



COLORADO

**Colorado Water
Conservation Board**

Department of Natural Resources

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John Hickenlooper, Governor

Robert Randall, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Jonathan Hernandez, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: September 20-21, 2017 Board Meeting

AGENDA ITEM: 14a. Water Project Loans and Water Supply Reserve Fund (WSRF) Grants
Fruitland Irrigation Company – Tunnel and Canal Renovation

Introduction

The Fruitland Irrigation Company (Company) is applying for a loan and grant for the Tunnel and Canal Renovation (Project). The purpose of the Project is to assure the continued ability to deliver irrigation water by stabilizing and renovating the Company's tunnels and canals, while minimizing seepage losses and salinity contributions to the Colorado River drainage. The total Project cost is estimated to be \$10,509,000. The Company is requesting a loan from the CWCB for approximately 16% of the Project cost and a WSRF grant for approximately 9% of the Project cost. The balance is to be funded with a Bureau of Reclamation and Colorado River District grants. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation for CWCB Loan

Staff recommends the Board approve a loan not to exceed \$1,746,290 (\$1,729,000 for Project costs and \$17,290 for the 1% service fee) to the Fruitland Irrigation Company for costs related to the Tunnel and Canal Renovation Project, from the Severance Tax Perpetual Base Fund. The loan terms shall be 40 years at the agricultural interest rate of 2.0% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Additionally staff recommends the following loan approval condition prior to executing a contract:

- 1) The Company shall provide evidence of grant funding approval from the Bureau of Reclamation's Colorado River Basinwide Salinity Program.

Staff Recommendation for WSRF Grant

Staff recommends approval of up to \$750,000 from the Statewide Fund and \$150,000 from the Gunnison Basin Fund to the Fruitland Irrigation Company for costs related to the Tunnel and Canal Renovation Project.

Additionally staff recommends the following grant approval condition prior to executing a contract:

- 1) The Company shall provide evidence of grant funding approval from the Bureau of Reclamation's Colorado River Basinwide Salinity Program.



Background

The Company owns and operates the 17.7 mile-long earthen Fruitland Highline Canal, the 22 mile-long earthen Gould Canal (including 0.8 miles through two rock tunnels), and the 10,168 AF Gould (aka Fruitland, aka Onion Valley) Reservoir. The Fruitland Highline Canal diverts from Crystal Creek, approximately 13 miles south of the Town of Crawford and provides irrigation water to approximately 5,900 acres in Delta and Montrose Counties. Irrigated acreage is primarily used for cattle ranching and production, with some grain production as well. Approximately 50% of the irrigated acres are irrigated by sprinklers with an estimated 77% system-wide efficiency.

The two tunnels in the Gould Canal are over 100 years old and have eroded to the point that its structural integrity is threatened. All water released from the Gould reservoir pass through these two tunnels. A collapse would eliminate the ability to deliver irrigation after the junior direct flow rights are out of priority, typically in mid-June.

Renovation of the Company's irrigation system began with reconstructing the Gould Reservoir outlet in 1988 which was funded through CWCB Loan C153542. Feasibility studies for further improvements continued with a Water Management Plan prepared in collaboration with the Delta Conservation District in 2002, a video inspection of the two tunnels in 2009, and an evaluation of potential combination with the Cattleman's Ditch in 2015. This was followed by a 2016 Feasibility Study prepared by Applegate Group which serves as the basis for this loan request.

The Fruitland Highline and Gould Canals are located within the Colorado River salinity control area. The Water Management Plan completed for the Fruitland Irrigation System in 2002 estimated canal seepage losses to be 12.5 cfs, or 1,856 AF annually. This seepage loss equates to approximately 6,053 tons of salt and 484 pounds of selenium to the Colorado River system and results in losing approximately 15 irrigation days each year. Eliminating seepage from these earthen canals will reduce salinity and selenium contributions to the Lower Gunnison and Colorado River Systems, providing benefits to both downstream users and improving critical aquatic habitat for four endangered fish species.

Loan Feasibility Study

Danny Todd, Board President, Fruitland Irrigation Company, prepared the Loan Feasibility Study titled, "Feasibility of the Fruitland Irrigation Company Tunnel and Canal Renovation Project," dated May 2017. The feasibility study relied on 2016 Feasibility Study prepared by Craig Ullmann, P.E., with Applegate Group, Inc. The feasibility study was prepared in accordance with CWCB guidelines and includes an analysis of alternatives, preliminary engineering design, and construction cost estimates. Financial statements were prepared by North Fork Accounting. The 2016 Feasibility Study was funded through an authorization in the 2014 Projects Bill (SB14-1333) as a Gunnison Basin Irrigation System Planning and Organization grant managed by the Delta Conservation District.

Borrower - Fruitland Irrigation Company

The Company is a Mutual Ditch Company established in 1901, originally as the Fruitland Land, Water, and Livestock Company. It operates as a nonprofit corporation and is in good standing with the Colorado Secretary of State. The Company is governed by a seven-member board of directors responsible for managing the business and affairs of the Company.

The Company is made up of 200,000 shares held by 130 shareholders. The by-laws (2016) of the Company state that annual assessments are set by the shareholders at the annual shareholders meeting, and without approval, assessments are limited to that necessary for operation and maintenance of the Company. A majority vote of the shareholders is required to approve debt against the company. The

Board of Directors have the authority to shut off water for non-payment of assessments and force the sale of stock for delinquent shareholders.

