

Colorado Water Conservation Board Water Supply Reserve Fund Grant Application Instructions

All WSRF grant applications shall conform to the current <u>2016 WSRF Criteria and Guidelines</u>. To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) <u>AND</u> the Colorado Water Conservation Board (CWCB). The process for Roundtable consideration and recommendation is outlined in the 2016 WSRF Criteria and Guidelines. The CWCB meets bimonthly according to the schedule on page 2 of this application. If you have questions, please contact the current CWCB staff Roundtable liaison:

Arkansas	Gunnison North Platte South Platte Yampa/White	Colorado Metro Rio Grande Southwest
Ben Wade	Craig Godbout	Megan Holcomb
ben.wade@state.co.us	craig.godbout@state.co.us	megan.holcomb@state.co.us
303-866-3441 x3238	303-866-3441 x3210	303-866-3441 x3222

WSRF Submittal Checklist (Required)		
Х	I acknowledge this request was recommended for CWCB approval by the sponsoring roundtable.	
Х	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines.	
Х	I acknowledge the Grantee will be able to contract with CWCB using the <u>Standard Contract</u> . ⁽¹⁾	
Applicat	ion Documents	
Х	Exhibit A: Statement of Work ⁽²⁾ (Word – see Template)	
Х	Exhibit B: Budget & Schedule ⁽²⁾ (Excel Spreadsheet – see Template)	
Х	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾	
Х	Map ⁽²⁾	
n/a	Photos/Drawings/Reports	
Х	Letters of Support	
Contrac	ting Documents ⁽³⁾	
Х	Detailed/Itemized Budget ⁽³⁾ (Excel Spreadsheet – see Template)	
To be provided	Certificate of Insurance ⁽⁴⁾ (General, Auto, & Workers' Comp.)	
n/a	Certificate of Good Standing ⁽⁴⁾	
Х	W-9 Form ⁽⁴⁾	
n/a	Independent Contractor Form ⁽⁴⁾ (If applicant is individual, not company/organization)	
To be provided	Electronic Funds Transfer (ETF) Form ⁽⁴⁾	
(1) Click "(Grant Agreements". For reference only/do not fill out or submit/required for contracting	

(2) Required with application if applicable.

(3) Additional documentation providing a Detailed/Itemized Budget maybe required for contracting. Applicants are encouraged to coordinate with the CWCB Project Manager to determine specifics.

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



Schedule			
CWCB Meeting	Application Submittal Dates	Type of Request	
January	December 1	Basin Account; BIP	
March	February 1	Basin/Statewide Account; BIP	
Мау	April 1	Basin Account; BIP	
July	June 1	Basin Account; BIP	
September	August 1	Basin/Statewide Account; BIP	
November	October 1	Basin Account/BIP	

Desired Timeline		
Desired CWCB Hearing Month:	September 2018	
Desired Notice to Proceed Date:	December 31, 2018	

Water Activity Summary		
Name of Applicant Lower South		tte Water Conservancy District
Name of Water Activity	South Platte Regional Water Development Concept Feasibility Study	
Approving Roundtable(s)		Basin Account Request(s) ⁽¹⁾
Metro Roundtable		\$77,500
South Platte Roundtable		\$77,500
Basin Account Request Subtotal		\$155,000
Statewide Account Request ⁽¹⁾		\$195,000
Total WSRF Funds Requested (Basin & Statewide)		\$350,000
Total Project Costs		\$470,000

(1) Please indicate the amount recommended for approval by the Roundtable(s)



	Grantee and Applicant Information
Name of Grantee(s)	Lower South Platte Water Conservancy District (LSPWCD)
Mailing Address	100 Broadway Plaza Suite 12 Sterling, CO 80751
FEIN	84-0562269
Grantee's Organization Contact ⁽¹⁾	Joe Frank
Position/Title	General Manager
Email	jmfrank@lspwcd.org
Phone	970-522-1378
Grant Management Contact ⁽²⁾	Joe Frank
Position/Title	General Manager
Email	jmfrank@lspwcd.org
Phone	970-522-1378
Name of Applicant (if different than grantee)	N/A
Mailing Address	N/A
Position/Title	N/A
Email	N/A
Phone	N/A

(1) Person with signatory authority

(2) Person responsible for creating reimbursement invoices (Invoice for Services) and corresponding with CWCB staff.

Description of Grantee

Provide a brief description of the grantee's organization (100 words or less).

Lower South Platte Water Conservancy District ("LSPWCD") is a public agency created in 1964 under the 1937 Water Conservancy Act for conserving, developing and stabilizing supplies of water for domestic, irrigation, power, manufacturing and other beneficial uses. LSPWCD encompasses 406,000 acres in portions of Morgan, Washington, Logan and Sedgwick counties.

LSPWCD's mission 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.



Type of Eligible Entity (check one)

	Public (Government): municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.	
x	Public (Districts): authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises	
	Private Incorporated: mutual ditch companies, homeowners associations, corporations	
	Private Individuals, Partnerships, and Sole Proprietors: are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.	
	Non-governmental organizations: broadly, any organization that is not part of the government	
	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes	

	Type of Water Activity (check one)		
X	Study		
	Implementation		

	Category of Water Activity (check all that apply)		
Х	Non-consu	mptive (Environmental)	
Х	Non-consu	mptive (Recreational)	
Х	Agricultura	1	
Х	Municipal/Industrial		
Х	Needs Assessment		
Х	Education & Outreach		
	Other	Explain:	

Location of Water Activity		
Please provide the general county and coordinates of the proposed activity below in decimal degrees . The Applicant shall also provide, in Exhibit C, a site map if applicable.		
County/Counties	All or portions of counties comprising the South Platte River Basin	
Latitude	n/a	
Longitude	n/a	



Water Activity Overview

Please provide a summary of the proposed water activity (200 words or less). Include a description of the activity and what the WSRF funding will be used for specifically (e.g. studies, permitting, construction). Provide a description of the water supply source to be utilized or the water body affected by the activity. Include details such as acres under irrigation, types of crops irrigated, number of residential and commercial taps, length of ditch improvements, length of pipe installed, area of habitat improvements. If this project addresses multiple purposes or spans multiple basins, please explain. The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, and Schedule.

