RUBY CANYON ENVIRONMENTAL

Verification Report
CAR1247 - Bluesource – Carroll Avoided Grassland Conversion Project

Reporting Period: June 16, 2020 - June 15, 2021

Prepared for:

Carroll Companies, Inc. and Bluesource, LLC

August 27, 2021

Ruby Canyon Environmental, Inc.
743 Horizon Court, Suite 385
Grand Junction, Colorado 81506
www.rubycanyonenv.com
(970) 241-9298

Table of Contents

1.0 Introduction

Ruby Canyon Environmental, Inc. (RCE) was contracted by Bluesource, LLC (Bluesource) to perform the verification of the Bluesource – Carroll Avoided Grassland Conversion Project (Project) for the reporting period June 16, 2020 through June 15, 2021 to the Climate Action Reserve (Reserve) Grassland Project Protocol Version 1.0 (Protocol). The Project is located on land owned by the Project Owner Carroll Companies, Inc. (Carroll) and involves greenhouse gas (GHG) emission reductions from the prevention of emissions to the atmosphere through conserving grassland belowground carbon stocks and avoiding crop cultivation activities.

1.1 Project Background & Site Description

Carroll MT Properties is the landowner of approximately 16,000 acres of pristine grassland located in Valley County, Montana located north of Glasgow. Carroll recorded a Deed of Conservation Easement with The Nature Conservancy on June 16, 2016 to preserve and protect in perpetuity the conservation values of the land (and Project area). The easement prohibits the conversion of the project area from a grassland state. During the site visit to the Project during the verification of the first reporting period and review of satellite imagery, RCE confirmed that the project area did not have tree canopy exceeding 10%.

1.2 Responsible Parties

Project Owner: Carroll Companies, Inc. (Carroll)

Landowner: Carroll MT Properties, LLC (Carroll MT Properties)

Technical Consultant: Bluesource, LLC (Bluesource)

1.3 Verification Team

The RCE verification team consisted of the following individuals:

Lead Verifier: David LaGreca
Senior Internal Reviewer: Phillip Cunningham

1.4 Objectives

The goal of the verification activities was to ensure that the claimed GHG emission reductions were complete, consistent, accurate, transparent, and permanent, and that the Project is in compliance with the Reserve project additionality, monitoring, and reporting requirements. Furthermore, the verification activities ensure that the data provided to RCE are well documented and free of any material errors or omissions.

1.5 Scope

The scope of the verification consisted of the following independent and objective activities:

- Review the project documentation against the Verification Criteria listed in Table 1 to develop a verification plan and a sampling plan
- Review the Project Monitoring Plan and Monitoring Report
- Review project ownership documentation
- Review project eligibility
- Review the Project's baseline emissions and confirm the baseline and Project boundaries

- Review the Project's evidence of environmental and regulatory requirements to ensure that the Project is additional
- Review data management and monitoring systems
- Review the Project's emission reduction calculations
- Issue requests for additional documentation, clarifications, and corrective actions as necessary
- Issue a verification report, list of findings, and verification statement to Bluesource and the Reserve.

1.6 Verification Criteria

Table 1. Verification Criteria

Criteria	Details
Standard of Verification	• Climate Action Reserve Grassland Project Protocol, Version 1.0 (July 22, 2015) • Errata and Clarifications to Grassland Project Protocol, Version 1.0 (October 15, 2020) • Reserve Offset Program Manual (March 12, 2021) • The Reserve Verification Program Manual (February 2021)
Verification Process	Climate Action Reserve and ISO 14064-3:2006 Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions
Level of Assurance	Reasonable assurance
Materiality	A >95% accuracy level (less than 5% error) because total annual ERs are less than 25,000 tCO_2e.

2.0 Verification Activities Summary

The current verification began with Bluesource selecting RCE as the verification body. As the first step in verification activities, RCE developed a verification plan to be followed throughout the verification. The verification plan consisted of the following activities:

- RCE completed the Notice of Verification Activities/Conflict of Interest form (NOVA/COI), announcing planned verification activities. This form was submitted to the Reserve's website on May 12, 2021; the COI assessment revealed no conflicts of interest and was approved by the Reserve on May 18, 2021.
- RCE held a verification kickoff meeting with Bluesource on June 30, 2021. During the kickoff meeting RCE reviewed the verification objectives, verification process, and the verification schedule.
- RCE performed a strategic review and risk assessment of the received data and support documents to understand the scope and areas of potential risk in the GHG emissions reductions.
- RCE developed a risk-based sampling plan based upon the strategic review and risk assessment. The verification plan and sampling plan were used throughout the verification and were revised as needed based upon additional risk assessments.
- RCE performed a risk-based desktop review of the submitted verification documents including an assessment of the GHG calculation methods, modeling inputs and parameters, source data

completeness, GHG management and monitoring systems, evidence of regulatory compliance, and record retention practices.

