



Last Update: September 18, 2020

Colorado Water Conservation Board
Water Supply Reserve Fund Grant Application

Instructions
<p>All WSRF grant applications shall conform to the current 2020 WSRF Criteria and Guidelines.</p> <p>To receive funding from the WSRF, a proposed water activity must be recommended for approval by a Roundtable(s) AND the approved by the Colorado Water Conservation Board (CWCB). The process for roundtable consideration and recommendation is outlined in the 2020 WSRF Criteria and Guidelines. The CWCB meets bimonthly.</p> <p>If you have questions, please contact the WSRF Grant Program Manager (for all Roundtables) or your Roundtable Liaison:</p> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;"> <p>Ben Wade ben.wade@state.co.us 303-866-3441 x3238 (office)</p> </div> <div style="text-align: center;"> <p>Sam Stein Sam.stein@state.co.us 303-866-3441 (office)</p> </div> </div>

WSRF Submittal Checklist (Required)
<p>YES <input type="checkbox"/> NO <input type="checkbox"/> This request was recommended for CWCB approval by the sponsoring roundtable.</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/> I have read and understand the 2020 WSRF Criteria and Guidelines.</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/> Grantee will be able to contract with CWCB using the Standard Contract.¹</p> <p style="text-align: center; margin-top: 20px;">Application Documents included:</p> <p>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Exhibit A: Statement of Work² (<i>Word – see Template</i>)</p> <p>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Exhibit B: Budget & Schedule² (<i>Excel Spreadsheet – see Template</i>)</p> <p>YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Letters of Matching and/or Pending 3rd Party Commitments²</p> <p>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Map²</p> <p>YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> Photos/Drawings/Reports</p> <p>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Letters of Support</p> <p style="text-align: center; margin-top: 20px;">Contracting Documents³</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/> Detailed/Itemized Budget³ (<i>Excel Spreadsheet – see Template</i>)</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/> Certificate of Insurance⁴ (<i>General, Auto, & Workers' Comp.</i>)</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/> Certificate of Good Standing⁽⁴⁾</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/> W-9 Form⁴</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/> Independent Contractor Form⁴ (<i>If applicant is individual, not company/organization</i>)</p> <p>YES <input type="checkbox"/> NO <input type="checkbox"/> Electronic Funds Transfer (ETF) Form⁴</p>

¹Click "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.



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Schedule		
CWCB Meeting	Application Submittal Dates	Type of Request
January	October 1	Basin Account
March	December 1	Basin/Statewide Account/Water Plan Grant Match ¹
May	February 1	Basin Account
July	April 1	Basin Account
September	June 1	Basin/Statewide Account
November	August 1	Basin Account

¹ If either the basin or statewide match includes matching funds from a pending Water Plant Grant, both must be submitted by December 1st deadline for March Board meeting review.

Water Activity Summary		
Name of Applicant	Town of Erie	
Name of Water Activity	Horizontal Well Pilot Project	
Approving Roundtable(s)		Basin Account Request(s) ¹
South Platte		\$25,000
Basin Account Request Subtotal		\$25,000
Basin Account Request Subtotal Approved by Roundtable		\$
Statewide Account Request ⁽¹⁾		\$50,000
Total WSRF Funds Requested (Basin & Statewide)		\$75,000
Total Project Costs		\$2,000,000 minimum

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

Grantee and Applicant Information	
Name of Grantee(s)	Town of Erie
Mailing Address	645 Holbrook Street P.O. Box 750, Erie, CO 80516



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Grantee and Applicant Information	
FEIN	84-0198350
Grantee's Organization Contact¹	Todd Fessenden
Position/Title	Public Works Director
Email	tfessenden@erieco.gov
Phone	303-926-2895
Grant Management Contact²	Tyler Buhren
Position/Title	Civil Engineer
Email	tburhenn@erieco.gov
Phone	303-926-2798
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).
<p>Erie is located in the heart of Colorado's major economic and population centers. Located in both Boulder and Weld Counties, Erie's planning area spans 48 square miles, extending from the north side of State Highway 52 south to State Highway 7, and between US 287 on the west and Interstate 25 to the east. Besides its thriving economy, Erie offers a progressive civic vision, and a sense of community which recognizes the importance of conserving and enhancing its historic small town character, and preserving the natural environment in which it resides.</p>

Type of Eligible Entity (check one)	
<input checked="" type="checkbox"/>	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.
<input type="checkbox"/>	Public (Districts): authorities, Title 32/special districts (conservancy, conservation, and irrigation districts), and water activity enterprises



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Type of Eligible Entity (check one)	
<input type="checkbox"/>	Private Incorporated: mutual ditch companies, homeowners associations, corporations
<input type="checkbox"/>	Private Individuals, Partnerships, and Sole Proprietors: are eligible for funding from the Basin Accounts but not for funding from the Statewide Account.
<input type="checkbox"/>	Non-governmental organizations: broadly, any organization that is not part of the government
<input type="checkbox"/>	Covered Entity: as defined in Section 37-60-126 Colorado Revised Statutes

