

STATE OF COLORADO

Colorado Water Conservation Board

Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Anna Mauss, P.E.
Tim Feehan, P.E., Assistant Director
Finance Section

DATE: November 4, 2011

SUBJECT: **Agenda Item 34c, November 15-16, 2011 Board Meeting**
Finance Section – New Loans
Two Rivers Water Company – Orlando Reservoir Rehabilitation Project

Introduction

The Two Rivers Water Company (Two Rivers) is applying for a loan for the Orlando Reservoir Rehabilitation Project (Project). This Project reflects the refinement of Two Rivers' business model over the past year and is intended to restore aging water infrastructure so that it can support agricultural operations. Two Rivers is requesting a loan for approximately 90% of the \$1,303,500 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 \$1,184,882 (\$1,173,150 for project costs and \$11,732 for the 1% Loan Service Fee) from the Construction Fund to the Two Rivers Water Company for engineering and construction costs related to the Orlando Reservoir Rehabilitation Project. The loan terms shall be 20 years at the agricultural interest rate of 2.50% per annum. Security for the loan shall be as outlined in the collateral section of this memo.

Staff additionally recommends the following loan approval conditions prior to executing a contract:

- A. State Engineer's Office approval of construction plans for the Cucharas Reservoir Phase I portion of the Project.
- B. Two Rivers obtains crop insurance on the alfalfa crops associated with the Purchase and Supply Agreement with the dairy operation in Boulder County.
- C. Two Rivers provides a title commitment on the 1,200 acres of land it is pledging as collateral.
- D. Two Rivers provides an appraisal of the water rights and land it is pledging as collateral. The land appraisal must include a dry land value for the 1,200 acres.

Staff additionally recommends the following loan contract condition:

Two Rivers Water Company will provide an annual report, due each January, documenting the prior year's water use. If the Orlando-Bradford system water rights are used for non-agricultural purposes, the CWCB will have the option of adjusting the interest rate to the current commercial interest rate of 6.25%.

Background

At the November 2010 board meeting, the Huerfano-Cucharas Irrigation Company (HCIC) was approved for a \$9,999,000 loan for the Cucharas Dam Rehabilitation Project. The loan was for a two-phased approach to address a storage restriction and pending breach order from the State Engineer's Office (SEO).

Prior to the loan approval, Two Rivers had purchased a controlling interest in HCIC in February 2010. It also acquired the Orlando No. 2 Reservoir, Bradford Lake (Orlando No. 1), Huerfano Valley Reservoir (Orlando No. 8), Butte Valley water rights, and 2,900 acres of farmland.

At the time of the 2010 loan approval, rehabilitation of the Cucharas Dam was proposed as a two-phased project. Phase I (\$218,160) was intended to modify the spillway to allow a temporary reduced level of storage in the Cucharas Reservoir. Phase II (\$9,780,840) was intended to fund a portion of a new roller compacted concrete (RCC) dam downstream of the Cucharas Reservoir, restoring the full capacity of the reservoir. The total cost of the RCC dam was estimated to be \$26,983,000.

The loan had conditions such that the CWCB would not disburse funds until the SEO approved Phase I of the project. Furthermore, the CWCB would not enter into a contract for Phase II until an additional Loan Feasibility Study was submitted and a follow-up presentation was made to the board, at which time additional loan conditions could be imposed. The follow-up presentation was to be made no later than the November 2011 board meeting. To date, no loan contracts have been executed for either phase of the project.

Since the November 2010 board meeting, Two River's business model has evolved and it is now focusing on rehabilitating its other water assets to support its agricultural production. Two Rivers would like to redirect the loan funding towards the following tasks: (1) completing the Phase I spillway modifications at the Cucharas Reservoir, (2) repairing the outlet works on Orlando No. 2, (3) rehabilitating the Orlando Ditch headgate, and (4) rehabilitating the HCIC headgate. Two Rivers believes that re-allocating loan funds towards the new Project will make for a more efficient use of its water resources and best support its agricultural production.

