

Water Supply Reserve Fund – Grant and Loan Program
Water Activity Summary Sheet
March 21-22, 2018
Agenda Item 25(g)

Applicant & Grantee: Lost Creek Groundwater Management District

Water Activity Name: Lost Creek Designated Basin Instrumentation Project

Water Activity Purpose: Multipurpose (Ag & M&I) – Study/Implementation

County: Adams & Weld

Drainage Basin: South Platte

Water Source: Groundwater

Amount Requested: \$25,000 South Platte Basin Account
\$43,000 Statewide Account
\$68,000 Total Request

Matching Funds: Applicant Match (cash & in-kind) = \$25,000

- 58% of the Statewide Account request (meets 10% min)

Basin Account Match = \$25,000

- 58% of Statewide Account Request (meets 10% min)

Total Match (Basin Account & Applicant) = \$50,000

- 74% of the Statewide Account request (meets 50% min)

Staff Recommendation:
Staff recommends approval of up to \$25,000 from the South Platte Basin Account; and \$63,000 from the Statewide Account to help fund the project titled: Lost Creek Designated Basin Implementation Project.

Water Activity Summary: WSRF grant funds, if approved, will assist the Lost Creek Groundwater Management District (LCGWMD) install 30 depth-sensing transducers in the Lost Creek designated basin. This array will measure water depths throughout the upper Lost Creek Designated Basin and report results directly to the State of Colorado Division of Water Resources HydroBase database. Funding will be used to procure, install, and connect the array to HydroBase. Initial installations will be conducted by DynoTek and will serve to train LCGWMD personnel to complete the project.

Project objectives:

- to provide baseline empirical data on actual water levels in the Lost Creek alluvial system. The data will support attainment of the following secondary objectives:
- Provide accurate and substantive data to support DWR, CWCB, and LCGWMD decisions on appropriations, well applications, and validate groundwater modeling.
- Characterize the Lost Creek system prior to establishment of ASR projects to be able to discern effects of infiltration methods, storage capacity, resident times, and export of resources from the system

Discussion: This effort assists the South Platte Basin Roundtable address their water supply challenges by promoting the exploration of Aquifer Storage and Recovery possibilities as highlighted in the South Platte Basin Implementation Plan (Section S.3.3. Groundwater and Aquifer Storage and

Recovery, page S-6) while also assisting the state in meeting several of the Critical Goals and Actions of Colorado's Water Plan, such as: "Promoting Additional Storage".

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:

<u>Funding Source</u>	<u>Cash</u>	<u>In-kind</u>	<u>Total</u>	<u>Status</u>
Lost Creek Ground Water Management District	\$25,000	\$0	\$25,000	Secured
WSRF South Platte Basin Account	\$25,000	n/a	\$25,000	
WSRF Statewide Account	\$43,000	n/a	\$43,000	
Total Project Costs	\$93,000	\$0	\$93,000	

CWCB Project Manager: Craig Godbout

South Platte Basin Roundtable
Garrett Varra, Chair
gvarra@varracompanies.com

January 19th, 2018

Craig Godbout
Water Supply Planning Section
Colorado Water Conservation Board
1313 Sherman Street Suite 718
Denver, CO 80203

Subject: Lost Creek Groundwater Management District – Lost Creek Designated Basin
Instrumentation Project WSRF Grant Application

Dear Mr. Godbout,

The South Platte Basin Roundtable approved funding of \$25,000.00 from the basin fund to the Lost Creek Groundwater Management District for the Lost Creek Designated Basin Instrumentation Project. The project was reviewed by the Roundtable on January 9th, 2018 at the monthly meeting. There was a quorum of members present at the meeting. The project requests \$43,000.00 in funding from the statewide account.

The project will create a near real time monitoring system within the Lost Creek Basin. The project will support 3 BIP Objectives: advancing multi-purpose water projects, improving municipal and industrial water efficiency, and sustaining irrigated agriculture. Water level monitoring within the basin is critical for decision making affecting citizens inside and outside of the basin.

