Grassland Project Monitoring Report

This report is required for projects that have selected a greater than annual verification period under the Grassland Project Protocol (see Section 7 of the protocol for reporting period and verification cycle information and report submittal requirements). If the project has previously been verified, certain information may not have changed from the previous verification period, but any changes relevant to this reporting period shall be included in this report.

This report is also required for projects that have elected to take a zero-credit reporting period. Please refer to Section 3.4.6 of the Reserve Program Manual for when and how the report shall be submitted.

Date of Report	12/12/2025
Grassland Owner	May Farms
Project Owner	Ducks Unlimited, Inc.
Easement Holder	Colorado Cattlemen's Agricultural Land Trust
Other relevant parties (e.g., technical consultants, service providers) (if applicable)	Cedar Creek Associates Inc.
Reserve Project ID	CAR1261
Project Name	May Ranch Avoided Grassland Conversion Project
Reserve Cooperative ID (if applicable)	
Cooperative Developer (if applicable)	
Name of Individual Completing Report	Lauren Alleman
Protocol Version	2.1
Dates of Current Reporting Period[1]	1/1/2024 to 12/31/2024
Expected Dates of Current Verification Period[2]	5/12/2025 to 8/12/2025
Requested Duration of Zero-Credit Reporting Period (if applicable)	Click here to enter a date. to Click here to enter a date.

[1] Under the grassland protocol, there is a 12 month limit for reporting periods after the initial reporting period. See Section 7.4 of the protocol for more information. Please enter the dates of the 12 month (or fewer) reporting period covered by this report.
[2] The verification period is the period of time over which GHG reductions will be verified.

Project Information

1. **Reason for Zero-Credit Reporting Period (if applicable)**
   Briefly describe the reason(s) that GHG emission reductions are not being claimed for this period.
   Not applicable.

2. **Record Keeping**
   Briefly describe how project data was recorded and maintained during the period in question.
   The easement and GHG ownership agreements are recorded with the property deed in the county courthouse and are on public record. All agreements and obligations pertaining to the project are maintained by Ducks Unlimited using our proprietary accounting systems. Key personnel for DU include Billy Gascoigne, Director of Agriculture and Strategic Partnerships, Lauren Alleman, Carbon Programs Specialist, and Christine Rost, Agricultural Systems Modeler. DU personnel mentioned above collected activity data from grassland owner, May Farms, over phone and confirmed by email. There is an executed monitoring agreement between Ducks Unlimited and Colorado Cattlemen's Agricultural Land Trust (CCALT), in which CCALT administers all conservation easement and rangeland health monitoring activities and provides formal reports to DU. Those reports are shared with DU to evaluate any possible project infractions. CCALT's Project Monitors are Dan Skeeters and Megan Knott.

3. **Operational/Personnel/Ownership Changes**
   Describe any changes to project equipment, management systems, landowners, easement holders, or personnel that occurred during the period in question.
   Lauren Alleman has assumed the lead role of project manager for the May Ranch Avoided Grassland Conversion Project. Billy Gascoigne has assumed an advisory role and Christine Rost has assumed a technical and lead modeling role on this project. Landowners and easement holders have not changed during the period in question. Project equipment and management systems have not changed.

4. **Regulatory Compliance**
   List all instances of legal violations caused by the project or project activities that occurred during the period in question. Note that while the project is not required to meet regulatory compliance requirements as laid out in the protocol during a zero-credit reporting period, disclosure of violations is required.

Dates of Noncompliance	Description	Actions Taken
1/1/2024	Eminent Domain for powerlines by Tri State; addendum to Conservation Easement held by CCALT which effectively removed the no sod busting clause on 15.5 acres of right-of-way	We removed 15.5 acres from project for the MLRA 69: Upper Arkansas Valley Rolling Plains soil type fine soil texture. CRTs were calculated on 15.5 acres of fine soil texture for all years since initial verification occurred. See Reversals section.

	within the boundary of the GHG project.	

5. **Monitoring Requirements**
Did the project meet the monitoring requirements, as laid out in the protocol, for the time period in question? If not, why and what monitoring was conducted in its place? Please describe for each item below.

