Conservancy Act (CRS 37-45-101) for conserving, developing and stabilizing supplies of water for domestic, irrigation, power, manufacturing and other beneficial uses. LSPWCD currently owns, operates and manages infrastructure and water rights in Sedgwick County for augmentation within the area. It encompasses 406,000 acres in portions of Morgan, Washington, Logan and Sedgwick counties. LSPWCD also assists numerous water users in the District with augmentation, recharge and small-scale storage project development and technical assistance.

Recently, with the support of the Colorado Water Conservation Board (CWCB) through grant programs, LSPWCD and a wide variety of agricultural and municipal water users provided support and formed the NECWC to facilitate water leases and optimize water management along the South Platte River between Greeley, Colorado and the Colorado-Nebraska state line. The NECWC is envisioned to help members facilitate leases and use of excess augmentation credits, available unappropriated supplies, and firming supplies through Alternative Transfer Methods (ATMs) that might periodically be leased from senior water right holders. While the NECWC has identified methods for inter-cooperative leases and transfers, there are additional benefits to be gained by enlarging the participation and developing partnerships with municipalities and industries who are not currently part of the NECWC.

The scope of work for this WaterSMART grant continues and incorporates work begun under several grants from the CWCB. Through the WaterSMART grant program, the NECWC will conduct extensive outreach and develop additional partnerships with local and regional stakeholders. The development of additional partnerships will lead to technical and legal questions that will need research and analysis, which will be conducted via the WaterSMART grant and will be incorporated into the existing research work being conducted by the NECWC. The work will culminate in the development of a water marketing strategy. The work funded by the WaterSMART effort will commence in 2017 and continue for approximately 2 years to end in 2019.

Although not included in the boundaries of this work, the Bureau of Reclamation's Colorado-Big Thompson Project provides return flows which are included in the water to be considered pursuant to this work. In addition, the Platte River Recovery Implementation Program (PRRIP) is a program with Reclamation participation. The PRRIP critical habitat is downstream of this project in Central Nebraska, but also relies on certain flows in the Platte River for its success.

Background Data

Background Studies

In 2009, the District was part of a team which studied the feasibility of creating a water marketing framework for efficiently moving augmentation credits from plans with excess credits into plans that need credits. A small group of water users and water professionals

began to discuss the possibility of creating a water organization in the Lower South Platte River to manage such a marketing framework.

Initial feasibility and analysis of excess augmentation credits, exchange potential and potential delivery efficiency improvements were completed as part of work conducted under a CWCB grant through the Colorado Corn Growers Association, in partnership with Ducks Unlimited, the City of Aurora and the stakeholders in the Lower South Platte basin. Work under this grant showed sufficient technical feasibility that stakeholders pursued additional efforts to evaluate organization structures and additional technical feasibility. The initial review of augmentation plan accounting indicated that there was 10,000 AF to 30,000 AF per year of excess credits from existing augmentation plans could be available (and recent research has shown higher amounts). The report from this project can be viewed using this link: http://www.lspwcd.org/index_files/Page313.htm

Additional work on the member organization was then pursued and was funded through the CWCB. Work under a grant through the CWCB's Water Supply Reserve Account (WSRA) titled *Lower South Platte Water Cooperative Organizational Analysis* focused primarily on an organizational structure while parallel work under the CWCB's Alternative Agricultural Water Transfer Methods grant program (ATM grant program) focused on developing an operations plan for the organization.

The WSRA grant work concluded that a cooperative would be the organizational structure that best fit the needs of the stakeholders. Through the WSRA grant work, organizational documents (articles of incorporation, bylaws, business plan, etc.) were developed. In addition, water law issues were researched. The report from this project can be viewed using this link: http://www.lspwcd.org/index_files/Page313.htm

The ATM grant work for operational planning is still ongoing. It focuses on operational issues and addresses the following items:

1. Technical issues such as identifying, quantifying and determining reliability of long term water supplies (from ATMs, excess augmentation credits and newly developed water rights) as well as evaluating accounting and data management needs and existing/new infrastructure to exchange, retime and store such water.
2. Legal issues such as addressing third party and internal water rights and injury concerns.
3. Financial and operational considerations for a water marketing organization.
4. Development of short and long term operational plans.

In 2013, LSPWCD applied for and received another ATM grant from the CWCB to build upon the results of the previous two grants. The objective of the grant was to implement the water cooperative. This work is ongoing and is described below.

1. Evaluate supplies, demands and delivery strategies for the initial participants in the NECWC. Extensive use was made of analytical tools developed during previous phases of work (i.e. exchange capacity tool, operational planning model, etc.).
2. Refine and implement an accounting system to track the movement of water among NECWC members. Work on the accounting system involved acquisition and input of data from participating augmentation plans, ditch companies, water providers, etc. and testing of the accounting system.
3. Meet with members to identify potential legal and operational concerns with the cooperative and to collaborate on potential solutions to the concerns prior to initiating the water court process.
4. Conduct startup and ongoing cooperative management tasks.

The NECWC was incorporated in January of 2014 with a current membership of twenty-two water user organizations. NECWC is governed by a 5-member board of directors elected by members. The NECWC can currently facilitate water leases that do not require water court approval. However, since the incorporation of the NECWC, the South Platte River basin has experienced relatively wet weather and above average stream flows. Because of this, augmentation plans have generally had sufficient replacement supply, and leases have not been actively pursued.

Description of the study area

Overall water demands and supplies in the South Platte River basin are large. Per the South Platte Basin Implementation Plan, page 1-17, existing supply is 735,000 AF with another 232,000 AF from projects that providers are pursuing (at a high success rate) leaving a net gap of 196,000 AF in 2050. The NECWC could potentially fill some of the projected gap.

Local demands were researched through the WSRA grant project cited earlier. Many water users were interviewed regarding their water demands. Water demands varied depending on the user. Most users expressed great interest in drought supplies. Several water users have chronic agricultural shortages and need new, reliable sources of water. Several industrial water users currently have adequate supplies, but would be very interested in the NECWC for future supplies. Initial quantification of demands was conducted, but more work is needed for a comprehensive assessment of local water demands.

The focus area for the NECWC has been in the Lower South Platte River basin between Greeley, Colorado and the Colorado-Nebraska state line. In addition, the NECWC is engaged in limited evaluations of serving the needs of upstream water users. A map of these two general focus areas is shown in the figure below.

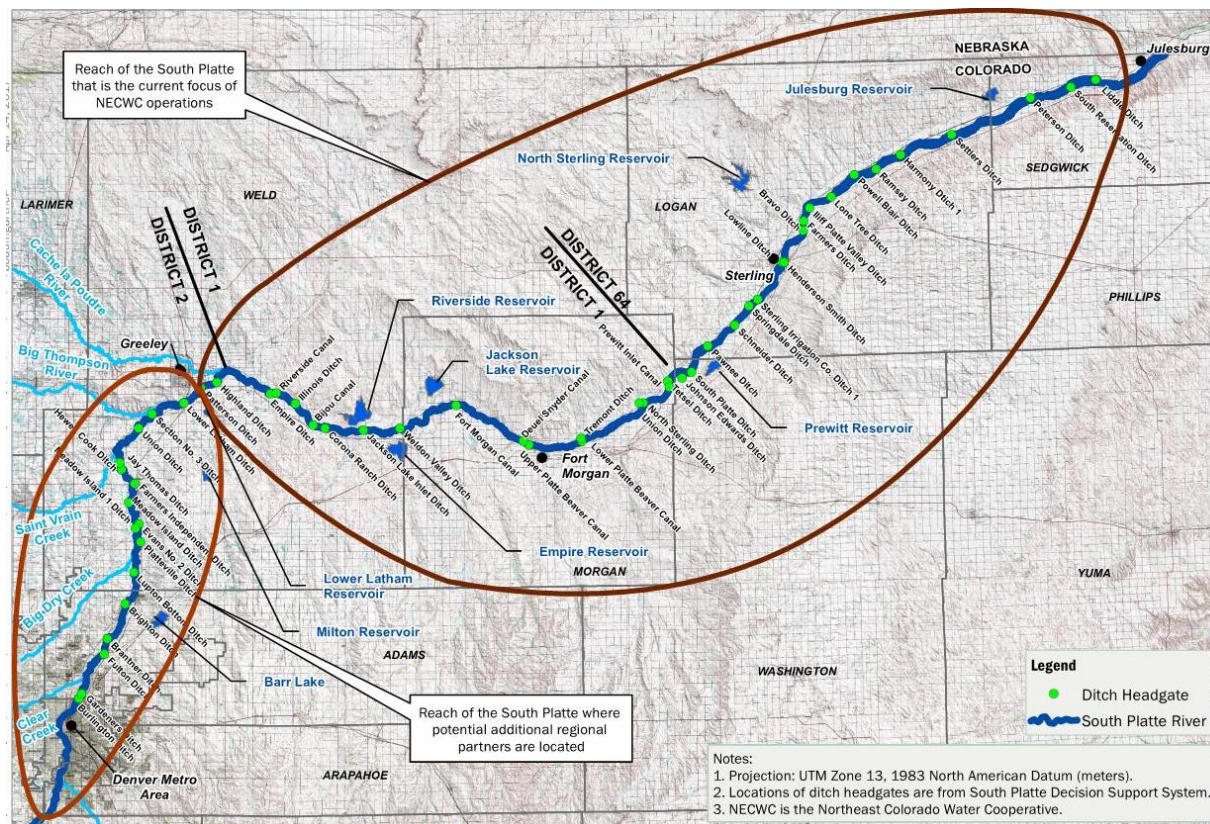


Figure 1. Map of South Platte River

Land use and cropping data from the State of Colorado's South Platte Decision Support System are shown in Tables 1 and 2 below. The tables reflect 2005 irrigated acreage and crop types in Water Districts 1 and 64 analyzed as part of the ATM grant cited previously.

