Final Report

Ordway Cattle Feeders Water Line Extension, Phase II

Applicant: Crowley County Board of Commissioners

> Submitted to: Colorado Water Conservation Board 1580 Logan, Suite 200 Denver, CO 80203



Prepared by: Balanced Management Service, Co. P.O. Box 1834 Colorado Springs, CO 80901 (719) 963-1809

May 1, 2014

Table of Contents

Project Description

Background

Problem to be Addressed

Challenges

Project Results

Project Description

In January, 2013, the Arkansas Basin Roundtable approved a WSRA grant/CWCB loan application for the Ordway Cattle Feeders Water Line Extension, Phase II.

The grant applicant was Crowley County, and the loan applicant was Ordway Cattle Feeders, LLC.

Funding Budget:		Actual:
WSRA Basin Funds	\$ 50,000	\$ 50,000
WSRA Statewide Funds	\$ 225,000	\$ 225,000
CWCB Loan	\$ 2,500,000	\$ 2,347,223
Crowley County	\$ 5,000	\$ 5,000
Ordway Cattle Feeders	\$ 598,904	\$ 598,904
LAVWCD	\$ 2,500	\$ 2,500
Funding Total (both phases)	\$ 3,381,404	\$ 3,228,627

This project completed a waterline that provides water to the Ordway Cattle Feeders feedlot from wells located on a local ranch owned by the company. Prior to the project, the Ordway Cattle Feeders already had in place a battery of four wells, two booster stations, and 4.2 miles of pipe at the west end of the proposed system. Phase I, funded by Ordway Cattle Feeders in its entirety, included re-establishing easements and the rehabilitation of the existing stretch of pipeline, wells and booster stations. Phase 2, partially funded by WSRA grant and CWCB loan funds, completed the project with a third booster station, 10.5 miles of water pipeline, two back-up generators, and a remote monitoring and control system.

The primary purpose of this project was to provide a consistent, viable supply of livestock drinking water, dust abatement, and compost conditioning water for the Feedyard. The Feedyard may also use this new water source to serve their feed mill needs in the future. In addition, the water supply also provides an emergency source of water for fighting farmstead and wild land fires in the area from Crowley to Ordway.

Background

Crowley County is located in the high plains of Southeast Colorado. It was established in 1911. The Town of Ordway is the county seat, and lies about 50 miles east of Pueblo.

Crowley County was supported primarily by irrigated agriculture for several decades. Much of Crowley County's water rights were sold to Front Range municipalities in the 1970's and 80's, resulting in a reduction from approximately 50,000 to 6,600 acres of irrigated farm land. Crowley County is a prime example and a horrible warning of the effects on local economies of large-scale traditional water rights transfers from Agricultural to Municipal/Industrial uses.

Currently, Ordway Cattle Feeders, LLC and a private prison comprise most of the tax base for the county. The only other two significantly-sized local employers are both tax exempt; the

local school system and a State prison. The importance of the Ordway Cattle Feeders feedlot to the county's economy cannot be overstated. County government officials state that the county government would be bankrupted by a feedlot closure.

Ordway Cattle Feeders, LLC is located two miles east of Ordway, Colorado, and has a capacity of 65,000 head of cattle. Cattle are fed until market ready, and are then sent to packing plants to produce beef for widespread consumption.

The company is the third largest employer in Crowley County, and the largest employer of the local population. They provide direct employment to 70 full time and 10 part time employees, with an annual payroll in excess of \$1.7 million. They are a tremendous, vital economic force, impacting the local, regional and state economy.

The feedlot was founded in 1972. Bill Foxley bought the land and water in the mid 60's; likely knowing that one day the water would be sold. It *was* sold, and Pueblo, Pueblo West, Colorado Springs, and Aurora were all beneficiaries of that water sale. But Foxley built a feedlot and kept the River Ranch so that there would be an agricultural enterprise in Crowley County with a demand for the crops that the local farmers who still had their water rights and farms could market to. The feedlot struggled with water supply issues from the beginning, issues that have been resolved by this project.

The Feedyard pays nearly \$60,000 in annual County taxes and has an operating expense of \$4.5 million, *plus* livestock and feedstuffs. It is estimated that they have a regional economic impact of over \$50 million per year, and an *additional* \$135 million per year direct impact in the rest of the state of Colorado.

Problem To Be Addressed

The water needs of the Feedyard have been roughly equivalent to the needs of a town with a population of 5,500 people, using approximately 1,500 acre feet of water per year. Prior to this project, two thirds of that water was purchased on the spot market from Front Range cities. In addition, the Feedyard owns 569 shares of Colorado Canal water paired with Lake Meredith and Lake Henry. Water had been delivered from Pueblo Reservoir, stored in Lake Henry and then piped to the Feedyard.

There were major problems with the historic supply regimen, and this project corrected those problems.

- Combined transit and evaporative losses sustained under the previous regimen were 66% in 2012 (data source-State Engineers Office and Colorado Canal Co). This means that the Feedyard lost 954 acre feet of water in order to provide 500 acre feet of water to the feedyard. This pipeline project eliminated 850 acre feet of that loss, freeing up that water for other uses.
- The prior water supply was not secure. Evaporative losses forced the Feedyard to purchase water on the spot market a vulnerable source that will not always be

available.

• The water supply storage and delivery system was not secure. The majority of Lake Henry water rights are held by Front Range cities. The reservoir's water levels are controlled mainly by Front Range users, creating increased vulnerability for the company. When less water is stored in Lake Henry, evaporation rates become greater. In the 2012 drought, the Feedyard was forced to install a floating pump in Lake Henry in order to get required water from the Lake.



Lake Henry, 2012

Construction of the 15-mile pipeline commenced on May 1, 2013, and water was being moved through the pipeline by June 28th. The prior water source, Lake Henry, was dry by July 2nd. If the new system had not been able to deliver water, major loss of cattle would have been inevitable. To understand the scope of the emergency, it would have required 550 semi trucks of water per day to provide the water needed to support the 65,000 cattle at the feedlot, an impossible feat.

Challenges

The time constraint was the biggest challenge to overcome in getting this project completed. Other challenges included obtaining land easements in a timely fashion and mechanical failures that slowed construction. There were a few leaks that were repaired after construction was complete. The system is working great at this point.

Project Results

Completion of this project allowed the feedlot to remain in operation through the summer of 2013 and into the future. Because the situation was dire, the project was phased so that water could be delivered as soon as possible. It took several months to complete other project components.

In addition to the benefits addressed above, additional benefits include:

- With use of Feedyard-owned wells, augmentation water can be stored at higher elevation reservoirs, further reducing evaporative loss.
- Water quality from the project wells is of higher quality than water that was previously being used.

Result







Water delivered!