



&



Verification Report

ACR634 ILTF/NICC & SIG Fond Du Lac Band Forest Carbon Project

April 25, 2023

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

TABLE OF CONTENTS

1	Introduction	3
1.1	Objectives	3
1.2	Project Background	3
1.3	Responsible Parties	3
1.4	Verification Team	4
1.5	Verification Criteria	4
1.5.1	Verification Standards, Guidelines, and Tools	4
1.5.2	Level of Assurance	4
1.5.3	Materiality	4
2	Verification Process	5
3	Verification Findings	5
3.1	Project Boundary and Activities	5
3.2	GHG Sources Sinks, and Reservoirs	6
3.3	Eligibility	6
3.3.1	ACR Eligibility	6
3.3.2	Methodology Eligibility	7
3.4	Additionality	7
3.4.1	Regulatory Surplus Test	7
3.4.2	Common Practice Test	7
3.4.3	Implementation Barriers Test	7
3.5	Permanence	8
3.6	Leakage	8
3.7	Environmental and Community Impacts	8
3.8	Local Stakeholder Consultation	9
3.9	Monitoring Plan	9
3.10	Baseline Scenario	9
3.11	On-site Inventory Verification Check	10
3.12	Project Data and GHG Emissions Reduction Assertion	10
3.12.1	Baseline Emissions	10
3.12.2	Project Emissions	10
3.12.3	Emissions Reductions	11
4	Verification Results	11
5	Verification Conclusion	11
	Appendix A—Documents Reviewed	13
	Appendix B—List of Findings	14

1 INTRODUCTION

The Indian Land Tenure Foundation (ILTF) contracted with Ruby Canyon Environmental, Inc. (RCE) to perform the verification of the ACR 634 ILTF/NICC & SIG Fond Du Lac Band Forest Carbon Project (Project) for the reporting period of January 9, 2021 – January 8, 2022 under the American Carbon Registry (ACR) program. ILTF acts as the project proponent for the landowner, Fond Du Lac Band of Lake Superior Chippewa (FDL). Spatial Informatics Group, LLC (SIG) acts as the project developer and manages the Project through the verification process.

This report is documentation of verification activities that RCE performed for the Project. For the verification, RCE ensured that the GHG assertion was materially correct, that the data provided to RCE was well documented, and that if ILTF and SIG made any material errors, that these errors were corrected.

RCE worked with Forest Resource Solutions and Technologies (FRST) to complete this verification.

1.1 OBJECTIVES

The objectives of the verification are to evaluate:

- The emissions reductions and to ensure that the assertion is materially correct;
- The data provided to RCE can be documented and if errors or omissions are detected, they be corrected

RCE retains all data and documents for seven years after the end of the project reporting period or for the duration required by ACR, whichever is longer.

1.2 PROJECT BACKGROUND

The Project area is located on 8,326 acres of upland forests in Minnesota.

The Fond du Lac Reservation was established under the 1854 Treaty with the United States Government. It is one of six Chippewa Indian Reservations in the State of Minnesota organized under the Minnesota Chippewa Tribe.

The Project is situated within 42,500 acres of tribal land, of which approximately 28,000 acres is forested. By committing to maintain forest CO₂ stocks above the regional baseline, the project will provide significant climate benefits through carbon sequestration.

1.3 RESPONSIBLE PARTIES

Project Proponent

Indian Land Tenure Foundation
151 County Road B2E
Little Canada, Minnesota 55117

Bryan Van Stippen, NICC Program Director
Phone: 651-789-1744

Project Developer

Spatial Informatics Group, LLC.
2529 Yolanda Ct.
Pleasanton, CA 94566
Charles Kerchner, Carbon Domain Manager
Phone: 802-999-6986

1.4 VERIFICATION TEAM

Lead Validator and Verifier: Zach Eyler
Biometrician: Andrea Eggleton, FRST
Professional Forester: Christian Eggleton, FRST
Forestry Analyst: Tim Facemire, FRST
Internal Reviewer: Phillip Cunningham

1.5 VERIFICATION CRITERIA

1.5.1 Verification Standards, Guidelines, and Tools

- ILTF/NICC & SIG Fond Du Lac Band Forest Carbon Project, Greenhouse Gas Plan, Version 1.2 (April 27, 2022)
- ILTF/NICC & SIG Fond Du Lac Band Forest Carbon Project Monitoring Report (April 24, 2023)
- ACR Standard, Version 7.0 (December 2020)
- ACR Validation and Verification Standard Version 1.1 (July 2019)
- Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non - Federal U.S. Forestlands v.1.3, April 2018
- Errata and Clarifications - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non - Federal U.S. Forestlands v.1.3, September 30, 2021
- ISO 14064-3:2006 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions”

1.5.2 Level of Assurance

The verification was conducted to a reasonable level of assurance.