In partnership with municipal and agricultural collaborators**, LSPWCD seeks WSRF support to continue detailed investigation and evaluation of a regional, multi-purpose, multi-benefit water development concept for the South Platte Basin. This "Regional Concept" embodies Colorado's water values (Colorado's Water Plan, Chap. 10) and builds upon approaches outlined in the South Platte/Metro BIP (Chap. 4.6.2).

The Regional Concept envisions multiple storage facilities and additional conveyance capacity strategically positioned throughout the Basin and operationally linked. This infrastructure network would store unappropriated native flow, reusable supplies, water derived from ATMs, and excess augmentation plan water in portions of the Basin where water is most available. This "Concept water" then would be delivered, either directly or by exchange, to specified "demand gateways" to meet diverse municipal, agricultural, environmental and recreational demands.

The proposed Water Activity will advance applicant's and collaborators' prior conceptual-level analyses by answering important outstanding questions regarding:

- an organizational structure for the concept;
- development of more precise demand estimates for municipal, agricultural, and environmental purposes by engaging water managers;
- refinements to the Regional Concept based on end-user needs;
- identification of water quality challenges and potential solutions;
- potential project cost estimates.

** Since 2015, the applicant and collaborators have worked to conceptualize possible "future in-basin multi-use projects" generally outlined in the BIP. Collaborators include North Sterling Irrigation District, Northern Colorado Water Conservancy District, St. Vrain-Lefthand Water Conservancy District, Denver Water, Aurora Water, and South Metro Water Supply Authority, each of whom has committed cash and/or in-kind matching resources described in attached letters of support/financial commitments. In addition, LSPWCD and collaborators recently have expanded participation in Regional Concept discussions by establishing a "Regional Concept Task Force", comprised of over 30 organizations and individuals and supported by both the Metro and South Platte Roundtables. This Task Force is described further in this application and in Exhibit A.

Μ	easi	urab	le R	lesu	lts

To catalog measurable results achieved with WSRF funds please provide any of the following values.

TBD (175,000 AF initial estimate)	New Storage Created (acre-feet)
TBD (54,000 AF/yr initial estimate)	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive
TBD	Existing Storage Preserved or Enhanced (acre-feet)
TBD	Length of Stream Restored or Protected (linear feet)
TBD	Efficiency Savings (indicate acre-feet/year OR dollars/year)
TBD	Area of Restored or Preserved Habitat (acres)
TBD	Length of Pipe/Canal Built or Improved



Measurable Results						
Completion of South Platte Basin Regional Concept Pre-Feasibility Study	Other	Explain: WSRF funds are proposed to support continued detailed investigation and evaluation of a regional, multi-purpose, multi- benefit water development concept for the South Platte Basin (the "Regional Concept"). The applicant and collaborators initiated this analysis in 2015 and have sustained it with over \$250,000 of cash and in-kind support, a portion of which is proposed to match WSRF funds this application seeks to obtain. To date, preliminary modeling and evaluation indicate that the Regional Concept's potential to address a meaningful portion of the South Platte Basin's water supply gap is sufficiently high to warrant continued detailed investigation designed to move the Regional Concept down the path toward development. The Regional Concept envisions multiple storage facilities,				
		conveyance capacity, and related infrastructure strategically positioned throughout the Basin and operationally linked. This infrastructure network's initial configuration would entail development of approximately 175,000 acre-feet of new off- channel storage capacity (both above and below ground) to store unappropriated native flow, reusable supplies, water derived from ATMs, and excess recharge credits at several locations in the Basin where these types of water are most available. This water would be delivered directly or by exchange to produce approximately 54,000 acre-feet of water each year to meet diverse municipal, agricultural, environmental and recreational demands within the Basin.				
		These early positive indications are encouraging. Yet many important issues remain to be investigated and evaluated to move the Regional Concept forward to development. With benefits potentially extending broadly across multiple parties in the South Platte Basin and, for that matter, all of Colorado, the applicant and collaborators believe that WSRF support for this continued investigation and evaluation is warranted. The measurable result of this water activity, therefore, will be a completed evaluation that includes:				
		 Refined understanding of specific municipal, agricultural, and environmental/recreational water demands that could be met by the Regional Concept, and at what cost. Refined understanding of the configuration of infrastructure components and their optimal linked operations that will permit the Regional Concept to meet the broadest possible range of demands. A range of options for an organizational/institutional structure best suited to support development and operation of the Regional Concept. A plan to expand and enhance public outreach and education efforts to inform and help sustain the Regional 				
		Concept's continued evolution and development. These measurable results represent integral and necessary steps toward the Regional Concept's eventual development.				



Water Activity Justification

Provide a description of how this water activity supports the goals of <u>Colorado's Water Plan</u>, the most recent <u>Statewide Water Supply Initiative</u>, and the respective <u>Roundtable Basin Implementation Plan</u> and <u>Education Action Plan</u>⁽¹⁾. The Applicant is required to reference specific needs, goals, themes, or Identified Projects and Processes (IPPs), including citations (e.g. document, chapters, sections, or page numbers).