Current Land Use: Yes, the entirety of the easement and carbon project boundary were assessed on foot by a stewardship staff member, Bill Noonan, of CCALT on June 11th, 2024.

The protocol requires a rangeland health assessment every six years, and the project was due in 2024. The rangeland health assessment was conducted at the end of the 2024 growing season by Cedar Creek Associates, Inc. Twelve sites were sampled in all 8 ecological sites with the majority of ecosystem health variables categorized as stable. These variables included soil and site stability, hydrologic function, and biotic integrity (Table 3, Cedar Creek Associates, Inc.).

The only violation of note was the Tri State condemnation which resulted in an addendum to the conservation easement held by CCALT. The condemnation and conservation easement addendum are described in the Reversals section of this monitoring report. No other easement violations were noted regarding the terms of easement reported by CCALT.

Livestock Grazing: The historic grasslands of the May Ranch support a generational cattle ranching operation. Stocking rates were determined for each appropriate livestock type—beef cows, calves, heifers, bulls—through verbal and written communication with the ranch owner we updated the head of mother cows from 600 to 480 as the landowner indicated they were not in a financial position to retain any heifers in the aftermath of the 2022 fire that impacted May Ranch. The ranch also reduced their number of bulls from 100 to 35 as they are not in a financial position to retain more than 35 bulls at this time. We assume the same 90% pregnancy rates, as were reported in previous monitoring reports.

Fertilizer Use: Not applicable.

Fires: A large catastrophic fire occurred in 2022. To contain the spread, the family created emergency fire breaks totaling 11.5 acres within the GHG project area. These acres were removed temporarily from the project in 2022 and 2023 verifications, until it could be demonstrated that the aboveground biomass had recovered to reference conditions (see Photo 1). This year, DU confirmed the re-establishment of native vegetation during a site visit in November. This determination was supported by the rangeland health assessment conducted by Cedar Creek Associates, Inc. at the end of the 2024 growing season. As a result, 11.5 acres were added back into the project for the 2024 verification event.

Photo 1. Revegetation on Emergency Fire Break, October 2024.

Reversals

Eminent Domain

In 2024, the Tri State power company successfully exercised eminent domain to establish a right-of-way through the GHG project area. On September 9, 2024, the Tri State power company and the May family executed an agreement allowing access and the associated amendments to the conservation easement for new power lines intersect the carbon project boundary. DU, May Farms, and CCALT, the noted parties of interest, reached an agreement and shared settlement with electric company. As a result, 15.5 acres have been removed from the carbon project boundaries (Figure 1). There are 90 CRTs associated with this event.

Boundary Adjustment:
The 2024 eminent domain case required recalculating the new project acres resulting from the removal of 15.5 acres in the right of way. This GIS exercise indicated that the actual GHG project boundary as uploaded to the registry in 2017 measures 12,449.6 acres (Figure 2). This differs from the 13,319.2 acres that have been modeled with GrassTool from 2017-2023, and we believe the riparian zone was inadvertently included in the early SSURGO analysis (Figure 3). DU reviewed the issue with CAR on May 27, 2025 and the group determined that the smaller boundary should be used since it excluded the riparian area and was memorialized in a map uploaded to the registry in 2017.

We calculated the CRTs from 2016/2017-2024 on the difference between the original GHG boundary measuring 13,319.20 acres and the revised GHG boundary measuring 12,434.1 acres (Table 1).

We analyzed SSURGO soils data by texture type for the Final GHG Boundary and estimated the cumulative number of credits that have been issued on the 885.1 acres (15.5 acres in ROW, 869.6 acres from boundary adjustment) since the original verification in 2016/2017. These credits will be debited from the v2024 issuances.