Type of Water Activity (check one)	
<input checked="" type="checkbox"/>	Study
<input checked="" type="checkbox"/>	Implementation

Category of Water Activity (check all that apply)		
<input type="checkbox"/>	Nonconsumptive (Environmental)	
<input type="checkbox"/>	Nonconsumptive (Recreational)	
<input type="checkbox"/>	Agricultural	
<input checked="" type="checkbox"/>	Municipal/Industrial	
<input type="checkbox"/>	Needs Assessment	
<input checked="" type="checkbox"/>	Education & Outreach	
<input type="checkbox"/>	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	Weld
Latitude	40.098043
Longitude	-105.0496301

Water Activity Overview
<p>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.</p> <p>The Applicant shall also provide, in Exhibit A, a detailed Statement of Work, Budget, and Schedule.</p>



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Water Activity Overview
<p>The Town of Erie is planning the construction and pilot testing of a Horizontally Directionally Drilled (HDD) well to divert Boulder Creek water while gaining water quality improvements through riverbank filtration (RBF) processes. HDD wells are innovative alternatives to vertical wells that address operational and maintenance challenges associated with thin alluvial aquifers in areas impacted by upstream discharge of wastewater treatment plant effluent. Horizontal wells typically have much higher yields than vertical wells in these conditions, which are common in the South Platte and Arkansas basins. Erie will initially put the water to beneficial use by pumping raw water augmented with Windy Gap effluent into a non-potable water pipeline for municipal use. Water rights and augmentation plan applications have been submitted, and a SWSP will be obtained to initiate the project.</p> <p>The WSRF Grant funding would be used for partial funding of the study portion, Task 3: Pilot Operations, Reporting and Community Workshop. This task will serve as a demonstration project for other entities that may benefit from improved alluvial groundwater supply development. If approved, this grant application would partially fund an HDD pilot facility operation, development of a best practices public document, and a community workshop to share information.</p>

Measurable Results		
To catalog measurable results achieved with WSRF funds please provide any of the following values.		
	New Storage Created (acre-feet)	
Up to 2,000 acre-feet of annual new consumptive water supplies	New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive	
	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 (linear feet)	
	Other	Explain:

Water Activity Justification
<p>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).</p> <p>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 2020 WSRF Criteria and Guidelines).</p>



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Water Activity Justification

The Erie HDD Well Pilot Project will support the following State and basin planning goals:

- Colorado Water Plan
 - Meet Colorado's Water Gaps – The development of this water supply to meet municipal demands will help to sustainably satisfy a portion of the State's supply gap.
 - Protect and Develop Conservation and Efficiency – This water supply project will increase Erie's yield efficiency of new water rights and Windy Gap water.
 - Integrate Land Use and Water Planning – Erie is integrating this new water supply project into Town wide planning for both non-potable and potable water uses.
 - Maintain Agricultural Viability – This water supply project will offset the need to obtain other water rights, such as those from agricultural "buy and dry".
 - Encourage Reuse – This HDD Pilot project will increase Erie's ability to leverage existing use of Windy Gap effluent supplies for augmentation to meet municipal demands. The Pilot project will also provide Best Practices information to other entities who would benefit from HDD wells within their reuse infrastructure.
- South Platte Basin Implementation Plan
 - Improve municipal and industrial water efficiency – HDD wells provide increased yields and water quality improvements to indirect potable reuse systems. This project will maximize the use of existing transmountain supplies and South Platte supplies and will offset needs for additional transmountain diversions.
 - Sustain irrigated agriculture – This water supply project will offset the need for obtaining other water rights, such as those from agricultural "buy and dry".
 - Promote education and outreach that emphasizes the South Platte Basin Implementation Plan priorities.– This Pilot project will provide research into the optimal design and operation of HDD wells. HDD wells provide increased yields and water quality improvements to indirect potable reuse systems. This Pilot project and community workshop will demonstrate this and provide Best Practices for other water users across the Basin and the State.

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 [2020 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)
Town of Erie	Cash in excess of \$1,800,000



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Matching Requirements: Basin Account Requests	
Total Match	\$1,800,000
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 2020 WSRF Criteria and Guidelines . At least of 10% of the required Statewide Account Grant request match shall be cash from Basin Account funds whether that is from one or multiple basins; and the remaining 40% of the required match may be provided from any source, including other grants, cash from the Basin Account, or any combination of cash, in-kind services, or in-kind materials.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):
Town of Erie	Cash in excess of \$1,800,000
South Platte Basin Roundtable	\$25,000
Total Match	\$1,825,000
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.



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Related Studies

No related studies have been identified.

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

Town of Erie
Horizontal Well Pilot Project
State Water Plan Grant approved at the December, 2019 CWCB board meeting.
CWCB Grant Award Letter No. CTGG12021-2281
Contract CMS No. 163996

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.

The Town does not currently have any TABOR issues that would affect this application.

