



COLORADO
Colorado Water Conservation Board
Department of Natural Resources

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Jared Polis, Governor

Dan Gibbs, DNR Executive Director

Rebecca Mitchell, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Rachel Pittinger, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: May 19-20, 2021 Board Meeting

AGENDA ITEM: 21. Change to Existing Loans
Orphan Wells of Wiggins - Kiowa Creek Dam Rehabilitation

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$373,700 (\$370,000 for Project costs and \$3,700 for the 1% service fee) to the Orphan Wells of Wiggins, LLC for costs related to the Kiowa Creek Dam Rehabilitation, from the Severance Tax Perpetual Base Fund. This is an increase of \$225,230 (\$223,000 for Project costs and \$2,230 for the 1% service fee). The loan term shall remain at 30 years at an interest rate of 1.15% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction

The Orphan Wells of Wiggins, LLC (Company) was approved for a CWCB loan of up to \$148,470 (Contract number CT2021-3116) for costs associated with the Kiowa Creek Dam Rehabilitation (Project) at the November 2020 CWCB Board Meeting. The Project will allow for the rehabilitation of the Kiowa Creek Recharge Facility dams that have suffered recent failures. The dams are located on Kiowa Creek near the South Platte River north of the Town of Wiggins. The dams are non-jurisdictional however; the State Engineer's Office Dam Safety Branch has strongly advised the Company of the need to rehabilitate the dams. Originally, this Project loan application included additional components that were not ready for staff to include them in the original funding approval. The Company has worked with staff to allow the additional components for funding. This Project now includes a well upgrade to a 200-horsepower electrical motor from the current diesel motor and a new pump. The total Project cost is now estimated to be \$370,000 and the Company is requesting a loan increase of \$223,000 for Project cost increases. See attached Project Data Sheet for a location map, Project summary, and the original board memo dated November 2020.



Project Update

The Company developed a recharge system, Orphan Wells of Wiggins Recharge Project that generates augmentation credits that may be used to offset the depletions caused by its 45 wells. By generating their own augmentation the Company shareholders can protect themselves from curtailment. The well affiliated with this Project is located near the South Platte River and Hwy 144. It diverts water into a recharge pipeline that discharges into recharge sites toward the Southeast of the well, near the Bijou Hill area. The well, when in priority, pumps water into 10 augmentation ponds. The water runs through approximately 7-miles of pipeline from County Road 1 and V to County Road 5.5 and County Road 4. The Walker Recharge Facility Project was decreed a junior right in 16CW3202 and the Kiowa Creek Recharge Site was decreed a senior recharge right in 81CW382.

This well pumped between 990 and 1400 Acre-Feet (AF) of water per year during the past four years. This represents about 40% of the Company’s water assets along with the other augmentation ponds. This well currently runs on a diesel engine. With the increased fuel costs, much monitoring and management as well as maintenance, and in sub-zero temperatures with conditioned fuel and insulated fuel lines, it is still difficult to keep the diesel engine running.

TABLE 1: UPDATED PROJECT COST ESTIMATE

Tasks	Original Cost	Current Cost
Kiowa Creek Dam Rehabilitation		
Ponds 1-3	\$69,000	
Ponds 4-5	\$71,000	
Well Upgrade		
Pump and Motor		\$60,000
Pump platform		\$15,000
Variable Speed Controls and Panel		\$60,000
Valves, Flowmeters, Vents, Tank, Boring		\$80,000
Old pump removal, screen installation		\$8,000
Engineering / Project Management	\$7,000	
Total	\$147,000	\$223,000

Permitting: The Company does not anticipate obtaining additional permits for this Project.

Schedule: Project design drawings are complete. Construction of the Kiowa Creek dam rehabilitation began July 2020 and the dam rehabilitation construction is complete. The anticipated completion time for all components of the Project is fall of 2021.

Financial Analysis

Table 2 provides a summary of the Project’s financial aspects. The term of the loan will remain at 30 years at the November 2020 agricultural interest rate of 1.15%.

