# STATE OF COLORADO

# Colorado Water Conservation Board Department of Natural Resources

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TO: Colorado Water Conservation Board Members

Anna Mauss, P.E., Project Manager

Kirk Russell, P.E., Chief

Finance and Administration Section

DATE: May 3, 2013

SUBJECT: Agenda Item 16e, May 15-16, 2013 Board Meeting

**Finance – New Water Project Loans** 

Two Rivers Water and Farming Company – Arkansas Storage Facility Project

#### Introduction

FROM:

The Two Rivers Water and Farming Company (Two Rivers) is applying for a loan for the Arkansas Storage Facility Project (Project). The Project is the development of 4,110 acre-feet (AF) of gravel pit reservoir storage located adjacent to the Arkansas River just east of the confluence of Fountain Creek and the Arkansas River. Two Rivers is requesting a loan for approximately 80% of the \$12,459,000 total Project cost. See attached Project Data Sheet for a location map and Project summary.

#### **Staff Recommendation**

Staff recommends the Board approve a loan not to exceed \$9,999,000 (\$9,900,000 for project costs and \$99,000 for the 1% Loan Service Fee) from the Construction Fund to the Two Rivers Water Company for engineering and construction costs related to the Arkansas Storage Facility Project. The loan terms shall be 10 years at the agricultural interest rate of 1.25% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

#### **Background**

Two Rivers currently farms 1,926 acres in Pueblo County and 150 acres in Huerfano County. It is developing a business model that integrates farming and wholesale water distribution through rotational fallowing. Fallowing agreements will be made between Two Rivers and municipalities making surplus irrigation water available for municipal use during droughts, and conversely making excess municipal water available for irrigation when the water supply is available.

In order to make this model work, additional water storage is needed. Ultimately, Two Rivers intends to build 25,000 AF of gravel pit storage through a multi-phase project. The first phase will be the development of 4,110 AF of storage.

The sources of water that could be stored in the new reservoir include: a) water rights associated with the Excelsior Ditch; b) water from the Two Rivers lease with the Pueblo Board of Water Works; and c) storage of Pueblo Board of Water Works and/or Colorado Springs Utilities reusable return flows associated with the Restoration of Yield as part of the Pueblo Flow Management Program.

The Pueblo Flow Management Program is an Intergovernmental Agreement between Pueblo Board of Water Works, Colorado Springs Utilities, the City of Aurora, Southeastern Colorado Water Conservancy District, and the City of Fountain to use the Holbrook Canal to recover flows from Pueblo Reservoir that are either released or forgone to benefit recreation and wildlife on the Arkansas River through Pueblo. Currently the program utilizes Holbrook Reservoir for storage, located over 70 miles downstream from Pueblo Reservoir on the Arkansas River between Rocky Ford and La Junta.

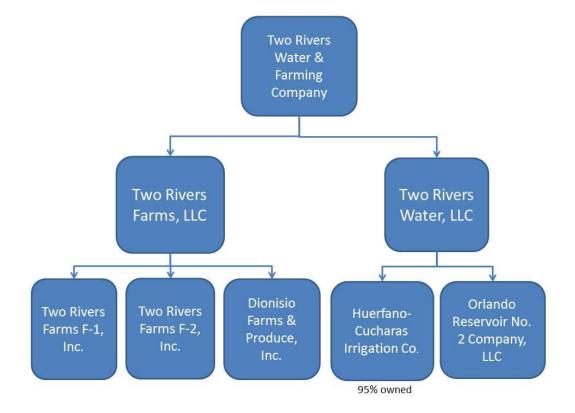
Both Pueblo Board of Water Works and Colorado Springs Utilities store water at Pueblo Reservoir, which is upstream of the Excelsior Ditch headgate and both water providers discharge reusable effluent. Since it is difficult to exchange water from downstream of the confluence of Fountain Creek back to Pueblo Reservoir, the location of the proposed storage reservoir would improve the exchange potential with Pueblo Reservoir and would also reduce transit losses as Holbrook Reservoir is an additional 45 miles downstream of the new reservoir location.

# **Loan Feasibility Study**

The Loan Feasibility Study, "Feasibility Evaluation Arkansas Storage Facility, Phase 1 Project," dated April 2013, was prepared by Robert Huzjak, P.E. with RJH Consultants, Inc. The study was prepared in accordance with the CWCB guidelines and includes alternatives analysis, engineering design and cost estimates.

