



COLORADO
**Colorado Water
Conservation Board**
Department of Natural Resources

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TO: Colorado Water Conservation Board Members

FROM: Matthew Stearns, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: January 27-28, 2020 Board Meeting

AGENDA ITEM: 20a. Water Project Loans
Highland Meadow Estates at Castle Peak Ranch, Inc. - Noecker Reservoir Repair

Introduction

The Highland Meadow Estates at Castle Peak Ranch, Inc. (Association or HOA) is applying for a loan for the Noecker Reservoir Repair (Project). The primary purpose of the Project is to repair Noecker Reservoir (Reservoir) to comply with a State Engineer's Office - Dam Safety Branch (SEO) Safety Compliance Plan, in which, if milestones are not completed by specific dates, will result in a Zero Storage Restriction for a 145 acre-feet (AF) reservoir. The total Project cost is estimated to be approximately \$721,000. The Association is requesting a loan for 90% of the total Project cost. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation for Loan

Staff recommends the Board approve a loan not to exceed \$655,490 (\$649,000 for Project costs and \$6,490 for the 1% service fee) to the Highland Meadow Estates at Castle Peak Ranch, Inc. for costs related to the Noecker Reservoir Repair, from the Construction Fund. The loan terms shall be 20 years at a reduced high-income municipal interest rate of 2.15% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Staff additionally recommends borrower, prior to loan contracting, amend legal documents as necessary to provide CWCB with the ability to foreclose a lien on the 2002 Settlement Agreement water rights, and to use the water outside of any current place of use restrictions in the event of loan default, and borrower shall provide an appraisal of the collateral with a value to loan of at least 110%.



Borrower - Highland Meadow Estates at Castle Peak Ranch, Inc.

The Association is a nonprofit corporation, formed June 15, 1990 that serves the Highland Meadow Estates Subdivision and is in good standing with the Colorado Secretary of State. It is governed by a 5-member Board of Directors who exercise all the powers of the Association. The Association is made up of 20 lots, and is located approximately one mile north of the Town of Eagle limits.

Revenues are primarily generated through assessments of members. Assessments upon members are set by the Board of Directors, however, special assessments for capital improvements cannot exceed \$500/lot per calendar year without prior written approval of the owners of no less than 16 lots (80%), and cannot exceed \$5,000/lot per calendar year without prior written approval of all 20 lots (100%). To enforce assessments, the Board of Directors has authority to place a lien on any lot that assessments are not paid within 30 days of written notice, and may enforce the lien by foreclosure of the lot and improvements.

Background

The Reservoir was originally constructed in the early 1900's and provides water primarily for irrigation and outdoor use of approximately 640 acres in Eagle County. The Reservoir is 145 acre-feet (AF) and is located approximately 5 miles north of the Town of Eagle, with water being delivered to the area of use via the Olesen Ditch.

The Association as majority owner has taken on responsibility for maintaining the Reservoir. However, there are five other non-Association parties with an interest in the Reservoir. All owners have specific requirements and rights as outlined in a Settlement Agreement dated May 28, 2002. This Settlement Agreement provides that improvements and necessary repairs to shared facilities costing more than \$25,000 each require an affirmative vote of the owners of at least 76% of the water rights. Upon affirmative vote, all owners must pay their proportionate share of the costs. Under current ownership of the water rights, the Association members are responsible for 75% of Project costs, while the non-Association parties are responsible for remaining 25%.

Over the past 10 years, the Association and the SEO have discussed the deteriorated outlet works. This is of primary concern to the SEO since the dam is a High Hazard Dam as it lies above Interstate 70 and the Town of Eagle. In the event of a dam failure there would be little warning to protect life and property.

On May 24, 2019, the SEO issued a Safety Compliance Plan with several deadlines for compliance, including acceptance of the repairs by May 1, 2021 from the SEO. Consequences for not meeting compliance schedule deadlines include issuance of a zero storage restriction. The latest inspection of the dam by the SEO occurred on June 4, 2019 and listed several deficiencies in addition to the outlet works that were formalized in the Engineer's Inspection Report (EIR). These included missing or sparse riprap, wave erosion, depressions and areas of bare earth on the crest, a slide area approximately 15 feet by 20 feet, and a possibly undersized spillway.