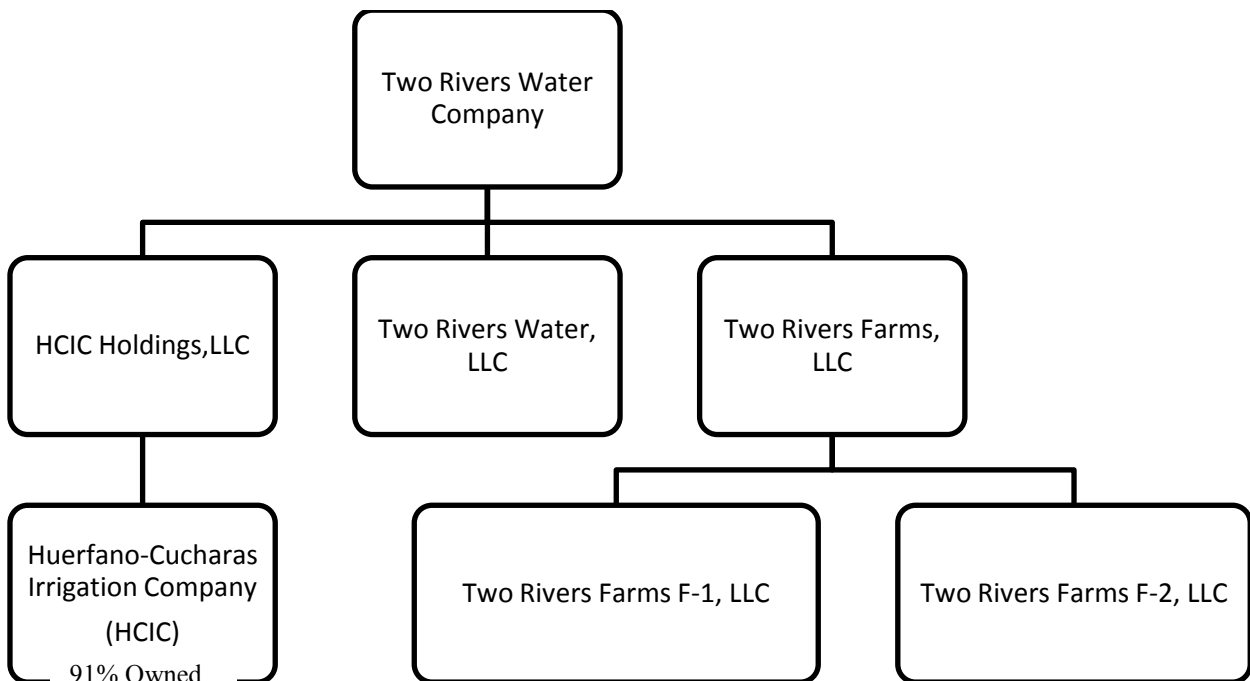
Loan Feasibility Study

The Loan Feasibility Study, "Two Rivers Water Distribution System Rehabilitation Feasibility Study," dated October 2011, was prepared by Mike Applegate, P.E. with Applegate Group, Inc. The study was prepared in accordance with the CWCB guidelines and includes alternatives analysis, engineering design and cost estimates.

Two Rivers Water 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) QTCQB 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 91% 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. It currently owns 2,900 acres of farmland and is in the process of acquiring another 1,000 acres. Two Rivers intends to acquire and farm over 25,000 acres within the Huerfano Cucharas river basin in the next five years.

Two Rivers is focusing its farming operations on organic alfalfa hay production. It currently has a contract to supply an organic dairy operation in Boulder County with all of the alfalfa Two Rivers can produce. The agreement provides a fixed price of \$225/ton for three years with three year rolling extensions to maintain a perpetual program.

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). In the past two years, Two Rivers has raised over \$30M in capital and expects to raise an additional \$100M over the next five years to fund the development of farmland and water assets within the Huerfano Cucharas river basin.

Two Rivers was formerly known as Navidec Financial Services, Inc. until it changed its name on November 19, 2009 to Two Rivers Water 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 parts of two regional systems that at one time worked as an integrated water project.

Irrigation water rights held by the Huerfano – Cucharas Irrigation Company are tabulated as follows:

TABLE 1: HUERFANO –CUCHARAS IRRIGATION CO. WATER RIGHTS

Name	Adjudication Date	Priority Date	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 Conditional	34,404.125 AF

In the past year, Two Rivers secured the Orlando – Bradford system. These additional water rights will be used in the system improvements as identified in this loan application.

TABLE 2: ORLANDO-BRADFORD WATER RIGHTS

Name	Adjudication Date	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
Bradford Reservoir Aka: Orlando Reservoir No. 1	10/03/1921	12/15/1905 Absolute	6,000 AF
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 the Project are based on bringing as much historically irrigated land back into production as possible. In 2011, the yield from the Orlando-Bradford system was 2,400 AF. A firm yield study of this system is currently being conducted by Bruce Lytle, P.E. with Lytle Water Solutions.

Two Rivers is also working on securing temporary water supplies for supplemental use. It has an agreement with the Pueblo Board of Water Works to take up to 500 AF per year of leased water at a rate of \$197/AF when the water can be exchanged into the system.