## **Two Rivers Water and Farming Company**

Two Rivers, incorporated in December 2002, is a for-profit company that is publicly traded on the OTC Markets Group, Inc (a company that facilitates the exchange of securities between independent brokers) OTCQB exchange under the symbol TURV. Two Rivers is the parent company to six subsidiaries. Below is an organizational chart showing the hierarchy:



Two Rivers owns a 95% interest in HCIC that was purchased in 2010. Two Rivers then purchased the Orlando Reservoir No. 2 and Butte Valley water rights in February 2011. In 2012, the Company purchased farmland along the Bessemer Ditch and Dionisio Farms and Produce, Inc., a produce business in Pueblo County. It currently owns 5,210 acres of farmland and is looking to expand their farming operations.

Two Rivers revenues are generated by its farming operations. It has also raised capital through debt, convertible debt (a note that can be converted into shares of stock or cash at an agreed-upon price), and through equity capital (stock offerings). Two Rivers has raised over \$40M in capital to support its operational activities. Two Rivers is planning on raising \$2.5M by mid-May 2013 and will raise an additional \$10-15M prior to the closing of the CWCB loan to secure the Project land and the balance of the construction funds.

Two Rivers was formerly known as Navidec Financial Services, Inc. until it changed its name on November 19, 2009 to Two Rivers Water and Farming Company. Per the Navidec Capital, Inc. bylaws, the president has the authority to make, execute, acknowledge and deliver any and all contracts.

## **Water Rights**

The water rights currently held by the Two Rivers Water Company are comprised of two regional systems that at one time worked as an integrated water project.

TABLE 1: HUERFANO – CUCHARAS IRRIGATION CO. WATER RIGHTS

Name	<b>Adjudication Date</b>	<b>Priority Date</b>	Amount
Huerfano Valley Ditch	02/23/1898	02/02/1888	42 cfs
Huerfano Valley Reservoir	02/23/1898	02/02/1888	2,017 AF
Huerfano Valley Ditch	10/03/1921	02/23/1898	18 cfs
Cucharas Reservoir	10/03/1921	03/14/1906 Absolute	31,958 AF
Cucharas Reservoir/ Aka:			
Orlando Reservoir No. 5	10/03/1921	03/14/1906 Conditiona	ıl 34,404.125 AF

#### TABLE 2: ORLANDO-BRADFORD WATER RIGHTS

Name	<b>Adjudication Date</b>	Priority Date	Amount
Orlando Canal No. 3	10/23/1921	10/19/1906	172 cfs
Butte Valley Ditch	06/12/1889	05/15/1862	18 cfs
Orlando No. 2 Reservoir	10/03/1921	12/14/1905 Absolute	3,110 AF
Robert Rice Ditch	03/01/1867	05/15/1862	3 cfs

The water demands for Two Rivers farming operations are based on bringing as much historically irrigated land back into production as possible. The current farming demands are approximately 6,741 AF per year.

In addition, Two Rivers is purchasing a 53.77% interest (1,792 shares) in the Excelsior Irrigation Company. This purchase is part of the overall Project, but not a part of this loan request. The Excelsior Irrigation Company shares are being purchased from Arkansas Ground Water Users Association (AGUA). The water will be stored in the new storage facility and will be leased back to AGUA. The ditch shares have an appropriation date of December 1861 for 60 cfs. On average, the Excelsior Ditch has diverted an average of 4,223 AF annually.

The Excelsior Ditch is generally used during the irrigation season for both direct use and for augmentation. When AGUA uses the water for augmentation, it can either release water directly back to the Arkansas River or the water can be sent to recharge ponds to cover lagged depletions during the non-irrigation season. Surface storage of these rights would be helpful to make late season irrigation water more consistently available and to provide a means for storing augmentation water.

Two Rivers has an agreement with the Pueblo Board of Water Works to lease up to 500 AF per year. The lease term is 5 years (April 2012 – April 2017) with the potential for extension of the lease. The water is released from Pueblo Reservoir and could be diverted at the Excelsior Ditch headgate and routed to storage.

## **Project Description**

The potential alternatives described in the loan feasibility study were the enlargement of Pueblo Reservoir or the enlargement of Holbrook Reservoir. The expansion of Pueblo Reservoir was not considered a practicable alternative as Southeastern Colorado Water Conservancy District's

application to enlarge the reservoir was recently withdrawn. In addition it took over eight years for Colorado Springs Utilities to get approval for re-regulation of uses in the reservoir.

The expansion of Holbrook reservoir was also dismissed due to the significant transit losses associated with delivering water to the reservoir and because the location of Holbrook would not satisfy the needs of the Excelsior Ditch users for direct irrigation water and for augmentation storage.