Loan Feasibility Study

Wendy Sacks, Treasurer of the Association, and Craig Ullmann, P.E., Applegate Group, Inc., prepared the Loan Feasibility Study titled, "Feasibility of Replacement of Noecker Dam Outlet Works," dated December 2019. The feasibility study was prepared in accordance with CWCB guidelines and includes

an analysis of alternatives and construction cost estimates. Financial statements were prepared by the Association.

Water Rights

Water rights associated with the Settlement Agreement include direct flow and storage rights owned by Association members and five other non-Association parties. As detailed in the Settlement Agreement, Association members own 75% of both the water rights for Castle Creek Ditch, and the first fill of the Reservoir up to the first 145 AF. The other non-Association parties individually own portions of the remaining 25% of these shared water rights. In addition, the non-Association parties own all of the Castle Ditch direct flow rights, the first fill of the Reservoir in excess of the first 145 AF, and the second fill of the Reservoir. The primary source of water for the reservoir is Eby Creek; however, a small portion is also derived from the reservoir drainage basin of approximately 70 acres.

The majority of water rights in the Settlement Agreement are for irrigation, however, the Noecker Reservoir, Second Fill, is also decreed for domestic, municipal, livestock water, and recreation.

TABLE 1: WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.	Ownership
Castle Creek Ditch	4.0 cfs	11/19/1884	3/5/1901	CA0385	Association members/ non-Association parties
Castle Creek Ditch, First Enlargement	0.41 cfs	11/19/1918	10/3/1936	CA0963	Association members/ non-Association parties
Noecker Reservoir, First Fill	304.175 AF	11/30/1903	11/10/1919	CA0722	Association members/ non-Association parties
Noecker Reservoir, Second Fill	302 AF	12/31/1936	12/31/1982	82CW0164	non-Association parties
Castle Ditch	4.41 cfs	6/30/1918	10/3/1936	CA0963	non-Association parties

Project Description

The purpose of this Project is to comply with the action items required by the SEO to address identified risks, improve the safety of the dam, and to provide access improvements to facilitate the necessary construction at the remote Reservoir site. The following alternatives were analyzed:

Alternative 1 - No Action: This alternative is considered unacceptable since rehabilitation / replacement of the outlet pipe is a mandatory requirement by the SEO to maintain any future storage in the Reservoir. This will eliminate the ability of the Reservoir owners to irrigate their land.

Alternative 2 - Line the Existing Outlet Pipe: This alternative includes lining the existing 8-inch diameter pipe to minimize potential dam excavation and construction costs. This alternative is considered unacceptable since it does not meet SEO's emergency drawdown requirements, nor will it address the issues identified in the most recent EIR

Alternative 3 - Install Additional High Level Outlet: This alternative includes installation of a new 18-inch outlet pipe 8 feet below the dam's crest height. This alternative will require constructing a riprap rundown channel on the downstream face of the dam, and still require lining the existing outlet pipe. This alternative was ruled out due to the additional cost of pipe and concerns that installation issues with the lining would still require removal and replacement of the existing outlet.

Selected Alternative 4 - Remove and Replace the Existing Outlet: This alternative includes removal and replacement of the existing outlet pipe. This option, while the most expensive, would meet the SEO's emergency drawdown requirement, provide a long maintenance free period following project completion, and bring the outlet up to current SEO safety standards.

The total cost associated with the Project is \$721,000 as shown in Table 2.

TABLE 2: ESTIMATED PROJECT COST

Task	Total
Design and Construction Services	\$105,000
Reservoir Construction	\$445,000
Access Road Improvements	\$99,000
Contingency (13.25%)	\$72,000
TOTAL	\$721,000

Permitting: The Reservoir is located on property owned by Castle Peak Ranch, which has an easement agreement with the Association members and the non-Association parties for the Reservoir, the Olesen Ditch, and access. No new easements or rights-of-way will be required. Applegate Consulting, Inc. expects construction to be exempt from 404 permitting by statutory exemption.

Schedule: Engineering is expected to be completed in early 2020, The Project will be bid and contracted in spring 2020. Construction is expected to begin in July 2020, with construction acceptance from the SEO by May of 2021.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The Association qualifies for a high-income municipal interest rate of 2.40% for a 30-year term, and to a reduced interest rate of 2.15% for a 20-year term per CWCB Financial Policy #7. The Association, along with the non-Association parties, will cover any costs that exceed the estimated loan amount.