Table 1. Boundary Adjustments to May Ranch

Description	Acres*	Rationale for Revision
Original Acres	13,319.2	GrassTool acres do not match acres in map uploaded to registry in 2017
Recalculated GHG Boundary	12,449.60	approx 869.6 acres were removed
Emergency fire breaks	*11.50*	*temporarily removed in 2022 and 2023; added back in 2024*
Eminent Domain (right of way)	15.50	settled in 2024; removed for all years
Final GHG Boundary	12,434.10	Recalculated GHG Boundary - (ROW) +/- (Fire Breaks)

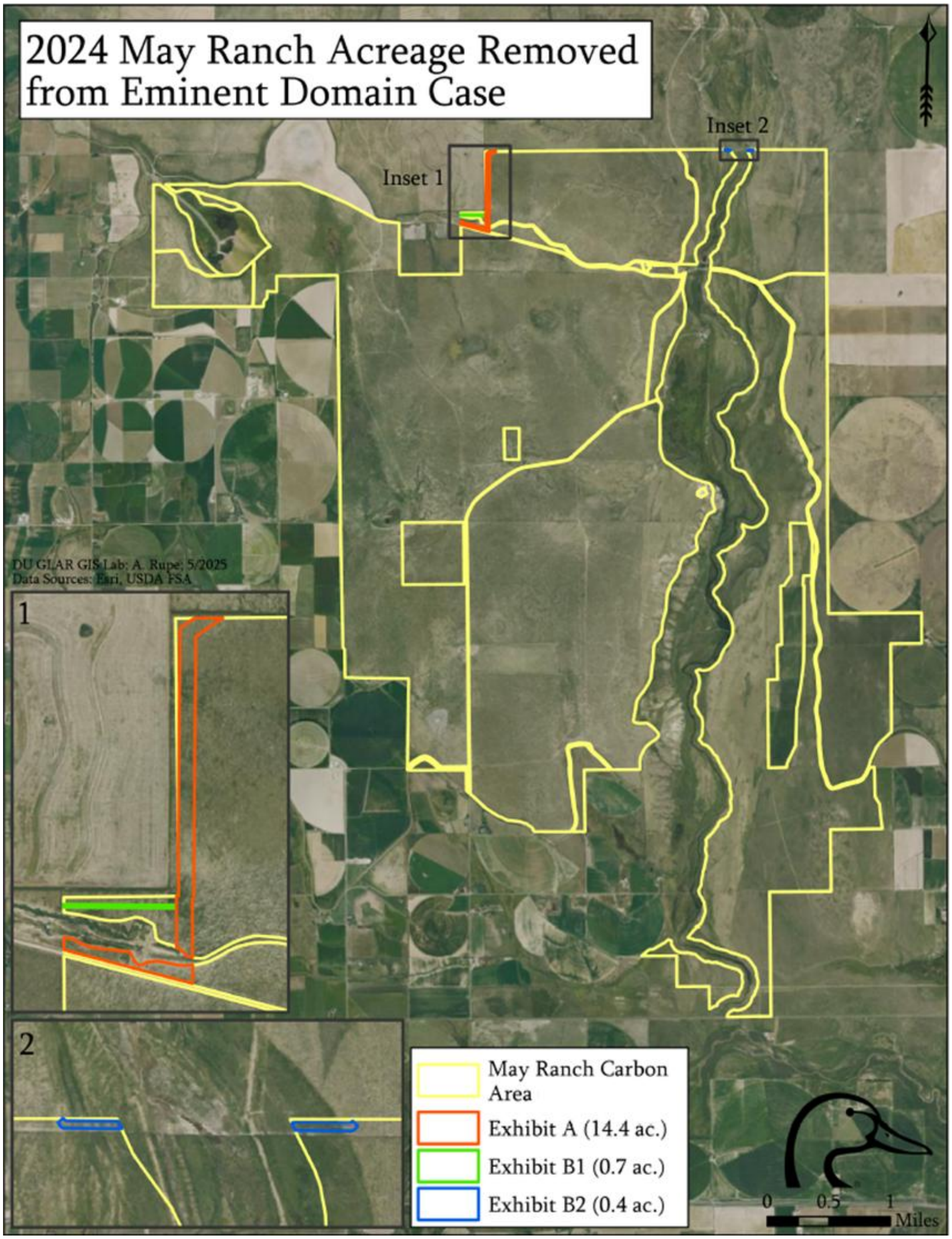

Figure 1. Right-of-way established for utility resulting in 15.5 acres removed from the GHG project area.