TABLE 2: UPDATED FINANCIAL SUMMARY

Project Item	Original	Current
Total Project Cost	\$147,000	\$370,000
CWCB Loan Amount	\$147,000	\$370,000
CWCB Loan Amount (Including 1% Service Fee)	\$148,470	\$373,700
CWCB Annual Loan Payment	\$5,880	\$14,800
CWCB Annual Loan Obligation (1 st Ten Years)	\$6,468	\$16,279
Number of Shares	225	225
Annual Loan Obligation per Share	\$28.75	\$72.35
Current Assessment per Share (225 shares)	\$750	\$750
Future Assessment per Share (225 shares)	\$750	\$750

Creditworthiness: The Company's debt has not changed since the November 2020 Project Approval.

TABLE 3: UPDATED FINANCIAL RATIOS

Financial Ratio	Prior Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% average: 100% - 120% strong: >120%	109% (average) \$346K/\$316K	104% (average) \$346K/\$332K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% average: 100% - 120% strong: >120%	181% (strong) <u>(\$346K-\$279K)</u> \$37K	126% (strong) <u>(\$346K-\$279K)</u> \$53K
Cash Reserves to Current Expenses weak: <50% average: 50% - 100% strong: >100%	11% (weak) \$35K/\$316K	11% (weak) \$35K/\$332K

Collateral: Security for this loan will remain as originally approved in November 2020.

cc: Mr. Steve Bruntz, President, Orphan Wells of Wiggins
 Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet
 Original Board Memo (November 2020)



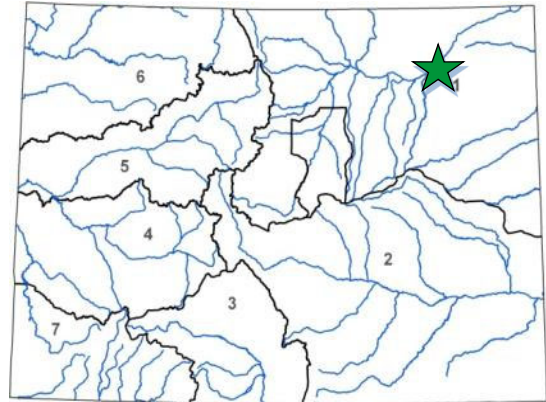
Kiowa Creek Dam Rehabilitation Project

Orphan Wells of Wiggins, LLC

May 2021 Board Meeting

(Loan Increase)

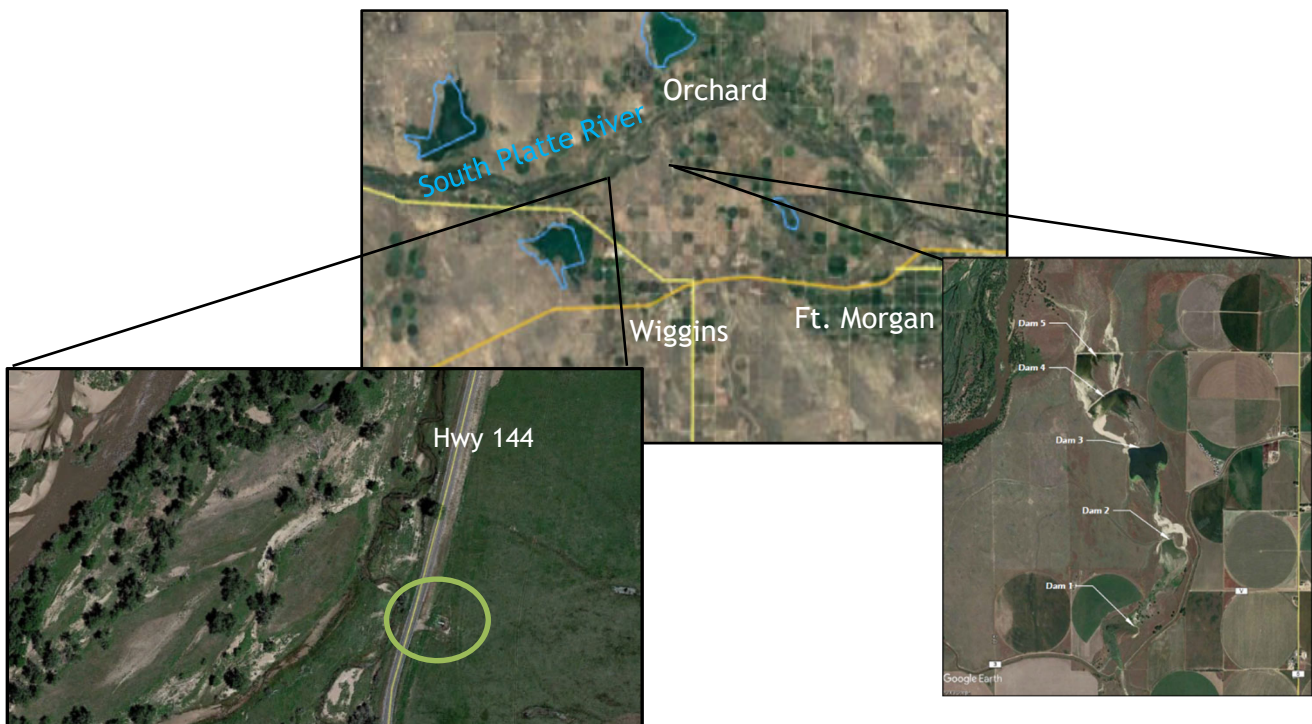
L O A N D E T A I L S	
Project Cost:	\$370,000
CWCB Loan (with 1% Service Fee):	\$373,700
Loan Term and Interest Rate:	30 Years @ 1.15%
Funding Source:	Severance Tax Perpetual Base Fund
B O R R O W E R T Y P E	
Agriculture	Municipal
100%	0% Low - 0% Mid - 0% High
Commercial	0%
P R O J E C T D E T A I L S	
Project Type:	Water Supply
Average Annual Kiowa Creek Diversions:	800 AF
Average Annual Walker Recharge Wells Yield:	2,500 AF