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

Crop Type	Acres
Alfalfa	134,053
Corn	174,016
Dry Beans	12,557
Pasture Grass	30,043
Small Grains	29,728
Farm Sod	2,826
Sugar Beets	11,178
Vegetables	6,750
Grand Total	401,152

The LSPWCD has worked with Reclamation on funding assistance programs in the past. The LSPWCD was successful in being awarded a grant (2004) under the *Water 2025: Preventing Crises and Conflict in the West* program, specifically under the Water Measurement Incentive Program. The project consisted of the purchase and installation of several measuring devices for large-scale wells, irrigation ditches and recharge pond facilities within the District boundaries. The project provided incentives and assistance towards these ends, and the grant project was successfully completed.

Project Description

The project described in this WaterSMART grant application will result in a water marketing strategy that expands the opportunity for the NECWC to facilitate water transactions to multiple end users utilizing a variety of water sources and delivery methods. The NECWC is currently working on operational planning and certain implementation activities. The opportunity provided by this grant funding, however, will allow the NECWC to expand its focus to a broader set of potential members and service area and thereby enhance operations both locally and regionally. The five objectives of the project are:

- 1. Preliminary Work Funded Through Matching Funds:** This task is work that is currently funded by the CWCB grant programs and forms the foundation for the larger scope of work to be funded by the WaterSMART grant.
- 2. Develop an Outreach and Partnership Building Plan:** The NECWC will engage local and regional stakeholders to encourage participation in the NECWC.
- 3. Conduct Scoping and Planning Activities Related to Local and Regional Partnerships:** Numerous technical and legal research and planning efforts will be needed to support incorporation of new partners and integration with existing NECWC membership.
- 4. Enhance Administrative and Management Tools:** Existing contract templates, corporate bylaws, and water accounting tools will be reviewed and enhanced and new tools will be developed to accommodate additional stakeholders and to make the tools scalable.

5. **Develop Financial and Funding Strategies:** Research will be conducted on the financial structure of water transactions that encourage market activity, and strategies will be developed for enhancing the long-term financial sustainability of the NECWC.
6. **Develop a Water Marketing Strategy:** Consistent with the requirements of this WaterSMART grant funding opportunity, a water marketing strategy will be developed that incorporates the results of outreach and research and integrates the water marketing and implementation strategies developed during the course of the work.

Scope of Work

The scope of work presented in this section was developed to achieve the five project objectives. The project objectives were used to structure the scope of work to provide clarity on how specific work activities contribute to achieving the objectives. The work is described in a series of overall tasks (which correspond to the objectives) and subtasks that describe the intermediate work activities that support the overall tasks. In addition, project startup activities required by the WaterSMART grant (designated as “Task 0”) are described.

Task 0: Develop a Project Work Plan

- Subtask 0.1: Develop a draft Project Work Plan. A draft Project Work Plan will be developed that meets the requirements of the WaterSMART grant. In addition, other ongoing work being conducted by the NECWC will be considered and incorporated into the Project Work Plan. The draft Project Work Plan will be developed by the NECWC (with assistance from the General Manager and consultants) and submitted to Reclamation for review. The Project Work Plan will include the following components:
 - Detailed description of how the work will be performed (i.e. the scope of work) with a focus on the three required project elements described in the WaterSMART grant application.
 - Detailed work schedule.
 - Delineation of roles and responsibilities among the grant recipient, other stakeholders, NECWC board members, contractors, etc.
 - Project controls such as invoicing requirements and protocols, progress reporting requirements, data management protocols, etc.
 - Communications and outreach plan that meets the requirements presented in the WorkSMART grant application. The plan will describe the role of stakeholders and the public in the planning and strategy development process, planned outreach activities by the NECWC, forums for collecting feedback from stakeholders on water marketing and operational strategies, etc. The communications and outreach plan will guide the activities associated with Task 2 (described later in this section).
- Subtask 0.2: Revise and finalize Project Work Plan: Comments on the draft Project Work Plan provided by Reclamation will be reviewed and incorporated into the final Project Work Plan. The final Project Work Plan will be submitted to Reclamation along with an explanation of how comments were incorporated into the final plan.
- Subtask 0.3: Update the Project Work Plan as needed: The Project Work Plan will be updated as conditions warrant, and updated versions will be submitted to Reclamation for its use. For budgeting purposes, 8 hours have been allocated for updating the Project Work Plan as needed.

Deliverable: Draft and final Project Work Plans (including a communication and outreach plan).

Task 1: Preliminary Work Funded Through Matching Funds

The work under the existing CWCB ATM grants will be integrated with the work associated with the WaterSMART grant described in Tasks 0, 2, 3, 4, 5, 6, and 7. The existing CWCB ATM grant work will focus on researching existing and new infrastructure that could enhance delivery reliability and use of unappropriated supplies, limited work with potential partners, evaluating operational strategies using analysis tools developed earlier in the project, developing a long-term operational strategy, and report writing (to satisfy the reporting requirements of the CWCB ATM grants). Given the limited resources related to development of potential regional partners, the CWCB ATM grant work is aimed at evaluating infrastructure and operations at a more local level with consideration of one specific regional partner and general consideration of other indistinct partners. These evaluations in conjunction with the WaterSMART grant work will allow the NECWC to greatly broaden their operational planning. Work to be done under Task 1 for the CWCB ATM grants is described below. The overall scopes of work for the CWCB ATM grants are available for review via links that are cited in another part of the grant application.

- Subtask 1.1 Research existing infrastructure. Conduct reconnaissance-level research on existing infrastructure to evaluate the feasibility of using the infrastructure for NECWC purposes. Identify potential new infrastructure that could be incorporated into the long-term operational plan.
- Subtask 1.2 Evaluate member plans. Evaluate potential supply, demand, delivery, and legal issues for each member of the NECWC.
- Subtask 1.3 Limited work with potential partners. Use operational analyses conducted by Parker Water and Sanitation District (PWSD) to identify mutually-beneficial operational strategies, and consider operational strategies that the NECWC could utilize to work with other partners.
- Subtask 1.4 Develop long-term operational strategy. Develop up to three long-term operational scenarios that incorporate existing and proposed new infrastructure and mutually-beneficial operational strategies with PWSD and other partners. The scenarios will have varying levels of infrastructure use and delivery objectives.
- Subtask 1.5 Report writing. Write a report covering the work associated with both of the ATM grants and submit to the NECWC board and CWCB.

Task 2: Develop an Outreach and Partnership Building Plan

Note that the subtasks described in this section are proposed and are subject to revision based on Reclamation feedback on the Project Work Plan described under Task 0. In addition, it is possible that the specific approach may be altered based on project needs and feedback from the NECWC board and members and other stakeholders. The NECWC will communicate potential alterations to the approach and schedule/budget effects to Reclamation as the project proceeds.

- Subtask 2.1: Conduct initial outreach with local stakeholders: Local stakeholders are generally described as agricultural water users and municipal water providers located along the South Platte River between Greeley, Colorado and the Colorado-Nebraska state line. During the formation of the NECWC, many efforts were made to recruit local water users and water providers into the NECWC. Many of these stakeholders joined the NECWC, but some did not, because they were interested in a more diverse and geographically-broad organization. The NECWC sees significant benefit in working with local stakeholders that have not yet joined. Also, in developing regional partnerships,

the NECWC sees new benefits for local stakeholders that did not previously join and also for existing members. In this subtask, NECWC board members, the General Manager, and consultants (on a limited basis) will meet individually with local stakeholders that are and are not currently members to update them on recent development work and to identify potential membership benefits that would be attractive to local stakeholders. For budgeting purposes, it is assumed that 10 meetings will be held with local stakeholders and the NECWC General Manager and a board member will attend each meeting.

- Subtask 2.2: Conduct initial outreach with regional stakeholders: Regional stakeholders are generally described as relatively large municipal and industrial water users and providers located along the South Platte River upstream of Greeley, Colorado. These stakeholders provide water to Front Range communities, and some have robust water portfolios (e.g. Denver, Fort Collins, Aurora, etc.) while some have developing water portfolios (e.g. Brighton, Firestone, Dacono, Johnstown, etc.). Outreach to regional stakeholders will take place in two stages as described below:
 - Phase 1. A stakeholder-focused, informational meeting on the NECWC will be held at a location convenient for Front Range water providers and other stakeholders. The meeting is envisioned to include a presentation describing the history and status of the NECWC, a description of the NECWC's long term goals, and a period for general discussion that would allow interested stakeholders to ask questions and gather more information. Invitations to the meeting will be sent by the NECWC to targeted municipal and industrial water providers (including energy companies with South Platte River interests) and environmental groups who have expressed prior interest in working with the NECWC. Options for joining the meeting from a remote location will be provided. The efforts associated with Phase 1 include development of an invitation list, development of an agenda, preparation of a presentation and other meeting materials, coordination with the hosting venue, and writing a summary of the meeting.
 - Phase 2. Following the informational meeting, the NECWC will meet with individual municipal and industrial water suppliers that express interest in working with the NECWC. Front Range water providers have expressed interest in working with the NECWC in the past, and it is very likely that those water providers will be interested in furthering these discussions. In addition, it is likely that new interest will be spurred through the informational meeting in Phase 1. The meetings in Phase 2 will include discussion of water transactions and benefits that the individual stakeholders would like to see with potential membership or partnership with the NECWC. In addition, the meetings will provide a forum for follow up questions and discussion between the NECWC and the provider. For budgeting purposes, it is assumed that 10 meetings will be held with providers, and the NECWC General Manager and a board member will attend each meeting.
- Subtask 2.3: Summarize initial outreach activities: Feedback from both local and regional outreach activities will be summarized. Conceptual water marketing and operational strategies that meet the needs expressed by local and regional stakeholders will be developed. The strategies will be researched and refined in Tasks 3, 4, and/or 5 (depending on the nature of the strategy).
- Subtask 2.4: Gather feedback on water marketing strategies: Work associated with this subtask will occur once research on technical, legal, financial, and administrative issues is conducted and resulting water marketing and operational strategies along with

administrative processes and tools are developed. It is envisioned that the forum for gathering feedback will occur as an informational meeting held in conjunction with a NECWC annual membership meeting. During the informational meeting, prior outreach activities and feedback will be described and resulting water marketing and operational strategies will be presented. Meeting attendees will be given the opportunity to provide both oral and written feedback. For budgeting purposes, 8 hours of follow up phone discussions and 8 follow up meetings with individual stakeholders have been allocated for the NECWC General Manager. Effort on this subtask includes development of an invitation list, development of an agenda, preparation of a presentation and other meeting materials, coordination with the hosting venue, and writing a summary of the meeting.