1.5.3 Materiality

The verification was conducted to ACR’s required materiality threshold of +/-5% of the GHG project’s emissions reductions or removal enhancements.

2 VERIFICATION PROCESS

As the first step in verification activities, the Lead Verifier developed a Verification Plan to be followed throughout the verification. The plan included the following activities:

- RCE completed a COI form on September 1, 2022 to identify any potential conflict of interest with the Project or Project Developer. The COI form was approved by ACR on September 7, 2022.
- RCE, FRST and SIG held a verification kick-off meeting on September 14, 2022. During the kick-off meeting RCE reviewed the verification objectives and process, reviewed the schedule, and submitted an initial document request.
- 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 process and were revised as needed based upon additional risk assessments.
- During the initial validation/verification, the verification team conducted the site visit to the Project to verify the inventory quality and forest management practices on June 2, 2021. No site visit was conducted as part of this verification.
- RCE performed a risk-based desktop review of the submitted verification documents. The desktop review included an assessment of the GHG calculation methods and inputs, source data completeness, GHG management and monitoring systems and eligibility documentation.
- RCE conducted interviews and had conversations with Project personnel during the verification. Personnel interviewed include:
 - Tim Kramer – SIG
- RCE submitted requests for corrective actions, non-material findings, additional documentation, and clarifications as necessary to ILTF and SIG throughout the verification.
- RCE's internal reviewer conducted a review of the verification sampling, report, and statement.
- RCE issued a final verification report, verification statement, and List of Findings.
- RCE and FRST held an exit meeting with SIG.

3 VERIFICATION FINDINGS

3.1 PROJECT BOUNDARY AND ACTIVITIES

The Project entails improved forest management on 8,326 acres of upland forests in Minnesota. GHG emission reductions for the Project are quantified by comparing actual onsite carbon stocks against modeled baseline onsite carbon stocks and baseline carbon in harvested wood products. The difference in these Project and baseline carbon stocks year over year is the basis for calculating the Project's primary goal of maintaining and enhancing forest GHG pools.

The Project's temporal boundary is the crediting period from January 9, 2019 – January 8, 2039.

3.2 GHG SOURCES SINKS, AND RESERVOIRS

Table 1 shows the GHG emission sources included in the project boundary based on the Methodology. RCE confirmed that the Project Plan appropriately identifies the offset project boundary and includes all relevant SSRs.

Table 1. GHG Emissions Sources

Source	GHG	Description
Above-ground biomass	CO ₂	Major carbon pool for project activity
Below-ground biomass	CO ₂	Major carbon pool for project activity
Standing dead wood	CO ₂	Major carbon pool in unmanaged stands for the project activity
Harvest wood products	CO ₂	Major carbon pool for project activity
Market Effects	CO ₂	Reductions in project outputs due to project activity may be compensated by other entities in the marketplace. Those emissions must be included in the quantification of project benefits.

3.3 ELIGIBILITY

3.3.1 ACR Eligibility

RCE confirmed the following ACR eligibility criteria listed in the ACR Standard, Version 7.0 by reviewing the project proponent's Project Plan, Monitoring Report, and calculations as well as other supporting documentation described throughout this report (a full list of documents reviewed is in Appendix A).

- **Start Date:** The project start date is January 9, 2019.
- **Minimum Project Term:** The minimum project term is 40 years.
- **Crediting Period:** The crediting period is 20 years as specified by the Methodology, January 9, 2019 – January 8, 2039.
- **Real:** RCE confirmed that the GHG reductions follow the ACR methodology and are verifiable.
- **Emission or Removal Origin:** RCE confirmed that FDL and ILTF own and has control over, or document effective control over the GHG sources/sinks from which the emissions reductions or removals originate.
- **Offset Title:** RCE confirmed that title to all emission reductions from the Project are owned by the Project Proponent (ILTF).
- **Additional:** RCE confirmed that the project is additional as described in Section 3.4.
- **Regulatory Compliance:** RCE confirmed that the Project was in compliance with all applicable regulations.
- **Permanent:** RCE confirmed that the Project correctly applied the ACR Tool for Risk Analysis and Buffer Determination to account for permanence. A total risk score of 16% was confirmed.
- **Net of Leakage:** RCE confirmed that the Project correctly accounted for leakage per the Methodology.
- **Independently Verified:** RCE is a third-party verification body that the project proponent has contracted to verify the Project.