The completed grant application will be forwarded directly to you by the applicant. Please contact the applicant directly or me at 720-272-2857 – gvarra@varracompanies.com, if you have any comments or questions.

Sincerely,



Garrett Varra



Last Update: August 3, 2017

Colorado Water Conservation Board

Water Supply Reserve Fund Grant Application

Instructions

All WSRF grant applications shall conform to the current [2016 WSRF Criteria and Guidelines](#).

To receive funding from the WSRF, a proposed water activity must be approved by a Roundtable(s) **AND** 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

Ben Wade
ben.wade@state.co.us
303-866-3441 x3238

Gunnison | North Platte | South Platte | Yampa/White

Craig Godbout
craig.godbout@state.co.us
303-866-3441 x3210

Colorado | Metro | Rio Grande | Southwest

Megan Holcomb
megan.holcomb@state.co.us
303-866-3441 x3222

WSRF Submittal Checklist (Required)

X	I acknowledge this request for funding was recommended for CWCB approval by the sponsoring Basin Roundtable(s).
X	I acknowledge I have read and understand the 2016 WSRF Criteria and Guidelines .
X	I acknowledge the Grantee will be able to contract with CWCB using the Standard Contract . ⁽¹⁾
Exhibit A	
X	Statement of Work ⁽²⁾ (Word – see Exhibit A Template)
X	Budget & Schedule ⁽²⁾ (Excel Spreadsheet – see Exhibit A Template)
X	Letters of Matching and/or Pending 3 rd Party Commitments ⁽²⁾
Exhibit C	
X	Map ⁽²⁾
X	Photos/Drawings/Reports
X	Letters of Support
P	Certificate of Insurance ⁽³⁾ (General, Auto, & Workers' Comp.)
Contracting Documents	
n/r	Certificate of Good Standing ⁽³⁾
n/r	W-9 ⁽³⁾
n/r	Independent Contractor Form ⁽³⁾ (If applicant is individual, not company/organization)
n/r	Electronic Funds Transfer (ETF) Form ⁽³⁾

(1) Click "Grant Agreements". For reference only/do not fill out or submit/required for contracting

(2) Required with application if applicable.

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

Last Update: August 3, 2017

Schedule		
CWCB Meeting	Application Submittal Dates	Type of Request
January	December 1	Basin Account; BIP
March	February 1	Basin/Statewide Account; BIP
May	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:	March 2018
Desired Notice to Proceed Date:	May 2018

Water Activity Summary		
Name of Applicant	Lost Creek Ground Water Management District	
Name of Water Activity	Lost Creek Designated Basin Instrumentation	
Approving Roundtable(s)	Basin Account Request(s) ⁽¹⁾	
South Plate Basin	\$ 25,000	
Basin Account Request Subtotal	\$ 25,000	
Statewide Account Request ⁽¹⁾	\$ 43,000	
Total WSRF Funds Requested (Basin & Statewide)	\$ 68,000	
Total Project Costs	\$ 93,000	

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



Last Update: August 3, 2017

Grantee and Applicant Information	
Name of Grantee(s)	Lost Creek Groundwater Management District
Mailing Address	50005 E. 120 th Avenue, Bennett, CO 80102
FEIN	84-6147781
Grantee's Organization Contact ⁽¹⁾	Tom Sauter
Position/Title	General Manager
Email	sauter@esrta.com
Phone	(303) 886-4475
Grant Management Contact ⁽²⁾	<u>Todd Denning</u>
Position/Title	Lost Creek Groundwater Management District Board Member
Email	denningte@rtebb.net
Phone	(970) 396-3205
Name of Applicant (if different than grantee)	
Mailing Address	
Position/Title	
Email	
Phone	

(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).
Lost Creek Ground Water Management District is a state commissioned board charged with management of water resources within the Lost Creek Designated Basin.