For applications that include a request for funds from the Statewide Account, the proposed water activity shall be evaluated based upon how well the proposal conforms to Colorado's Water Plan criteria for state support (CWP, Section 9.4, pp. 9-43 to 9-44;) (Also listed pp. 4-5 in <u>2016 WSRF</u> Criteria and Guidelines).

1) The Regional Concept embodies Colorado's water values and conforms to applicable criteria for WSRF statewide account funding.

Throughout its considerable length, Colorado's Water Plan (2015) articulates a broad set of values related to the development, use, and stewardship of Colorado's most important natural resource. Chapter 10 summarizes these values and lists a set of actions needed to maintain them into the future. The Regional Concept embodies Colorado's water values and represents a series of actions that can be taken to maintain these values in the face of rapid growth and change in Colorado's most populous river basin.

The proposed Water Activity – the South Platte River Basin Regional Water Development Concept Pre-Feasibility Study – is an integral and necessary step toward the Regional Concept's eventual development. Given their interdependence, discreet references in this application to the "Regional Concept" and to the "proposed Water Activity" (the pre-feasibility study) are effectively interchangeable. In the following ways, the proposed Water Activity conforms to applicable criteria for WSRF Statewide Account funding described in CWP Chap. 9, section 9.4, pages 43-44, reiterated in the 2016 WSRF Criteria and Guidelines, and further reflected in various ways throughout Colorado's Water Plan.

a. The Regional Concept is deeply rooted in collaboration. Shortly after the April 2015 publication of the South Platte/Metro Basin Implementation Plan (BIP), and prior to adoption in October that year of Colorado's Water Plan, a small group of water resource professionals who had been active in the BIP's preparation and Roundtable leadership, began meeting informally to discuss "conceptual future in-basin multi-use projects" outlined in the BIP (BIP, Chap. 4, section 4.6.2, pages 4-74 – 4-85). The group referred to itself as the South Platte Regional Opportunities Working Group (SPROWG).

SPROWG members were animated from the outset by an interest in determining the viability of conceptual projects outlined in the BIP and whether these projects could contribute meaningfully toward reduction of the Basin's projected water supply gap once identified projects and processes (IPPs) had been developed. Early in their discussions, SPROWG members agreed to set aside their employing organizations' interest and concerns in favor of using their individual and collective expertise to elaborate a set of regionally oriented water management solutions that might benefit water users throughout the Basin and, further, generate benefits for the entire State. More recently, in the Spring of 2018, after two and half years of joint inquiry and discovery supported by technical consulting capacity, SPROWG members determined their early investigations and analyses were sufficiently promising to share more broadly and ask other South Platte Basin water users, water professionals, and stakeholders to join in a continuing process of joint inquiry and collaboration.

With support from both Roundtables, SPROWG has expanded to become the South Platte Regional Water Development Concept Task Force ("Task Force"). The Task Force consists of more than 30 organizations and individuals who have become knowledgeable about the



Water Activity Justification

Regional Concept and have contributed to the formulation of this application for WSRF support. The Task Force has met three times since forming in June 2018 following educational workshops SPROWG convened in May to highlight work completed to date on the Regional Concept. Should WSRF funds be awarded, the Task Force will play a pivotal role in helping to guide and inform the work of consultants retained to complete tasks described in Exhibit A. The Task Force also will play an important role in helping other South Platte Basin water users and stakeholders become knowledgeable about and active in the refinement and further development of the Regional Concept, thereby sustaining the rich collaborative efforts from which the Regional Concept originally emerged (CWP, Chap. 9, section 9.4, pages 9-43 – 9-44; 2016 WRSF Criteria and Guidelines).

- b. The Regional Concept can help reduce Colorado's water supply gap by a meaningful amount. Colorado's Water Plan projects that the gap between municipal and industrial water demands and developed supplies could be 560,000 acre-feet by 2050. Accordingly, the Plan sets forth an ambitious goal of reducing this gap to zero by 2030 (CWP, Chap. 10, section 10-2, page 10-5). Based on reconnaissance-level modeling completed in 2017, the Regional Concept appears capable of addressing a meaningful portion of the projected water supply gap in the South Platte Basin. Specifically, modeling suggests the Regional Concept could meet a significant portion of raw water needs associated with modeled municipal demands within two sub-regions of the South Platte Basin (I-25 corridor and parts of Denver metro area, see map attached as Exhibit C) likely to experience comparatively large increases in future water demands beyond those demands that will be met by projects currently in the permitting process. In its current configuration, the Concept, as modeled, also could meet some agricultural demands in Districts 1 and 2 in the South Platte Basin. In total, analysis indicates that about 54,000 acre-feet of modeled municipal and agricultural water demands could be met 100 percent of the time, equivalent to roughly 10 percent of the statewide municipal and industrial water supply gap projected for 2050.
- c. The Regional Concept can generate meaningful benefits for irrigated agriculture in the South Platte Basin. With highly productive soils, proximity to transportation networks, access to markets, and sophisticated approaches to water management, it's little wonder the South Platte Basin is where Colorado's most economically productive agricultural region is located. As noted, the Regional Concept could help sustain the Basin's important agricultural values by helping to meet at least some unmet or under-met agricultural water supply demands in addition to meeting projected unmet municipal demands.

Beyond this, the Regional Concept's benefit to irrigated agriculture stems from its capacity to offer growing municipal water providers an alternative to "buy and dry" methods of securing additional municipal water supplies (CWP, Chap. 10, page 10-6; Chap. 9, section 9-4, pages 9-43 – 9-44; 2016 WRSF Criteria and Guidelines). More specifically, the Regional Concept would achieve its water yield by relying on several different types of water, including unappropriated native flow, reusable return flows, water derived from ATMs, and excess augmentation plan water. Put simply, the Regional Concept stands as an alternative to "buy-and-dry" approaches municipal water suppliers might otherwise pursue absent other viable choices.