Water Rights

The Company owns and the following water rights:

TABLE 1: WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.
Fruitland Canal	67.4375 CFS	5/17/1901	6/23/1914	CA0617
Fruitland Canal	300 CFS	5/17/1901	2/10/1930	CA2030
Fruitland Canal	74.7 CFS	7/1/1914	2/10/1930	CA2030
Fruitland Canal	40 CFS	5/17/1901	3/20/1954	CA3503
Fruitland Canal	5 CFS	5/17/1901	3/20/1954	CA3503
Fruitland Canal	40 CFS	5/17/1901	3/20/1954	CA3503
Fruitland Canal	10 CFS	5/17/1901	3/20/1954	CA3503
Fruitland Reservoir	2800 AF	5/17/1901	6/23/1914	CA0617
Fruitland Reservoir	3884.95 AF	5/17/1901	2/10/1930	CA2030
Fruitland Reservoir	2483 AF	5/17/1901	2/10/1930	CA2030
Fruitland Reservoir	6417 AF	5/17/1901	2/10/1930	CA2030

Average annual diversions are 10,103 AF.

Project Description

The objective of the Project is to stabilize and renovate the tunnels, and improve the Gould Canal to assure the continued ability to deliver irrigation water to shareholders while minimizing seepage losses and salinity contributions to the Colorado River drainage. Alternatives to minimizing seepage losses included either piping or lining sections of earthen ditch.

Alternative 1 - No Action: This alternative was not selected because the tunnels will collapse without significant rehabilitation and prevent the Company from delivering Gould Reservoir water to its shareholders. Additionally, no action will continue annual contributions of 6053 tons of salt to the Colorado River system while losing an estimated 22% of diversions to seepage.

Alternative 2 - Pipeline: This alternative would reduce seepage by converting the open earthen ditch into a buried pipeline. A benefit to putting the ditch into a pipeline is the reduced maintenance cost especially in areas prone to rock fall. An evaluation of the ditch system revealed that the 2.1 mile-long ditch section from the dam outlet, along the canyon, and through the two tunnels would most benefit from having a buried pipeline to reduce delivery interruptions that occur with rock fall events. Two types of pipeline were analyzed.

Alternative 2A - Pressure Pipeline: Benefits to a pressure pipeline is it can allow farmers to more efficiently irrigate their lands by converting to sprinklers. However, most of the lands irrigated by the ditch are already using sprinklers as pressure is currently available from on-farm pipelines. Therefore this alternative was not selected.

Selected Alternative 2B - Gravity Pipeline: This alternative was the preferred pipeline alternative because of the material cost savings in using a pipeline not rated for pressure applications. This pipe is also suitable for rehabilitation of the tunnels.

Alternative 3 - Ditch Liner: This alternative would reduce seepage by converting the open earthen ditch into an open lined ditch. Lining the ditch is generally more cost effective and so this was the chosen alternative where rock-falls is not a maintenance concern, namely the 10.3 mile-long ditch section downstream of the two tunnels. Two types of ditch liner were analyzed.

Alternative 3A - Rock-Filled Geocell Liner: This alternative uses geocells that are backfilled with rock. The rock is necessary to protect the liner from damage resulting from animal traffic and would produce a stable channel section. This alternative was not selected because it is approximately 19% more expensive than the shotcrete liner alternative, and concerns of long-term maintenance issues related to sedimentation within the rock that may allow for vegetation to take root. Additionally, as this would be the first salinity control program project to use this type of liner, its likely a pilot study would first be required.

Selected Lining Alternative 3B - Shotcrete Liner: This alternative uses a PVC geo-liner covered with shotcrete. The shotcrete cover material primarily serves to protect the liner from damage. This liner type is currently the only approved method allowed under the Salinity Control Program. Based on the shallow cross section of the canal, it is anticipated the liner will be a semi-parabolic cross section rather than the typical trapezoidal section. A non-woven geotextile is first placed on the prepared canal bed followed by a 30 mil PVC liner, and then another non-woven geotextile. A 3 inch thick layer of shotcrete, consisting of fibermesh, is then installed on top of the liner. A soil cover is sometimes used in place of shotcrete. Based on the geometry of the canal, this was not cost effective because of the significant increase in the width needed to provide for the minimum side slope needed for a soil cover.

The total cost associated with the Project is shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Task	Total
Construction - Gravity Pipe (Section 1)	\$1,081,000
Construction - Upper Tunnel	\$1,044,000
Construction - Lower Tunnel	\$1,374,000
Construction - Shotcrete Lining (Sections 2,3,4, & 5)	\$5,375,000
CONSTRUCTION SUB-TOTAL	\$8,874,000
Engineering	\$520,000
Construction Observation	\$495,000
Project Management	\$40,000
NEPA/Cultural Resources	\$133,000
Habitat Mitigation	\$447,000
INDIRECT SUBTOTAL	\$1,635,000
TOTAL	\$10,509,000

Permitting: Work will occur within existing ditch easements and rights-of-way. NEPA and cultural resource surveys will be completed prior to any construction activity to satisfy federal funding requirements.

Schedule: The Company will be submitting an application for funding to the USBR Colorado River Basinwide Salinity Program in November 2017, which could be awarded in January 2018. Construction will occur during the non-irrigation season and is anticipated to begin fall 2019 and be completed over three construction seasons for completion in spring 2022.