L O C A T I O N	
County:	Morgan
Water Source:	South Platte River
Drainage Basin:	South Platte
Division:	1
District:	1

The Orphan Wells of Wiggins, LLC (Company) was incorporated in 2003 to build a recharge system that generates augmentation credits for shareholders who own junior wells in areas not served by an agricultural ditch system. This recharge system pumps water from a recharge well to recharge ponds during the winter months where it infiltrates to groundwater. This water reaches the South Platte during the irrigation season in order to offset shareholder well withdrawals. In case of an immediate need to offset depletions the Company can pump water from an augmentation well directly to the river. The Company has 15 members and 225 shares.

The loan will fund two related parts of the Project. The first will be to pay for repairs to the Kiowa Creek Recharge Project site for dam safety concerns. Kiowa Creek Recharge Facility includes five ponds and dams. Repair on the non-jurisdictional dams is strongly encouraged by the State Engineer’s Office Dam Safety Branch after the dams have failed multiple times and most recently in the spring of 2020. The second will be to pay for an upgrade to an existing recharge well with a new pump and from diesel power to a 200-horsepower electric power supply. Construction began on the Kiowa Creek dam repairs in July 2020. The anticipated completion time for both parts of the Project is fall of 2021.





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TO: Colorado Water Conservation Board Members

FROM: Rachel Pittinger, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief *KGR*

DATE: November 18-19, 2020 Board Meeting (**Updated November 19, 2020**)

AGENDA ITEM: 6d. Water Project Loans
Orphan Wells of Wiggins - Kiowa Creek Dam Rehabilitation

Staff Recommendation: (Board approved Staff Recommendation November 18, 2020)

Staff recommends the Board approve a loan not to exceed \$148,470 (\$147,000 for Project costs and \$1,470 for the 1% service fee) to the Orphan Wells of Wiggins, LLC for costs related to the Kiowa Creek Dam Rehabilitation, from the Severance Perpetual Base Tax Fund. The loan term will be 30 years at an agricultural interest rate of 1.15% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.

Introduction:

The Orphan Wells of Wiggins, LLC (Company) is applying for a loan for the Kiowa Creek Dam Rehabilitation (Project). This Project will allow for the rehabilitation of the Kiowa Creek Recharge Facility dams that have suffered recent failures. The dams are located on Kiowa Creek near the South Platte River north of the Town of Wiggins. The dams are non-jurisdictional however, the State Engineer's Office Dam Safety Branch has strongly advised the Company of the need to rehabilitate the dams. The total Project cost is estimated to be \$147,000. See attached Project Data Sheet for a location map and Project summary.