Last Update: August 3, 2017

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
X	Implementation

Category of Water Activity (check all that apply)		
	Nonconsumptive (Environmental)	
	Nonconsumptive (Recreational)	
X	Agricultural	
X	Municipal/Industrial	
X	Needs Assessment	
	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/Countries	Adams/Weld
Latitude	N40
Longitude	W104



Last Update: August 3, 2017

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.

The project will emplace 30 depth transducers with continuous reporting capability throughout the upper Lost Creek Designated Basin. Reports will be linked to DWR through HydroBase reporting. The transducers will be placed in existing wells selected in arrays to observe the extents of the Lost Creek alluvial system. A map showing candidate locations is attached.

These transducers will establish baseline aquifer parameters in advance of municipal uses and increasing export activities from the basin. They will provide continuous and consistent monitoring of water levels throughout the basin area that is currently under study for aquifer storage and recovery (ASR) as identified in the Colorado Water Plan.

Measurable Results

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

109,000 (projected)	New Storage Created (acre-feet)	
	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
109,000 (projected)	Existing Storage Preserved or Enhanced (acre-feet)	
	Length of Stream Restored or Protected (linear feet)	
	Efficiency Savings (indicate acre-feet/year OR dollars/year)	
	Area of Restored or Preserved Habitat (acres)	
	Length of Pipe/Canal Built or Improved	
X	Other	Explain: Colorado Water Plan 2016 ASR Pilot Project Requirement



Last Update: August 3, 2017

Water Activity Justification

Provide a description of how this water activity supports the goals of [Colorado's Water Plan](#), the most recent [Statewide Water Supply Initiative](#), and the respective [Roundtable Basin Implementation Plan and Education Action Plan](#) ⁽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 [2016 WSRF Criteria and Guidelines](#)).

This project directly supports aquifer storage and recovery (ASR) activities in the Lost Creek Designated Basin. Lost Creek is specifically identified in the Colorado Water plan as the best candidate basin to add aquifer storage to meet a significant portion of the 400,000 acre feet of water needed by 2050. By instrumenting the basin's alluvial aquifer system, the Division of Water Resources will have highly accurate empirical data to observe changes to the system as exports, storage, and recharge activities commence. This data will enable the Division to validate more accurate groundwater models and provide the local management district as well as all appropriators with accurate data regarding water capacities and reserves.

Accurate measurement of water levels is a first step in the strategic plan to monitor levels, resident times, inflows and appropriations, and water quality.

Increasing ownership of wells and water rights by Denver area municipalities within a rich agricultural area of the basin will require increasingly accurate determinations of water reserves in the Lost Creek system in order to maximize efficiency of storage and appropriation rates. This instrumentation array long with existing systems already in service will provide a basin-wide view of existing water resources and trends previously only previously estimated through competing models and theoretical studies.

This project directly serves to promote the top three priorities of South Platte Basin Roundtable Basin Implementation Plan:

- Develop or *advance* multi-purpose water supply projects
- Improve municipal and industrial water efficiency
- Sustain irrigated agriculture

This project directly serves Colorado Water Plan implementation through:

- Development of a near real time monitoring system of the best identified candidate for alluvial storage along the front range with the potential to serve 12 or more municipal water authorities.
- Promotes advancement of statewide groundwater modeling to support future water infrastructure and supply efficiency (WISE) projects.
- Develops decision support data to expand water storage development along the front range.



Last Update: August 3, 2017

Water Activity Justification

(1) Access Basin Implementation Plans or Education Action Plans from Basin drop down menu.

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)
Lost Creek Groundwater Management District (applicant)	\$ 25,000 (cash)



Last Update: August 3, 2017

Matching Requirements: Basin Account Requests	
Total Match (Approved Jan 2018)	\$ 25,000 (cash)
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 3 rd 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):
CWCB Statewide Account	\$ 43,000
Total Match	\$ 43,000
If you requested a Waiver to the Statewide Account matching, indicate % you wish waived. (Max 50% reduction of requirement).	