Water Supply Reserve Fund Grant

Applicant & Grantee: Fruitland Irrigation Company
Water Activity Name: Fruitland Irrigation Renovation Project
Water Activity Purpose: Agricultural & Environmental
County: Delta & Montrose
Drainage Basin: Gunnison
Water Source: Crystal Creek

At the June 2017 Gunnison Basin Roundtable meeting, the Roundtable recommended approval of the Fruitland Irrigation Renovation Project application request for the following Basin and Statewide Funds:

Amount Requested/Source of Funds: \$150,000 Gunnison Basin Fund
\$750,000 Statewide Fund
\$900,000 Total Grant Request

Matching Funds: Basin Fund Match: \$150,000 = 17% of total grant request (meets 5% min);
Non-Statewide Fund Match: \$9,719,000 = 1080% of total grant request (meets 25% min);
Applicant & 3rd Party Match: \$9,609,000 = 1068% of total grant request (meets 5% min)

Discussion: This project meets Goals 1, 2, 3 and 8 of the Gunnison Basin Implementation Plan which are to : (1) protect existing water uses in Gunnison Basin, (2) discourage the conversion of productive agricultural land to other uses, (3) improve agricultural water supplies to reduce shortages, and, (8) restore, maintain, and modernize critical water infrastructure.

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 staff has determined it satisfies the Evaluation Criteria outlined in Colorado's Water Plan, Section 9.4. Please refer to Basin Roundtable Chair's Recommendation Letter and the Application for a detailed response.

<u>Funding Source</u>	<u>Cash</u>	<u>In-Kind</u>	<u>Total</u>	<u>Status</u>
BOR Basinwide Funding	\$7,790,000	\$0	\$7,790,000	Pending
CO River District	\$50,000	\$0	\$50,000	Pending
Fruitland Irrigation District	\$0	\$40,000	\$40,000	Secured
CWCB Water Project Loan	\$1,729,000	\$0	\$1,729,000	Pending
Subtotal Matching Funds	\$9,569,000	\$40,000	\$9,609,000	
WSRF Gunnison Account	\$150,000	\$0	\$150,000	
WSRF Statewide Account	\$750,000	\$0	\$750,000	
Total Project Costs	\$10,469,000	\$40,000	\$10,509,000	

CWCB Loan Program

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The Company qualifies for an agricultural interest rate of 1.75% for a 30-year term. The Company is seeking a 40-year term and thus the interest rate will be increased by 0.25% to 2.0% per CWCB Financial Policy #7 (Lending Rate Determination). Financial feasibility of the project is dependent on the grant request to the BOR Basinwide Funding.

TABLE 3: FINANCIAL SUMMARY

Total Project Cost	\$10,509,000
BOR Basinwide Funding	\$7,790,000
CO River District	\$50,000
Company Contribution (In-Kind)	\$40,000
WSRF Grant	\$900,000
CWCB Loan Amount	\$1,729,000
CWCB Loan Amount (Including 1% Service Fee)	\$1,746,290
CWCB Annual Loan Payment	\$63,837
CWCB Annual Loan Obligation (1 st Ten Years)	\$70,221
Number of Shares	200,000
Annual Obligation per Share	\$0.35
Current Assessment per Share	\$0.50
Future Assessment per Share	\$0.85

Creditworthiness: At the time of loan application, the Company had \$85,863 in existing debt made up of one CWCB loan. That loan was for repairs to Gould Reservoir in 1989-1990. The Company paid that loan in full on August 31, 2017.

In anticipation of this Project, the Company has raised its assessments from \$0.35/share in 2014, to \$0.40/share in 2015, and to \$0.50/share in 2016. The Board has received shareholder approval to increase share assessments to as much as \$1.00/share to pay off this loan. The Board anticipates increasing assessments to \$0.85/share to service this debt.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	Past 2 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	170% (strong) \$104K/\$61K	144% (strong) \$174K/\$121K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	530% (strong) (\$104K-\$51K) \$10K	176% (strong) (\$174K-\$51K) \$70K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	190% (strong) \$116K/\$61K	25% (weak) \$30K/\$121K
Annual Operating Cost per Acre-Foot (10,103 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$6 (strong) \$61K/10,103 AF	\$12 (average) \$121K/10,103 AF

Loan/Grant Payment: Payments from the CWCB funds will be processed at the following percentages: 66% loan to 34% WSRF grant. The Company has also submitted a CWCB water plan grant which if approved will reduce the final loan balance.

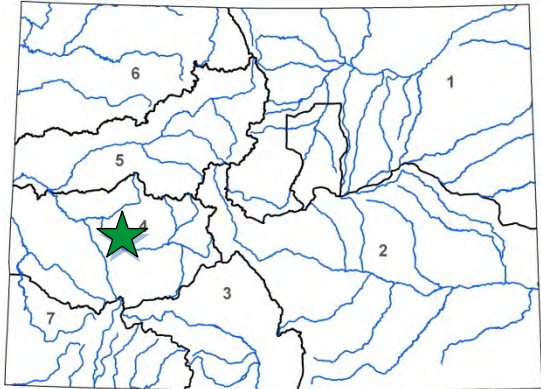
Collateral: Security for this loan will be a pledge of assessment revenues back by a rate covenant and an undivided 100% interest in the Onion Valley Dam (aka Gould Reservoir). This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Danny Todd, President, Fruitland Irrigation Company
Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program - Project Data Sheet



L O A N D E T A I L S	
Project Cost:	\$10,509,000
CWCB Loan (with Service Fee):	\$1,774,671
Loan Term and Interest Rate:	40 Years @ 2.0%
Funding Source:	Severance Tax PBF and WSRF Grant
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
100%	0% Low - 0% Mid -0% High 0%
P R O J E C T D E T A I L S	
Project Type:	Ditch Rehabilitation
Average Annual Diversions:	10,103 AF



L O C A T I O N	
County:	Delta & Montrose
Water Source:	Crystal Creek
Drainage Basin:	Gunnison
Division:	4 District: 40

The Company owns and operates the 17.7 mile-long earthen Fruitland Highline Canal, the 22 mile-long earthen Gould Canal including 0.8 miles through two rock tunnels, and the 10,168 AF Gould Reservoir. The Fruitland Highline Canal diverts from Crystal Creek, 13 miles south of the Town of Crawford and provides irrigation water to approximately 5,900 acres in Delta and Montrose Counties.