- Environmental and Community Assessments: RCE reviewed project impacts as described in section 3.6 of this report.

3.3.2 Methodology Eligibility

RCE reviewed the Project against the ACR Methodology eligibility and applicability conditions and confirmed the following:

- The Project is on lands not federally owned.
- FDL controls the timber rights on the forestland and can legally harvest.
- The Project does not have commercial timber harvesting occurring on or after the project start date.
- The Project is on tribal lands.
- The Project is not on public non-federal lands.
- The Project does not use non-native species where adequately stocked native stands were converted for forestry or other land uses after 1997.
- The Project has not drained or flooded wetlands on or after the project start date.
- FDL owns the land and timber rights and transferred all carbon credit title to ILTF.
- The Project's stocking levels will increase well above the baseline conditions for the duration of the Project and by the end of the Crediting Period.

3.4 ADDITIONALITY

The Project meets the requirements for the demonstration of additionality specified by the ACR Standard and the Methodology.

3.4.1 Regulatory Surplus Test

RCE confirmed that there are no existing laws, regulations, statutes, legal rulings, or other regulatory frameworks in effect as of the start date that requires the Project activity and the associated GHG emissions reductions; thus the Project passes the regulatory surplus test.

3.4.2 Common Practice Test

The Project area is most similar to industrial forestland, which is most common for private lands in the region. Private land is typically heavily clearcut to maximize NPV. With Project implementation the forestland carbon stocks will exceed the common practice found in the region.

3.4.3 Implementation Barriers Test

The Project chose to assess the financial barriers test per the ACR Standard and Methodology. RCE confirmed that carbon funding is reasonably expected to incentivize the Project's implementation. Due to the Project being implemented, FDL loses the ability to monetize timber harvests during the life of the Project. SIG provided a financial assessment comparison of NPV between the baseline scenario with harvesting and the project scenario without harvesting but including revenue from carbon credits. Without carbon funding the project scenario NPV is zero compared to a positive NPV for the baseline scenario with harvesting.

3.5 PERMANENCE

RCE confirmed that the Project correctly applied the ACR Tool for Risk Analysis and Buffer Determination to account for permanence. A total risk score of 16% was confirmed.

RCE and FRST also confirmed that the Project committed to a 40-year agreement with ACR by signing the AFOLU Carbon Project Reversal Risk Mitigation Agreement. Through this agreement and the ACR Tool the Project adequately addressed potential causes of unintentional reversals.

3.6 LEAKAGE

RCE and FRST confirmed that the Project correctly accounted for leakage. The Project demonstrated that there is no activity-shifting leakage since there is an entity-wide management certification that covers all entity owned lands. The Project also correctly accounted for market leakage per the Methodology – since wood products decreased by greater than 25%, the market leakage is 40%.

3.7 ENVIRONMENTAL AND COMMUNITY IMPACTS

The Project Plan includes a summary of the Project activity's net positive environmental and community impacts. The Project will provide environmental benefits including carbon sequestration, habitat protection for wildlife, trees, and plant species, water quality protection, and reduced soil erosion. The Project is not expected to cause any negative environmental impacts.

Sustainable Development Goals

Goal	Impact (+, -, N/A)	Rationale	RCE Conclusion
GOAL 1: No Poverty	N/A		Not included.
GOAL 2: Zero Hunger	N/A		Not included.
GOAL 3: Good Health and Well-being	N/A		Not included.
GOAL 4: Quality Education	N/A		Not included.
GOAL 5: Gender Equality	N/A		Not included.
GOAL 6: Clean Water and Sanitation	+	By maintaining forests and ensuring sustainable forest management the project reduces erosion and non-point source water pollution.	Project will provide this benefit.
GOAL 7: Affordable and Clean Energy	N/A		Not included.
GOAL 8: Decent Work and Economic Growth	+	By maintaining forest, habitats, and recreational opportunities the project contributes to tourism, an important resource to the local economy.	Project will provide this benefit.
GOAL 9: Industry, Innovation and Infrastructure	+	The project provides a new revenue.	Project will provide this benefit.

