

FINAL REPORT
FOR
CONTRACT:

08-PDA-00094

DUCKS UNLIMITED, INC.
2926 E. MULBERRY AVENUE
FORT COLLINS, CO 80524

IN COOPERATION WITH:

THE COLORADO WATER CONSERVATION BOARD
THE SOUTH PLATTE WATER RELATED ACTIVITIES PROGRAM
THE UNITED STATES FISH AND WILDLIFE SERVICE
NORTH AMERICAN WETLANDS CONSERVATION COUNCIL
SOUTH PLATTE RIVER RANCH, LLC
GOLDEN EAGLE RANCH, LLC
CITY OF BRUSH, COLORADO



EXECUTIVE SUMMARY

DUCKS UNLIMITED IS PROUD TO PROVIDE THIS REPORT TO OUR FUNDING PARTNERS AT THE COLORADO WATER CONSERVATION BOARD. OVER THE LAST SEVERAL YEARS THE CWCB AND DU HAVE PARTNERED TO DELIVER THE VERY BEST IN WETLAND HABITATS THAT PROVIDE FOR WATERFOWL AND THE PEOPLE OF COLORADO. THIS PARTNERSHIP HAS RESULTED IN CONSERVATION OF HABITAT FOR BIRDS, WHILE RETIMING WATER TO MEET THE MULTIPLE NEEDS OF THE STATEWIDE WATER SUPPLY INITIATIVE. OUR PROJECTS BENEFIT NOT ONLY THE DUCKS, GEESE AND OTHER WILDLIFE THAT DEPEND ON QUALITY WETLANDS, BUT ALSO TO THE PEOPLE OF COLORADO WHO CONTINUE TO ENJOY THESE SPECIAL PLACES.

WE ARE VERY PLEASED TO REPORT THAT WE HAVE COMPLETED ALL OF THE PROJECTS IN THIS CONTRACT STARTING IN MARCH OF 2009 AND ENDING IN OCTOBER OF LAST YEAR. HEYBORNE, GOLDEN EAGLE RANCH, AND BRUSH PRAIRIE PONDS ARE ALREADY IN OPERATION RECEIVING WATER INTO THE RECHARGE FACILITIES. PROJECTS WILL PROVIDE RIVER AUGMENTATION CREDITS TO MEET THE MUNICIPAL AND INDUSTRIAL NEEDS OF THE CITY OF BRUSH, AND FOR THE LOWER SOUTH PLATTE WATER CONSERVANCY DISTRICT AND LOWER LOGAN WELL USERS GROUP. IT IS DIFFICULT TO DETERMINE EXACTLY HOW MANY PEOPLE WILL BENEFIT FROM THESE PROJECTS BUT, THE POPULATION OF BRUSH IS 5,332. IN FACT, THE HEYBORNE PROPERTY WILL PROVIDE WATER TO KEEP EIGHT FAMILY FARMS IN BUSINESS NEAR OVID.

OF COURSE, WE EXPECT GREAT WATERFOWL, WILDLIFE, AND ENVIRONMENTAL BENEFITS FROM THE PROJECT. OUR ESTIMATES DETERMINED THAT MORE THAN XXX DUCK USE DAYS WOULD BE REALIZED FROM THE WETLAND DEVELOPMENT. IN ADDITION TO PROVIDING WATER CREDITS FOR MUNICIPAL, INDUSTRIAL AND AGRICULTURAL USES, THE WATER WILL BE USED AS PART OF THE PLATTE RIVER RECOVERY PROGRAM TO COVER COLORADO'S OBLIGATIONS; IN EFFECT ADDRESSING ENDANGERED SPECIES ISSUES.

OVERALL, THE PROJECT CAME IN ON BUDGET, BUT DID SUFFER SOME DELAYS IN CONSTRUCTION. HEAVY WINTER SNOWS AND SPRING RAINS IN 2009 CAUSED CONSTRUCTION PROBLEMS THAT FORCED US TO SEEK A CONTRACT EXTENSION. THE TOTAL CONTRACT COSTS WAS \$743,295 WITH CWCB PAYING 278,476. ALTHOUGH THE PROJECTS ARE ONLY BEGINNING TO RECEIVE WATER WE HAVE ALREADY EXCEEDED THE GOALS OF HEYBORNE BY PLACING MORE THAN DOUBLE THE WATER AND WE THINK SUCH CAPACITY COULD BE HIGHER WITH ADDITION OF MORE WELLS. GOLDEN EAGLE RANCH AND BRUSH PRAIRIE PONDS APPEAR TO BE HEADING IN THE SAME DIRECTION HOWEVER A FULL YEAR OF OPERATION IS NEEDED TO DETERMINE THEIR FULL EFFECTIVENESS.