Moreover, the Regional Concept offers a means by which Basin water users can begin to realize, at scale, the still largely theoretical potential of Alternative Transfer Methods (ATMs). In fact, the Regional Concept as currently envisioned would be sustained in part by an annual average of about 30,000 acre-feet of water derived from ATMs, representing well over half of the 2050 goal articulated in Colorado's Water Plan of achieving 50,000 acre-foot annually of ATM-based water sharing (CWP Chap. 10, section 10.2, page 10-6; Chap. 9, section 9-4, pages 9-43 – 9-44; 2016 WSRF Criteria and Guidelines).



Water Activity Justification

- d. The Regional Concept envisions development of substantial new off-channel storage. Colorado's Water Plan sets a measurable objective of securing an additional 400,000 acre-feet of water storage by 2050 (CWP, Chap. 10, section 10.2, page 10-6). The Regional Concept, as modeled, entails development of at least 175,000 acre-feet of off-channel storage capacity (potentially above and below ground) in up to four general locations in the Basin (from the Denver metropolitan area to the state line). This storage will be distributed across multiple facilities strategically located and operationally linked (see Concept map at Exhibit C).
- e. The Regional Concept offers ways to maximize the use of water resources in the South Platte Basin. By combining different "types" of water available at different locations in the Basin into a single source of supply, referred to herein as "Concept water," the Regional Concept will leverage the respective timing, frequency, and volume characteristics of these distinct water supply types to achieve greater yield more reliably than could be achieved by focusing on any single type of water. These water supply "types" include unappropriated native flow, reusable supplies, water derived from ATMs, and excess recharge credits. Diverted, stored, and co-mingled where most available in the Basin, this Concept water would be delivered directly or by exchange to produce approximately 54,000 acre-feet of water each year to meet diverse municipal, agricultural, environmental and recreational demands within the Basin (Colorado's Water Plan, Chap. 9, section 9.4, pages 9-43 9-44). Notably, the concept relies on and seeks to maximize in-basin supplies and does not contemplate the use of any additional transmountain diversions.
- f. The Regional Concept offers opportunities to address water supply needs associated with important environmental and recreational attributes in the South Platte Basin, including water quality and watershed health. Investigation and evaluation completed to date has not yet illuminated opportunities to address water needs associated with important South Platte Basin environmental and recreational attributes (see, for example, Chap. 4 of the South Platte/Metro BIP). The proposed Water Activity offers the applicant, collaborators, Task Force members, and other South Platte Basin stakeholders a chance to specify and incorporate these needs into a refined configuration of the Regional Concept, thereby ensuring the Concept will help address both consumptive and non-consumptive water needs in the Basin, and, further, that the water supply needs of identified environmental and recreational attributes are incorporated into the Concept prior to their consideration in project permitting.

In addition, successful implementation of the Regional Concept will require substantial effort to address water quality issues and watershed health (CWP Chap 10, section 10.2, page 10-6; Chap 9, section 9.4, pages 9-43 – 9-44). Preliminary modeling shows that Basin water supplies available for development are most plentiful in the Basin's lower reaches, downstream of Greeley. Water quality with respect to many water quality constituents in these reaches often does not meet regulatory standards for many uses, necessitating incorporation into the Regional Concept measures to address water quality. The proposed Water Activity envisions identification and high-level evaluation of a range of options, and their costs, to address water quality at significant scale, including how non-point source programs could be developed and implemented over potentially large geographic areas to generally reduce concentrations of water quality constituents of concern and improve watershed health.

g. The Regional Concept offers an opportunity to devise governance and decision-making processes that are inclusive, transparent, and coordinated with those of existing institutions and organizations. The proposed Water Activity envisions identification and evaluation of a range of organizational/institutional structures capable of supporting the permitting, financing, development and operation of the Regional Concept. This information will be used by the applicant, collaborators, Task Force members, and South Platte Basin stakeholders to support future discussion and agreement on an organizational/institutional



Water Activity Justification

arrangement best suited to sustain the Regional Concept. Among many factors to be considered in the proposed organizational/institutional options analysis, criteria for support from the State of Colorado (see CWP Chap. 9 section 9.4, pages 43-44) can be addressed, including, for example, water conservation best practices, land use, opportunities to partner with local governments, and financial matters.

- h. The Regional Concept offers excellent education and outreach opportunities aimed at broadening understanding or and involvement with water management in the South Platte Basin. Since the Regional Concept's benefits are envisioned to be shared broadly by many different types of South Platte Basin water users and water uses, the proposed Water Activity includes development of an Education and Outreach Plan to guide efforts to engage stakeholders from throughout the Basin and solicit their ideas and perspectives. Development of this Plan will entail close coordination with the applicant, collaborators, the Task Force, the Roundtables (including, especially, PEPO representatives), and other South Platte Basin stakeholders. As such, it aligns with the emphasis placed in Colorado's Water Plan on education and outreach as a means to engage the public to promote well-informed community discourse and decision making regarding balanced water solutions. (CWP Chap 10, section 10.2, page 10-7; Chap. 9, section 9.4, page 9-44; 2016 WSRF Criteria and Guidelines).
- *i.* The proposed Water Activity envisions refining project cost estimates and normalizing these costs to allow for comparison with other possible water supply options. This cost estimation task aligns with criteria for State support detailed in Colorado's Water Plan (Chap 9, section 9.4, page 9-44) and could help inform broader discussion about a sustainable funding source to implement Colorado's Water Plan (CWP Chap. 10, section 10-2, page 10-7). Importantly, cost estimates will account for the relative advantages of phased development of the Regional Concept over time as demand materializes. These estimates will also offer a means to compare Regional Concept costs with those associated with other possible water sources.