- RCE submitted requests for clarifications to Bluesource during the verification.
- RCE's Senior Internal Reviewer conducted a review of the verification sampling, verification report, and verification statement.
- RCE issued a final verification report, verification statement, and list of findings.
- RCE held an exit meeting with Bluesource.

3.0 Project Overview

3.1 Assessment of the GHG Reduction Project Operations

The project is located on 16,000 acres of grassland north of Glasgow, Montana. The landowner recorded a conservation easement with The Nature Conservancy on June 16, 2016 which is the Project commencement date according to the Protocol. The Project activity consists of preserving the grassland in its natural state and ensuring no tillage for commercial crop cultivation takes place. In the absence of the easement, the baseline assumes that the land would have been converted for crop production.

3.2 GHG Project Boundary (sources, sinks and/or reservoirs)

GHG emission reductions for the Project are quantified by mapping land areas within the conservation easement that meet the Reserve's eligibility requirements. Project emissions from grazing and fossil fuel used to support grazing activities are also included in the assessment boundary.

According to the Protocol, GHGs included in the baseline and project boundary are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O).

Table 2 lists the sources of GHG emissions reviewed during the verification of the Project, as required by the Protocol.

Table 2. Project GHG Sources, Sinks, and Reservoirs

Activity	GHG Sources, Sinks & Reservoirs
Baseline	• Soil Organic Carbon. • Belowground biomass • Soil nitrogen dynamics and fertilization • Agricultural equipment from site preparation and ongoing operations
Project	• Grazing • Agricultural equipment from site preparation and ongoing operations

3.3 Project Eligibility Criteria

The Protocol specifies six eligibility rules that a project must meet in order to register emission reductions with the Reserve: Location, Project Start Date, Additionality, Project Crediting Period, Requirements for Permanence and Regulatory Compliance. Below is a summary of the Reserve eligibility requirements and the Project's compliance to each requirement.

3.3.1 Eligibility Rule 1: Location

The Project is located north of Glasgow, Montana, USA. The included acreage is located entirely on private property. None of the Project land is located on state, federal or Native American tribal land. The Project therefore meets this eligibility requirement.

3.3.2 Eligibility Rule 2: Project Start Date

The project start date is defined as the date on which the project area is committed to the continued management and protection of grassland and therefore avoids conversion to cropland. Carroll signed a deed of conservation easement with The Nature Conservancy and publicly recorded the easement on June 16, 2016. This is the project start date. RCE confirmed that Bluesource completed the project submittal form and uploaded the form to the Reserve website on December 15, 2016 which is no more than six months after the project start date.

3.3.3 Eligibility Rule 3: Additionality

- Performance Standard Test

  The project passes the performance standard test established by the Protocol by meeting a performance threshold applicable to all grassland projects. The performance standard test involves two steps: the financial threshold and suitability threshold.

  Financial Threshold

  The Protocol stipulates that projects in counties with a cropland premium greater than 100% are eligible without any discount for uncertainty. The project area is located entirely within Valley County, Montana, and RCE used the Grassland Project Calculation Tool (GrassTool) Beta Version 1.0h (November 2017) to confirm that the cropland premium for this county is above the 100% threshold.

  Suitability Threshold

  During the first reporting period, FRST reproduced the GIS analysis for the suitability threshold. Suitability is demonstrated by determining the non-irrigated Land Capability Classification (LCC) for the soil map units that are contained within or intersect the project area. At least 75% of the total area contained within the project boundary must be identified as Class I, II, III, or IV soils and up to 25% of the total area may be Class V or VI soils. Bluesource used GIS analysis combined with soil survey geographic database (SSURGO) information to produce a data table calculating the amount of area in each soil class. FRST reproduced the mapping of LCC classification from the Project GIS data and confirmed that not more than 25% of the project area is Class V or VI soils. No marginal soils were included in the boundaries (Class VII and VIII).

- Legal Requirement Test

  All projects are subject to a Legal Requirement Test to ensure that the GHG reductions achieved by a project would not otherwise have occurred due to federal, state, or local regulations, or other legally binding mandates. All project area is located on private lands in rural areas. Carroll provided information confirming that there was no zoning, permitting, ownership or other legal obstacle to the conversion of the project area to cropland. Additionally, RCE confirmed through interviews with the landowner that there is no obligation for keeping the land in a natural grassland state.