WE ARE VERY PROUD OF THE PARTNERSHIPS DEVELOPED TO DELIVER THESE INNOVATIVE, COMPLICATED AND MUCH NEEDED PROJECTS. ALTHOUGH NEGOTIATIONS AND MULTIPLE AGREEMENTS BETWEEN PARTNERS MADE FOR A DAUNTING TASK, WE WERE ABLE TO SUCCEED AND EXCEED OUR EXPECTATIONS. I LOOK FORWARD TO A LONG AND PRODUCTIVE REALTIONSHIP WITH THE COLORADO WATER CONSERVATION BOARD.

Colorado Water Conservation Board Contract # 08PDA000094
Project Completion Report

HABITAT AND WATER SUMMARY

Table 1 summarizes the acreage conserved through the actions funded under the contract. No projects funded under this contract are complete.

Table 1. Acreage and Acre-foot summary table for all projects funded by the CWCB under contract #: 08-PDA-00094.

#	Name	Acre-feet Proposed	Acre-feet Delivered*	Acres Proposed	Acres Completed
	Heyborne Wetland Creation	0	806	0	40
	Golden Eagle Ranch Wetlands	120	127	32	120
	Brush Prairie Ponds Div 12	20	1614	20	20
TOTAL		140	2547	20	180

- ACRE-FEET DELIVERED BASED OFF DATA AND ESTIMATES FOR OPERATIONS IN 2009. THE NUMBERS ARE SUBJECT TO CHANGE DUE TO WATER AVAILABILITY, PRIORITY CALLS, AND CLIMATE.

OVERALL CONTRACT COSTS AND MATCHING FUNDS

As of 1/22/2010

	Total Cost (\$)	CWCB Grant (total \$)	Grant Spent (%)	DU and Partner Match (\$)	DU and Partner Match (%)
Contract	778,851	278,476	100	500,352	64%
Actual	743,295	278,476	100	464,639	63%

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Project Completion Report

Brush Prairie Ponds – Diversion 12 Wetlands

CO-95-7

Completed – May, 2009

Project Summary

Brush Prairie Ponds State Wildlife Area was one of the first projects originally restored by Ducks Unlimited, Inc in 1988. Located south of Brush, Colorado the property provides 650 acres of wetlands and native grass uplands for wildlife and recreation. The Audubon Society has decreed the undulating sand sage and wetlands an important bird area. Owned by the city, the property is managed by the Division of Wildlife for hunting. The city uses river augmentation credits derived from the wetlands to cover municipal wells that supply residents and industry with water.

As one of the best examples of cooperation demonstrated in the State, the City of Brush, the Fort Morgan Reservoir and Irrigation Company, and the Division of Wildlife work together to deliver water for wetlands that provide recharge credits, hunting opportunities, and wildlife habitat. Water in the wetlands infiltrates the alluvial aquifer where it returns to the river over a period of five years. Credits are used to cover municipal and industrial needs as well as those of the agricultural economy that supports Brush.

When Ducks Unlimited and the DOW originally designed Brush Prairie Ponds, twelve diversion structures were installed. However, the eastern most structure (12) was never used as adjacent neighbors expressed that high

groundwater levels and contaminated groundwater would negatively impact their homes and wells. Through several years of monitoring and purchase of at-risk homes proved to reduce any negative impacts.

As a result, Ducks Unlimited with the financial assistance of the Water Conservation Board was able to finally construct several wetland basins throughout the draw leading from diversion twelve. More than 20 acres of wetlands were enhanced, restored or created. In the first year of operation the wetlands took 1,614 acre-feet of water for recharge. Diversion 12 allowed access for more hunters and wildlife viewing. Increased water capacity will provide added comfort to the city's water budget.

Such projects are the essence of the Water for the 21st Century Act and Ducks Unlimited is proud to be a leader in these partnerships.