The Company is seeking a CWCB Loan and a WSRF Grant as part of an overall funding package for the Tunnel and Canal Renovation Project. The two tunnels in the Gould Canal are over 100 years old and have eroded to the point that its structural integrity is threatened. A collapse would eliminate the ability to deliver irrigation water after the junior direct flow rights are out of priority, typically in mid-June. Additionally, the Fruitland Highline and Gould Canals are located within the Colorado River salinity control area. The seepage losses are estimated to be 12.5 cfs, or 1856 AF annually which equates to approximately 6,053 tons of salt to the Colorado River system.

CWCB funding will be used to pipe the Gould Canal from Gould Reservoir through the two tunnels, a distance of approximately 2.1 miles and line the earthen canal for approximately 10.3 miles.



Canal to be piped



Canal to be lined



The Gunnison Basin Roundtable
501 Palmer Street
Delta, CO 81416

June 9, 2017

Mr. Craig Godbout
Water Supply Management Section
COLORADO WATER CONSERVATION BOARD
1313 Sherman St., Room 718
Denver, CO 80203

Re: WSRF Grant Request: Fruitland Irrigation Renovation Project

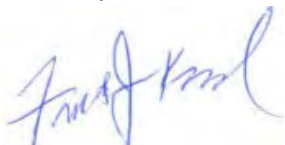
Dear Mr. Godbout:

This letter is presented to advise you that the grant application submitted by the Fruitland Irrigation Company for \$150,000 from Basin Account funds and \$750,000 in Statewide Account funds from the Water Supply Reserve Fund for the Fruitland Irrigation Renovation Project was reviewed by the Gunnison Basin Roundtable and its Project Screening Committee. The request for funding was approved by a unanimous vote of the Gunnison Basin Roundtable during our meeting on June 5, 2017.

This water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes. The requirements/language from the statute is provided in Part 3 of the Criteria and Guidelines. In addition, this project meets Goals 1,2, 3 and 8 of the Gunnison Basin Implementation Plan.

Thank you for your support of this grant application.

Sincerely,



Frank J. Kugel
Gunnison Basin Roundtable

cc: Kathleen Curry (email)
Tom Alvey (email)
Fruitland Mesa, applicant (email)



COLORADO WATER CONSERVATION BOARD



WATER SUPPLY RESERVE ACCOUNT APPLICATION FORM

Today's Date: May 1, 2017

Fruitland Irrigation Renovation Project

Name of Water Activity/Project

Fruitland Irrigation Company

Name of Applicant

Gunnison Basin

Amount from Statewide
Account:

\$ 750,000

Amount from Basin
Account(s):

\$ 150,000

Approving Basin Roundtable(s)

(If multiple basins specify amounts in parentheses.)

Total WSRA Funds
Requested:

\$ 900,000

FEIN: 84-0207921

Application Content

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Water Rights, Availability, and Sustainability	page 10
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Required Exhibits

- A. Statement of Work, Budget, and Schedule
- B. Project Map
- C. As Needed (i.e. letters of support, photos, maps, etc.)

Appendices – Reference Material

- 1. Program Information
- 2. Insurance Requirements
- 3. WSRA Standard Contract Information (Required for Projects Over \$100,000)
- 4. W-9 Form (Required for All Projects Prior to Contracting)

Water Supply Reserve Account – Application Form

Revised October 2013

Instructions

To receive funding from the Water Supply Reserve Account (WSRA), a proposed water activity must be approved by the local Basin Roundtable **AND** the Colorado Water Conservation Board (CWCB). The process for Basin Roundtable consideration and approval is outlined in materials in Appendix 1.

Once approved by the local Basin Roundtable, the applicant should submit this application **with a detailed statement of work including budget and schedule as Exhibit A** to CWCB staff by the application deadline.

WSRA applications are due with the roundtable letter of support 60 calendar days prior to the bi-monthly Board meeting at which it will be considered. Board meetings are held in January, March, May, July, September, and November. Meeting details, including scheduled dates, agendas, etc. are posted on the CWCB website at: <http://cwcb.state.co.us> Applications to the WSRA Basin Account are considered at every board meeting, while applications to the WSRA Statewide Account are only considered at the March and September board meetings.

When completing this application, the applicant should refer to the WSRA Criteria and Guidelines available at: <http://cwcb.state.co.us/LoansGrants/water-supply-reserve-account-grants/Documents/WSRACriteriaGuidelines.pdf>. In addition, the applicant should also refer to the [Supplemental Scoring Matrix](#) applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests .

