



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

1313 Sherman Street
Denver, CO 80203

P (303) 866-3441
F (303) 866-4474

John Hickenlooper, Governor
Robert Randall, DNR Executive Director
James Eklund, CWCB Director

TO: Colorado Water Conservation Board Members

FROM: Jonathan Hernandez, P.E., Project Manager
Kirk Russell, P.E., Finance Section Chief

DATE: March 22-23, 2017 Board Meeting

AGENDA ITEM: 28b. Water Project Loans
Town of Wiggins - Wiggins Recharge Facility at Glassey Farms

Introduction

The Town of Wiggins (Town), acting by and through its water activity enterprise, is applying for a loan for the Wiggins Recharge Facility at Glassey Farms (Project). The purpose of the Project is to reduce the Town's reliance on leased water and shore up its water supply for current and future demands by developing an augmentation water source by purchasing the Glassey Farm and associated water rights. Developing recharge ponds at the Glassey Farm will help ensure the Town can continue to draw from its South Platte Alluvial Aquifer wells. The Town is seeking a CWCB loan to cover 100% of Project costs which is estimated at \$2,385,000. See attached Project Data Sheet for a location map and Project summary.

Staff Recommendation

Staff recommends the Board approve a loan not to exceed \$2,408,850 (\$2,385,000 for Project costs and \$23,850 for the 1% service fee) to the Town of Wiggins, acting by and through its water activity enterprise, for costs related to the Wiggins Recharge Facility at Glassey Farms Project, from the Severance Tax Perpetual Base Fund. The loan terms shall be 30 years at the municipal low income interest rate of 2.40% per annum. Security for the loan shall be in compliance with CWCB Financial Policy #5.



Background

The Town is located approximately 70 miles northeast of Denver near the intersection of US Highway 34 and Interstate 76 in Morgan County. The Town is less than 1 square mile and has a population of approximately 900. Agriculture is the predominant economic driver for the Town. The service area for the Town covers approximately 7 square miles. Its existing water facilities are split into two locations: (1) inside Town limits, and (2) the reverse osmosis water treatment plant located 7 miles north of the Town.

Historically, the Town has relied on wells drilled into the Kiowa Bijou Designated Ground Water Basin for its water supply. Those wells are non-tributary and permit the Town to pull 483.4 acre-feet (AF) per year from the Kiowa Bijou basin without an augmentation requirement. Due to high nitrate concentrations and other water quality issues, as well as dropping aquifer levels, the Town drilled two wells into the South Platte Alluvial Aquifer (South Platte Wells) in 2008. The Town is permitted to pull 590 AF per year from its South Platte wells, which are currently augmented through the Kammerer Recharge Facility and an augmentation water lease with the Town of Castle Rock.

Two industrial properties have recently been annexed into the Town limits, totaling approximately 340 acres of land. Two are zoned commercial and two are zoned residential. Those developments are projected to bring up to 310 jobs into Wiggins over the next 5 years and approximately 500 new single family units and 150 multi-family units. The Northeast Colorado Housing Needs Assessment, prepared by Colorado Center for Community Development and DOLA, indicate that Morgan County is experiencing a severe housing shortage. Construction has begun with the first phase of housing and population is projected to grow from 900 to 2,280 in the next 10 years.

A 2016 Preliminary Engineering Report (PER), prepared for USDA Rural Development funding applications, show a current water demand for the Town of 140 AF per year and projects a demand of 400 AF per year by 2022, and over 900 AF per year by 2050. The Town is pursuing the financing of this Project through CWCB instead of USDA Rural Development due to a shorter application process with CWCB and the assurance funds could be used on a non-potable water project.

Loan Feasibility Study

Paul Larino, MPA, Town Manager, prepared the Loan Feasibility Study titled, "Feasibility of the Wiggins Recharge Facility at the Glassey Farm," dated February 1, 2017. The feasibility study was prepared in accordance with CWCB guidelines and includes an analysis of alternatives, preliminary engineering design, and construction cost estimates. The study relies on the PER prepared by Diamondback Engineering & Surveying, dated April 2016. Feasibility level water resources engineering and cost estimates were performed by Andrew Case, P.E., of Leonard Rice Engineers. Water right legal analysis has been provided by Rick Fendel of Petrock and Fendel, P.C. Audited financial statements were provided by Holscher, Mayberry & Company, LLC.

Borrower - Town of Wiggins

The Town was established in 1882 and incorporated in 1974 as a statutory town and is governed by a Mayor and a six-member Board of Trustees. The Town employs a full-time Town Administrator who is appointed by the Board of Trustees and who works under the general direction of the Board and Mayor. The Town has approximately 330 homes and several commercial and industrial properties for a total of 370 active water and sewer taps.

In 2010, the "Town of Wiggins Water Enterprise" was established (Ordinance No. 06-2010) pursuant to the provisions of Title 37, Article 45.1, Colorado Revised Statutes. The water activity enterprise operates within the meaning of Article X, Section 20, Colorado Constitution. Enterprise revenues are

primarily derived from water usage fees and charges and receive less than 10% of its annual revenues in grants from all Colorado state and local governments combined.