Project Description

Alternatives were considered for each of the tasks within the Project. The following summarizes the selected alternatives:

Task 1 - Cucharas Reservoir Phase I: The Cucharas #5 Dam is currently under a restriction and pending breach order by the SEO. Two Rivers intends to modify the spillway to keep it compliant with SEO regulations. This modification will remove the pending breach order and allow Two Rivers to store the restricted volume of water (7,500 AF) until Phase II (a new RCC dam downstream of the existing dam) is constructed. Pending SEO approval, construction of the spillway modification is scheduled to occur by the spring of 2012. The cost is estimated to be \$240,000.

Task 2 - Orlando Reservoir Phase I – Outlet Works Rehabilitation: The Orlando Reservoir No. 2 is a 3,110 AF reservoir located 11 miles north of Walsenburg. The outlet pipe is a 100-year old corrugated metal pipe that has collapsed in several locations. Two Rivers breached the dam at the outlet works location in anticipation of constructing new outlet works. The new outlet works will include the installation of a manhole on the upstream face of the dam, an inlet pipe to the manhole with a headwall/trash rack system at the base of the reservoir, and a new outlet pipe. Two Rivers plans on beginning this work in November of 2011. The cost is estimated to be \$495,200.

Although the Orlando Reservoir No. 2 has a decreed volume of 3,110 AF, it has accumulated approximately eight feet of sediment reducing the actual storage volume to 1,100 AF. In the future, Two Rivers will likely invest in regaining the decreed storage capacity.

Task 3 - Orlando Canal No. 3 Headgate Rehabilitation: The Orlando Canal headgate has historically operated using a manmade temporary sand dam to divert decreed flows from the Huerfano River into the Orlando Canal. This diversion method is an expensive maintenance item for Two Rivers so it plans on constructing a new sheet pile diversion dam to allow for permanent flow control. Construction is scheduled for the fall of 2012. The cost is estimated to be \$173,400.

Task 4 - HCIC Headgate Structure Improvements: The HCIC headgate is located on the Huerfano River. It currently consists of a concrete wall with reinforced riprap on the downstream slope. Water is diverted through a set of wooden stop logs/trash racks to four metal slide gates leading to the ditch. Water can be returned immediately back to the river through a set of sand trap slide gates. The selected alternative for the headgate improvements includes the installation of remotely operated gates. A 5.5-foot wide Rubicon FlumeGate is proposed at the river diversion. It will communicate with two proposed downstream Rubicon SlipGates at the river return culvert in order to convey the desired amount of water. Design and permitting is scheduled for the summer of 2012. Construction will follow in the winter of 2012/2013. The cost is estimated to be \$364,900.

TABLE 3: TOTAL PROJECT COST SUMMARY

Task	Engineering	Construction	Contingency	Total
Preliminary Engineering	\$30,000			\$30,000
1) Cucharas Phase I	\$20,000	\$200,000	\$20,000	\$240,000
2) Orlando Outlet Works	\$88,000	\$312,200	\$95,000	\$495,200
3) Orlando Ditch Headgate Rehabilitation	\$46,000	\$93,900	\$33,500	\$173,400
4) HCIC Headgate Improvements	\$68,000	\$226,900	\$70,000	\$364,900
Total				\$1,303,500

Financial Analysis

Table 4 shows a summary of the financial aspects of the loan request. Two Rivers will be using all of the water for agricultural purposes, so the agricultural interest rate of 2.75% applies. The loan term will be 20 years, so the interest rate will be reduced to 2.50% (per CWCB Financial Policy # 7).

TABLE 4: FINANCIAL SUMMARY

Total Project Cost	\$1,303,500
CWCB Loan Amount (90% of total Project cost)	\$1,173,150
CWCB Loan Amount (Including 1% Service Fee)	\$1,184,882
CWCB Loan Payment	\$76,007
CWCB Loan Obligation (Including 10% Reserve)	\$83,607

Creditworthiness: Because Two Rivers is in the process of establishing a new agricultural business, it has been investing funds in land, water, equipment and infrastructure. Two Rivers revenues on the farming business were \$11,000 in 2009 and \$196,000 in 2010. To date, cash flow from operations has not been sufficient to cover operations; however, Two Rivers expects to generate \$2,700,000 in revenues in 2012 from its alfalfa sales based on the negotiated price of \$225/ton with 3,000 acres in production, assuming 4 tons/acre. This revenue stream would be sufficient to cover the CWCB debt service and the existing long-term debt (see Table 5) held by Two Rivers. Because past performance cannot be demonstrated, the CWCB is requiring Two Rivers to obtain crop insurance to insure a reliable level of cash flow to cover the CWCB annual loan payment.