The application, statement of work, budget, and schedule **must be submitted in electronic format** (Microsoft Word or text-enabled PDF are preferred) and can be emailed or mailed on a disk to:

Craig Godbout - WSRA Application
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203
Craig.godbout@state.co.us

If you have questions or need additional assistance, please contact Craig Godbout at: 303-866-3441 x3210 or craig.godbout@state.co.us.

Water Supply Reserve Account – Application Form

Revised October 2013

Part I. - Description of the Applicant (Project Sponsor or Owner);

1.	Applicant	Fruitland Irrigation Company		
	Mailing address:	c/o Danny Todd 34918 Fruitland Mesa Rd Crawford, CO 81415		
	FEIN #:	84-0207921		
	Primary	Danny Todd	Position/Title	President
	Email:	toddcattlecompany@gmail.com		
	Phone	Cell: 970-589-5230	Office	970-921-7051
	Alternate	Ron Klaseen	Position/Title	Board Member
	Email:	waterboy2829@aol.com		
	Phone	Cell: 970-234-2928	Office	970-921-6657

2. Eligible entities for WSRA funds include the following. What type of entity is the Applicant?

- ☐ Public (Government) – municipalities, enterprises, counties, and State of Colorado agencies. Federal agencies are encouraged to work with local entities and the local entity should be the grant recipient. Federal agencies are eligible, but only if they can make a compelling case for why a local partner cannot be the grant recipient.
- ☐ 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 defined as any organization that is not part of the government.

Water Supply Reserve Account – Application Form

Revised October 2013

3. Provide a brief description of your organization

Fruitland Irrigation Company (FIC) is a mutual ditch company and a non-profit corporation registered in the State of Colorado, established in 1901. Originally established by the Gould brothers as the Fruitland Land, Water and Livestock Company, the company acquired its current name when ownership transferred to the water users of Fruitland Mesa in 1937. There are currently 130 shareholders for the 200,000 shares of FIC stock. The Fruitland Irrigation Company has the power to set annual assessments to be paid by the shareholders, the power to cut off water deliveries to shareholders that fail to pay their assessments, and the power to offer stock for sale to pay back assessments.

The FIC operates and maintains the Fruitland Highline Canal - 17.7 miles of earthen ditch; the Gould Canal – 22 miles of earthen ditch, including 0.8 miles through two rock tunnels; and the Gould Reservoir (aka Fruitland or Onion Valley Reservoir) with 10,168 acre-feet of decreed storage. Water is delivered via this system to irrigate an estimated 5900 acres on Fruitland Mesa, southwest of the town of Crawford. Irrigated acreage within the service area is primarily used for cattle ranching and hay production, with some grain production as well.

4. If the Contracting Entity is different then the Applicant (Project Sponsor or Owner) please describe the Contracting Entity here.

Same

5. Successful applicants will have to execute a contract with the CWCB prior to beginning work on the portion of the project funded by the WSRA grant. In order to expedite the contracting process the CWCB has established a standard contract with provisions the applicant must adhere to. A link to this standard contract is included in Appendix 3. Please review this contract and check the appropriate box.

☒

The Applicant will be able to contract with the CWCB using the Standard Contract

☐

The Applicant has reviewed the standard contract and has some questions/issues/concerns. Please be aware that any deviation from the standard contract could result in a significant delay between grant approval and the funds being available.

6. 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.

Since the Fruitland Irrigation Company is a private entity without taxing authority, no TABOR restrictions apply.

Water Supply Reserve Account – Application Form

Revised October 2013

Part II. - Description of the Water Activity/Project

1. What is the primary purpose of this grant application? (Please check only one)

☐

Nonconsumptive (Environmental or Recreational)

☒

Agricultural

☐

Municipal/Industrial

☐

Needs Assessment

☐

Education

☐

Other

2. If you feel this project addresses multiple purposes please explain.

This project addresses agricultural water supply and efficiency by assuring continued reliable delivery of irrigation water and reducing delivery system losses; both water quality and wildlife habitat are improved by significant reductions in salinity and selenium contributions to the Gunnison and Colorado Rivers.

3. Is this project primarily a study or implementation of a water activity/project? (Please check only one)

☐

Study

☒

Implementation

4. To catalog measurable results achieved with WSRA funds can you provide any of the following numbers?

New Storage Created (acre-feet)

New Annual Water Supplies Developed, Consumptive or Nonconsumptive

Existing Storage Preserved or Enhanced (acre-feet)

Length of Stream Restored or Protected (linear feet)

Length of Pipe/Canal Built or Improved (linear feet)

Efficiency Savings (acre-feet/year OR dollars/year – **circle one**)

Area of Restored or Preserved Habitat (acres)

Other --

Annual reductions of salinity 5790 tons & selenium 460 lbs

Water Supply Reserve Account – Application Form

Revised October 2013

4. To help us map WSRA projects please include a map (Exhibit B) and provide the general coordinates below:

Latitude

38.603457

Longitude:

-107.590801

5. Please provide an overview/summary of the proposed water activity (no more than one page). Include a description of the overall water activity and specifically what the WSRA funding will be used for. A full **Statement of Work** with a detailed budget and schedule is required as **Exhibit A** of this application.

The two rock wall tunnels of the Gould Canal were constructed over 100 years ago, and have eroded to the point that collapse is threatened. If either of these tunnels collapse, water delivery out of Gould Reservoir will be obstructed, prohibiting irrigation water delivery to the service area after their direct flow diversion right is out of priority, typically by mid-June. This project plans to install 2 miles of polyethylene pipe from the reservoir outlet through the two tunnels. Cellular concrete will be injected between the pipe and rock walls to stabilize the tunnel and protect the pipe. Another 10.3 miles of earthen delivery ditches will be improved with PVC-geotech liner covered with shotcrete.