Deliverables: Notes from meetings, summary of outreach activities, meeting handouts and presentations, summary of feedback.

Task 3: Conduct Scoping and Planning Activities Related to Local and Regional Partnerships

Outreach activities conducted in Task 1 will lead to technical, legal and administrative issues that need research. In addition, scoping and planning work will need to be conducted to broaden existing water marketing and operational strategies to accommodate the development of regional partnerships and to incorporate new, local members into the NECWC.

- Subtask 3.1: Conduct technical analyses: Under this subtask, water supplies, demands, and methods of delivery for potential partners will be evaluated considering the needs of existing NECWC members. Supplies, demands, and delivery methods for existing members have been previously evaluated and this subtask will build on this work. Activities under this subtask are described below:
 - Supply and demand assessment. Locations of supply and centers of demand (e.g. municipal water intakes, locations of well depletions, etc.) will be mapped. Similar mapping was conducted previously for the existing members of the NECWC, and the mapping will be expanded for this effort. In addition, approximate volumes of supply and demand, information on timing of supply availability and demand, etc. will be collected. It is anticipated that some or much of this information can be obtained during individual meetings with prospective partners conducted in Task 1. For budgeting purposes, 20 hours have been allocated for follow up phone calls, meetings, etc. with potential partners. Water supplies derived from Alternative Water Transfer Methods (ATMs) will also be considered as either firming supply or base supply depending on the needs of potential end users.
 - Delivery evaluation. Using existing exchange analysis and operational planning tools developed by the NECWC, water delivery issues will be researched and delivery strategies will be developed. This work will be done in coordination with technical evaluations that consider existing and new infrastructure that could enhance deliveries. The work includes updating existing tools to incorporate new locations of supply and points of delivery and recent hydrologic data describing stream flows, diversions, etc. Refer to the application section “Existing Analysis Contributing to the Water Marketing Strategy” for description of tools and analyses conducted prior to this grant application.
 - Infrastructure evaluation. Infrastructure that could mitigate potential delivery issues will be researched. Existing infrastructure that could be accessed by the NECWC will be evaluated as well as new infrastructure that could be developed cooperatively

with municipal and industrial partners. Infrastructure that meets both short and long term delivery needs will be assessed. This work will be conducted in close coordination with the delivery evaluation described above.

- Strategy development. Water delivery strategies and concepts will be developed based on the technical evaluations described above. Concepts describing short term strategies as well as longer term strategies (as the NECWC is “built out”) will be developed. The strategies will be based on input provided by stakeholders in Task 2. The strategies will be presented to stakeholders and the NECWC membership in Subtask 2.4.
- Subtask 3.2: Conduct legal analyses: Legal research and analysis of water law and water rights issues will be conducted under this subtask. Recommendations will be developed concerning legal requirements and necessary NECWC water management operations and practices to address potential water rights issues and prevent injury to existing water rights within the operational area of the NECWC. Relevant water rights decrees and other documents will be reviewed and evaluated to determine the ability and constraints to exchange, retime and lease excess augmentation water and/or other types of available water. The content and nature of future exchange, change of use and new water right filings will also be evaluated as part of this task (however, consistent with WaterSMART grant requirements, no work will be done on actual water court filings or documents). The budget includes the cost for this legal analysis. The engineering consultants will assist the legal consultants by analyzing technical issues related to water laws and water rights in conjunction with operational planning.

Deliverables: Descriptions of water delivery strategies and concepts to be presented to stakeholders; spreadsheets, data, and calculations associated with technical analyses.

Task 4. Enhance Administrative and Management Tools

Administrative and management tools include water transfer agreement templates, partnering agreements for usage of existing infrastructure and/or the development of new infrastructure and water accounting methodologies. Enhancements will be made to existing tools and new tools will be created using feedback from stakeholders gathered in Task 2.

- Subtask 4.1: Review and edit water transfer agreements and cooperative bylaws: The NECWC developed template water transfer agreements during previous work efforts, and they developed and implemented cooperative bylaws. The existing water transfer templates will be reviewed by NECWC’s corporate counsel and necessary changes will be made based on the feedback gathered from prospective partners and the NECWC board of directors as determined in Task 2. In addition, cooperative bylaws will be reviewed and necessary changes to accommodate new or additional member qualifications and new partners. Depending on the results of the research and information gathering conducted in Task 2, structural changes to the cooperative bylaws may be needed, such additional membership or patron classes, voting rights changes for any new classes of membership and board of director qualifications or designations. Water marketing strategies, or operational protocols will be considered and adopted as necessary.
- Subtask 4.2: Develop partnering agreements for existing infrastructure: The NECWC has been and will be conducting technical research on existing infrastructure that could be beneficial for operations. The work under this grant will consider existing infrastructure in the context of additional local and regional partners identified in Task 2, and the work will also contemplate contract terms for infrastructure usage agreements.

The technical analyses described in Task 3 will identify existing infrastructure that could potentially be used by the NECWC to enhance deliveries based on new partnerships. Owners of existing infrastructure will be engaged to explore mutually-beneficial operational arrangements and contract terms necessary to establish usage agreements. Template usage agreements will be developed based on discussions with owners. It is likely that each owner will have unique needs. The agreement templates will focus on common needs among owners and will allow for customization. For budgeting purposes, it is assumed that 5 meetings will be conducted with owners of existing infrastructure. The meetings will be attended by the NECWC General Manager, one NECWC board member, and legal counsel and/or engineering consultant (depending on need).

- Subtask 4.3: Develop partnering agreements for new infrastructure: Subtask 3.1 evaluations will identify potential new infrastructure for water delivery that could be beneficial to both the NECWC and local/regional partners. Potential municipal and industrial partners and local stakeholders will be engaged to discuss the operations of new infrastructure, benefits that could be derived from the infrastructure, potential costs of infrastructure, and strategies for partnering on construction and financing of new infrastructure. Contract terms, conditions, and concepts and funding strategies will be identified that are necessary to establish amicable financing and operational agreements for new infrastructure. Template agreements will then be developed. The engagement of potential partners is envisioned to occur over a series of three meetings. The objectives of the meetings are described below. It is anticipated that the meetings will be attended by the NECWC General Manager, one NECWC board member, and legal counsel and/or engineering consultant (depending on need).
 - Meeting 1: Discuss location, operations, and benefits of potential infrastructure with several potential partners who could potentially benefit from and help finance existing infrastructure. Discuss concepts that would need to be addressed in a potential agreement and for funding the projects. Draft agreement terms, conditions, and concepts and funding strategies will be developed based on feedback in Meeting 1 and will be distributed to participants prior to Meeting 2.
 - Meeting 2: Review and refine potential agreement terms, conditions, and concepts and funding strategies. A template agreement and a draft-final description of funding strategies will be developed based on feedback in Meeting 2 and will be distributed to participants prior to Meeting 3.
 - Meeting 3: Review and refine potential template agreement and funding strategies.

Costs have been allocated in the budget for legal work on Subtasks 4.1, 4.2, and 4.3.

- Subtask 4.4: Expand water accounting tool: The NECWC has developed a detailed water accounting tool that tracks available supply at many locations in the South Platte River on a real time basis, records water transactions, accounts for transit losses, incorporates the priority and location of river calls, and allows the user to evaluate operational alternatives. It is likely that the outreach and planning activities described in other tasks will require changes in the water accounting tool. For example, the accounting tool will likely need to be expanded to consider the use of new and existing infrastructure. The expansion of the water accounting tool will occur in a stepwise fashion as described below:
 - Identification of needed enhancements: Based on information gathered and analyses conducted in Tasks 2 and 3, a list of water accounting tool enhancements will be developed.

- Meeting with Division Engineer: NECWC consultants have met previously with the Division 1 Engineer to describe the water accounting tool and discuss features that the Division 1 Engineer will require. An additional meeting under this grant project will be conducted to describe the needed enhancements to the tool and to get feedback from Division 1 Engineer staff regarding their requirements.
- Implementation of enhancements and testing: Accounting tool enhancements that can be achieved given the available budget will be implemented. Testing of the enhancements will be conducted.

Outreach activities may identify the need to develop a tool or “dashboard” that would allow members, stakeholders, and the Division Engineer to see the amounts and locations of available water on a real time basis. Content and functionality of a dashboard will be considered if necessary and described in the water marketing strategy.

Deliverables: Template agreements, updated bylaws (if necessary), updated water accounting tool.

Task 5. Develop Financial and Funding Strategies

Under this task, research will be conducted on the financial structure of water transactions that encourage market activity during periods of variable supplies and demands for water. Strategies for joint funding of infrastructure projects with partners will be explored. In addition, strategies will be developed for enhancing the long-term financial sustainability of the NECWC and for funding long-term operations and water accounting.

