

# STATE OF COLORADO

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## Colorado Water Conservation Board

### Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Ryan Edwards, P.E.  
Kirk Russell, P.E., Chief  
Finance Section

DATE: November 4, 2011

SUBJECT: **Agenda Item 34a, November 15-16, 2011 Board Meeting**  
**Finance Section – New Project Loans**  
**Paradise Acres Homeowners Association – Dedicated Fill Pipe Project**

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### Introduction

The Paradise Acres Homeowners Association (Association) is applying for a loan for the Dedicated Fill Pipe Project (Project). The purpose of the Project is to complete the final segment of the direct supply pipeline for the transmission of raw water from the supply well to the existing storage tanks. The loan request is for approximately 90% of the estimated \$69,000 total cost of the project. See the attached Project Data Sheet for a location map and project summary.

### Staff Recommendation

Staff recommends the Board approve a loan, from the Construction Fund, not to exceed \$62,721 (\$62,100 for project costs and \$621 for the 1% Loan Service Fee) to the Paradise Acres Homeowners Association for the Dedicated Fill Pipe Project. The loan terms shall be 30 years at a low-income municipal interest rate of 4.00% per annum. Security for the loan shall be in compliance with the CWCB Financial Policy #5.

### Background

Paradise Acres is a 140-lot mountain subdivision located 18 miles northwest of La Veta, Colorado. The primary water supply for the community is from a groundwater well (Houchin Well #3) and two storage tanks. The current pipe network directly connects the well, tanks and distribution lines, lacking the ability to isolate the well and tank from the distribution lines.

Recent changes to the Colorado primary drinking water regulations require a water system to have continuous chemical disinfection treatment. After a February 15, 2011 inspection, the Colorado Department of Public Health and Environment (CDPHE) deemed the Paradise Acres system out of compliance with disinfection standards. A mandate, requiring compliance by July 15, 2011 was

issued, and later extended to November 1, 2011 as the Association was progressively working towards compliance. The Association is currently working with the CDPHE on a second extension that will coincide with the construction schedule of this Project.

In preparation of the upcoming regulatory changes the Association began planning for the Project several years ago. Assessments were gradually raised to increase cash reserves, and in 2009 the initial 2,500 LF of the direct fill line was installed during a pipeline repair project.

### **Loan Feasibility Study**

The loan feasibility study titled “Feasibility Study – Paradise Acres Homeowners Association Construction of Dedicated Line & Building”, dated September 2011, was prepared by Dr. Kent Hay and Dr. Phil Warlick, President and Treasurer respectively of the Association. Technical Assistance was provided by Allen Davey, P.E., from Davis Engineering Service. The study was prepared in accordance with CWCBC guidelines, and includes preliminary engineering and a cost estimate used to establish the total project cost.

### **Paradise Acres Homeowners Association**

The Association incorporated with the State of Colorado on June 16, 1998. The Association is responsible for the operation, maintenance and regulatory compliance of the potable water distribution system which serves Paradise Acres. To date, 86 of the 140 lots have been sold, with 38 residences constructed and receiving water service from the Association. The remaining 54 lots are developer owned. Numerous residents have purchased multiple lots so full build-out is expected to be less than 140 residences. The Association’s water distribution system includes two 3,000-gallon storage tanks, a portion of the Houchin Well #3 yield, and a network of distribution lines.

The Association is managed by a five member board of directors with the authority to incur debt in emergency situations, including a state mandate. A majority approval of Association members is required for the Association to increase assessments and pledge real property for security on debts.

### **Water Rights**

The Project does not require any additional water rights beyond the Association’s current portfolio. The Association holds a right to 50 gallons-per-minute of Houchin Well #3 and a 1/5<sup>th</sup> interest in Lewis Ditch, which is used for augmentation (Case # 99CW129). The Lewis Ditch right has an appropriation date of: Priority #157 on June 1, 1874 & Priority #158 on June 1, 1876; and adjudication date of February 23, 1898 as the Killian Decree. The Association is entitled to 5.37 AF annually.

### **Project Description**

The objective of this Project is for the Association to achieve compliance with the Colorado primary drinking water regulations, avoiding a fine or total shut down of their potable water system. Three alternatives were considered:

**Alternative No. 1 – No Action:** This alternative was not acceptable as it would result in fines from the CDPHE and/or a mandated shut down of the entire potable water supply system.

**Alternative No. 2 – Add Treatment and Contact Time at the Well:** This alternative would satisfy disinfection standards by either: 1) adding an additional storage tank adjacent to the well and

treating the water prior to entering the tank, or by 2) increasing contact time by installing additional pipe between the well and the distribution network. Both of these alternatives are comparable in cost to Alternative 3; however, both present greater operation and maintenance concerns.

**Selected Alternative No. 3 – Dedicated Fill Line:** This alternative includes the installation of 3,700 LF of 2” pipe, completing the direct fill supply line between the well and storage tanks. The direct fill line will transport raw water to the storage tanks, isolating the raw water supply system from the distribution system. The project also includes the construction of an 8’ x 10’ housing structure. This alternative provides the Association the means to disinfect the water supply in compliance with current standards and provide an ability to maintain service during times of maintenance or repair of the raw water supply line.