An analysis of piping options was completed by Applegate Group, Inc. engineers, and this approach to renovating the Fruitland Irrigation system canals was determined to be the most feasible and cost effective. A copy of this feasibility study is included in Exhibit C.

WSRF funding will contribute to financing the pipeline portion of this project. As a substantial agricultural infrastructure renovation project, the WSRF funds requested are an essential, though minor portion of project funding (<10%). These state funds will enable Fruitland Irrigation Company to access major project funding through the Colorado River Salinity Control Program administered by the Bureau of Reclamation.

Water Supply Reserve Account – Application Form

Revised October 2013

Part III. – Threshold and Evaluation Criteria

1. Describe how the water activity meets these **Threshold Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines.)

- a) The water activity is consistent with Section 37-75-102 Colorado Revised Statutes.¹

No water rights will be impacted by this project, other than preserving the ability to put those rights held by the Fruitland Irrigation Company to beneficial use.

- b) The water activity underwent an evaluation and approval process and was approved by the Basin Roundtable (BRT) and the application includes a description of the results of the BRT's evaluation and approval of the activity. At a minimum, the description must include the level of agreement reached by the roundtable, including any minority opinion(s) if there was not general agreement for the activity. The description must also include reasons why general agreement was not reached (if it was not), including who opposed the activity and why they opposed it. Note- If this information is included in the letter from the roundtable chair simply reference that letter.

This WSRF application will be submitted to the Gunnison Basin Roundtable Selection Committee by May 1, 2017.

¹ 37-75-102. Water rights - protections. (1) It is the policy of the General Assembly that the current system of allocating water within Colorado shall not be superseded, abrogated, or otherwise impaired by this article. Nothing in this article shall be interpreted to repeal or in any manner amend the existing water rights adjudication system. The General Assembly affirms the state constitution's recognition of water rights as a private usufructuary property right, and this article is not intended to restrict the ability of the holder of a water right to use or to dispose of that water right in any manner permitted under Colorado law. (2) The General Assembly affirms the protections for contractual and property rights recognized by the contract and takings protections under the state constitution and related statutes. This article shall not be implemented in any way that would diminish, impair, or cause injury to any property or contractual right created by intergovernmental agreements, contracts, stipulations among parties to water cases, terms and conditions in water decrees, or any other similar document related to the allocation or use of water. This article shall not be construed to supersede, abrogate, or cause injury to vested water rights or decreed conditional water rights. The General Assembly affirms that this article does not impair, limit, or otherwise affect the rights of persons or entities to enter into agreements, contracts, or memoranda of understanding with other persons or entities relating to the appropriation, movement, or use of water under other provisions of law.

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- c) The water activity meets the provisions of Section 37-75-104(2), Colorado Revised Statutes.² The Basin Roundtable Chairs shall include in their approval letters for particular WSRA grant applications a description of how the water activity will assist in meeting the water supply needs identified in the basin roundtable's consumptive and/or non-consumptive needs assessments.

Repair of the Fruitland Tunnels is listed as a Tier 2 project in the 2015 Gunnison Basin Implementation Plan, though it is a critical project to maintain water delivery to over 5000 irrigated acres.

The project supports the following Gunnison Basin Roundtable goals:

1. Primary Goal: Protect existing water uses in the Gunnison Basin,
 2. Discourage the conversion of productive agricultural land to all other uses,
 3. Improve agricultural water supplies to reduce shortages,
 -
 6. Improve water quality,
 -
 8. Restore, maintain, and modernize critical water infrastructure.
- d) Matching Requirement: For requests from the Statewide Fund, the applicants will be required to demonstrate a **25 percent** (or greater) match of the total grant request from the other sources, including but not limited to Basin Funds. A minimum match of 5% of the total grant amount shall be from Basin funds. A minimum match of 5% of the total grant amount must come from the applicant or 3rd party sources. Sources of matching funds include but are not limited to Basin Funds, in-kind services, funding from other sources, and/or direct cash match. Past expenditures directly related to the project may be considered as matching funds if the expenditures occurred within 9 months of the date the contract or purchase order between the applicant and the State of Colorado is executed. Please describe the source(s) of matching funds. (NOTE: These matching funds should also be reflected in your Detailed Budget in **Exhibit A** of this application)

Total estimate construction cost for this project is \$10.5 million. Funding to complete this project is being solicited from Bureau of Reclamation, Colorado River Basinwide Salinity Control Program, USDA-NRCS Regional Conservation Partnership Program, Colorado River District, WSRF State and Basin grants, and CWCB Water Project Loan. The WSRF amounts listed on this application are the maximum funding amounts requested, amounts may be decreased if application for NRCS-RCPP is successful. The two anticipated funding scenarios are summarized in the table below.

² 37-75-104 (2)(c). Using data and information from the Statewide Water Supply Initiative and other appropriate sources and in cooperation with the on-going Statewide Water Supply Initiative, develop a basin-wide consumptive and nonconsumptive water supply needs assessment, conduct an analysis of available unappropriated waters within the basin, and propose projects or methods, both structural and nonstructural, for meeting those needs and utilizing those unappropriated waters where appropriate. Basin Roundtables shall actively seek the input and advice of affected local governments, water providers, and other interested stakeholders and persons in establishing its needs assessment, and shall propose projects or methods for meeting those needs. Recommendations from this assessment shall be forwarded to the Interbasin Compact Committee and other basin roundtables for analysis and consideration after the General Assembly has approved the Interbasin Compact Charter.