Location

Town: Brush, CO

County: Morgan

UTM: 13 616,724mE, 4,452,567mN

Partners

City of Brush

Colorado Water Conservation Board

Ducks Unlimited, Inc.

Contractor(s)

Dove Creek Enterprises, Inc.

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Property Ownership

City of Brush

Property Management

Colorado Division of Wildlife

Agreement Expiration

Ducks Unlimited executed a Site Conservation Agreement with the city. As per the agreement, the Ranch will be responsible for maintenance and operation for 30 years.

Management Guidelines

Management of the property is the responsibility of the city and Division of Wildlife. Ducks Unlimited will provide a waterfowl management plan that maximizes river augmentation and waterfowl habitat.

Habitat and Water Goals

	Contract	Actual
Wetland (ac)	20	20
Water (acft)	20	1614*

Water numbers reported are for the entire property starting in June 2009 through the remainder of the

Financial Summary

	COST (\$)	CWCB FUNDS (\$)	DU / PARTNER FUNDS (\$)	CWCB LEVERAGE*
Contracted	23,706	9,050	14,656	2.6:1
Actual	45,588	9,050	36,358	5:1

*CWCD Leverage = Total Cost / CWCB Cost

List of Deliverables

Deliverables can be found with CWCB separate from the report.

- 1) Detailed Survey and Design
- 2) Detailed Bid Package

Figure 1: Diversion 12 Wetland Area



Figure 2: Installing Water Control Structure



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Project Completion Report

Golden Eagle Ranch – Saltgrass Restoration

CO-129-6

Completed – October, 2009

Project Summary

Golden Eagle Ranch is located on the South Platte River near Proctor, Colorado where it straddles both sides of the river for six miles. Owners donated conservation easements on the entire ranch to Ducks Unlimited serving permanent protection for the land and existing water rights. Although much of the property provides great habitat for wildlife through both natural and agricultural amenities, much of the native saltgrass meadow has been lost due to grazing and hydrologic degradation. Saltgrass is highly valuable habitat for North Pintail a continental species of concern.

Extensive cottonwood riparian recovering from historic ravages of grazing, agricultural fields and pasture culminate to provide wealth for both wildlife and people. Much of the property can be irrigated with senior water rights from the Powell- Blair Ditch, but the floodplain has been converted to agriculture causing the elimination of seasonal wetland habitat and wintering waterfowl habitat. Additionally, water is only available from April through October annually which is of little use to migratory waterfowl.

Ducks Unlimited developed a plan with the ranch owners and the Lower Logan Well Users Group to construct several wetland impoundments and share water for the benefit of all parties. The ranch required water during winter months outside of the

normal irrigation season and conversely the Lower Logan Group needs water during the irrigation season. As a result, Ducks Unlimited constructed a wetland recharge project that will maximize habitat for waterfowl while delivering a substantial amount of river augmentation credits. The project is capable of generating credits throughout the year, but a target of credits in the summer will allow the Lower Logan group to meet their member's irrigation needs. In return, the group will provide available credits accrued in the winter to cover out-of-priority pumping for waterfowl and associated hunting on the ranch.

Water is provided through a headgate well that will operate during free river periods, a recharge well located next to wetland impoundments, Prewitt Reservoir Recharge Water, and a junior recharge right to be delivered through the headgate well or the Powell Ditch. The groups are working cooperatively to complete water court filings.

As a result of this project, several groups who traditionally distrusted each other have cooperated to assure a bright future. Agriculture and wildlife working together for a mutually beneficial goal. More than 150 acres in new wetlands and 127 acft of water annually. The Northern Pintails will love it.

Colorado Water Conservation Board Contract # 08PDA000094
Project Completion Report

Location

Town: Proctor, CO
County: Logan
UTM: 13 671,854mE, 4,518,116mN

Partners

Colorado Water Conservation Board
Ducks Unlimited, Inc.
N.A. Wetlands Conservation Act

Contractor(s)

Canfield Drilling, Inc.
RWT Enterprises, Inc.

Property Ownership

Golden Eagle Ranch

Agreement Expiration

Ducks Unlimited executed a Site Conservation Agreement with the ranch. As per the agreement, the Ranch will be responsible for maintenance and operation for 30 years.

Management Guidelines

Property management is the responsibility of the city and Division of Wildlife. Ducks Unlimited will provide a waterfowl management plan that maximizes river augmentation and waterfowl habitat.