- Subtask 5.1: Develop strategies to encourage water market activity: A key potential benefit of the NECWC is to encourage water market activity in the context of variable supplies and demands (for example, providing a market for excess water supplies when demands are few or nonexistent). The NECWC could work with water users to retime their excess water supplies during periods of low demand and then make those supplies available at some point in the future when demands are higher. While this is a compelling concept, it will require careful planning and creative financial arrangements given the current lack of available revenue that could be used to retime excess supplies when demand is low. In this subtask, strategies for enhancing the ability of the NECWC to be a “market maker” will be explored. Work activities associated with this subtask are as follows:
 - Reach out to financial entities: Entities such as Premier Farm Credit, Bank of Colorado, Co-Bank, etc. will be contacted to discuss their potential involvement in evaluating financial and funding strategies and to identify representatives from interested organizations that could assist the NECWC with this task.
 - Scenario development meeting. Conduct a meeting with NECWC board members, legal counsel (both water and corporate counsel), financial entity representatives, and technical consultants to identify potential funding scenarios and water transactions that could occur to enhance market activity and financial considerations and arrangements associated with those transactions. For budgeting purposes, it is assumed that this meeting will take place during an NECWC board/coordination meeting described in Subtask 7.2.
 - Financial analysis. With assistance from financial entities, conduct a financial analysis to evaluate alternatives for potential capital outlays to stimulate market activities and compensation arrangements for recouping NECWC water investments when demands are higher.

- Evaluation of alternatives. Base on the financial analysis, financial alternatives will be evaluated and the most viable alternatives will be identified.
- Documentation of alternatives. A report will be written to document the alternatives and to describe them in terms that can be understood and used by NECWC membership.
- Subtask 5.2: Develop strategies for long term funding of NECWC operations and water accounting: With the inclusion of more local and regional partners, the NECWC anticipates that more alternatives for long-term funding of operations and maintenance can be developed. The NECWC has discussed initial strategies for funding their long-term operations and water accounting. However, based on the input and feedback obtained during other phases of this work, and based on the strategies developed in Subtask 5.1, the initial strategies will be reviewed, updated, and enhanced. The steps involved in this subtask will be like those described for Subtask 5.1 and will incorporate the findings of Subtask 5.1.
 - Meet with Colorado Water Conservation Board: The NECWC will meet with staff from the CWCB to discuss loans and potential financial assistance that could help fund infrastructure and operations.
 - Scenario development meeting. Conduct a meeting with NECWC board members, legal counsel (both water and corporate counsel), financial entity representatives and technical consultants to identify potential funding needs for operations and ongoing water accounting with consideration of the findings of Subtask 5.1. For budgeting purposes, it is assumed that this meeting will take place during an NECWC board/coordination meeting described in Subtask 7.2.
 - Financial analysis. With assistance from financial entities, conduct a financial analysis to evaluate costs for ongoing operations and water accounting and funding sources considering the water transaction financing alternatives described in Subtask 5.1.
 - Evaluation of alternatives. Based on the financial analysis, funding alternatives for on-going operations and water accounting will be evaluated and the most viable alternatives will be identified.
 - Documentation of alternatives. A report will be written to describe the alternatives in terms that can be understood and used by NECWC membership.

Deliverables: Reports describing alternatives for encouraging water market activity and for long term funding of NECWC operations and water accounting.

Task 6. Develop a Water Marketing Strategy

Based on the findings, strategies, and stakeholder input from previous tasks and from work that has already been conducted by the NECWC, a water marketing strategy document will be developed that meets the requirements of the WaterSMART grant application. The following subtasks describe the proposed steps for developing the strategy.

- Subtask 6.1. Develop draft water marketing strategy: The draft water marketing strategy will be developed based on existing short and long term operational planning conducted by the NECWC and from the work associated with this scope of work. The draft water marketing strategy document will be submitted to Reclamation and the NECWC board of directors for review. The strategy requirements in the WaterSMART grant application align well with the needs of the NECWC, and they are described below within the context of the NECWC:

- Implementation plan: The water marketing strategy will build on the short and long term operational planning already conducted by the NECWC to incorporate the needs and opportunities afforded by the inclusion of additional local and regional partners. Based on the findings of the other tasks in this scope of work, short and long term strategies for delivering water supplies to meet the demands of members and outside customers will be described. Existing and new infrastructure will be identified that can help enhance delivery reliability. Administrative tools and contract templates developed in other tasks will be described. Financial considerations and alternatives and preferences will be presented. Water accounting enhancements and the website for communicating real time water availability will be described. Implementation steps that identify top priorities (in terms of utilization of infrastructure, enhancing exchange capacity, conducting water transactions to stimulate market activity and develop drought supplies, etc.) will be presented along with a recommended timeline for implementation. Steps that have already been taken by the NECWC will be incorporated into the timeline. The implementation steps and schedule will also consider necessary environmental compliance steps and timelines.
- Rules and requirements for water marketing activities: Rules and requirements for water marketing activities will span several topics and will be developed based on existing NECWC research and findings from the work associated with this grant. Rules and requirements will be derived based on water rights considerations, template agreements for infrastructure sharing and water transactions, water accounting requirements, etc. Note that rules and requirements pertaining to water rights issues could change in the future when aspects of NECWC operation are adjudicated in water court.
- Contracts or agreements supporting water marketing: Template agreements for water transactions and infrastructure sharing developed during the course of this work will be incorporated into the water marketing strategy document.
- Monitoring plan for water marketing activities: The updates to the water accounting system will be described in the water marketing strategy document. In addition, it's necessity, features, and function will be described.
- Developing water marketing support tools: The use and benefits of the web-based dashboard of water availability will be described in the water marketing strategy.
- Subtask 6.2: Revise and finalize water marketing strategy: Comments on the draft water marketing strategy provided by Reclamation and the NECWC board of directors will be reviewed and incorporated into the final water marketing strategy. The final water marketing strategy will be submitted to Reclamation and the NECWC along with an explanation of how comments were incorporated into the final document. The document will serve as a guide to the NECWC as it develops partnerships and expands both locally and regionally.

Deliverables: Draft and final water marketing strategy documents.

Task 7. Project Management

Project management activities to be conducted for this project are described below:

- Subtask 7.1: Monitor budgets and schedules: Monitoring of budgets and schedules commonly occurs monthly when invoices and progress reports are generated. Monthly invoices and progress reports will be developed and submitted in this subtask. For budgeting purposes, it is assumed that 24 invoices and progress reports will be generated over the proposed 2-year period for the project. In addition, 2 hours have

been budgeted on a monthly basis to monitor, analyze, and update project schedules, budgets, and earned value estimates.

- Subtask 7.2: NECWC board/coordination meetings: Meetings among the consulting team, NECWC General Manager and Board of Directors will be held regularly. For budgeting purposes, it was assumed that 9 of these meetings will be held during the 2-year period of the project. During these meetings, progress on various tasks will be discussed, work will be coordinated, and technical, legal, and administrative issues will be discussed. For budgeting purposes, it is assumed that these meetings will be held in Fort Morgan, Colorado, and will last 6 hours (including travel time to and from Fort Morgan). Funding under this task support consultant efforts and not for time associated with the Board of Directors or the NECWC General Manager.
- Subtask 7.3: Reclamation reporting requirements: Reporting requirements described in the WaterSMART grant application will be conducted in this subtask. Requirements and associated support activities are described below.
 - Financial reports: Fully completed forms SF-425 will be submitted on a semi-annual basis and with the final performance report. The forms will be completed and submitted by the NECWC General Manager. For budgeting purposes, 4 hours per report have been allocated to this activity.
 - Interim Performance Reports: Interim Performance Reports will be submitted semi-annually. The reports will include information required by Reclamation including a comparison of actual accomplishments to the milestones established by the financial assistance agreement for the period; the reasons why milestones were not met (if applicable); the status of milestones from the previous reporting period that were not met (if applicable); whether the project is on schedule and within the original cost estimate; additional pertinent information or issues related to the status of the project.

The reports will be completed and submitted by the NECWC General Manager with assistance from technical consultants. For budgeting purposes, 4 hours per report have been allocated to this activity.
 - Final Performance Report. A final performance report will be submitted that includes information on whether the project objectives and goals were met; the benefits achieved by the project including how the plan improves long-term water supply sustainability; how the water marketing strategy demonstrates collaboration; photographs documenting the project (note that photographs will be provided if possible, but due to the nature of the project, they will likely be very limited)

The Final Performance Report will be written by the NECWC General Manager and technical consultants and will be reviewed by the NECWC board.

Evaluation Criteria

The WaterSMART grant evaluation criteria (in italicized text) along with applicant responses are presented below.

E.1.1. Evaluation Criterion A – Water Marketing Benefits

Describe how the proposed water market or water marketing activities are anticipated to benefit water supply sustainability after implementation of the strategy. Describe the benefits that are anticipated to result from the water marketing strategy, addressing each of the following:

- *Explain whether the water market/activity will address a specific water supply shortfall and describe the extent of benefits to different sectors, including agricultural, municipal/industrial, tribal and environmental sectors, including:*
 - *Will the water marketing strategy address a specific water supply shortfall?*
 - *What is the nature and severity of the shortfall and which sectors are affected? Please describe the shortfall (e.g. nature and extent of impacts) and provide support for your response.*
 - *How and to what extent will the water market/water marketing activities, once implemented, address the shortfall? Please describe the expected benefits (e.g. how water users will benefit) and provide support for your response.*
 - *Will the water market/water marketing activities benefit multiple sectors (e.g., agricultural, municipal, tribal and environmental) and/or types of water uses (e.g. hydropower generation, recreation, irrigation)? If so, to what extent and which sectors and water uses will benefit? Provide support for your response.*

Response: The water market activity being proposed will address the project water supply gap in the South Platte River Basin. The gap was defined in the Colorado Water Plan (see <https://www.colorado.gov/pacific/cowaterplan/plan>) as ranging from 204,000 AF to 310,000 AF depending on the specific scenario for proposed project success. All sectors (agriculture, municipal, industrial, environmental) will be affected as the availability of water in the basin will shift water to the highest market value use. By developing a water marketing entity with defined processes which are in place and suitable for use by all affected users, the shortfalls can be reduced by active management and voluntary leases of unused augmentation credits, senior direct flows, development of new and available water supplies, and other methods of transfer.

The users will benefit by participating in a program that facilitates the sharing of water and the development of new storage and conveyance systems. By increasing the number of participants in the cooperative venture, the options available are more and the amount of water that can be optimized increases.