2) The Regional Concept aligns with the South Platte/Metro Basin Implementation Plan (BIP).

The South Platte/Metro Basin Implementation Plan (BIP) indicates in its Executive Summary that, to address the Basin's projected water supply gaps, water users in the basin should:

- continue to maximize implementation of IPPs (Section S.5.1)
- maintain leadership in conservation and reuse (Section S.5.2)
- maximize use and effectiveness of native South Platte supplies (Section S.5.3)
- minimize traditional agricultural "buy and dry" and maximize use of Alternative Transfer Methods (ATMs) (Section S.5.4)
- protect and enhance environmental and recreational attributes (Section S.5.5)
- promote multi-purpose storage projects that enhance South Platte Basin solutions, manage the risk of increased demands and reduced supplies due to climate change (Section S.5.8),
- support research of new technologies and strategies (Section S.5.10).

The Regional Concept will help to achieve all of these broad BIP objectives by expanding upon the conceptual in-basin multi-purpose project descriptions offered in Section 4.6.2.

3) The Regional Concept aligns with the Statewide Water Supply Initiative.

SWSI 2010 provided foundational data and information for Colorado's Water Plan and the South Platte/Metro BIP. Municipal and agricultural gaps/shortages were quantified in SWSI 2010 and strategies for mitigating future potential gaps were described. The vision that underpinned the



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development of water supply strategies was conceived by the IBCC and stated:

"We envision a Colorado that balances municipal, industrial, agricultural, environmental, and recreational water needs and promotes cooperation among all water uses."

To analyze potential water supply strategies, SWSI 2010 described a "portfolio tool" framework. The portfolio tool considered various strategies for meeting future gaps and provided a means for basin roundtables to evaluate the pros and cons (or "tradeoffs") associated with various strategies. Portfolios of water supply strategies described in SWSI 2010 included elements such as IPPs, conservation, new supply, and agricultural water transfers (traditional and alternative).

The proposed Water Activity aligns with SWSI 2010 in several ways:

- The Regional Concept aims to fulfill the vision of the IBCC in that it seeks to provide benefits to municipal, industrial, agricultural, environmental, and recreational water users. In addition, the Concept has been and will continue to be developed in a cooperative manner.
- The Regional Concept fills a significant portion of the future municipal and industrial water supply gap identified in SWSI 2010.
- Figure 7-5 in the SWSI 2010 report describes several agricultural transfer and new supply project concepts that could meet future water supply needs in the Front Range. The Regional Concept bears resemblance and is consistent with some of the concepts so described. However, the Regional Concept improves upon the SWSI 2010 project concepts in that it envisions utilizing a wide variety of water supply sources and it focuses on alternative rather than traditional (aka "buy and dry") agricultural water transfers.

SWSI is currently being updated, and revised data sets along with analysis tools will be available for use for the proposed Water Activity. Prospective consultants will be able to use these data sets and tools to conduct some of the analyses described in Exhibit A.

Matching Requirements: Basin Account Requests

Basin (only) Account grant requests require a 25% match (cash and/or in-kind) from the Applicant or 3rd party and shall be accompanied by a **letter of commitment** as described in the 2016 WSRF Criteria and Guidelines (submitted on the contributing entity's letterhead). Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind)
N/A	\$ N/A
Total Match	\$ N/A
If you requested a Waiver to the Basin Account matching requirements, indicate the percentage you wish waived.	



Matching Requirements: Statewide Account Requests

Statewide Account grant requests require a 50% match as described in the 2016 WSRF Criteria and Guidelines. A minimum of 10% match shall be from Basin Account funds (cash only). A minimum of 10% match shall be provided by the applicant or 3rd party (cash, in-kind, or combination). The remaining 30% of the required match may be provided from any other source (Basin, applicant, or 3rd party) and shall be accompanied by a **letter of commitment.** Attach additional sheet if necessary.

Contributing Entity	Amount and Form of Match (note cash or in-kind):		
Metro Roundtable	\$ 77,500 cash		
South Platte Roundtable	\$ 77,500 cash		
Lower South Platte Water Conservancy District (applicant and fiscal agent)	\$ 10,000 – in-kind \$ 3,333 cash		
Prewitt Operating Company/North Sterling Irrigation District	\$ 10,000 – in-kind		
Northern Colorado Water Conservancy District	\$ 12,000 – in-kind \$ 10,000 – cash		
St. Vrain – Lefthand Water Conservancy District	\$ 4,000 – in-kind \$ 3,333 – cash		
Denver Water	\$ 22,000 – in-kind \$ 10,000 cash		
Aurora Water	\$ 12,000 – in-kind \$10,000 – cash		
South Metro Water Supply Authority	\$ 10,000 – in-kind \$ 3,334 – cash		
Total Match	\$ 275,000 – cash & in-kind		
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	N/A		

Related Studies

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

The proposed Water Activity builds upon and will consider findings and conclusions of the studies listed in the "Previous CWCB Grants" section below, as well as the following reports and associated documentation:

- Colorado's Water Plan
- South Platte/Metro Basin Implementation Plan
- South Platte Storage Study
- Statewide Water Supply Initiative
- Analyses completed to date of "conceptual in-basin multi-party, multi benefit projects" conducted by applicant and collaborators