  The landowner has not entered into any concurrent legally binding agreements and is not receiving ecosystem services credits or payment stacking. The landowner receives a small fee from the government for allowing hunters to access their land, but this does not constitute credit stacking as described in the Protocol. RCE also reviewed the attestation of voluntary implementation and confirmed that the information was correct.

3.3.4 Eligibility Rule 4: Project Crediting Period

The baseline for any grassland project registered under this protocol is valid for 50 years. The crediting period for this project is June 16, 2016 to June 15, 2066. RCE confirmed that the reporting period June 16, 2020 to June 15, 2021 is within the crediting period.

3.3.5 Eligibility Rule 5: Requirements for Permanence

Emission reductions credited under this Protocol must be permanent. For the purposes of the Protocol, an emission reduction is considered "permanent" if the quantity of carbon associated with that reduction is stored for at least 100 years following the issuance of a credit for that reduction. A reversal occurs if stored carbon is released through a disturbance of the project area or is deemed to be released through termination of the project or a portion of the project. The Lead Verifier reviewed email communication from the landowner confirming that no reversals had taken place during the reporting period. The Landowner also signed a notarized affidavit stating that the land met the definition of a grassland during the reporting period.

RCE considers the risk of reversal to be low on the project area because the land is in an area that is not under intense pressure from surrounding cash crops (compared with areas in the corn belt) and because the Project Developer's main income source is not derived from the land itself.

RCE also reviewed the conservation easement and confirmed that there was sufficient language that restricts plowing and farming that would release carbon stored in the soil. The landowner has elected to record the project implementation agreement (PIA) on the land title which grants the Reserve the ability to enforce the protocol requirements on the project area. RCE reviewed the PIA and confirmed the subordination clause was Type 1. Bluesource correctly entered this parameter into the GrassTool. The Project contributed 248 tonnes of CO_2e to the buffer pool during the reporting period.

3.3.6 Eligibility Rule 6: Regulatory Compliance

RCE reviewed EPA's enforcement and compliance history online (ECHO) database and the United States Department of Labor Occupational Safety and Health Administration website to confirm regulatory compliance for the project. Additionally, RCE contacted Montana's Department of Environmental Quality via email and confirmed that there were no violations reported or pending on the project area or against the landowner. No evidence was found that would indicate that there was a regulatory violation attributable to the project during the reporting period.

There have been no easement monitoring reports conducted on the property since 2017 (which RCE reviewed during the initial verification). Based on the fact that the Project Developer has attested that there has been no development on the land and that there is a low risk of over-grazing, RCE finds no reason that the Project would not be in good standing with the terms of the conservation easement.

Finally, RCE confirmed signature of the Attestation of Regulatory Compliance, after the end of the reporting period, which was uploaded to the Reserve.

3.4 Ownership of GHG reductions

RCE reviewed evidence that the Project Owner has sole ownership of the GHG emission reductions. In the previous reporting period, RCE confirmed via GIS analysis that all property within the project area is under the ownership of Carroll by first downloading a shape file from Montana Cadastral data showing all

ownership parcels for Valley County. RCE then aligned the Carroll Project boundary with the parcel ownership data. All parcels were in alignment with the Carrol Project shape files and confirmed Carroll owned all land included in the Project. RCE also confirmed signature of the Attestation of Title which was uploaded to the Reserve after the end of the reporting period.

3.5 GHG Monitoring and Management Systems

RCE reviewed the data management systems during the site visit and desktop review for the verification of the first reporting period. RCE confirmed that there have been no changes to data management systems since the first verification.

The primary data gathered for the Project originates from GIS shape files. Bluesource used Montana Cadastral agency data to map the entire area covered by the conservation easement (approximately 16,000 acres). Because the GIS data for Montana private lands are publicly available and drawn in the same GIS layer, there is a very low risk of overlapping into lands that are owned by another landowner. Bluesource compared this data to a government GIS layer with federal lands and removed any overlapping polygons from the project area.

The next step involved comparing the project area to the SSURGO GIS layer and excluding any ineligible LCC classes (marginal lands). Bluesource removed LCC V and VI lands that would put the total areas of these classes over the Protocol 25% threshold. The final project area was approximately 8,264 acres.

For stratification purposes, all project lands are in the Major Land Resource Area (MLRA) 52: Brown Glaciated Plain. Bluesource used a data table output from the SSURGO layer to classify the area by dominant soil texture component. Approximately 2,971 acres were classified as 'clay' and 5,294 acres were classified as 'loam'. FRST independently reproduced Bluesource's methods for stratification and confirmed that Carroll is the owner of all property listed within the project area.