Water Conservation: The most recent water conservation policy for the Town was adopted and approved on March 25, 2015 (Ordinance No. 03-2015). The ordinance establishes watering schedules to be implemented during times of typical water conditions, declared water shortages, and declared water shortage emergencies. Prohibitions on wasting of water, and penalties for violating the ordinance are also included in the water conservation policy. The Town is not a covered entity requiring a Water Efficiency Plan to be approved by CWCB as it does not provide 2,000 AF or more of water annually.

Water Rights

The Town owns six wells drilled into the Kiowa Bijou Designated Groundwater Basin, and two wells drilled in the South Platte Alluvial Aquifer, as shown in Table 1. The South Platte wells are augmented through the Town's decreed augmentation plan (Case No. 11CW131) and a Substitute Water Supply Plan (SWSP) approved by the State Engineer's Office (SEO). The Town owns 18 shares of the Weldon Valley Ditch Company (WVDC), and has leased an additional 9 WVDC shares, for use within its augmentation plan and the SWSP. However, the Town was recently notified that this was the last year those 9 leased shares would be available. The Town maintains a short-term lease with the Town of Castle Rock that supplements its lack of augmentation water.

TABLE 1: TOWN WELLS

Well ID	Aquifer	Annual Appropriation
Kiowa Bijou 1418	Kiowa Bijou Basin	170.3 AF
Kiowa Bijou 14465	Kiowa Bijou Basin	200 AF
Kiowa Bijou 14466	Kiowa Bijou Basin	
Thomas 436	Kiowa Bijou Basin	113.1 AF
Thomas 435	Kiowa Bijou Basin	
Thomas 6798	Kiowa Bijou Basin	
South Platte 75611	South Platte Alluvial	590 AF
South Platte 75612	South Platte Alluvial	

Project Description

The purpose of the Project is to shore up the Town's water supply for current and future demands by finding a reliable and long-term augmentation water source. To achieve this, three alternatives were analyzed:

Alternative 1 - No Action: This alternative was not selected because the Town currently relies on leased augmentation water that is not a long-term source. Additionally, the Town has no guarantee that during a drought a lease would be available, or be within a reasonable cost.

Alternative 2 - Purchase Augmentation Water from Alternate Sources: The Town has explored various other sources for augmentation water but has not found land or water at a price comparable to the Glassey Farm (Alternative 3). However, the Town is also seeking a similar recharge Project at the Knievel Farm, which could be a future project in addition to the Glassey Farm Project.

Selected Alternative 3 - Recharge at Glassey Farm: The Glassey Farm is located east of Fort Morgan and was historically flood irrigation with 20 shares of the Fort Morgan Reservoir and Irrigation Company (FMRIC) and carriage ditch rights consisting of 20 shares of the South Side Lateral Company (SSLC). The Glassey Family is the original landowner but they have since moved off the farm. The farm land is currently leased to tenant farmers and the residence is left unused. Both the Farm and the shares used to irrigate the property are for sale and the Town has entered into a purchase agreement with the owner. The location and contours of the farm lend itself well to the construction of the proposed recharge ponds and the water shares will be able to be physically delivered to the site using the existing headgate. Additionally, the Putnam Beaver Ditch runs through the northern part of the property providing an opportunity to be used in the future if the Town secures water rights related to that ditch in the future.

Use of the FMRIC and SSLC shares will require a water rights change case. The Town's augmentation plan allows for the addition of water through a notification procedure rather than re-opening the augmentation court case. These costs will be in addition to the Project costs identified below and are not subject to this loan request. In the near term, the water will be added to the Town's water system through a SEO approved SWSP.

The farm is approximately 120 acres and the three recharge ponds will use a total of approximately 40 acres. The Town is in active negotiations with Morgan County Community College to share the use of the remaining farmland for an agricultural education program focused on low watering farming techniques. The Town is also seeking collaborative partnerships with Arapahoe County, Town of Brush, Central Colorado Water Conservancy District, and Morgan County Quality Water District for shared use of the recharge ponds.

The cost associated with this alternative is shown in Table 2.

TABLE 2: PROJECT COST

Task	Cost
Land and Water Rights	\$1,270,000
Engineering and Surveying	\$115,000
Construction of Recharge Ponds	\$850,000
Piping, Headgates, Controls, Concrete	\$150,000
TOTAL	\$2,385,000

Permitting: The Town does not anticipate needing an easement to operate the facility. Additionally, a U.S. Army Corps of Engineer's 404 permit should not be necessary since none of the property is located in wetlands or the river.

Schedule: Final design is expected by the end of April 2017. Closing on the farm is expected to occur by June 2017 with construction occurring summer to fall 2017.

Financial Analysis

Table 3 provides a summary of the Project's financial aspects. The Town qualifies for the low-income municipal interest rate of 2.40% for a 30-year term.