The existing NECWC numbers 22 members, including agricultural and municipal users. These users will see a significant benefit of having water available after and during extended droughts. The benefits are discussed in previously-cited work by the NECWC under a WSRA grant, (see Section 3.3.1.1 at http://www.lspwcd.org/index_files/Page313.htm).

The intent of that grant was to explore ways to quantify and use excess recharge credits. That study identified unused recharge credits as ranging from 30,000 AF to 80,000 AF during the period from 2008 to 2010. (see Table 3-2 in WSRA report).

- *Explain how and to what extent the proposed water market or water marketing activities will improve water supply sustainability in general in the area upon implementation of the strategy (address all that apply including increasing resiliency to drought; providing instream flows for ecological purposes, species, recreation or water quality objectives; sustaining agricultural communities while still reducing diversions; reducing the likelihood of conflicts over water; and demonstrating a water marketing approach that is innovative and which may be applied by others).*

Response: The NECWC was identified as a regional project concept in the South Platte Basin Implementation Plan (see <http://southplattebasin.com>). The NECWC members have been continuously developing this concept for over several years. The formation of the NECWC is significant in that the members have recognized the value of collaboration and the need for collaboration, rather than conflict over water. As the first of its kind, the

NECWC is being watched by the Colorado water community to see if it can engage the right people at the right time, to effectively optimize the use of water currently in the system. Its success will be a harbinger of future conversations throughout the state.

Prior research into operations of the NECWC showed significant benefits to potential members in optimizing the use of existing supplies and meeting additional demand. The figure below illustrates modeling results and shows a portion of water demands in the service area and varying levels of additional deliveries to meet those demands, depending on the level of infrastructure available to affect the delivery.

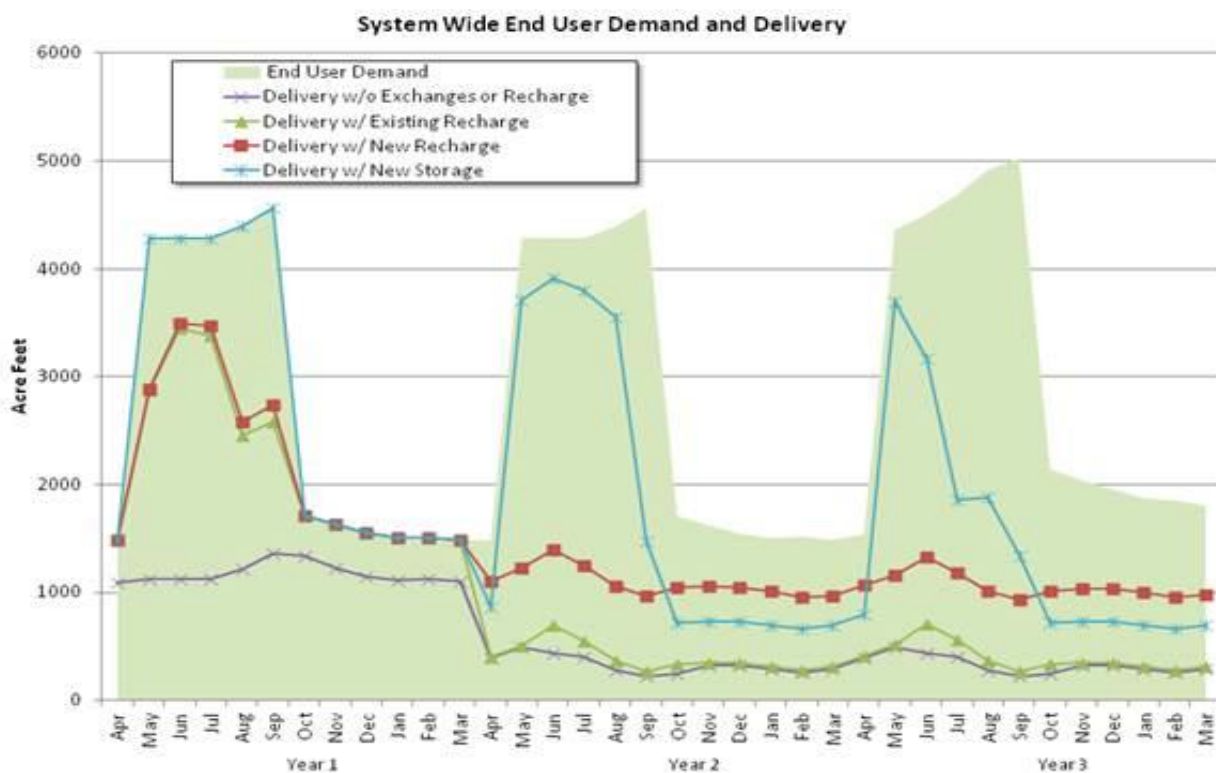


Figure 2. System Wide Ender User Demand and Delivery

- Explain the extent to which the water market/activity will be ready to proceed upon completion of the strategy. Addressing each of the following (note: Funding Group I proposals will be evaluated separately from Funding Group II proposals, to ensure fairness):
 - Describe your plans and timeline for implementing the strategy upon its completion.
 - Are there complex issues, including issues of law or policy, that would need to be resolved before the strategy could be implemented?
 - Explain whether previous planning, outreach and/or water marketing activities have been completed, including work on any of the required Project elements (1), (2), and (3), describe above. Note that links to existing work that will contribute to the strategy are requested in Section D.2.28. Existing Analysis Contributing to the Water Marketing Strategy (if applicable). While previous planning or existing water marketing activities are not required, these efforts may support the resolution of complex issues within the timeframe for the grant, so that implementation may follow quickly upon completion of the strategy.

Response: The expectation of the NECWC is that this work will result in a road map and an implementation plan and schedule. The conditions for implementing include willing lessors

and lessees, hydrologic conditions which can set up the group for banking unused recharge credits, and a way to “pay forward” the banking to get the program started. This is no mean feat, but that is why the NECWC is inviting others to join them. The bigger the user pool, the more likely it is to be able to make matches that will be useful and effective. The NECWC is already set up as a legal entity that can facilitate water transactions. This additional work effort will enhance the potential for actual movement of water and long-term success of the NECWC.

As noted in the WSRA report, there are some water law challenges unique to Colorado. However, those challenges can be and should be thoroughly explored to identify ways to work within the existing legal framework (see page 11 of WSRA report). This will be adjudicated by the Colorado Water court once the NECWC files a water rights application.

As noted earlier, the South Platte Basin Implementation Plan included this concept, largely due to the need to manage existing water more effectively, in combination with additional “new” water with highly variable availability. The NECWC was formed with the assistance of several previous grants and resulting work that began to form this concept and idea.

As for the results of other work, the NECWC has available to it several tools developed through previous grant efforts. The tools include a historical point flow and exchange analysis tool, a 3-year operational planning tool, a robust and comprehensive water accounting tool and various quantifications of demands and supplies from existing and potential NECWC members. These are described in detail in the ATM grant applications and WSRA report, referenced previously.

E.1.2 Evaluation Criterion B- Level of Stakeholder Support and Involvement (30 Points)

- *Identify stakeholders in the planning area who have committed to be involved in the planning process.*
 - *Describe their commitments, e.g., will they contribute funding or in-kind services or otherwise engage on the planning process?*
 - *Please explain whether the project is supported by a diverse set of stakeholders (appropriate given the types of interested stakeholders within the watershed and the scale, type and complexity of the proposed strategy). For example, is the project supported by entities representing environmental, agricultural, municipal, tribal or recreation uses?*

Documentation could include letters from stakeholders committing to be involved in the planning process (see Section D.2.2.7. Letters of Support); such letters should explain what their specific interest is and how they plan to participate.

Response: This project is supported by a variety of stakeholders. First and foremost, are the members of the NECWC itself. This group has demonstrated forward thinking and an understanding of the impact, particularly on agriculture, of the ability to move water around for great benefit. Both members and non-members have understood the value of the project and demonstrated that support through providing matching funds for the CWCB grants to develop the concept. As the CWCB grant moneys are not yet spent, that funding will provide cost sharing funds that will be used in conjunction with the WaterSMART grant funds to enhance the reach of the NECWC for existing and new stakeholders. They are leveraging their own funds to promote the ideas and concepts embodied in the mission of the NECWC. In addition to the agricultural supporters, the Morgan County Quality Water and the Parker Water and Sanitation district have demonstrated their support by offering

meeting space, and in the case of Parker, discussing the feasibility of a shared storage facility to support the exchanges and use of credits for municipal purposes. Parker has gone so far as to include this alternative in its Water Supply Master Plan (see <http://www.pwsd.org/DocumentCenter/View/749>).

In addition to the participants, the CWCB has submitted a letter of support for this grant application, demonstrating a statewide commitment to developing this alternative as far as possible. Parker Water and Sanitation District has also provided a letter of support.

- *Describe stakeholders in the planning area who have expressed their support for the planning process, whether or not they have committed to participate. Support can include letters of support from stakeholders or a description of feedback from interested stakeholders; such letters should identify the stakeholder's specific interest.*
- *Is there opposition to the proposed strategy? If so, describe the opposition and explain how it will be addressed. Opposition will not necessarily result in fewer points.*
- *Do any separate planning efforts express support for the proposed water market/transaction? Or, will the proposed water marketing strategy complement other ongoing or recent planning efforts within the area? Other relevant planning efforts could include a WaterSMART Basin Study, water management plan, water conservation plan, drought contingency plan, state water plan, or other planning efforts.*

Response: As noted previously, there are a variety letters of support from members, and from the state offices. Both members and non-members have provided letters of commitment to demonstrate local support (see ATM grant application attachments at http://www.lspwcd.org/index_files/Page313.htm). There are currently no direct opposers but there may very well be opposition through the water court process once a water rights application is filed for the NECWC. The NECWC has met with members to discuss concerns and evaluated potential water court related issues and strategies to quell heavy opposition (see WSRA report). Until a water court case is filed, the strength and breadth of the opposition is unknown. However, the more outreach and public education the NECWC can do, the more likely they are to be successful in a water court case specific to this project.