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Funding Source	Scenario 1: With NRCS-RCPP Funding			Scenario 2: Without NRCS-RCPP Funding		
	Grant	Loan	Percent	Grant	Loan	Percent
BOR Basinwide Funding	\$ 6,000,000		57%	\$ 7,451,349		74%
NRCS-RCPP	\$ 3,625,000		34%	-		
CO River District	\$ 50,000		0.5%	\$ 50,000		0.5%
CWCB Water Project Loan		\$ 547,746	5%		\$ 1,721,397	16%
Fruitland IC - In-Kind	\$ 40,000		0%	\$ 40,000		0.4%
WSRF Gunnison Basin Grant	\$ 25,000		0.2%	\$ 150,000		1.4%
WSRF State Fund Grant	\$ 250,000		2%	\$ 750,000		7%
Total	\$ 9,990,000	\$ 547,746	100%	\$ 8,441,349	\$ 1,721,397	100%
Project Total	\$ 10,537,746			\$ 10,162,746		

Matching funds provided for this project from the applicant and third party sources vary from 82% to 88% depending on the funding scenario secured. Gunnison Basin WSRF contributions requested are either 10% or 12.5% of total WSRF funds requested, exceeding the minimum 5% requirement. In either scenario, the majority of funding will be provided by the Bureau of Reclamation, and the project will proceed.

- For Applications that include a request for funds from the **Statewide Account**, describe how the water activity/project meets all applicable **Evaluation Criteria**. (Detailed in Part 3 of the Water Supply Reserve Account Criteria and Guidelines and repeated below.) Projects will be assessed on how well they meet the Evaluation Criteria. **Please attach additional pages as necessary.**

Evaluation Criteria – the following criteria will be utilized to further evaluate the merits of the water activity proposed for funding from the Statewide Account. In evaluation of proposed water activities, preference will be given to projects that meet one or more criteria from each of the three “tiers” or categories. Each “tier” is grouped in level of importance. For instance, projects that meet Tier 1 criteria will outweigh projects that only meet Tier 3 criteria. The applicant should also refer to the Supplemental Scoring Matrix applied to Evaluation Criteria Tiers 1-3 for Statewide Account requests. WSRF grant requests for projects that may qualify for loans through the CWCB loan program will receive preference in the Statewide Evaluation Criteria if the grant request is part of a CWCB loan/WSRF grant package. For these CWCB loan/WSRF grant packages, the applicant must have a CWCB loan/WSRF grant ratio of 1:1 or higher. Preference will be given to those with a higher loan/grant ratio.

Tier 1: Promoting Collaboration/Cooperation and Meeting Water Management Goals and Identified Water Needs

- The water activity addresses multiple needs or issues, including consumptive and/or non-consumptive needs, or the needs and issues of multiple interests or multiple basins. This can be demonstrated by obtaining letters of support from other basin roundtables (in addition to an approval letter from the sponsoring basin).

This project meets both agricultural water supply and instream water quality needs, including aquatic habitat benefits from reduced salinity and selenium contributions impacting the endangered fish species in the Gunnison and Colorado Rivers. These benefits accrue to both the Gunnison and Colorado River basins within Colorado, as well as to all downstream water users within the Colorado River basin beyond our state line.

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- b. The number and types of entities represented in the application and the degree to which the activity will promote cooperation and collaboration among traditional consumptive water interests and/or non-consumptive interests, and if applicable, the degree to which the water activity is effective in addressing intrabasin or interbasin needs or issues.

Support for this project will come from at least five collaborating entities. As described above, this project effectively addresses interbasin water quality and aquatic wildlife habitat needs.

- c. The water activity helps implement projects and processes identified as helping meet Colorado's future water needs, and/or addresses the gap areas between available water supply and future need as identified in SWSI or a roundtable's basin-wide water needs assessment.

The FIC project will create an additional 1856 AF of agricultural water supply by decreasing seepage losses that can be stored in an existing reservoir, therefore maximizing the benefit of existing storage and helping to decrease the current agricultural water supply gap of 128,000 AF identified in the 2010 Gunnison Basin SWSI report.

Tier 2: Facilitating Water Activity Implementation

- d. Funding from this Account will reduce the uncertainty that the water activity will be implemented. For this criterion the applicant should discuss how receiving funding from the Account will make a significant difference in the implementation of the water activity (i.e., how will receiving funding enable the water activity to move forward or the inability obtaining funding elsewhere).

While the majority of funding for this project will be provided by the Colorado River Salinity Control Program administered by the Bureau of Reclamation, the ability to secure these federal funds is dependent on the WSRF and Water Project Loan funds requested from the Gunnison Basin Roundtable and CWCB. State and applicant contributions are essential to make the application for Reclamation funds competitive, and both federal and state funds will be required to finance this significant agricultural infrastructure renovation project. Without the contribution of both state and federal funds to finance this project, the continued beneficial use of these agricultural water rights is in jeopardy.

- e. The amount of matching funds provided by the applicant via direct contributions, demonstrable in-kind contributions, and/or other sources demonstrates a significant & appropriate commitment to the project.