Borrower - Orphan Wells of Wiggins, LLC:

The Company is a limited liability company formed in 2003 by a group of farmers in the Wiggins area. The intent was to cooperate in finding and developing new augmentation sources for their irrigation wells. At the time, members had been shut down by enforcement of the law that affected Ground Water Appropriators of the South Platte River Basin, Inc. (GASP). The Company is in good standing with the Colorado Secretary of State.

The Company has 15 shareholders and has issued 225 shares of stock. Revenues are derived from assessments. The Company is governed by a five-member Board of Directors. They have the power to set annual assessments to be paid by the shareholders and the power to retain augmentation credits from shareholders that fail to pay their assessments. The average annual diversions on Kiowa Creek are 1,600 acre-feet (AF). The Company's average annual diversions of Kiowa Creek are 800 AF.

Background:

The Project is located in Morgan County and is comprised of 25 agricultural operators that own 45 wells which irrigate approximately 4,500 acres. The Kiowa Creek dam rehabilitation site is located approximately 1-mile west of County Road 5 and County Road V, approximately 6.5 miles north of Wiggins. It is a series of recharge dams located within Kiowa Creek near the South Platte River. These dams are non-jurisdictional and repair on these dams is strongly encouraged by the State Engineer's Office Dam Safety Branch after the dams have failed multiple times and most recently in the spring of 2020.

The Company has developed a recharge system, Orphan Wells of Wiggins Recharge Project, that generates augmentation credits that may be used to offset the depletions caused by their 45 wells. By generating their own augmentation the Company shareholders can protect themselves from curtailment.

Loan Feasibility Study:

Mr. Heath Kuntz, Principal, with Adaptive Resources, Inc., prepared the Loan Feasibility Study titled, "CWCB Loan Feasibility Study for Orphan Wells of Wiggins, LLC regarding the Walker Recharge Project and the infrastructure repairs to Kiowa Creek Recharge Facility," dated September 24, 2020. The feasibility study was prepared in accordance with CWCB guidelines and includes an analysis of alternatives and estimated costs. Financial statements were provided by the Company.

Water Rights:

The Company currently owns the Orphan Wells of Wiggins Recharge Facility Project with a 2015 water right to pump water from the South Platte River into several decreed recharge sites through underground pipelines. This project was funded by the 2004 CWCB loan in repayment. The Kiowa Creek Recharge Site was decreed a senior recharge right in 81CW382. There is no pending water court action. The Company has a decreed augmentation plan with Decree 15CW3182. The plan has been amended twice in Decrees 18CW3236 and 19CW3031. The water right relevant to this Project is shown in Table 1.

TABLE 1: WATER RIGHTS

Name	Amount	Appropriation Date	Adjudication Date	Water Court Case No.
Kiowa Creek Recharge and Storage Facility	5,000 AF	March 7, 1982	April 29, 1987	81CW382 15CW3182

Project Description:

The purpose of the Project is for the rehabilitation of the Kiowa Creek dams that have suffered failures. The alternatives considered for the rehabilitation work included:

Alternative 1 - No Action-Kiowa Creek Dam Rehabilitation: If no rehabilitation occurs, Kiowa Creek would only be able to divert water into the upper pond and would require removal of the lower ponds due to dam insufficiencies. This alternative would not allow the Company to reconstruct the existing recharge well and maximize pumping for irrigation per the decree. Without the Project, the Company's ability to fully utilize its recharge water, protect future dam breaches and control flooding along Kiowa Creek may be compromised.