Two Rivers has the following long-term debt:

TABLE 5: LONG-TERM DEBT

Lender Name	Remaining Amount	Loan Date	Annual Payment	Maturity Date	Collateral
HCIC Shareholders	\$7,401,244	9/2009 – 9/2010 (1)	\$440,936	9/2012 – 9/2013 (2)	Shares in Huerfano Cucharas Irrigation Company
CNH Capital America LLC	\$12,949	5/15/2011	\$2,487	5/15/2014	Various farm equipment
AGCO Finance, LLC	\$74,220	5/15/2011	\$8,742	5/15/2016	Various farm equipment
Wells Fargo Auto Loan	\$32,158	6/15/2011	\$4,660	8/13/2015	F-350 truck
Case Family	\$ 187,500	1/28/2011			188 acres of land
Convertible Debt (A series)	\$2,000,000	2/28/2011	\$120,000	3/31/2014	F-1 farm assets including HCIC shares, land, irrigation and some farming equipment
Convertible Debt (B series)	\$5,332,000	7/2011 – 9/2011	\$319,920	6/30/2014	Orlando assets
Total	\$15,040,071		\$896,745		

Notes on HCIC Debt: (1)Loans entered into from September 2009 - September 2010; (2) Maturity is between September 2012 - September 2013

TABLE 6: FINANCIAL RATIOS

Financial Ratio	Past 2 Years	Two Rivers Projections
<p>Operating Ratio (revenues/expenses)</p> <p>weak: <100% - average: 100% - 120% - strong: >120%</p>	<p>See note (3)</p> <p>Net loss = \$9.5M (2010)</p> <p>Net loss = \$2.9M (2009)</p>	<p>113%</p> <p>Average (\$2.7M/\$2.4M)</p>
<p>Debt Service Coverage Ratio (revenues-expenses)/debt service</p> <p>weak: <100% - average: 100% - 120% - strong: >120%</p>	<p>See note (3)</p> <p>\$12.4M ex. debt on top of losses</p>	<p>133%</p> <p>Strong (\$2.7M-\$1.4M/\$980K)</p>
<p>Cash Reserves to Current Expenses</p> <p>weak: <50% - average: 50% - 100% - strong: >100%</p>	<p>See note (3)</p> <p>\$1.941M cash</p>	<p>75%</p> <p>Average (\$1.8M/\$2.4M)</p>
<p>Annual Operating Cost per Acre-Foot (6,800 AF)</p> <p>weak: >\$20 - average: \$10 - \$20 - strong: <\$10</p>	<p>See note (3)</p>	<p>\$41 (4)</p> <p>Weak \$280K/6,800AF</p>

Notes on Financial Ratios: (3) The past two years have been atypical since Two Rivers was discontinuing operations in real estate and mortgage businesses and beginning its efforts in farming and water acquisition and development. Going forward, revenues will be generated through agricultural production.

(4) Annual operating cost is based on the operating costs of the HCIC (which is where all of the water delivery costs were accounted for). The delivery number is based on the average historic yield of the HCIC system per a yield study by Lytle Water Solutions.

Collateral: As security for the loan, the Two Rivers will pledge an assignment of the contractual revenues generated by the alfalfa hay production, a first position lien on the water rights for the Orlando Reservoir No. 2, a first position lien on the Orlando Reservoir No. 2, and a first position lien on the 1,200 acres of farmland irrigated by the associated reservoir. This is a variance from the CWCB Financial Policy #5 (Collateral).

Staff Recommendation

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

Attachment: Water Project Loan Program – Project Data Sheet

CWCB Construction Loan Program Project Data Sheet

Borrower: Two Rivers Water Company

County: Huerfano & Pueblo

Project Name: Orlando Reservoir Rehabilitation

Project Type: Reservoir Rehabilitation

Drainage Basin: Arkansas River

Water Source: Huerfano River

Total Project Cost: \$1,303,500

Funding Sources: Construction Fund

Type of Borrower: Agricultural

Average Delivery: 6,800 AF

Loan Amount: \$1,184,882 (Including 1% fee)

Interest Rate: 2.5%
(Reduced)

Term: 20 years

The Two Rivers Water Company is requesting a CWCB loan to restore aging water infrastructure in order to support the company's agricultural production. Loan funds will be used to modify the spillway at the Cucharas Dam. This will bring the spillway up to SEO standards and will allow the company to store water and avoid a pending breach order. Loan funds will also be used to repair the outlet works at the Orlando Reservoir No. 2, to construct a new headgate on the Orlando Canal, and to replace the old Huerfano-Cucharas Irrigation Company (HCIC) headgate with new automated gates. Construction on these projects will begin in the fall of 2011 with completion expected by January of 2013.