The Colorado Water Plan and the South Platte Basin Implementation Plan have both identified the NECWC's mission and the formation of an implementation plan as an essential ingredient for meeting the potential gap in the basin.

- *Please describe any relevant planning efforts, including who is undertaking these efforts and whether they support or are complemented by the proposed water marketing strategy. Explain how the proposed water marketing strategy will avoid duplication or complication of others ongoing planning efforts.*
- *Describe what efforts you will undertake to ensure participation by a diverse array of stakeholders in developing the water marketing strategy. If specific stakeholders have not yet been identified, or if some sectors are not yet represented, explain how you will accomplish this in the first few months after an award. Support could include a description of key stakeholder interests in the planning area and what efforts that you will undertake to engage them in the planning process, including outreach to stakeholders or collaborating with other groups or partners.*

Response: The answer to these questions is in the Project Description. Expanding the NECWC and doing outreach to other stakeholders such as recreational and environmental groups is important to achieve support for the strategy. As for other planning efforts, the state is continuing its planning by updating the Statewide Water Supply Initiative (SWSI), which is in its third generation and will be updating the basic data used by the basins for

Multiple tools have been developed to help research and implement the NECWC. Specifically, the LSPWCD has a point flow model that has formed the basis of delivery evaluations. The model is calibrated to river gains and losses. It has been used and reviewed by multiple agencies and consulting firms to great effect. As noted previously, the results of SWSI are the basis for the current South Platte Basin Implementation Plan and the point flow model was used in the SPRBIP to quantify unappropriated water supplies in the basin. The water accounting tool has also been tested and reviewed with a number of hypothetical transactions and operational scenarios. The tools are robust and have been calibrated and tested and the data are accurate.

LSPWCD staff, NECWC board members and consultants proposed for this work have all been involved with NECWC research since its inception and are well-qualified to perform the work in this WaterSMART application. Attachment 2 includes a request for sole source contracting with these same engineering consultants and attorneys to maintain consistency and provide valuable historical knowledge and expertise.

E.14 Evaluation Criterion D- Nexus to Reclamation (10 Points)

- *Is there a Reclamation project, facility, or activity within the planning area?*
- *Is the planning area in the same basin as a Reclamation project, facility, or activity?*
- *In what way, will the proposed Project benefit a basin where a Reclamation project, facility, or activity is located?*
- *Will the Project help Reclamation meet trust responsibilities to any tribe(s)?*
- *Does the proposed Project support implementation of an Interior initiative (e.g., the National Drought Resiliency Partnership or the Colorado River System Conservation Program, for example)? Or, does the Project support a complementary initiative of another Interior agency (e.g., a U.S. Fish and Wildlife Service wildlife refuge)?*

Response. The project will include an evaluation of this question as the details of the water marketing strategies are clarified. However, the State of Colorado must comply with the Platte River Recovery Implementation Program. Any partners that develop water through this project for municipal and industrial uses will be required to participate in the South Platte Water Related Activities Program (SPWRAP) to maintain compliance with the PRRIP. With respect to return flows associated with the Colorado-Big Thompson (C-BT) project, NECWC is committed to the maintenance of C-BT return flows for the benefit of water users within the boundaries of the Northern Colorado Water Conservancy District.

Environmental and Cultural Resources Compliance

In reviewing the grant application instructions, there is a signification list of detailed questions that must be considered.

Our assessment is that there will be no environmental or cultural resource implications unless or until there is an actual trade or exchange to consider and unless or until there is new infrastructure necessary to affect that trade or exchange. The details of the strategy and its implementation, along with a schedule, include an analysis of this issue.

Required Permits or Approvals

There is currently no expectation of required permits. Approvals will be through water court and will likely be part of the implementation. The NECWC may, upon requests from members, conduct limited transactions during the grant period of performance.

Other approvals may need to be delivered from ditch companies or reservoir companies if a joint effort is considered for the transactions. But those evaluations are a part of the work contemplated by this grant application. Otherwise, there is no expectation of other needed permits or approvals until the implementation period.

Project Budget

Funding Plan and Letters of Commitment

Non-Federal costs for this project will be obtained from grant funds provided by the CWCB, cash contributions from existing NECWC members and stakeholders, in-kind services provided by the LSPWCD via prior expenditures of existing CWCB grant fund, and in-kind services from the LSPWCD and NECWC Board of Directors. Note that the CWCB verified the amount of ATM grant funds available as of July 1, 2016 (see Attachment 1). Most of those funds are accounted for as “CWCB funds” and are cash contributions. A small portion of those funds are categorized as “In-kind Grant Expenditures Since July 1, 2016”. The various funding sources are described below:

CWCB funds

The source of funds from the CWCB is their Alternative Agricultural Water Transfer Methods (ATM) grant program. The NECWC is currently conducting limited planning and implementation activities via two ATM grants. The first grant focuses on short and long term operational planning in areas local to the NECWC with a very limited evaluation of regional partnerships. The objective of the second grant is to advance implementation of the NECWC on a local level with its existing members. The work associated with these grants (focused largely on local operations and implementation) will integrate seamlessly with work described in this WaterSMART grant application that seeks to develop a water market strategy that builds NECWC membership and patronage both locally and regionally.

Requested information for the grant application regarding these funds is provided below:

- The amount of funding commitment: The CWCB grants were awarded prior to the date of this grant application. As of the date of this application, the amount of remaining CWCB grant funds is \$147,483.04. This amount is proposed as part of the non-Federal funding contribution to this project.
- The date the funds will be available to the applicant: These funds are available now.
- Any time constraints on the availability of funds: The end dates for the CWCB grant funding contracts are both March 1, 2018. However, the end dates have been extended in the past, and may be extended again depending on the needs of the project. However, CWCB ATM grants cannot be extended longer than five years after the date of the contract. As a result, the end date of the CWCB grant focused on operations cannot be extended past February 24, 2020, and the end date of the CWCB grant focused on implementation cannot be extended past November 1, 2018.
- Any other contingencies associated with the funding commitment: None.

Cash Contributions from Existing NECWC Members and Stakeholders

The CWCB’s ATM grant program requires a 10% cash match from the grant applicants. The cash match obligation was provided by a wide array of NECWC members and stakeholders totaling 35 different water-related organizations in the South Platte River basin. NECWC members and stakeholders provided their contributions to the LSPWCD (the applicant and manager of the ATM grant funds). These cash contributions have already been committed to the ATM grant project work and are available to meet the non-Federal funding

requirements under this WaterSMART grant. Requested information for the grant application regarding these funds is provided below:

- The amount of funding commitment: As of the date of this grant application, \$44,750.75 is available from the LSPWCD via contributions from NECWC members and stakeholders.
- The date the funds will be available to the applicant: These funds are available now.
- Any time constraints on the availability of funds: While there are no specific time constraints on the availability of these funds, it is expected that they will be spent prior to the end dates of the ATM grants.
- Any other contingencies associated with the funding commitment: None.

In-Kind Grant Expenditures Since July 1, 2016

Since July 1, 2016, some of the grant funds available from the CWCB were spent in working towards completing the objectives of the CWCB ATM grants. As the administrator of the grants, the LSPWCD spent the grant funds on legal and technical/engineering services pertinent to the grant objectives. Requested information for the grant application regarding these expenditures is provided below:

- Project expenditure and amount: The expenditures were for legal and technical/engineering services associated with work done under the ATM grants. The total amount of the expenditures is \$11,307.97.
- Whether the expenditure is or will be in-kind services or donations: The expenditures were in-kind services performed by legal and engineering contractors.
- The date of cost incurrence: The costs were incurred at various times between July 1, 2016 and the date of this application.
- How the expenditure benefits the Project: The contractor services provided legal and engineering support to the NECWC in evaluating constraints to exchanges and alternatives for delivering supplies to members, preliminary analysis of water management alternatives to meet the needs of a municipal member of the NECWC, continued development of legal strategies for NECWC operations, etc. In advancing objectives of the ATM grants, these services will help inform solutions to legal and technical/operational issues associated with new potential partnerships and the water marketing strategy developed in this WaterSMART grant.

In-Kind Service from the LSPWCD

The LSPWCD serves as the general manager of the NECWC. In this role, the LSPWCD will provide a variety of in-kind services during the course of the WaterSMART grant. In-kind services by the LSPWCD will include financial and progress reporting to Reclamation, numerous meetings with stakeholders and potential partners (see Project Description for more details), development assistance and review of project deliverables, and serving as the point-of-contact for stakeholders and potential partners.

- Project expenditure and amount: In-kind services for LSPWCD total \$10,729.
- Whether the expenditure is or will be in-kind services or donations: The expenditures will be in-kind services.
- The date of cost incurrence: Services will be provided throughout the grant.
- How the expenditure benefits the Project: LSPWCD staff will perform many of the necessary tasks associated with the WaterSMART grant project. In addition, the LSPWCD staff are local to the NECWC's service area, and they are trusted by local water users and stakeholders. As a result, their involvement in describing the benefits of the

NECWC and recruiting local stakeholders is essential to the success of the development and implementation of the water marketing plan that will result from this project. In addition, LSPWCD staff have served as a regional point-of-contact for the NECWC in the past, and their involvement will be critical to successful outreach discussions with potential regional partners.

In-Kind Service from the NECWC Board of Directors

The NECWC has five Directors, and they were chosen by the membership to represent their interests in the NECWC. In this role, the NECWC Board of Directors will review project deliverables, assist in outreach with potential local and regional partners, and assist in conducting work associated with developing administrative tools and financial strategies for the NECWC (see Project Description for more details on this work).