Habitat and Water Goals

	Contract	Actual
Wetland (ac)	32	150
Water (acft)	120	127*

Water accomplishments are based from modeling and have yet to be tested.

Figure 1. Looking South to Saltgrass Meadow – Pre Construction



Figure 2: First Flood January 2010



Financial Summary

	COST (\$)	CWCB FUNDS (\$)	DU / PARTNER FUNDS (\$)	CWCB LEVERAGE*
Contracted	355,455**	120,734	234,721	3:1
Actual	261,614	120,734	140,880	2:1

*CWCD Leverage = Total Cost / CWCB Cost

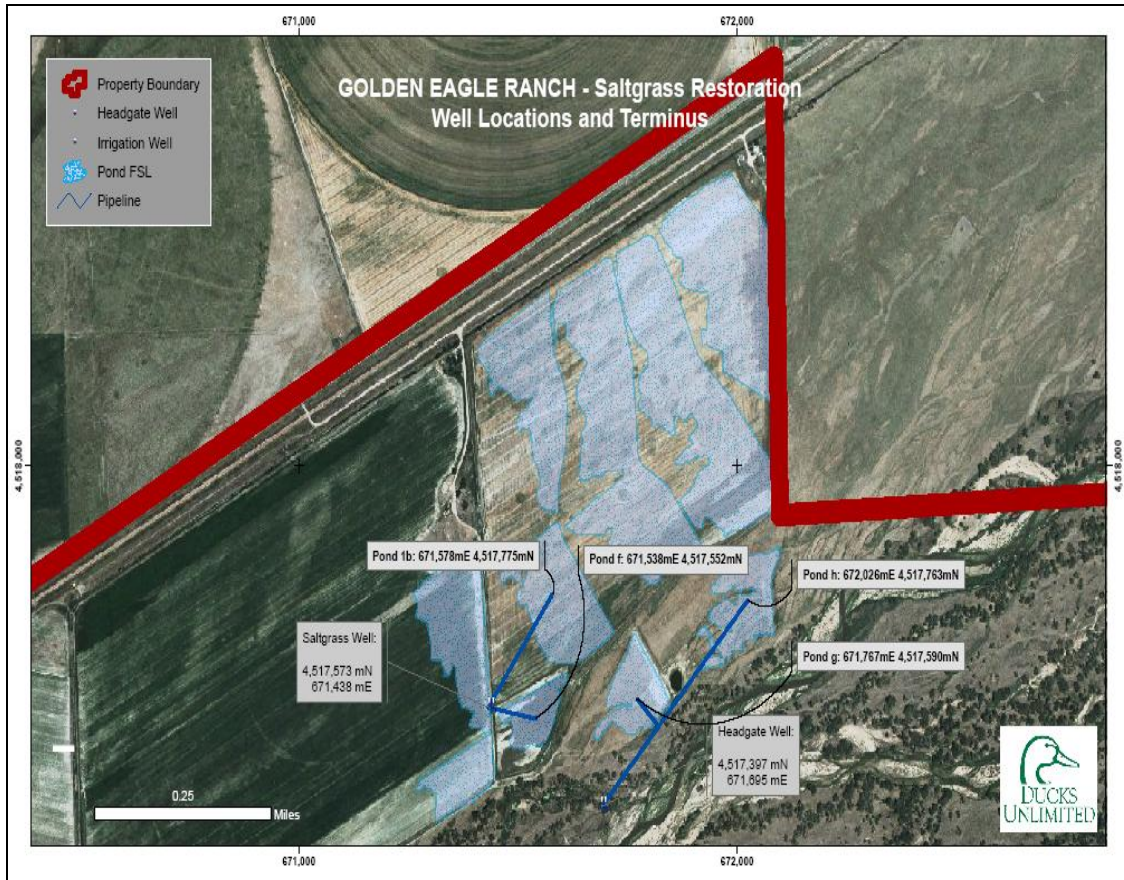
** There will be several more charges to complete the project as the water rights engineering and legal is completed, but the CWCB portion of the project is complete. We will provide an update when legal and engineering are complete in 2012.

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List of Deliverables

Deliverables can be found with CWCB separate from the report.