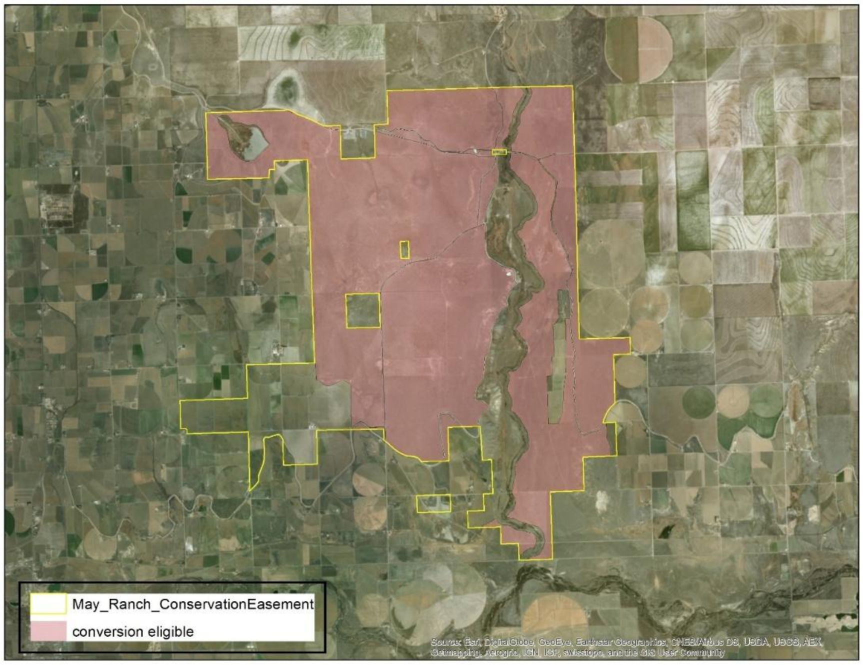

Figure 2. GHG boundary map uploaded to CAR in 2017 measuring 12,449.6 acres (*Dallas May Ranch Eligible Acres.jpg*).

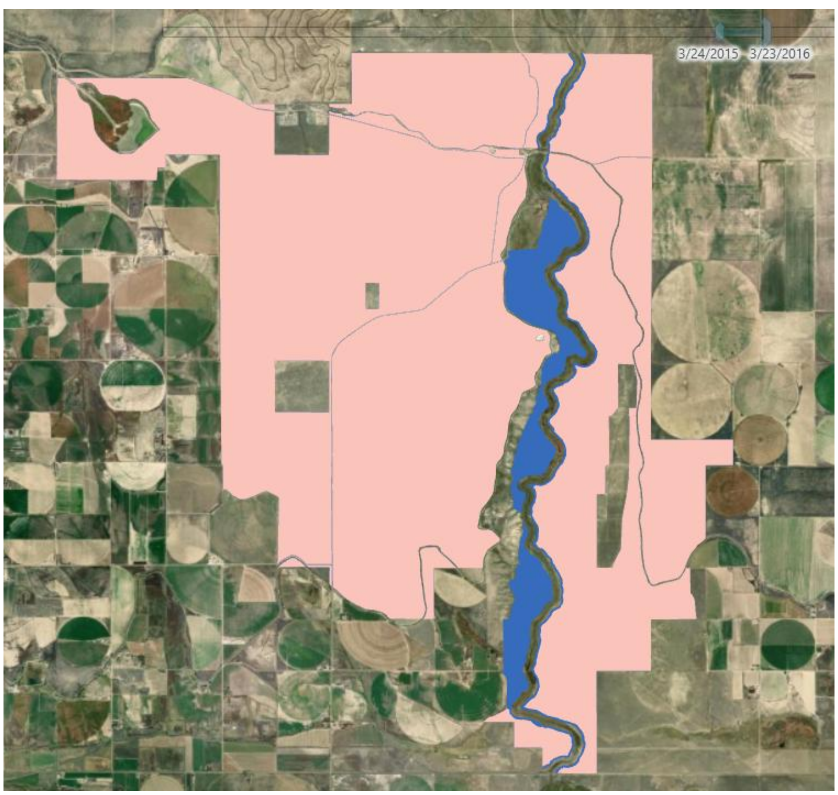

Figure 3. Final GHG boundary (pink) showing area removed in riparian zone and ROW (blue).