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.



Last Update: August 3, 2017

Related Studies

CWCB funded a study for aquifer storage and recovery within the Lost Creek Designated Basin in 2016. The study is currently underway and being assisted by the Lost Creek Groundwater Management District Board.

Additionally, the 2016 Colorado Water Plan calls for implementation of innovative storage methods and cites aquifer storage as a principal objective with the Lost Creek system being the most likely candidate due to proximity to front range municipalities and projected storage capacity.

The city of Aurora is currently conducting studies within the Lost Creek Designated Basin to develop municipal ASR capabilities and fully supports this project.

Previous CWCB Grants

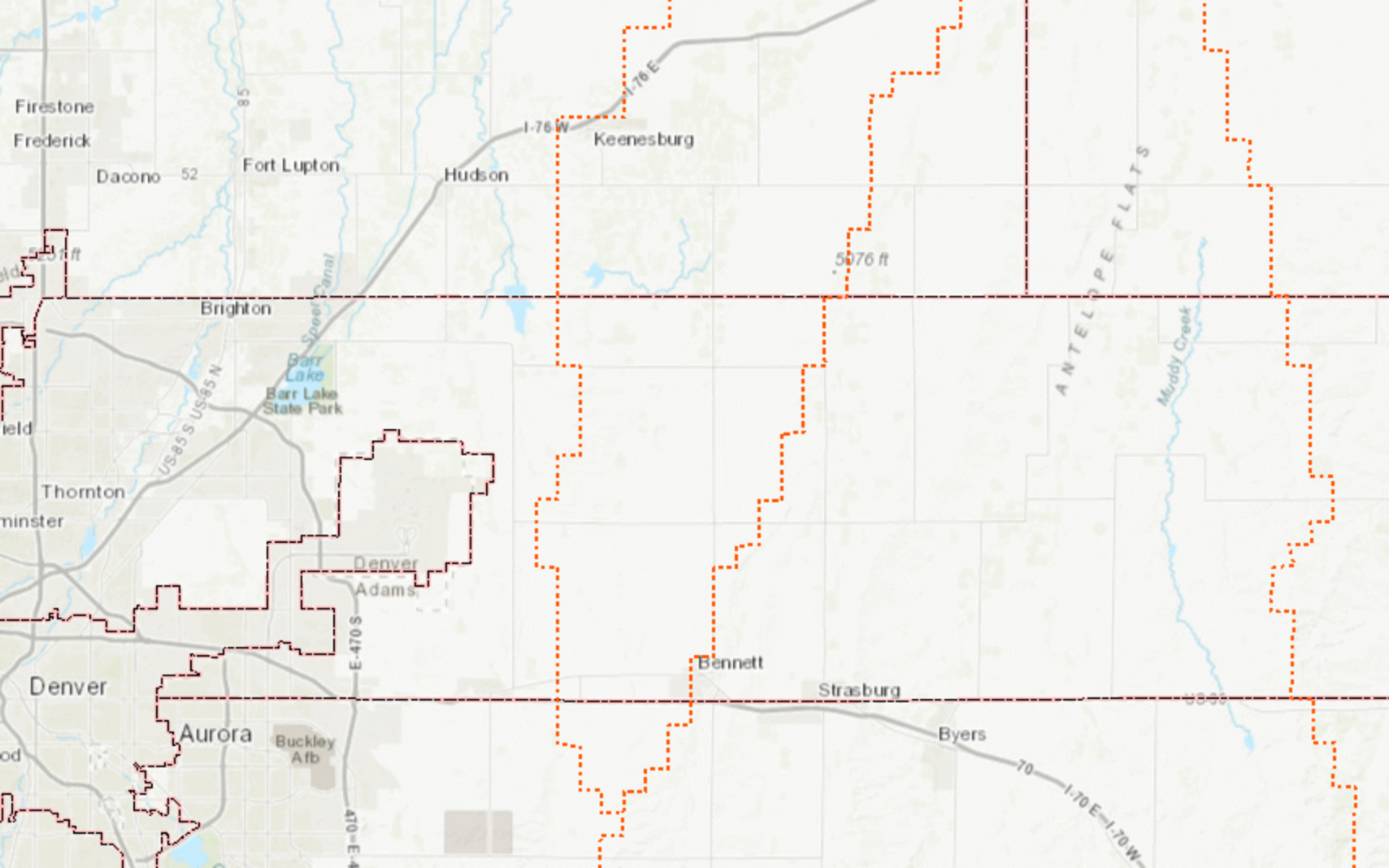
List all previous or current CWCB grants (including WSRF) awarded to both the Applicant and Grantee. Include: 1) Applicant name; 2) Water activity name; 3) Approving RT(s); 4) CWCB board meeting date; 5) Contract number or purchase order