TABLE 3: FINANCIAL SUMMARY

Total Project Cost	\$2,385,000
CWCB Loan Amount	\$2,385,000
CWCB Loan Amount (Including 1% Service Fee)	\$2,408,850
CWCB Annual Loan Payment	\$113,560
CWCB Annual Loan Obligation (1 st Ten Years)	\$124,916
Monthly Cost of Loan per Tap (370 Taps)	\$28.13

Creditworthiness: The Town's water activity enterprise has \$3,912,190 in existing debt made up of a water rights lease-purchase with a private party and two USDA Rural Utilities loans. Both USDA loans financed the Town's reverse osmosis water treatment plant. The Town is in good standing with all debt obligations.

TABLE 4: EXISTING DEBT OBLIGATION

Lender	Original Balance	Current Balance	Annual Payments	Maturity Date	Collateral
Private Lease	\$500,000	\$364,642	\$42,125	2029	NA
USDA (2011)	\$3,327,000	\$3,027,233	\$126,626	2051	Water activity enterprise revenues
USDA (2013)	\$549,000	\$520,315	\$20,446	2053	Water activity enterprise revenues
TOTAL		\$3,912,190	\$189,197		

The Town's current water rates include a base fee of \$69.50 per month and \$3.20 per thousand gallons for a usage fee. The average water bill is \$98 per month.

Construction has begun on the first development and 44 houses are slated to be built by the end of 2017. Town forecasts estimate the population will grow from 900 people to 2,280 people by 2027. With a current tap fee of \$11,500, the additional 650 residential taps would provide \$7,475,000 in revenue to the Town's water activity enterprise. This revenue is dedicated to water development investments including the development of the Knievel Farm project. To be conservative, the financial ratios do not take into account the forecasted growth but analyze the "Future w/ Project" using only the existing customers for the revenue base.

TABLE 5: FINANCIAL RATIOS

Financial Ratio	Past 2 Years	Future w/ Project
Operating Ratio (revenues/expenses) weak: <100% - average: 100% - 120% - strong: >120%	111% (average) \$457K/\$413K	108% (average) \$582K/\$538K
Debt Service Coverage Ratio (revenues-expenses)/debt service weak: <100% - average: 100% - 120% - strong: >120%	123% (strong) (\$457K-\$224K) \$189K	114% (average) (\$582K-\$224K) \$314K
Cash Reserves to Current Expenses weak: <50% - average: 50% - 100% - strong: >100%	80% (average) \$331K/\$413K	62% (average) \$331K/\$538K
Debt per Tap (370 Taps) weak: >\$5,000 - average: \$2,500 - \$5,000 - strong: <\$2,500	\$10,568 (weak) \$3.91M/370	\$17,027 (weak) \$6.30M/370
Average Monthly Water Bill weak: >\$60 - average: \$30 - \$60 - strong: <\$30	\$98 (weak)	\$126 (weak)

Collateral: Security for this loan will be a pledge of water activity enterprise revenues backed by a rate covenant and annual financial reporting. This security is in compliance with the CWCB Financial Policy #5 (Collateral).

cc: Paul Larino, Town Administrator, Town of Wiggins
 Jennifer Mele, Colorado Attorney General's Office

Attachment: Water Project Loan Program - Project Data Sheet

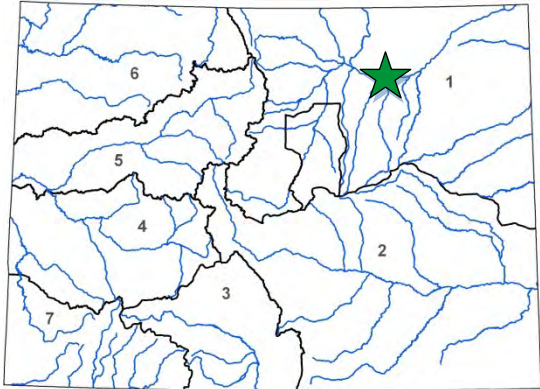


Wiggins Recharge Facility at Glassey Farms

Town of Wiggins

March 2017 Board Meeting

L O A N D E T A I L S	
Project Cost:	\$2,385,000
CWCB Loan:	\$2,408,850
Loan Term and Interest Rate:	30 Years @ 2.40%
Funding Source:	Severance Tax PBF
B O R R O W E R T Y P E	
Agriculture	Municipal
0%	100% Low - 0% Mid - 0% High
	Commercial
	0%
P R O J E C T D E T A I L S	
Project Type:	Augmentation
Average Annual Delivery:	140 AF



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

The Town of Wiggins, through a water activity enterprise, provides service to approximately 900 residents. The Town anticipates considerable growth over the next 10 years due to four new developments recently annexed into the Town limits. Those developments are projected to bring up to 310 jobs into Wiggins over the next 5 years and approximately 500 new single family units and 150 multi-family units.

Historically the Town has relied on non-tributary wells drilled into the Kiowa Bijou Designated Ground Water Basin. Due to water quality issues and dropping aquifer levels, the Town drilled two wells into the South Platte Alluvial Aquifer. Those wells are augmented through the Kammerer Recharge site and augmentation water leases. In order to develop a reliable and long-term augmentation water supply, the Town will purchase the Glassey Farm and associated water rights. Recharge ponds will take approximately 40 acres and the Town is in negotiations with Morgan County Community College to share the remaining farmland for an agricultural education program focused on low watering farming techniques. Construction is planned to begin summer 2017 and be complete by fall 2017.