Fossil Fuel Use / Energy Consumption: One half ton work pickup and a feed truck that run on diesel fuel were both used with an estimated ten thousand miles per year for each. No gasoline, propane, natural gas, or electricity were consumed within the scope of our project.

6. **Calculation Method**
Briefly describe the methods and software that were or will be used to perform emission reduction calculations. If using the GrassTool, please specify the version.
The Climate Action Reserve's GrassTool Beta v2.1h was used to estimate baseline and project emissions for the 2024 verification period. CAR's Grassland Protocol V2.1 was referenced when using the SUURGO Web Soil Survey to identify soil classifications and soil texture. Permanent infrastructure was delineated in ArcMap by a remote sensing specialist. Project emissions for enteric fermentation and diesel use is outlined above and has been reviewed by the verifier in years past. The Major Land Resources Area designations, as defined by the USDA NRCS, was used to stratify our two ecosystem types and estimate our baseline emissions. Per CAR guidance, a weighted average based on respective acreage in each MLRA was derived and used in our input calculations.

7. **Permanence**
If you suspect that a reversal may have occurred during the current reporting period, please explain the nature of the suspected reversal. (avoidable or unavoidable, the cause, and expected magnitude)
An avoidable reversal occurred due to an eminent domain case with an electric company. To address this reversal, we have permanently removed 15.5 acres since 2016/2107 vintage. All of the 15.5 acres are in the MLRA 69: Upper Arkansas Valley Rolling Plains Fine soil texture category.

Estimated Emissions

List estimates in units of tCO_2e. If the reporting period spans multiple vintages (i.e. calendar years), please list the calculated reductions per vintage. If the emission reductions have yet to be calculated, please put “TBD” (to be determined) in the spaces provided.

Vintage:	2024	
Baseline Emissions (A):	12,860	
Project Emissions (B):	3,977	
Total Emission Reductions (A-B):	8,883	
Reversals (Eminent Domain ROW) (C)	90*	
Boundary Adjustment (D)	4,763*	
Net Emissions Reductions ((A-B)-(C+D))	4,030	
Buffer Pool Contribution*:	177	

**Total credits from Eminent Domain (n=90 credits) and Boundary Adjustment (n=4,763 credits).The total of both of these is 4,853 that will be removed from our 8,883 2024 CRTs with a remaining 4,030 2024 CRTs.*

Monitoring Summary Table

(not required for Zero-Credit Reporting Period monitoring)

Parameter Monitored	Value	Description/Notes
MLRA(s)	69, 67B	Upper Arkansas Valley Rolling Plains, Central High Plains, Southern part
State	Colorado	Click here to enter text.
County	Prowers	Click here to enter text.
Cropland Premium	N/A.	Click here to enter text.
DF_{conv}	1%	Click here to enter text.
DF_{σ}	N/A.	Click here to enter text.
Stratum 1 (acres)	515	69: Fine
Stratum 2 (acres)	8312.8	69: Medium
Stratum 3 (acres)	3576.3	69: Coarse
Stratum 4 (acres)	30	67B: Coarse
Emission factor group for the reporting period	Years 1-10	Click here to enter text.
Buffer pool contribution percentage	1.8	Click here to enter text.
Types and volumes of fossil fuels used	1,585 gallons of diesel	Click here to enter text.
Quantity of electricity used	N/A.	Click here to enter text.
Types, quantities, and N contents of organic fertilizers	N/A.	Click here to enter text.
Livestock categories and AGD for each	Beef cows: 125,520 Calves: 105,408 Bulls: 6,405	GrazingDayEquipmentCalc24.xlsx
Grazing season	April to October	Click here to enter text.
Ambient temperature during grazing season	67.63	WeatherData24.xlsx
Area burned by stratum	0	Click here to enter text.
DM_s for each stratum burned	0	Click here to enter text.