The CDPHE has approved the project and construction is expected to begin in the spring of 2012. It is estimated the project will take six weeks to complete. The pipeline will be located in dedicated right-of-way or within existing easements; therefore, no further right-of-way/easement acquisitions or permits are anticipated.

**TABLE 2: TOTAL PROJECT COST SUMMARY**

Task	Cost
Engineering	\$5,000
Construction	\$52,000
Contingency (20%)	\$12,000
Total	\$69,000

### **Financial Analysis**

The Association qualifies for a low-income municipal interest rate of 4.00% for a 30-year term. Table 3 provides a summary of the financial aspects of the loan request.

**TABLE 3: PROJECT FINANCIAL SUMMARY**

Total Project Cost	\$69,000
CWCB Loan Amount (90% of total Project cost)	\$62,100
CWCB Loan Amount (including 1% Service Fee)	\$62,721
CWCB Annual Loan Payment	\$3,627
CWCB Loan Obligation (including 10% debt reserve funding)	\$3,990
Number of Lots (excluding developer owned lots)	86
Number of Taps	38
Current Lot Assessment (per lot)	\$330
Current Water Assessment (per tap)	\$220
Annual Cost of Project (per lot)	\$46
Annual Cost of Project (per tap)	\$105

### ***Creditworthiness:***

The majority of operating revenues for the Association are generated from annual assessments. All landowners pay a general per lot assessment, and additional assessments for water and trash are collected on all residences. The Association has no outstanding debt and sufficient cash reserves to

cover its portion of the total project cost. The Association previously raised assessments in anticipation of this Project; therefore, no additional increases are planned unless necessary.

**TABLE 4: FINANCIAL RATIOS**

Financial Ratio	2009-2010	Future w/ Project
Operating Ratio (operating revenues/operating expenses) weak: <100% - average: 100% - 120% - strong: >120%	138% (strong) \$44.4K/\$32.1K	123% (strong) \$44.4K/\$36.1K
Debt Service Coverage Ratio (total eligible revenues-operating expenses)/total debt service weak: <100% - average: 100% - 120% - strong: >120%	No Current Debt (strong)	308% (strong) (\$44.4K-\$32.1K)/\$4.0K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	242% (strong) \$77.7K/\$32.1K	196% (strong) \$70.8K/\$36.1K
Average Cost of Water per Residence (monthly) weak: >\$60 - average: \$30 - \$60 - strong: <\$30	\$18.33 (strong)	\$18.33 (strong)
Debt per Tap (Total Debt Service / taps) weak: >\$5,000 - average: \$2,500 - \$5,000 - strong: <\$2,000	No Current Debt (strong)	\$1,650 (strong) \$62.7K/38

**Collateral:** As security for the loan, the Association will pledge lot and water assessment revenues backed by a rate covenant, annual financial reporting, and Lewis Ditch water rights, as noted under the “*Water Rights*” section of this memo. This is in compliance with the CWCB Financial Policy #5 (Collateral).

#### Staff Recommendation

Staff recommends the Board approve a loan, from the Construction Fund, not to exceed \$62,721 (\$62,100 for project costs and \$621 for the 1% Loan Service Fee) to the Paradise Acres Homeowners Association for the Dedicated Fill Pipe Project. The loan terms shall be 30 years at a low-income municipal interest rate of 4.00% per annum. Security for the loan shall be in compliance with the CWCB Financial Policy #5.

cc: Kent Hay, President, Paradise Acres Homeowners Association  
Susan Schneider, AGO  
Peter Johnson, AGO

Attachment: Water Project Loan Program – Project Data Sheet

## Water Project Loan Program – Project Data Sheet

**Borrower:** Paradise Acres Homeowners Association

**County:** Huerfano

**Project Name:** Dedicated Fill Pipe

**Project Type:** Pipeline Project

**Drainage Basin:** Arkansas River, District 79

**Water Source:** Pass Creek

**Total Project Cost:** \$69,000

**Funding Source:** Construction Fund

**Type of Borrower:** Low-Income Municipal

**Avg. Annual Delivery:** 5.37 AF

**CWCB Loan:** \$62,721 (w/ 1% service fee)

**Interest Rate:** 4.00% **Term:** 30 years

The Paradise Acres Homeowners Association is responsible for supplying the Paradise Acres subdivision with potable water. Paradise Acres is a 140-lot subdivision located 18 miles northwest of La Veta. The primary water supply for the community is from a groundwater well (Houchin Well #3). The proposed 3,700 LF of 2" pipe will complete a direct fill line capable of transmitting raw water between the well and two storage tanks, isolating the raw water supply from the distribution network. Without the project the Association is unable to comply with a disinfection mandate from the CDPHE, subjecting the Association to fines and shut-down of their potable water distribution network, leaving the residences of Paradise Acres without water.

**Location Map**