Bluesource provided time-referenced aerial phots taken during the relevant years (Category A: Evidence that is independently sufficient) showing that the Project has been in greater than 30 years of continuous, long-term permanent grassland or pastureland. RCE believes this evidence is independently sufficient for the verification body to be reasonably assured of the nature of the land use during the previous 30 years. In addition, RCE visited the site in May of 2018 and saw no indication of recent disturbance which supports the Project Owner's claim that the project area is grassland.

The site visit for the verification of the first reporting period included an assessment of the Project data collection, processing and handling procedures; recordkeeping and data storage; quality control and assurance procedures; record retention systems; interviews with the land owner and Bluesource; and a tour via airplane and vehicle (during which most of the project area was viewed by the Lead Verifier). RCE confirmed during the site visit that there is a prescribed grazing management plan in place to prevent overgrazing of the land.

Bluesource's data storage and retention policies are in conformance with the Protocol requirements and follow the Monitoring Plan. All data are kept for a period of ten years after the information is generated or seven years after the last verification.

3.6 Assessment of GHG Emissions Reductions Calculations

The emission reduction calculation assessment included a review of Project assumptions, raw data inputs, and accuracy of calculations. Bluesource used the Reserve GrassTool to calculate emission reductions for the project. RCE's review was divided into two separate operations: namely reviewing the inputs into the GrassTool and confirming Bluesource's GIS analysis.

RCE reviewed the following inputs into the GrassTool: reporting period start and end date, type of project implementation agreement, site visit (yes/no), whether the Project passes the suitability threshold (yes/no), State and county, MLRA grouping, soil texture category, prior land use category, area in each project stratum (acres), fossil fuel usage and animal grazing days. RCE found no material errors in any of these inputs.

Project emissions consisted of direct emissions of CO_2 from the combustion of diesel which is used in mobile equipment supporting grazing operations. No synthetic or organic fertilizer application takes place on the property. Additionally, Carroll confirmed that there were no fires on the land during the reporting period. Project emissions increased substantially due in part to the changes in the CAR template for the global warming potentials for CH_4 and N_20, and in part due to a more accurate accounting of livestock on site, as described below.

Bluesource used the GrassTool to quantify project emissions from grazing. RCE reviewed the Project Owner's method of calculating total animal grazing days and found it to be reasonable. The Project Owner calculates animal grazing days (AGD) by dividing total acres in the property by acres in the project area and multiplying that percentage by the total number of each type of animal on the property throughout the reporting period. This approach was updated for RP4 to account for the actual number of animals on site made possible by a better tracking system being implemented. Beef cows, beef heifers, yearling heifers, and horses are the only livestock category that grazed in the Project area during this reporting period.

RCE reviewed the Project assertion spreadsheet and corresponding GHG calculations for compliance to the Protocol's calculation methodologies and found no material misstatements in the final Project GHG reduction calculations and results.

4.0 Verification Results

Bluesource provided sufficient evidence and documentation of their emission reduction estimates, data collection procedures, and monitoring and quality control procedures. The verification process focused on verifying the emission reduction calculations and the source data used to quantify the emission reductions in accordance with Protocol requirements.

Table 5 defines the emission reductions verified for this reporting period. During final review, RCE identified no material misstatements in the data or emission reduction calculations.

During the verification process, RCE issued two document requests in order to complete the verification. Bluesource and Carroll sufficiently addressed the document request. The details of these requests are documented in RCE's list of findings provided to the Reserve and Bluesource.

5.0 Conclusion

RCE conducted a risk-based analysis of the CAR1247 Bluesource – Carroll Avoided Grassland Conversion Project emission reduction assertion including a strategic review of the Project data and evidence. Based upon the processes and procedures and the evidence collected, RCE concludes that the GHG assertion is a fair representation of the Project emission reductions resulting from the prevention of GHG emissions to the atmosphere through conserving grassland belowground carbon stocks and avoiding crop cultivation activities during the reporting period from June 16, 2020 through June 15, 2021. The GHG assertion can be considered:

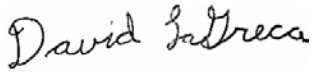
- In conformance with the Reserve Grassland Project Protocol Version 1.0,
- Without material discrepancy, and
- Verified to a reasonable level of assurance.

The verified emission reductions are listed in Table 3.

Table 3. Emission Reductions Verified for June 16, 2020 through June 15, 2021.

Vintage	Total Emission Reductions CO_2e (metric tons)	Buffer Pool Contribution CO_2e (metric tons)	Total Emission Reductions Issued to Account Holder CO_2e (metric tons)
2020	5,844	135	5,979
2021	4,874	113	4,987

Lead Verifier Signature



David LaGreca

Senior Internal Reviewer Signature

Phillip Cunningham