- Project expenditure and amount: In-kind services for the NECWC Board of Directors for this project total \$22,200.00.
- Whether the expenditure is or will be in-kind services or donations: The expenditures will be in-kind services.
- The date of cost incurrence: Services will be provided throughout the grant.
- How the expenditure benefits the Project: The Board of Directors represents the interests of the NECWC membership, and their participation in the project and approval of deliverables and the water marketing strategy will be essential to the success of the project. In addition, the Board of Directors are all local to the NECWC's service area, and they are trusted by local water users and stakeholders. As a result, their involvement in describing the benefits of the NECWC and recruiting local stakeholders is essential to the success of the development and implementation of the water marketing plan that will result from this project.

No other funding has either been requested or received from Federal funding sources, and no other funding requests (either non-Federal or Federal) for this project are pending.

The following table summarizes the funding sources and amounts described above.

Table 3. Summary of Non Federal and Federal Funding Sources	
FUNDING SOURCES	AMOUNT
Non-Federal Entities	
Colorado Water Conservation Board	\$147,483.04
Lower South Platte Water Conservancy District (Cash contributions from NECWC members and stakeholders)	\$44,750.75
*Lower South Platte Water Conservancy District (In-kind grant expenditures since July 1, 2016)	\$11,307.97
*Lower South Platte Water Conservancy District (In-kind services)	\$10,728.94
*NECWC Board of Directors (In-kind services)	\$22,200.00
Non-Federal Subtotal	\$236,470.70
Other Federal Entities	
Other Federal Subtotal	\$0.00
REQUESTED RECLAMATION FUNDING	\$236,244.44
Total Project Funding	\$472,715.14

*Asterisk denotes in-kind contributions

Equipment

Additional equipment is not needed for this program.

Materials and supplies

Additional materials and supplies are not needed for this program

Contractual

Legal, and engineering consultants will be used to conduct a large portion of the work. The table entitled Labor Breakdown for Grant-Reimbursed Services describes how consultant labor is anticipated to be distributed by task. Labor rates for various staff in consultant organizations are based on their current rate offerings to a wide variety of clients and were not altered for this application.

Labor for legal assistance related to water matters will be necessary in most tasks, but has a focus on evaluating legal issues and strategies that develop from exploring new partnerships with local and regional stakeholders. Legal assistance for corporate matters will be used in Subtask 4.1. Labor for engineering services will be used throughout the project but will focus on technical issues and water management strategies that develop from exploring new partnerships with local and regional stakeholders. Engineering services will also be needed to update the water accounting tool as needed. It is anticipated that the engineering firm will lead the development of the water marketing strategy and will get a great deal of input from water attorneys, the LSPWCD, and the NECWC board.

Legal and engineering consultants will incur travel costs to attend one-on-one and informational meetings with stakeholders. Travel costs are a part of the total consulting costs (for each type of consultant) in the Budget Proposal. Travel costs are local (with no airfare or overnight stays) and are based on mileage at the Federal rate of \$0.535 per mile.

As described previously, the labor costs in Labor Breakdown for Grant-Reimbursed Services (Table 7) only reflect the labor anticipated to be reimbursed by the WaterSMART grant. The labor estimate for Task 1 (Preliminary work funded through matching funds) is not included in that table. Grant scopes of work and associated budgets (referenced in other portions of this grant application), describe how the labor for Task 1 will be allocated. Contributing cash from the CWCB and LSPWCD will be used to reimburse the costs of Task 1. The table below summarizes how these cash contributions will be distributed among various consultants and for NECWC startup costs.

Table 5. Summary of Costs for Task 1			
	Cash Contributions	In-Kind expenditures of Cash since 7/1/2016	Totals
NECWC Startup (by LSPWCD)	\$22,250.00	\$476.56	\$22,726.56
Water Accountants	\$18,000.00		\$18,000.00
Engineering	\$91,185.29	\$7,033.41	\$98,218.70
Legal	\$60,798.50	\$3,798.00	\$64,596.50
Total	\$192,233.79	\$11,307.97	\$203,541.76

Other Expenses

The CWCB ATM grants and LSPWCD will contribute \$22,727 for implementation startup costs. These costs may include updates to water accounting and submission to the Division

Engineer, costs associated with facilitating limited water transactions (those allowable without water court approval), and corporate expenses such as audits, etc. In-kind services to be provided by the LSPWCD and NECWC board for the WaterSMART grant are valued at \$32,929. The valuation was based on the total number of hours anticipated multiplied by the rate for these services. The rates for in-kind services associated with various LSPWCD staff are the same as those for WaterSMART grant reimbursed services. The rate for NECWC board members was based on the rate for the program manager (or LSPWCD District Manager). The in-kind services to be provided NECWC board members (where they are used) will be the same as those provided by the District Manager, and will have the same approximate value. The table below shows how in-kind services are anticipated to be distributed among the tasks for this project.

Table 6. Summary of In Kind Services					
Hourly Rates for In-Kind Services:	LSPWCD			NECWC Board (total for all five Directors)	Total In-Kind Services by Task
	Program Manager	District Secretary	District Technician		
	\$60.25	\$30.03	\$33.03		
Task 0. Develop a Project Work Plan	6.25	2	0	0	\$436.62
Task 1. Preliminary work funded through matching funds					
Task 2. Develop an outreach and partnership building plan	82.5	0	6	205	\$17,468.81
Task 3. Conduct scoping and planning activities related to local and regional partnerships	2	0	0	15	\$1,020.50
Task 4. Enhance administrative and management tools	36	0	0	100	\$8,169.00
Task 5. Develop financial and funding strategies	4	0	0	40	\$2,641.00
Task 6. Develop a water marketing strategy	1.5	0	0	10	\$690.38
Task 7. Project Management	22	26	12	0	\$2,502.64
Total In-Kind Service Hours	154.25	28	18	370	
Total In-Kind Services by Personnel:	\$9,293.56	\$840.84	\$594.54	\$22,200.00	
Total Project In-Kind Services:					\$32,928.94

Indirect Costs

Indirect costs incurred by the LSPWCD during the course of this work was computed at the de minimis rate of 10% of total wages and fringe benefits reimbursed by the WaterSMART grant. The total estimated indirect costs are \$975.48.

Total Costs

Total project costs are estimated at \$472,715.14. The LSPWCD is requesting a WaterSMART grant for \$236,244.44. The costs provided by the applicants, including cash contributions from the CWCB and LSPWCD as well as in-kind services from LSPWCD and the NECWC board total \$236,470.70.

Table 7. Labor Breakdown for Grant Reimbursed Services

	LSPWCD			Legal Services (Water)			Legal Services (Corp.)	Engineering Services							Total Labor by Task
	District Manager	District Secretary	District Technician	Partner	Associate Attorney	Paralegal	Attorney	Project Manager	Project Analyst	Managing Engineer	Sen. Vice President	Principal Engineer	Engineer III	Water Accountant	
Hourly Rates for Grant-Reimbursed Labor:	\$60.25	\$30.03	\$33.03	\$235	\$210	\$90	\$300	\$173	\$95	\$201	\$227	\$153	\$114	\$100	
Task 0. Develop a Project Work Plan	6.25	2	0	0	0	0	0	42	2	7.5	0	0	0	0	\$9,400
Task 1. Preliminary Work Funded Through Matching Funds	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0
Task 2. Develop an Outreach and Partnership Building Plan	82.5	0	6	20.5	0	0	0	0	0	42	0	49	3	0	\$26,267
Task 3. Conduct Scoping and Planning Activities Related to Local and Regional Partnerships	2	0	0	40	24	0	0	0	0	62	0	170	24	0	\$55,769
Task 4. Enhance Administrative and management Tools	36	0	0	25	6	0	34	0	0	30	0	2	0	300	\$55,840

Table 7. Labor Breakdown for Grant Reimbursed Services

	LSPWCD			Legal Services (Water)			Legal Services (Corp.)	Engineering Services							Total Labor by Task
	District Manager	District Secretary	District Technician	Partner	Associate Attorney	Paralegal	Attorney	Project Manager	Project Analyst	Managing Engineer	Sen. Vice President	Principal Engineer	Engineer III	Water Accountant	
Hourly Rates for Grant-Reimbursed Labor:	\$60.25	\$30.03	\$33.03	\$235	\$210	\$90	\$300	\$173	\$95	\$201	\$227	\$153	\$114	\$100	
Task 5. Develop Financial and Funding Strategies	4	0	0	16	5	0	0	0	0	8	0	0	0	0	\$6,659
Task 6. Develop a Water Marketing Strategy	1.5	0	0	18	4	0	0	0	0	39	10	130	0	0	\$35,159
Task 7. Project Management	22	26	12	42	0	23	0	52	24	71	0	4	0	0	\$40,602
Total Hours	154.25	28	18	161.5	39	23	34	94	26	259.5	10	355	27	300	
Total Labor by Personnel:	\$9,294	\$841	\$595	\$37,953	\$8,190	\$2,070	\$10,200	\$16,262	\$2,470	\$52,160	\$2,270	\$54,315	\$3,078	\$30,000	

Total Grant-Reimbursed Labor: \$229,695.94

Existing Analyses Contributing to the Water Marketing Strategy

As part of this application, LSPWCD has referenced several documents for details and as prior work. The first four documents are grant applications and/or completion reports for grants that were performed in the development of the concept for a regional water marketing framework. We did not include the actual documents because there are nearly 2000 pages in total. So, there are links to each of the documents for the reviewers to consider if desired.

Four of the documents reside on the website for the LSPWCD and are listed below (see http://www.lspwcd.org/index_files/Page313.htm).