Ultimately the Project location was chosen because it is ideally situated to benefit irrigation use, augmentation releases, and use for Restoration of Yield water through exchange. The Project will be located 10 miles east of Pueblo, immediately south of Highway 50 and approximately ½ mile north of the Arkansas River. The site is currently being used to produce blue grass sod and is on lands historically irrigated by the Excelsior Ditch.

The gravel pit will develop storage above and below the existing ground by storing water in the granular alluvial soils, excavating a basin into the native soil profile, and constructing an embankment dam. The embankment dam will be a ring dam and will vary in height from a few feet on the north end to approximately 30 feet on the south end.

The reservoir will receive water from the Excelsior Ditch. The Excelsior Ditch gets its water from the Arkansas River through an existing diversion approximately four miles west of the Project site. A new gated diversion structure located on the north side of the reservoir will divert the ditch flow to the new reservoir (through an open channel and 60-inch pipeline to be constructed).

The active reservoir storage (that can be released directly back to the Arkansas River) will be 2,910 AF. The alluvial storage capacity is 1,200 AF making the total storage volume 4,110 AF.

*Schedule:* Preliminary engineering has been completed. Final design and permitting will begin following CWCB loan contract execution as summarized in Table 3:

**TABLE 3: SCHEDULE** 

Task	Schedule Date	
Final Engineering & Permitting Start	Summer 2013 to Summer 2014	
SEO Submittal / Approval	Spring/Summer 2014	
Construction	Summer/Fall 2014 to Fall 2015	

*Permitting:* A portion of the proposed dam is located within the Federal Emergency Management Agency (FEMA) 100-year floodplain. This will require a local floodplain development permit from Pueblo County and potentially a FEMA Conditional Letter of Map Revision.

Water delivered to the proposed reservoir will be diverted at an existing diversion structure on the Arkansas River so a 404 permit under the Clean Water Act is not expected to be required.

A Special Use and Land Use 1041 permit will be required from Pueblo County as will State Engineer Office (SEO) approval of the construction plans and specifications.

*Cost Estimate:* The engineer's opinion of probable costs are based on the feasibility-level design and are estimated as follows:

**TABLE 4: COST SUMMARY** 

Task	Cost
Final Design and Engineering	\$604,200
Permitting	\$67,100
Administration	\$67,100
Construction	\$9,773,800
Construction Engineering	\$604,200
Contingency	\$1,342,600
Total Construction and Engineering and Permitting	\$12,459,000

In addition, Two Rivers is investing \$10,064,800 for the Southwest Farms (the Project site) and Excelsior Ditch rights.

# **Financial Analysis**

Table 5 shows a summary of the financial aspects of the loan request. The agricultural interest rate is currently 1.75% for a 30 year term. Two Rivers Water and Farming applied for loan term of 10 years, so the interest rate will be reduced to 1.25% (per CWCB Financial Policy # 7).

TABLE 5: FINANCIAL SUMMARY

Total Project Cost	\$12,459,000
CWCB Loan Amount	\$9,900,000
CWCB Loan Amount (Including 1% Service Fee)	\$9,999,000
CWCB Loan Payment	\$1,069,924
CWCB Loan Obligation with Reserve Account	\$1,176,916
Cost of Project per AF (including land ,Excelsior Ditch , and construction cost)	\$5,480

The CWCB will disburse funds at a rate of no greater than 90% of the total invoice amount for engineering and construction activities related to the Project, up to the approved loan limit.

*Creditworthiness*: Two Rivers raised \$40M over the past three years to support their operations and expansion. Due to extreme drought, revenues for 2013 are projected to be 50% of normal. Two Rivers expects to generate farm revenues of \$8.1M in 2014.

**TABLE 6: EXISTING DEBT** 

Note	Dec 31, 2012 principal balance	2013 Payment	Maturity Date	Collateral
HCIC seller carry back (1)	\$ 7,364,000	\$ 331,000	(1)	Certain HCIC shares
Orlando seller carry back	187,000	-	1/28/2014	188 acres of land
Series A convertible debt	25,000	1,000	3/31/2014	F-1 assets
Series B convertible debt	225,000	13,000	6/30/2014	F-2 assets
CWCB	1,151,000	76,000	3/5/2032	Certain Orlando & Farmland assets
First National Bank Pueblo - Dionisio	851,000	76,000	6/15/2017	Dionisio farmland & 146.6 Bessemer shares, well permits
Seller Carry Back - Dionisio	590,000	35,000	11/2/2017	Certain Dionisio assets
Seller Carry Back – SW Farms	4,200,000	(1)	8/31/2013	Assets purchased from SW Farms
First National Bank Pueblo - Mater	169,000	15,000	12/5/2017	Mater assets
Seller Carry Back - Mater	25,000	2,000	11/7/2015	Land from Mater purchase
Equipment loans	559,000	163,000	Various	Specific equipment
Total	\$ 15,346,000	\$ 712,000		

#### Notes:

(1) It is assumed that these debts will be paid before the CWCB loan is in repayment.