Previous CWCB Grants

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

- 1) ATM Grant: Development of Practical Alternative Agricultural Water Transfer Measures for Preservation of Colorado Irrigated Agriculture
 - Applicant: Colorado Corn Growers Association, in partnership with Lower South Platte Water Conservancy District, City of Aurora, Ducks Unlimited, and Lower South Platte River Basin stakeholders
 - b. Approving RT: NA (at the time, roundtable approval was not required)
 - c. CWCB Board approval date: November 2008
 - d. Contract number: 150445
 - e. Summary: In 2009, with support from a CWCB grant, Lower South Platte Water Conservancy District (LSPWCD) partnered with Colorado Corn Growers, the City of Aurora, Ducks Unlimited, and Lower South Platte River Basin stakeholders to study the feasibility of creating a water marketing framework for efficiently moving augmentation credits from plans with excess credits into plans that need credits. Initial feasibility and analysis of excess augmentation credits, exchange potential and potential delivery efficiency improvements were completed. The initial review of augmentation plan accounting indicated 10,000 – 30,000 AF per year of excess credits from existing augmentation plans could be available (with more recent research indicating even higher amounts). This work showed sufficient technical feasibility that stakeholders pursued additional efforts to evaluate organization structures and additional technical feasibility, including formation of a small group of water users and water professionals which began discussing the possibility of creating a water organization in the Lower South Platte River to manage such a marketing framework. The project report can be viewed using this link: http://www.lspwcd.org/index_files/Page313.htm

2) WSRA Grant: Lower South Platte Water Cooperative Organizational Analysis

- a. Applicant: Lower South Platte Water Conservancy District
- b. Approving RT: South Platte Basin Roundtable
- c. CWCB Board approval date: September 2010
- d. Contract number: C150476 (routing number 28922)
- e. Summary: Based on results derived from the grant described above, additional work on the member organization was then pursued under a new CWCB Water Supply Reserve Account (WSRA) grant focused primarily on an organizational structure to support the excess augmentation credit marketing framework. This 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 and water law issues were researched. The report from this project can be viewed using this link: http://www.lspwcd.org/index_files/Page313.htm

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3) ATM Grant: Lower South Platte Water Cooperative, Operational Development of Alternative Agriculture Water Transfer Methods

- a. Applicant: Lower South Platte Water Conservancy District
- Approving RT: NA (roundtable approval was not required, but the work was done in combination with the WSRA grant described in #2 above, which was approved by the South Platte Basin Roundtable)
- c. CWCB Board approval date: January 2011
- d. Contract number: CTGG1 2015-2938, CMS#76987
- e. Summary: While evaluating organizational structures under the WSRA grant (grant #2 above), the Lower South Platte Water Conservancy District conducted 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, called the



Previous CWCB Grants

Northeast Colorado Water Cooperative (NECWC). The ATM grant work for operational planning is still ongoing and addresses the following items:

- i. 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.
- ii. Legal issues such as addressing third party and internal water rights and injury concerns.
- iii. Financial and operational considerations for a water marketing organization.
- iv. Development of short and long term operational plans.

4) ATM Grant: Implementation of the Northeast Colorado Water Cooperative

- a. Applicant: Lower South Platte Water Conservancy District
- Approving RT: NA (roundtable approval was not required, but the work built upon the WSRA grant described in #2 above, which was approved by the South Platte Basin Roundtable)
- c. CWCB Board approval date: May 2013
- d. Contract number: Original contract C150531, CMS#61149. The original contract was closed and a Purchase Order was issued in 2018 to accommodate a contract extension necessitated by a pending WaterSMART grant from the U.S. Bureau of Reclamation that will broaden the implementation of the cooperative. The Purchase Order number is POGG1 PDAA 201800000675.
- e. Summary: Applied for and awarded in 2013, this grant builds upon previous grants, and is oriented toward implementing the water cooperative. This work is ongoing and entails:
 - i. Evaluate supplies, demands and delivery strategies for initial NECWC participants. Extensive use was made of analytical tools developed during previous phases of work (i.e. exchange capacity tool, operational planning model, etc.).
 - ii. 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.
 - iii. Meet with members to identify potential legal and operational concerns with the cooperative and to collaborate on potential solutions prior to initiating the water court process.
 - iv. Conduct startup and ongoing cooperative management tasks.
 The NECWC was incorporated in January of 2014 with a current membership of 22 water user organizations. NECWC is governed by a 5-member board of directors elected by
 - members. The NECWC can facilitate water leases not requiring water court approval.

5) South Platte Storage Study

- a. Applicant: Lower South Platte Water Conservancy District (LSPWCD)
- b. Approving RT: South Platte Basin and Metro Roundtables
- c. CWCB Board approval date: September, 2016
- d. Contract number: #CTGG1 2017-851
- e. Summary: LSPWCD committed to be the fiscal agent for the Colorado General Assembly directed (HB16-1256) study. Now complete, the study's primary objective was to investigate multiple possible sites in the Lower South Platte Basin for constructing new reservoirs, enlarging existing reservoirs, or for implementing alternative storage mechanisms. Each of these identified sites will include the following analysis as per HB16-1256: The final South Platte Storage Study report can be found at: http://southplattebasin.com/wp-content/uploads/2016/04/South-Platte-Storage-Study_FINAL-REPORT.pdf



Tax Payer Bill of Rights

The Tax Payer Bill of Rights (TABOR) may limit the amount of grant money an entity can receive. Please describe any relevant TABOR issues that may affect the applicant. Lower South Platte Water Conservancy District has no TABOR limits on revenue.