**Water Supply Reserve Fund
Water Activity Summary Sheet
March 10-11, 2021
Consent Agenda Item 2(m)**

Applicant & Grantee: Town of Erie

Water Activity Name: Horizontal Well Pilot Project

Water Activity Purpose: Education & Outreach, Municipal/Industrial - Study & Implementation

County: Weld

Drainage Basin: South Platte

Water Source: Boulder Creek

Amount Requested: \$25,000 South Platte Basin Account
\$50,000 Statewide Account
\$75,000 Total Request

Matching Funds: Basin Account Match = \$25,000

- 50% of statewide request (meets 10% min)

Applicant & 3rd Party Match = \$1,800,000 (cash)

- 36 times of the statewide request (meets 10% min)

Total Match (Basin request & Applicant Match) = \$1,825,000

- 36.5 times the statewide request (meets 50% min)

Staff Recommendation:
Staff recommends approval of up to \$25,000 from the South Platte Basin Account and \$50,000 from the Statewide Account to help fund the project: Horizontal Well Pilot Project

Water Activity Summary: The Town of Erie is planning the construction and pilot testing of a Horizontally Directionally Drilled (HDD) well to divert Boulder Creek water while gaining water quality improvements through riverbank filtration (RBF) processes. HDD wells are innovative alternatives to vertical wells that address operational and maintenance challenges associated with thin alluvial aquifers in areas impacted by upstream discharge of wastewater treatment plant effluent. Horizontal wells typically have much higher yields than vertical wells in these conditions, which are common in the South Platte and Arkansas basins. Erie will initially put the water to beneficial use by pumping raw water augmented with Windy Gap effluent into a non-potable water pipeline for municipal use. Water rights and augmentation plan applications have been submitted, and a Substitute Water Supply Plan will be obtained to initiate the project.

If approved, the WSRF Grant funding would be used for partial funding of the study portion, Task 3, which includes pilot operations, the development of a best practices public document and a community workshop. (This request is in addition to a previously approved Water Plan grant the Board for the same task back in November 2019.)

Discussion: This project aligns with the South Platte Basin Implementation Plan focus on improving water efficiency, sustaining irrigated agriculture, and promoting education. As stated in the Roundtable approval letter, this proposal can also advance the Water Plan's objectives of meeting water gaps, developing efficiency, agricultural viability and encouraging reuse.

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

Eligibility Requirements: The application meets requirements of all eligibility components.

Evaluation Criteria: Staff has determined this activity satisfies the Evaluation Criteria.

Funding Sources/Match	Cash	In-Kind	Total	Status
Town of Erie	\$1,800,000	\$0	\$1,800,000	Secured
Sub-Total	\$1,800,000	\$0	\$1,800,000	
WSRF Metro Basin Account	\$25,000	\$0	\$25,000	Secured
WSRF Statewide Account	\$50,000		\$50,000	
Sub-Total	\$75,000	\$0	\$75,000	
Total Project Costs	\$1,875,000	\$0	\$1,875,000	

CWCB Project Manager: Cole Bedford

November 20, 2020

Ben Wade
Colorado Water Conservation Board
1313 Sherman St., Room 718
Denver, CO 80203

Re: South Platte Roundtable support for WSRF Basin Funds for the Town of Erie - *Horizontal Well Pilot Project*

Dear Ben,

The South Platte Roundtable underwent an evaluation and approval process and voted to support the Town of Erie's Horizontal Well Pilot project. The vote took place at the November 10, 2020 South Platte Basin Roundtable meeting and passed unanimously. This project involves the design, construction, and operation of a horizontal directionally drilled (HDD) well near the Town of Erie's North Water Reclamation Facility (NWRf). The Town is developing an indirect potable (and non-potable) system capable of maximizing the efficient use of their new and existing Boulder Creek water rights through reuse of its Windy Gap water for augmentation purposes. The HDD well will be designed to maximize yield while also providing riverbank filtration (RBF) water quality improvements that will act as water pre-treatment, reducing water treatment plant upgrades. The Town will use the HDD Well Pilot results to improve designs for the rest of the system, which may ultimately include five (5) more HDD wells. The HDD Well Pilot results will also be distributed to other entities considering water supply development in shallow alluvial aquifers.

The Town of Erie's WSRF application fully meets the South Platte Basin Roundtable WSRF Guidelines and WSRF Grant Program Criteria. The project will help advance the South Platte Basin Implementation Plan's focus on improving water efficiency, sustaining irrigated agriculture, and promoting education as outlined in the application. It will also further advance Colorado's Water Plan conservation measurable objectives of meeting Colorado's water gaps, developing efficiency, water planning, agricultural viability, and encouraging reuse as outline in the application.

Upon review and consideration of the Town of Erie's proposal, the South Platte Basin Roundtable unanimously voted to approve \$25,000 of the \$50,000 Basin WSRF funds requested by the applicant at the November 10, 2020 Roundtable meeting.

Sincerely,



Garrett Varra, Chair
South Platte Basin Roundtable