**TABLE 7: FINANCIAL RATIOS** 

Financial Ratio	Past 2 Years	Two Rivers Projections
Operating Ratio (revenues/expenses)  weak: <100% - average: 100% - 120% - strong: >120%	See note (2) Net loss = \$6.6M (2011) Net loss = \$7.9M (2012)	198% <sup>(3)</sup> Strong (\$8.1M/\$4.1M)
Debt Service Coverage Ratio (revenues-expenses)/debt service  weak: <100% - average: 100% - 120% - strong: >120%	\$5.5M average ex. debt on top of losses <sup>(2)</sup>	210% <sup>(3)</sup> Strong (\$8.1M-\$4.1M/ \$1.9M <sup>(4)</sup> )
Cash Reserves to Current Expenses  weak: <50% - average: 50% - 100% - strong: >100%	10% Weak \$1.3M/\$12.8M	183% Strong (\$11M <sup>(5)</sup> /\$6M)
Annual Operating Cost per Acre-Foot (6,741 AF)  weak: >\$20 - average: \$10 - \$20 - strong: <\$10	See note (2)	\$608 Weak \$4.1M/6,741AF

Notes on Financial Ratios: (2) Over the past two years, Two Rivers has not made a profit in its overall operations. (3)Based on projections from Two Rivers in 2014 farming revenue is expected to be \$8.1M and farming expenses are expected to be \$4.1M. (4) Debt service is based on an average principal due for existing debt of \$874K plus the CWCB loan payment of \$1M. (5) Assumes \$12.5M will be raised prior to CWCB loan contract execution.

*Collateral*: Two Rivers will secure the loan with a first position lien on 1,792 shares of the Excelsior Irrigation Company and the Southwest Farms land. In addition, the loan will be cross-collateralized with the existing CWCB loan (C150328A) as summarized in Table 8.

For a borrower of this type Financial Policy #5 requires a pledge of collateral at an amount equal to or greater than 110% of the loan amount. Because the two CWCB loans will be cross collateralized, the appraised value of the collateral must be \$12,302,270 (\$9,999,000 plus \$1,184,882 for loan C150328A). Two Rivers will be required to provide an appraisal or opinion of value of all proposed collateral prior to executing a loan contract.

**TABLE 8: COLLATERAL** 

Description	Estimated Value	
Excelsior Irrigation Company Shares	\$3,500,000 <sup>(6)</sup>	
Southwest Farm (approximately 323 acres)	\$4,300,000 <sup>(6)</sup>	
Orlando Reservoir #2 (with water rights)	\$2,554,000 <sup>(7)</sup>	
Land	\$958,200 <sup>(7)</sup>	
Total Estimated Value	\$11,435,400	

Notes on Collateral: (6) Estimated value provided by Two Rivers. Appraisal to be completed prior to executing a loan contract. (7) Based on 2011 appraisal.

cc: Wayne Harding, CFO, Two Rivers Water Company Susan Schneider, AGO

Attachment: Water Project Loan Program – Project Data Sheet

# CWCB Water Project Loan Program Project Data Sheet

**Borrower:** Two Rivers Water and Farming County: Huerfano / Cucharas

Company

**Drainage Basin/ District:** Arkansas / 14 **Water Source:** Arkansas River

**Total Project Cost:** \$12,459,000 **Funding Source:** Construction Fund

Type of Borrower: Agricultural Average Annual Diversion: AF

Storage Added: 4,110 AF

**CWCB Loan:** \$9,999,000 **Interest Rate:** 1.25%\* **Term:** 10 years

(with 1% Service Fee) (Reduced from 1.75%)

Two Rivers Water and Farming Company currently farms 1,926 acres in Pueblo County and 150 acres in Huerfano County. It is developing a business model that integrates farming and wholesale water distribution through rotational fallowing. Fallowing agreements will be made between Two Rivers and municipalities making surplus irrigation water available for municipal use during droughts, and conversely making excess municipal water available for irrigation when the water supply is available. In order to make this model work, additional water storage is needed. Ultimately, Two Rivers intends to build 25,000 AF of gravel pit storage through a multi-phase project. The first phase will be the development of 4,110 AF of storage located adjacent to the Arkansas River 10 miles east of Pueblo. Design and permitting are scheduled to begin mid-2013 through mid-2014. Construction is expected to follow beginning in mid-2014.