Alternative 2 - Walker Recharge Wells and Kiowa Creek Dam Rehabilitation: This alternative includes construction of a new well that is part of the Central Colorado Water Conservancy District (CCWCD) Decree No. 16CW3202 and improve the Company's existing recharge well's infrastructure. This alternative fulfills the Company objective to fully utilize the allowable pumping as decreed in 15CW3182 for each of its shareholders and to be able to divert water from the South Platte River, when in-priority, place it into recharge to allow additional irrigation well pumping per the Company's decree and augmentation plan. The second component to this alternative includes the extension of three outlet structures on Kiowa Creek and armoring to prevent erosion near the outlet pipes. Kiowa Creek dams in Ponds 4 and 5 require earthen material and widening. This alternative was initially selected, however additional information regarding the purchase agreement between the Company and CCWCD requires further development. The estimated cost for this alternative is approximately \$736,000.

Selected Alternative 3 - Kiowa Creek Dam Rehabilitation: This alternative includes the extension of each of the three outlet structures within the upper three ponds away from the dams to prevent erosion of the outlet and will require rock armor rip-rap for each of the three outlet pipes. Ponds 4 and 5 require additional dam material and widening from 8-foot to 20-foot wide. A geotechnical report determined the material in the bottom of each pond was suitable for the dams. The estimated cost for the dam rehabilitation is approximately \$147,000 and is shown in Table 2. This alternative was selected.

TABLE 2: ESTIMATED PROJECT COST

Tasks	Cost
Kiowa Creek Dam Rehabilitation	
Ponds 1-3	\$69,000
Ponds 4-5	\$71,000
Subtotal	\$140,000
Project Management/Engineering	\$7,000
TOTAL	\$147,000

Permitting: The Company does not anticipate obtaining additional permits for this Project. Access and right-of-ways to the upper Ponds 1-3 are by CCWCD in perpetuity. CCWCD agreed to allow the Company access to these Ponds for rehabilitation and maintenance. Access and right-of-ways to the lower Ponds 4 and 5 are owned by the Company. The dams are non-jurisdictional. The State Engineer’s Office, Colorado Dam Safety Branch, supports improvements to these dams and has provided direction on their rehabilitation.

Schedule: Project design drawings are complete. Construction began on the Kiowa Creek dam rehabilitation in July 2020. The anticipated completion time for the Project is the spring of 2021.

Financial Analysis:

Table 3 provides a summary of the Project’s financial aspects. The Company qualifies for an agricultural interest rate of 1.15% for a 30-year loan. (Share ownership is 100% agricultural.) All interest rate evaluations are per CWCB Financial Policy #7 (Lending Rate Determination).

TABLE 3: FINANCIAL SUMMARY

Project Cost	\$147,000
CWCB Loan Amount	\$147,000
CWCB Loan Amount (Including 1% Service Fee)	\$148,470
CWCB Annual Loan Payment	\$5,880
CWCB Annual Loan Obligation (1 st Ten Years)	\$6,468
Number of Shareholders	15
Number of Shares	225
Annual Loan Obligation per Share	\$28.75
Current Assessment per Share (225 shares)	\$750
Future Assessment per Share (225 shares)	\$750

Creditworthiness: The Company has \$525,606 in existing debt. The Company has an existing CWCB loan for other recharge and augmentation wells as summarized in Table 4. It was substantially completed in 2011 and is in good standing. The Company’s reserve account is fully funded per the loan contract requirement. Over the last 30 years, shareholder assessments for the Company have increased gradually from \$620 per share in 2004 to \$750 per share in 2020. The Company does not anticipate increasing assessments for this Project.

TABLE 4: EXISTING DEBT

Lender	Original Balance	Current Balance	Annual Payment	Maturity Date	Collateral
CWCB 150159	\$1,037,700	\$525,606	\$36,961	2038	Pledge of Assessments, pipeline, pumps, recharge wells
Total		\$525,606	\$36,961		

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	109% (average) \$346K/\$316K	107% (average) \$346K/\$323K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	181% (strong) (\$346K-\$279K) \$37K	155% (strong) (\$346K-\$279K) \$43K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	11% (weak) \$35K/\$316K	10% (weak) \$35K/\$348K

Collateral: Security for this loan will be a pledge of assessment revenues backed by an assessment covenant and will also include collateral secured in the Company's previous CWCB loan C150159. This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Mr. Steve Bruntz, President, Orphan Wells of Wiggins
 Jennifer Mele, Colorado Attorney General's Office

Attachments: Water Project Loan Program - Project Data Sheet