The Fruitland Irrigation Company is completely committed to this project, the future of their water supply depends upon it. At their 2017 annual meeting, the FIC water users unanimously approved assessment increases to service a significant loan that will be required to supplement the anticipated Reclamation and WSRF funding available. FIC will also provide in-kind contribution of project management estimated at an additional \$40,000. It is also of note that Fruitland water users have committed to efficient use of their agricultural water supplies. Nearly 50% of the service area is irrigated by sprinklers, with an estimated 77% system-wide efficiency. Overall, cultivated land in Delta County is 95% surface irrigated, with typical system efficiencies of 50% or less. With an improved, reliable and efficient off-farm delivery system, there is the opportunity to address on-farm irrigation efficiency for another 2,700 acres, including 5 miles of laterals with the potential for pressurized delivery.

Tier 3: The Water Activity Addresses Other Issues of Statewide Value and Maximizes Benefits

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- f. The water activity helps sustain agriculture & open space, or meets environmental or recreational needs.

This project is critical to maintaining irrigated agriculture on the over 5000 acre service area. The improved management of the system enabled by this project will provide increased economic benefits of related on-farm improvements, particularly with an extended irrigation season in times of drought

- g. The water activity assists in the administration of compact-entitled waters or addresses problems related to compact entitled waters and compact compliance and the degree to which the activity promotes maximum utilization of state waters.

This project addresses agricultural use of water rights tributary to the Colorado River, including continued beneficial use of rights both senior (442 cfs) and junior (95 cfs) to the 1922 Colorado River Compact.

- h. The water activity assists in the recovery of threatened and endangered wildlife species or Colorado State species of concern.

By removing 5790 tons per year of salinity and 460 lbs per year of selenium contributed to the Gunnison and Colorado Rivers, this project directly improves critical aquatic habitat benefiting the Recovery Program for the four endangered fish species inhabiting these waters.

- i. The water activity provides a high level of benefit to Colorado in relationship to the amount of funds requested.

While the applicant appreciates that this application requests significant funding from the WSRF, these funds will be used to leverage at least \$7.4 million in federal funds, providing a state benefit to cost ratio of over 62:1. This economic analysis includes both WSRF and CWCB loan funds as the state costs. Benefits are quantified at the USBR salinity control rate of \$300 per ton, and increased hay production valued at \$150/ton.

- j. The water activity is complimentary to or assists in the implementation of other CWCB programs.

The Fruitland Irrigation Renovation Project is consistent with the following goals of the Colorado Water Plan:

- Supports a vibrant agricultural economy;
- Improves the efficiency of water delivery infrastructure; and
- Promotes a strong & healthy environment by improving water quality in the Colorado River, including aquatic habitat for the four endangered fish species.

This project also supports of the Colorado Water Plan's identified Agricultural Critical Actions to:

- Maintain agricultural viability; and
- Support agricultural water conservation and efficiency.

Continued: Explanation of how the water activity/project meets all applicable **Evaluation Criteria**.

Please attach additional pages as necessary.

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Part IV. – Required Supporting Material

1. **Water Rights, Availability, and Sustainability** – This information is needed to assess the viability of the water project or activity. Please provide a description of the water supply source to be utilized, or the water body to be affected by, the water activity. This should include a description of applicable water rights, and water rights issues, and the name/location of water bodies affected by the water activity.

The Fruitland Canal diverts water from Crystal Creek, tributary to the Gunnison River, and conveys water to Gould Reservoir (aka Onion Valley Reservoir, Fruitland Reservoir), and to the irrigated service area via Gould Canal. Fruitland Irrigation Company holds absolute water rights to divert 537.1375 cfs, and storage rights of 10,167.95 acre-feet. Structure Summaries with the details of these water rights are included in the Exhibit D.

2. Please provide a brief narrative of any related studies or permitting issues.

All work planned for this project will occur below the outlet of Gould Reservoir, therefore no Army Corps 404 permitting will be required. NEPA studies and BOR review will be included in the pre-construction phase of the project, as required by federal funding.

Renovation of the Fruitland Irrigation system began with reconstruction of the Gould Reservoir outlet in 1988. Feasibility studies for further improvements continued with a Water Management Plan prepared in collaboration with the Delta Conservation District in 2002, evaluation of potential combination with the Cattleman's Ditch prior to the 2015 USBR Basinwide FOA, and were further developed in the 2016 Feasibility Study prepared by Applegate Group, funded by CWCB. This Feasibility Study is included in Exhibit C.

3. Statement of Work, Detailed Budget, and Project Schedule

The statement of work will form the basis for the contract between the Applicant and the State of Colorado. In short, the Applicant is agreeing to undertake the work for the compensation outlined in the statement of work and budget, and in return, the State of Colorado is receiving the deliverables/products specified. **Please note that costs incurred prior to execution of a contract or purchase order are not subject to reimbursement.** All WSRA funds are disbursed on a reimbursement basis after review invoices and appropriate backup material.

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Please provide a detailed statement of work using the template in Exhibit A. Additional sections or modifications may be included as necessary. Please define all acronyms and include page numbers.

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 10 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to Basin Roundtables and the general public and help promote the development of a common technical platform.

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The above statements are true to the best of my knowledge:

Signature of Applicant: *Danny Todd President*

Print Applicant's Name: Fruitland Irrigation Company, Danny Todd, President

Project Title: Fruitland Irrigation Renovation Project

Return an electronic version (hardcopy may also be submitted) of this application to:

Craig Godbout – WSRA Application
Colorado Water Conservation Board
1313 Sherman St., Room 721
Denver, CO 80203
303-866-3441, ext. 3210 (office)
303-547-8061 (cell)