- 1) Detailed Survey and Design
- 2) Detailed Bid Package
- 3) Detailed Engineering Package
- 4) Water Court Permits, Well Permits



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Project Completion Report

**South Platte River Ranch – Recharge Wetland Creation
CO-196-1**

Completed – March, 2009

Project Summary

The Heyborne Project, known legally as South Platte River Ranch, is located near Ovid, CO on the south side of the river. The property is ripe for river augmentation with access to the river and deep sandy layers located in the dry sand-sage uplands extending over a mile to the south. However, the property lacked key ingredients for a wetland recharge project; water and natural basins.

As a waterfowl and wildlife managed property, the South Platte River Ranch exhibits several wonderful qualities including mature cottonwood forest, thick grass undergrowth, extensive warm-water sloughs, dry land crops, and sage uplands. Deer, wild turkey, pheasants, quail, and ducks utilize the grounds extensively, but the grounds lacked any seasonal wetland habitat for waterfowl foraging and loafing. Seasonal wetlands historically constituted a considerable portion of the lower South Platte Basin as annual floods would fill depressions in the adjacent floodplain, providing annual plant seeds for forage.

As part of Ducks Unlimited's program, we identify project sites that can contribute to our mission of filling the sky with waterfowl while also providing benefit to other wildlife and people. The Ranch project offered such opportunity. Water agencies and wildlife organizations combined efforts under Ducks Unlimited guidance to develop a large wetland recharge project. Project elements included the decree of a new

water right, engineering of a large pump and pipeline water delivery infrastructure, and creation of several wetland impoundments.

As the project concluded, several benefits to numerous groups could be identified. The Lower South Platte Water Conservancy District filed for and owned the recharge water decree to apply credits for member benefits; the State received augmentation credits for the Platte River Recovery Program and endangered species; the landowner realized an increase in property value, improved hunting opportunities, and some long-term revenue from credit lease; and Ducks Unlimited received the increase in waterfowl habitat.

The result was nearly 40 acres of new seasonal wetland habitat that provides water for environmental, recreational, agricultural, wildlife, and cultural benefits. In fact, as the project was reaching conclusion, 8 wells were determined to be out of State compliance and ordered to shut down. As a direct benefit from the project, these wells were able to receive credits through the partnership and can continue their agricultural heritage. We saved the family farm.

Colorado Water Conservation Board Contract # 08PDA000094
Project Completion Report

Location

Town: Ovid, CO
County: Sedgwick
UTM: 13 724,203mE, 4,534,690mN

Partners

Colorado Water Conservation Board
Ducks Unlimited, Inc.
SP Water Related Activities Program
North American Wetlands Conservation
Council
Dr. Kent Heyborne
Lower South Platte Water Conservancy
District

Contractor(s)

Ensminger Construction, Inc.
Interstate Irrigation, Inc.

Property Ownership

South Platte River Ranch, LLC

Agreement Expiration

Ducks Unlimited executed a Site Conservation Agreement with the Ranch. As per the agreement, the Ranch will be responsible for maintenance and operation for 30 years.

Management Guidelines

Management of the property is the responsibility of the landowner. Ducks Unlimited will provide a waterfowl management plan that maximizes river augmentation and waterfowl habitat.

Habitat and Water Goals

	Contract	Actual
Wetland (ac)	0	150
Water (acft)	400	832*

*The project has exceeded original estimates due to the abnormal availability of water in the lower river in 2009. However, the project was designed to handle an additional 3,000gpm pump that could raise expectations even higher.

Figure 1. Wetland Basin – During Construction



Figure 2: Wetland Looking toward the Northwest – Post Construction



Financial Summary

	COST (\$)	CWCB FUNDS (\$)	DU / PARTNER FUNDS (\$)	CWCB LEVERAGE*
Contracted	399,690	148,692	250,948	2.7:1
Actual	436,093	148,692	287,401	3:1

*CWCD Leverage = Total Cost / CWCB Cost

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List of Deliverables

Deliverables can be found with CWCB separate from the report.

- 1) Core Sample Locations and Report
- 2) Report of Findings for Water Availability in Lower River
- 3) Agreements with Landowners
- 4) Detailed Survey and Design
- 5) Detailed Bid Package
- 6) Engineering Details Associated with Recharge Plan
- 7) Copy of Water Court Filings

Heyborne Final Pond Location