TABLE 3: FINANCIAL SUMMARY

Total Project Cost	\$721,000
CWCB Loan Amount	\$649,000
CWCB Loan Amount (Including 1% Service Fee)	\$655,490
CWCB Annual Loan Payment	\$40,670
CWCB Annual Loan Obligation (1 st Ten Years)	\$44,737
2019 Annual Assessment per Association Lot (20 Lots)	\$3,775
Approx. Annual Payment towards CWCB Loan per Association Lot (20 Lots)	\$1,678
Approx. Annual Contribution from non-Association parties towards CWCB Loan	\$11,185

Creditworthiness: The Association has no existing debt. The Association raises revenue through assessments, and special assessments for capital improvements. The Association is anticipating making loan repayments from a combination of special assessments on Association lots (75% of the loan payment amount) and from invoiced payments from non-Association party contributions (25% of the loan payment amount); however, the Association will ultimately be responsible for repayment of the loan. Financial indicator ratios for the Association reflecting this repayment apportionment are shown in Table 4 below.

TABLE 4: FINANCIAL RATIOS

Financial Ratio	Prior Years	Future w/ Project ¹
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	99% (weak) \$76.6K/\$77.0K	100% (average) \$121.7K/\$121.7K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	N/A	100% (average) <u>(\$121.7K-\$77.0K)</u> \$44.7K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	30% (weak) \$23.0K/\$77.0K	19% (weak) \$23.0K/\$121.7K
Annual Operating Cost per Acre-Foot (145 AF) weak: >\$20 - average: \$10 - \$20 - strong: <\$10	\$531 (weak) \$77.0K/145AF	\$839 (weak) \$121.7K/145AF

1. Assumes an annual special assessment of \$1,678 for each Association lot, and a combined annual payment of \$11,184 from non-Association parties.

Collateral: Security for this loan will be a pledge of special assessments, the Reservoir and all legal access to the Reservoir, and all water rights listed in the 2002 Settlement Agreement without the current restrictions on place of use. This security is in compliance with CWCB Financial Policy #5 (Collateral).

cc: Ms. Wendy Sacks, Treasurer, Highland Meadow Estate at Castle Peak Ranch, Inc.
Ms. Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program - Project Data Sheet

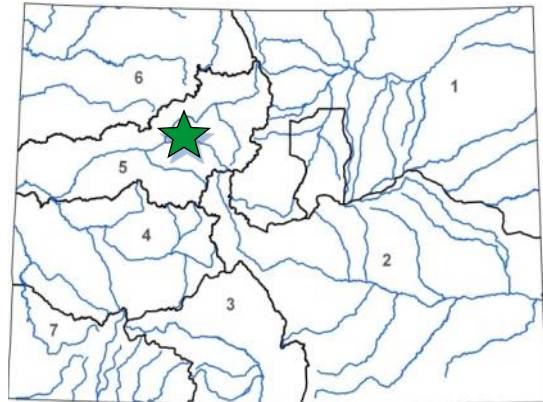


Noecker Reservoir Repair

Highland Meadow Estates at Castle Peak Ranch, Inc.

January 2020 Board Meeting

L O A N D E T A I L S	
Project Cost:	\$721,000
CWCB Loan (with 1% Service Fee):	\$655,490
Loan Term and Interest Rate:	20 Years @ 2.15%
Funding Source:	Construction Fund
B O R R O W E R T Y P E	
Agriculture	Municipal Commercial
0%	0% Low - 0% Mid - 100% High 0%
P R O J E C T D E T A I L S	
Project Type:	Dam Rehabilitation
Total Reservoir Storage:	145 AF
Storage Preserved:	145 AF



The Highland Meadow Estates at Castle Peak Ranch, Inc. (Association or HOA) administers and maintains Noecker Reservoir to provide irrigation and outdoor use for the benefit of its members and five non-Association parties in the vicinity. The Association is located in Eagle County.

L O C A T I O N	
County:	Eagle
Water Source:	Eby Creek
Drainage Basin:	Colorado
Division:	5 District: 37

The dam of Noecker Reservoir is classified as High Hazard due to several inhabited structures and an Interstate 70 crossing located within the downstream flood inundation limits. The outlet pipe for the dam is in a deteriorated condition and the Office of the State Engineer Dam Safety Branch (SEO) is requiring rehabilitation and/or replacement of the outlet pipe and associated structures to address safety concerns. This project includes access improvements, and removal and replacement of the existing outlet pipe, outlet structure, and appurtenances. Construction is expected to occur in the summer and fall of 2020.