None.

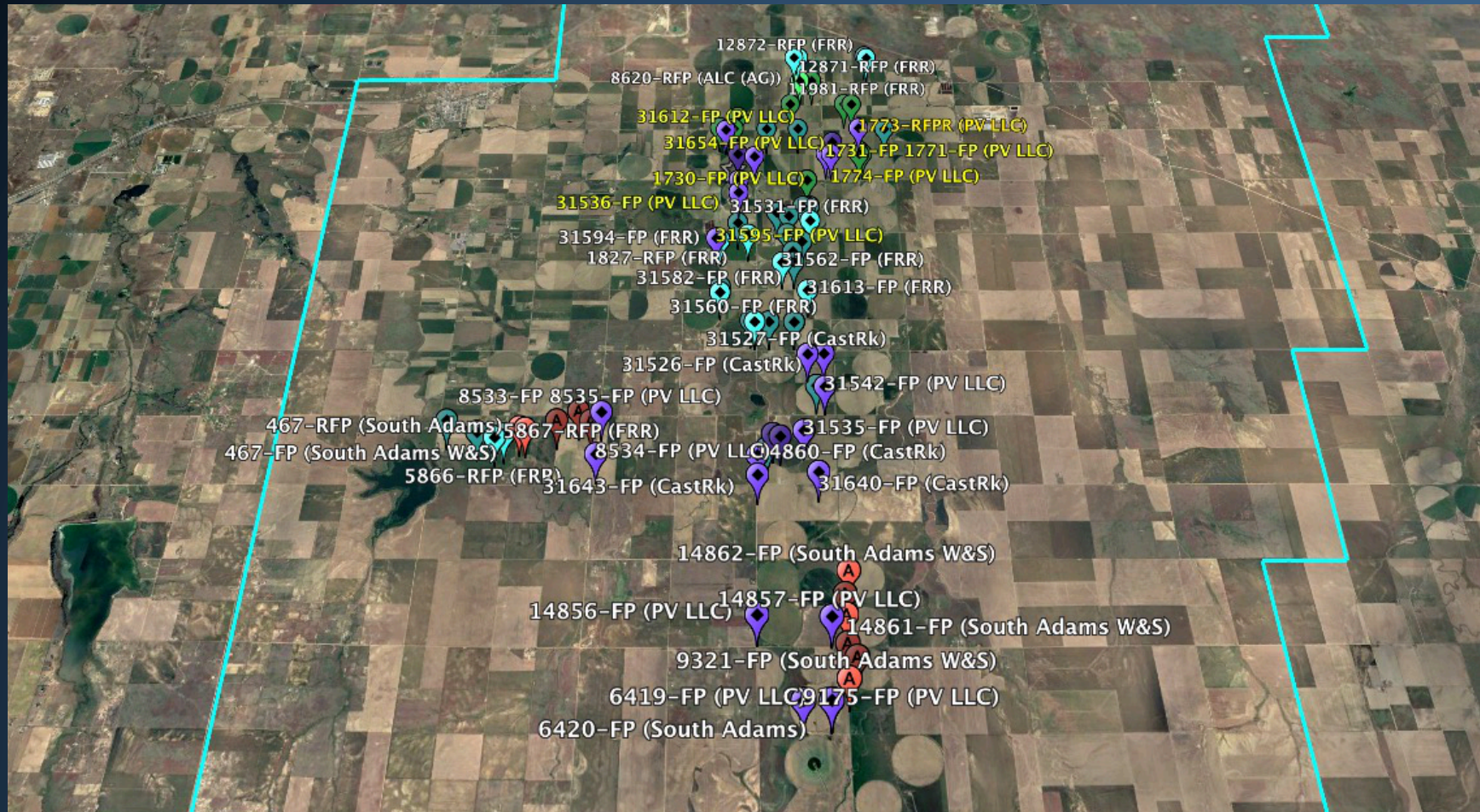
Tax Payer Bill of Rights