Water Supply Reserve Fund – Grant and Loan Program Water Activity Summary Sheet September 18-20, 2018 Agenda Item 12(n)

Applicant & Grantee:	Lower South Platte Water Conservancy District
Water Activity Name:	South Platte Regional Water Development Concept Feasibility Study
Water Activity Purpose:	Multipurpose/Study
County:	All or portions of counties comprising the South Platte River Basin
Drainage Basin:	South Platte
Water Source:	South Platte River
Amount Requested:	\$77,500 South Platte Basin Account \$77,500 Metro Account <u>\$195,000 Statewide Account</u> \$350,000 Total request
Matching Funds:	Applicant & 3 rd Party Match (cash & in-kind) = \$120,000 • 62% of the Statewide Account request (meets 10% min) Basin Account Match = \$155,000 • 79% of the Statewide Account request (meets 10% min) Total Match (Applicant/3 rd Party & Basin Account) = \$275,000 • 141% of Statewide Account request (meets 50% min)
Staff Recommendation:	
	to to \$77,500 from the South Platte Basin Account; \$77,500 from

the Metro Account; and \$195,000 from the Statewide Account to help fund the project titled: South Platte Regional Water Development Concept Feasibility Study.

Water Activity Summary: WSRF grant funds, if approved, will assist the Lower South Platte Water Conservancy District (LSPWCD) support the efforts of the Regional Concept Task Force to continue detailed investigation and evaluation of a regional, multi-purpose, multi-benefit water development concept for the South Platte Basin via the South Platte Regional Water Development Concept Feasibility Study (Regional Concept). The Regional Concept envisions multiple storage facilities and additional conveyance capacity strategically positioned throughout the Basin and operationally linked. This infrastructure network would store unappropriated native flow, reusable supplies, water derived from ATMs, and excess augmentation plan water in portions of the Basin where water is most available. This "Concept water" then would be delivered, either directly or by exchange, to specified "demand gateways" to meet diverse municipal, agricultural, environmental and recreational demands.

The proposed Water Activity will advance applicant's and collaborators' prior conceptual-level analyses by answering important outstanding questions regarding:

• an organizational structure for the concept;

• development of more precise demand estimates for municipal, agricultural, and environmental purposes by engaging water managers;

- refinements to the Regional Concept based on end-user needs;
- identification of water quality challenges and potential solutions;
- potential project cost estimates

Since 2015, the applicant and collaborators have worked to conceptualize possible "future in-basin multi-use projects" generally outlined in the South Platte Basin Implementation Plan. Collaborators include North Sterling Irrigation District, Northern Colorado Water Conservancy District, St. Vrain-Lefthand Water Conservancy District, Denver Water, Aurora Water, and South Metro Water Supply Authority, each of whom has committed cash and/or in-kind matching resources described in attached letters of support/financial commitments. In addition, LSPWCD and collaborators recently have expanded participation in Regional Concept discussions by establishing a "Regional Concept Task Force", comprised of over 30 organizations and individuals and supported by both the Metro and South Platte Roundtables.

To date, preliminary modeling and evaluation indicate that the Regional Concept's potential to address a meaningful portion of the South Platte Basin's water supply gap is sufficiently high to warrant continue detailed investigation designed to move the Regional Concept down the path toward development. These early positive indications are encouraging. Yet many important issues remain to be investigated and evaluated to move the Regional Concept forward to development. With benefits potentially extending broadly across multiple parties in the South Platte Basin and, for that matter, all of Colorado, the applicant and collaborators believe that WSRF support for this continued investigation and evaluation is warranted. The measurable result of this water activity, therefore, will be a completed evaluation that includes:

• Refined understanding of specific municipal, agricultural, and environmental/recreational water demands that could be met by the Regional Concept, and at what cost.

• Refined understanding of the configuration of

- infrastructure components and their optimal linked
- operations that will permit the Regional Concept to meet

the broadest possible range of demands.

• A range of options for an organizational/institutional structure best suited to support development and operation of the Regional Concept.

• A plan to expand and enhance public outreach and

education efforts to inform and help sustain the Regional

Concept's continued evolution and development

Discussion: This effort will assist the South Platte Basin and Metro Roundtables achieve the following goals to the extent possible; develop multipurpose storage, conveyance, system interconnections and other infrastructure projects to take advantage of limited remaining South Platte supplies and enhance water use efficiencies and supply reliability as identified in Section 1.9.4: South Platte Storage and Other Infrastructure of the South Platte Basin Implementation Plan (SPBIP). In addition, this effort assists the roundtables pursue a "conceptual future in-basin multi-use projects" outlined in the Section 4.6.2 of the SPBIP. Additionally, this effort assists Colorado achieve several goals highlighted in Chapter 10 of Colorado's Water Plan, such as reducing the projected 2050 municipal and industrial gap from as much as 560,000 acre-feet to zero acre-feet by 2030; to share at least 50,000 acre-feet of agricultural water using voluntary alternative transfer methods by 2030; and

of attaining 400,000 acre-feet of water storage in order to manage and share conserved water and the yield of IPPs by 2050.

Issues/Additional Needs: No issues or additional needs have been identified.

Eligibility Requirements: The application meets requirements of all eligibility components: General Eligibility, Entity Eligibility, Water Activity Eligibility, and Eligibility Based on Match Requirements.

Evaluation Criteria: This activity has undergone review and evaluation and staff has determined that it satisfies the Evaluation Criteria. Please refer to Basin Roundtable Chair's Recommendation Letter and the WSRF Grant Application for applicant's detailed response.