- Alternative Agricultural Water Transfer Methods Competitive Grant Program Application, 2011
- Alternative Agricultural Water Transfer Methods Competitive Grant Program Application, 2013
- Completion Report: Development of Practical Alternative Agricultural Water Transfer Measures for Preservation of Colorado Irrigated Agriculture, May 2011
- WSRA Grant Completion Report: “Organizational Analysis for Northeast Colorado Water Cooperation”, June 30, 2015

Two more documents referenced are

- South Platte Basin Implementation Plan, April 17, 2015;
<http://www.southplattebasin.com/the-south-platte-basin>
- Colorado Water Plan, December, 2015
<https://www.colorado.gov/cowaterplan>

And, finally, demonstrating that NECWC is actively partnering with a municipality, we have included the following:

- Parker Water and Sanitation District, 2015 Long-term Water Supply Plan;
<http://www.pwsd.org/DocumentCenter/View/749>

Appendix A: Letters of Support

1. Mike Groves, President, NECWC
2. James Eklund, Executive Director, Colorado Water Conservation Board
3. Ron Redd, District Manager, Parker Water and Sanitation District

NORTHEAST COLORADO WATER COOPERATIVE

April 14th, 2017

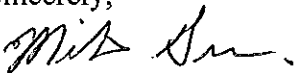
Joe Frank, General Manager
Lower South Platte Water
Conservancy District
100 Broadway Plaza, Suite 12
Sterling, CO 80751

Re: Application for Bureau of Reclamation WaterSMART: Water Marketing Strategy Grant
BOR-DO-18-F014

Dear Mr. Frank:

On behalf of the board of directors and the 23 members (see member list below) of the Northeast Colorado Water Cooperative (NECWC), I am writing this letter to support the Lower South Platte Water Conservancy District (LSPWCD) in their application of a Water Marketing Strategy Grant. The board of directors of NECWC voted unanimously on March 16th, 2017 to request LSPWCD apply for a Water Marketing Strategy Grant and supports LSPWCD in securing funding through the WaterSMART program. NECWC was formed to be an entity through which various water transactions can be made to optimize the use of water in the South Platte River Basin. Our members are water users in the basin and are stakeholders in the project. The NECWC board of directors are committed to provide the amount of in-kind services described in the WaterSMART grant application. In addition, NECWC is committed to working directly with LSPWCD to efficiently accomplish the objectives outlined in the grant scope of work.

Sincerely,



Mike Groves
President, NECWC

NECWC Member Organizations

1	Bijou Irrigation Company	12	Parker Water and Sanitation District
2	Deuel and Snyder Ditch Company	13	Pioneer Water & Irrigation, Inc.
3	Ft. Morgan Farms, LLC	14	Riverside Irrigation District
4	Groves Farms	15	South Platte Ditch Well Users
5	Julesburg Irrigation District	16	Stromberger Land and Cattle Company
6	Logan Well Users, Inc.	17	Sublette
7	Lower Logan Well Users, Inc.	18	Teague Enterprises Augmentation
8	Lower Platte and Beaver Canal Company	19	Town of Wiggins
9	Lowline Ditch Company	20	Weimer Farms
10	LSPWCD WAE	21	Weldon Valley Ditch Company
11	Morgan County Quality Water District	22	Wiggins Farms, LLC



COLORADO

Colorado Water
Conservation Board

Department of Natural Resources

1313 Sherman Street, Room 718
Denver, CO 80203

March 24, 2017

Joe Frank, General Manager
Lower South Platte Water Conservancy District
100 Broadway Plaza, Suite 12
Sterling, CO 80751

RE: Application for WaterSMART Grants: Water Marketing Strategy Grants for Fiscal Year 2017

Dear Mr. Frank:

I understand that the Lower South Platte Water Conservancy District (LSPWCD) is applying for a grant from the US Bureau of Reclamation as referenced above. The LSPWCD has been a leader in developing new concepts for alternatives to “buy and dry” of irrigated farmlands in Colorado. I understand that, if awarded, this grant will allow the LSPWCD on behalf of the Northeast Colorado Water Cooperative to continue working towards implementing such alternatives. Given that finding new solutions is an integral part of the Colorado Water Plan and important for our future, I am fully supportive of your efforts and of the application for a WaterSMART Grant to further develop the concept and its implementation in the South Platte River Basin.

Sincerely,

James Eklund
Executive Director
Colorado Water Conservation Board



ParkerWater

& SANITATION DISTRICT

April 14, 2017

Joe Frank, General Manager
Lower South Platte Water Conservancy District
100 Broadway Plaza, Suite 12
Sterling, Colorado 80751

Subject: Support for WaterSMART Grant Application by the Northeast Colorado Water Cooperative

Dear Mr. Frank,

On behalf of Parker Water and Sanitation District (PWSD), I am writing this letter to express support for the Northeast Colorado Water Cooperative's (NECWC's) application for financial assistance via the U.S. Bureau of Reclamation's WaterSMART Grants: Water Marketing Strategy Grants for Fiscal Year 2017. As you know, PWSD is working collaboratively with the NECWC to develop a partnership with agricultural water users and to evaluate mutually-beneficial water management strategies in the Lower South Platte River basin. We see collaboration among municipal water providers, agricultural water users, and environmental interests playing a key role in meeting the future water needs of the basin, and we support the NECWC's efforts to explore additional local and regional partnerships. As an active member of the NECWC, PWSD is looking forward to supporting the NECWC in this project in whatever capacity is appropriate.

Sincerely,



Ron Redd
District Manager

Appendix B: Official Resolution

1. Resolution of the LSPWCD

LOWER SOUTH PLATTE WATER CONSERVANCY DISTRICT
RESOLUTION 17-001

RESOLUTION AUTHORIZING LOWER SOUTH PLATTE WATER CONSERVANCY DISTRICT COMMITMENT TO OBLIGATIONS OF U.S. BUREAU OF RECLAMATION WATERSMART GRANT FOR FUNDING OPPORTUNITY ANNOUNCEMENT NO. BOR-DO-17-F014 (WATER MARKETING STRATEGY GRANTS FOR FISCAL YEAR 2017)

WHEREAS, the Lower South Platte Water Conservancy District was formed in 1964 under the Water Conservancy District Act of 1937 to promote the conservation of water located in Logan, Morgan, Sedgwick and Washington counties; and

WHEREAS, the stated mission of the Lower South Platte Water Conservancy District 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; and*

WHEREAS, the Lower South Platte Water Conservancy District is helping to provide technical and administrative assistance to water users and has undertaken projects in augmentation, recharge, storage, water conservation, water quality, water measurement and data collection; and

WHEREAS, the Lower South Platte Water Conservancy District has worked with and continues to work with local water users, managers and consultants to secure Colorado Water Conservation Board funding and local matching funds to advance the feasibility, set-up, creation and implementation of the Northeast Colorado Water Cooperative; and

WHEREAS, the Northeast Colorado Water Cooperative was incorporated as a Colorado Cooperative on January 1st, 2014 with a current membership of 23 water user organizations; and

WHEREAS, the U.S. Bureau of Reclamation WaterSMART Water Marketing Strategy Grant (BOR-DO-17-F014) objectives, eligibility requirements, and evaluation criteria match very closely with the current goals and objectives of the Northeast Colorado Water Cooperative to advance the development and marketing of water by the Northeast Colorado Water Cooperative; and

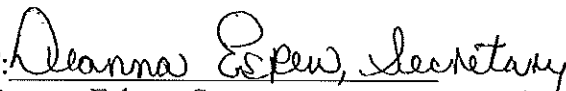
WHEREAS, the Northeast Colorado Water Cooperative Board of Directors voted unanimously on March 16th, 2017 to request the Lower South Platte Water Conservancy District apply for funding from the U.S. Bureau of Reclamation for a WaterSMART Water Marketing Strategy Grant (BOR-DO-17-F014) to analyze and develop water marketing strategies for the Northeast Colorado Water Cooperative; and

WHEREAS, it is the desire of the Lower South Platte Water Conservancy District to apply for a WaterSMART Water Marketing Strategy Grant (BOR-DO-17-F014) from the U.S. Bureau of Reclamation and to secure funding for further advancement of the Northeast Colorado Water Cooperative through the development of water marketing strategies.

NOW THEREFORE BE IT RESOLVED by the Board of Directors of the Lower South Platte Water Conservancy District that: 1) the Board of Directors has reviewed and supports the grant application for the above mentioned grant, 2) the Board of Directors authorizes Joe Frank, General Manager to legally enter into an agreement with the U.S. Bureau of Reclamation for the above mentioned grant, 3) the Board of Directors officially authorizes the Lower South Platte Water Conservancy District to commit to financial and legal obligations associated with the receipt of a financial assistance award under this Funding Opportunity Agreement, 4) the Board of Directors proclaims the capability of the Lower South Platte Water Conservancy District to provide \$158,791 of matching funds from the Colorado Water Conservation Board, \$44,751 of matching funds from Lower South Platte Water Conservancy District and \$32,929 of in-kind match from Lower South Platte Water Conservancy District staff and Northeast Colorado Water Cooperative board members, and 5) the Board of Directors proclaims that the Lower South Platte Water Conservancy District will work with the U.S. Bureau of Reclamation to meet the established deadlines for entering into a grant agreement for the above mentioned grant.

ADOPTED THIS 11th DAY OF April, 2017.


Ken Fritzler, President

ATTEST: 
Deanna Eskew, Secretary



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

1313 Sherman Street, Room
718
Denver, CO 80203

Date: April 14, 2017

Joe Frank PE, General Manager
Lower South Platte Water Conservancy District
100 Broadway Plaza, Suite 12
Sterling, Colorado 80751

Mr. Frank:

CWCB staff has verified that two Alternative Agricultural Transfer Methods (ATM) Grants are currently underway and were in effect on July 1, 2016 with the following balances:

Grantee: Lower South Platte Water Conservancy District
Grant Title: Lower South Platte Water Cooperative Organization Analysis
Contract No.: CTGG1 2015-2938
July 1, 2016 Balance: \$56,594.11

Grantee: Lower South Platte Water Conservancy District
Grant Title: Northeast Colorado Water Cooperative Implementation Project
Contract No.: CTGG1 2015-496
July 1, 2016 Balance: \$102,197.40

If you need additional assistance, please do not hesitate to contact me.

Best regards:

Craig Godbout
ATM Grant Program Manager
Water Supply Planning Section
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver CO 80203