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.

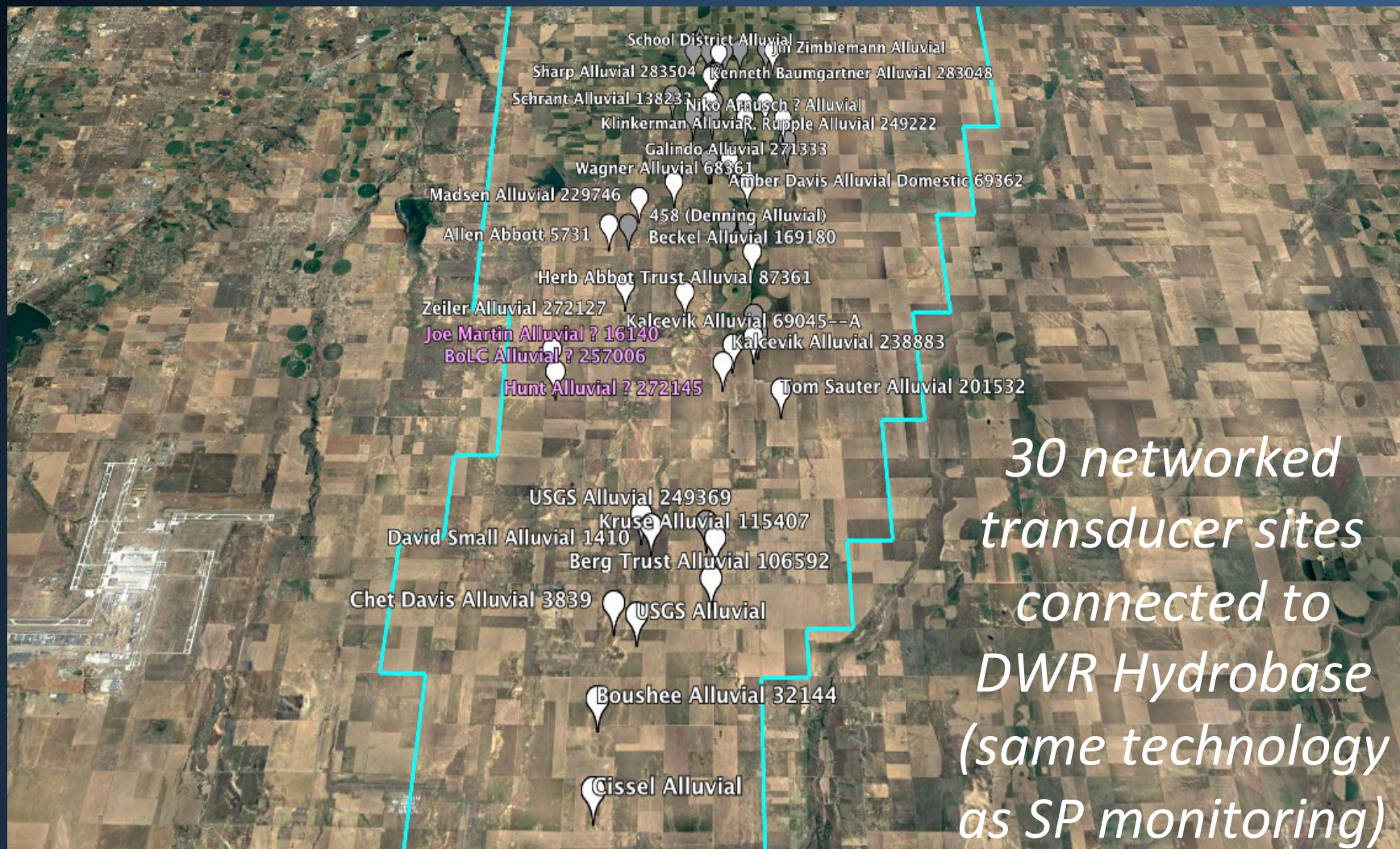
None.