Funding Summary/Matching Funds:								
Funding Source	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>				
Lower South Platte Water Conservancy District	\$3,333	\$10,000	\$13,333	Secured				
Prewitt Operating Company/								
North Sterling Irrigation District	\$0	\$10,000	\$10,000	Secured				
Northern Colorado Water Conservancy District	\$10,000	\$12,000	\$22,000	Secured				
St. Vrain-Lefthand Water Conservancy District	\$3,333	\$4,000	\$7,333	Secured				
Denver Water	\$10,000	\$22,000	\$32,000	Secured				
Aurora Water	\$10,000	\$12,000	\$22,000	Secured				
South Metro Water Supply Authority	\$3,334	\$10,000	\$13,334	Secured				
Sub-total	\$40,000	\$80,000	\$120,000					
WSRF South Platte Basin Account	\$77,500	n/a	\$77,500	Secured				
WSRF Metro Account	\$77,500	n/a	\$77,500	Secured				
Sub-total	\$195,000	\$80,000	\$275,000					
WSRF Statewide Account	\$195,000	n/a	\$195,000					
Total Study Costs	\$390,000	\$80,000	\$470,000					

CWCB Project Manager: Russ Sands

August 9, 2018

Colorado Water Conservation Board 1313 Sherman Street, Suite 721 Denver, CO 80203

RE: Metro Roundtable Funding Recommendation Letter for South Platte Regional Water Development Concept Feasibility Study

Dear Honorable Board Members,

On behalf of the Metro Roundtable, acting as its Chairwoman, I am writing to express the Roundtable's recommendation to fund the Water Supply Reserve Fund (WSRF) grant application for the South Platte Regional Water Development Concept Feasibility Study. In addition to our Roundtable's affirmative recommendation, this letter includes information requested in your Water Supply Reserve Fund Criteria and Guidelines in the "Application Process" section starting on page 6 of the guidelines.

Summary of the Project:

In partnership with municipal and agricultural collaborators, Lower South Platte Water Conservancy District (LSPWCD) seeks WSRF support to continue detailed investigation and evaluation of a regional, multi-purpose, multi-benefit water development concept for the South Platte Basin. This "Regional Concept" embodies Colorado's water values (Colorado's Water Plan, Chap. 10) and builds upon approaches outlined in the South Platte/Metro BIP (Chap. 4.6.2).

The Regional Concept envisions multiple storage facilities and additional conveyance capacity strategically positioned throughout the Basin and operationally linked. This infrastructure network would store unappropriated native flow, reusable supplies, water derived from ATMs, and excess augmentation plan water in portions of the Basin where water is most available. This "Concept water" then would be delivered, either directly or by exchange, to specified "demand gateways" to meet diverse municipal, agricultural, environmental and recreational demands.

The LSPWCD and collaborators are seeking WSRF funding to conduct investigations to advance their prior conceptual-level analyses by answering important outstanding questions regarding:

- An organizational structure for the concept;
- Development of more precise demand estimates for municipal, agricultural, and environmental purposes by engaging water managers;
- Refinements to the Regional Concept based on end-user needs;
- Identification of water quality challenges and potential solutions;
- Potential project cost estimates.

Amount of Grant Funding Sought:

The applicant is seeking funding from the South Platte and Metro Roundtables' Basin Accounts as well as from the Statewide Account. The amounts of requested funding are as follows:

- South Platte Basin Account: \$77,500
- Metro Basin Account: \$77,500
- Statewide Account: \$195,000

Eligibility Requirements:

The project meets all of the eligibility requirements described in the Water Supply Reserve Fund Criteria and Guidelines.

- General Eligibility: The grant application was approved by our Roundtable at their August 9, 2018 meeting. The Regional Concept described in the grant application will assist in meeting basinwide consumptive uses and may assist in meeting nonconsumptive water supply needs identified in the South Platte Basin Implementation Plan.
- Entity Eligibility: The applicant (i.e. LSPWCD) is a water conservancy district, which is an eligible entity to receive WSRF funding.
- Water Activity Eligibility: The project will include technical studies/analyses and education and outreach; all of which are activities eligible for WSRF funding.
- Matching Requirements: The project meets the Basin and Statewide requirements for cash and in-kind match (see Exhibit B in the application and letters of commitment).

Level of Agreement Among Roundtable Members:

The Roundtable members were unanimous in their recommendation to fund this project from both the Basin and Statewide Accounts.

If you need additional information from our Roundtable regarding this recommendation or have questions, please do not hesitate to contact me.

Sincerely,

Enan E

Barbara Biggs, Chairwoman Metro Roundtable

August 9, 2018

Colorado Water Conservation Board 1313 Sherman Street, Suite 721 Denver, CO 80203

RE: South Platte Basin Roundtable Funding Recommendation Letter for South Platte Regional Water Development Concept Feasibility Study

Dear Honorable Board Members,

On behalf of the South Platte Basin Roundtable, acting as its Chair, I am writing to express the Roundtable's recommendation to fund the Water Supply Reserve Fund (WSRF) grant application for the South Platte Regional Water Development Concept Feasibility Study. In addition to our Roundtable's affirmative recommendation, this letter includes information requested in your Water Supply Reserve Fund Criteria and Guidelines in the "Application Process" section starting on page 6 of the guidelines.

Summary of the Project:

In partnership with municipal and agricultural collaborators, Lower South Platte Water Conservancy District (LSPWCD) seeks WSRF support to continue detailed investigation and evaluation of a regional, multi-purpose, multi-benefit water development concept for the South Platte Basin. This "Regional Concept" embodies Colorado's water values (Colorado's Water Plan, Chap. 10) and builds upon approaches outlined in the South Platte/Metro BIP (Chap. 4.6.2).

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Level of Agreement Among Roundtable Members:

The Roundtable members were unanimous in their recommendation to fund this project from both the Basin and Statewide Accounts.

If you need additional information from our Roundtable regarding this recommendation or have questions, please do not hesitate to contact me.

Sincerely,

Garrett Varra, Chair South Platte Basin Roundtable