Current and Future Export Sites



Candidate Sites



LOST CREEK GROUND WATER MANAGEMENT
DISTRICT

50005 E. 120th Ave., Bennett, CO 80102

Bill Warren - Kent Crisman - John Sauter - Curtis Baumgartner
Todd Denning - Gerald Graybill - Thomas Sauter

October 30, 2017

Colorado Water Conservation Board
Via email

Dear Board members,

Please be advised that the Lost Creek Ground Water Management District is authorized to contribute \$25,000 towards the grant application for the study of the Lost Creek alluvial aquifer.

The Mangement District appreciates your consideration for this grant application.

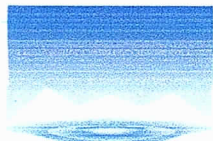
If you have any questions, please direct them to Todd Denning, Tom Sauter or any of the other board members of the Lost Creek Management District.

Sincerely yours,

A handwritten signature in blue ink that reads "Thomas M. Sauter". The signature is fluid and cursive, with the first name "Thomas" and last name "Sauter" clearly legible.

Thomas M. Sauter
Director
Lost Creek Ground Water Management District

Cc: William Warren, Kent Crisman, John Sauter, Curtis Baumgartner, Gerald Graybill



RENEWSTRATEGIES

December 8, 2017

RE: Lost Creek Ground Water Management District's request for funds to support a network of transducers in the Lost Creek Basin

Dear Colorado Water Conservation Board and the South Platte Round Table:

This letter is written in support of the Lost Creek Ground Water Management District's request for funds to support a network of transducers in the Lost Creek Basin. This project is important to Lost Creek because it will allow the Lost Creek Management District to generate reliable data on a daily, weekly, monthly and annual basis of the aquifer levels in the Lost Creek Designated Basin.

As the CWCB and the South Platte Roundtable are aware, the Colorado Water Plan supports the development of underground storage in Colorado, including in the State's Designated Basins. State studies have identified the Lost Creek Designated Basin as potentially the best location for underground storage.

As entities begin to move forward with efforts to potentially develop underground storage in the Lost Creek Designated Basin, it will be helpful for the State and the Lost Creek Management District to have reliable data when considering underground storage applications and plans. The data will also be helpful to the Management District in managing the Lost Creek aquifer generally.

Todd Denning, the person taking the lead for Lost Creek in developing the transducer network and requesting funds from the CWCB, and his family are long-time residents in the Lost Creek Valley. Mr. Denning currently is a farmer and commercial airline pilot and is a retired Air Force fighter pilot. His integrity combined with his agricultural, business, technical and engineering background make him imminently qualified to manage this project with and for the Lost Creek Management District.

Renew Strategies has managed water rights and land in the Lost Creek Basin for approximately seven years. As such, we are familiar with Mr. Denning, the Lost Creek Board and the operations of the Lost Creek aquifer. It is with this background that we highly recommend Mr. Denning, the Lost Creek Management District and this transducer project to the CWCB and South Platte Forum.

Very truly yours,

Mark Sullivan, Manager
Renew Strategies, LLC