GOAL 10: Reduced Inequality	N/A		Not included.
GOAL 11: Sustainable Cities and Communities	+	By maintaining forests and ensuring sustainable forest management the project sustains the character and economic viability of local communities.	Project will provide this benefit.
GOAL 12: Responsible Consumption and Production	N/A		Not included.
GOAL 13: Climate Action	+	By maintaining forest and ensuring sustainable forest management the project increases sequestration of carbon.	Project will provide this benefit.
GOAL 14: Life Below Water	N/A		Not included.
GOAL 15: Life on Land	+	By maintaining forest and ensuring sustainable forest management the project protects habitat benefits both within the project area and the larger landscape.	Project will provide this benefit.
GOAL 16: Peace and Justice Strong Institutions	N/A		Not included.
GOAL 17: Partnerships to achieve the Goal	N/A		Not included.

3.8 LOCAL STAKEHOLDER CONSULTATION

No formal stakeholder consultation occurred since the Project is held on private tribal lands.

3.9 MONITORING PLAN

The Project Plan includes a Monitoring Plan that identifies all monitored data and parameters. RCE confirmed that the monitoring parameters and approaches conform to the methods required by the Methodology. The plan includes all relevant data parameters and appropriately identifies units of measurements, data sources, methodologies, uncertainty, monitoring frequency and procedures, and QA/QC procedures. After discussions with SIG and reviews of project documents, RCE determined that the Monitoring Plan accurately reflects how Project data is monitored and recorded and there are no deviations relevant to the Project activity against the requirements of the Methodology. ILTF and SIG implemented the monitoring plan as stated in the Project Plan during Project activities.

3.10 BASELINE SCENARIO

The Project's baseline scenario represents harvest levels that maximize the net present value (NPV) at a 5% discount rate (for Tribal Land) subject to FDL's existing harvest constraints, which limits harvest regimes to be more conservative than typical practices in the project region. The baseline also includes restrictions due to Minnesota State Forest Practice Laws.

The Project's baseline model simulates a range of harvest types and rotation lengths based on legal requirements and simulated growth within each stratum. The objective of modeling was to determine possible timber harvests in the project area over 100-years within the framework of legal and reasonable harvest constraints.

Stands were modeled for different prescriptions including no harvest and clearcut.

ILTF and SIG utilized the USDA's Forest Vegetation Simulator (FVS) Lake States variant to model harvests and yields. Growth models were calibrated using site index values obtained from tree cores of dominant/codominant species located in or close to project plots. With this site tree data, Carmean site index curves from GTR 88 and 128 were then used to calculate site specific indices to appropriately calibrate growth. The process was confirmed to be consistently and systematically applied to each plot.

RCE reviewed the resulting baseline outputs to ensure that they reflected the modeling objectives and the legal additionality requirements. The model grows trees and volumes at a reasonable rate compared to regional averages.

3.11 ON-SITE INVENTORY VERIFICATION CHECK

This reporting period did not include an on-site inventory verification. The verification team confirmed the on-site carbon stocks during the initial validation/verification.

Project Area

During the previous site visit, the Verification Team conducted boundary-line reconnaissance by visiting Project boundary edge lines and points, plotting edge points with GPS receivers, and determining whether there were discrepancies with the digital Project boundary files provided by SIG and the physical boundary witnessed on-site. This was done to determine the risk that Project area inaccuracies could contribute to a material misstatement in Project emission reductions. To the extent feasible, the Verification Team confirmed that the Project area boundary was appropriate and accurate.

3.12 PROJECT DATA AND GHG EMISSIONS REDUCTION ASSERTION

RCE reviewed the Project Plan and Project data and calculations to ensure that appropriate equations were used in calculating baseline emissions, project emissions, and net emissions reductions.

3.12.1 Baseline Emissions

RCE and FRST confirmed that the baseline emissions were correctly calculated. See more detail in section 3.10.

3.12.2 Project Emissions

RCE and FRST confirmed that the project emissions were correctly calculated.

3.12.3 Emissions Reductions

RCE verified that SIG calculated emissions reductions according to relevant Methodology equations and that the methods are included in the Project Plan.

RCE recalculated emissions reductions for this reporting period according to the equations defined in the Methodology and the Project Plan and found the Project assertion to be free of material misstatement.

RCE and FRST also recalculated and confirmed the uncertainty assessment for the Project. The uncertainty calculation is the compiled square roots of the summed errors of each of the strata using a 90% confidence interval. RCE and FRST confirmed that the live, dead, and total uncertainty for the reporting period onsite carbon stocks was accurate.

4 VERIFICATION RESULTS

RCE developed a List of Findings for the verification. The List of Findings noted all corrective action requests (CARs), non-material findings (NMs), additional documentation requests (ADRs), and clarification requests (CRs), as necessary. ILTF and SIG appropriately responded to all items in the List of Findings. The List of Findings is provided as Appendix B.

5 VERIFICATION CONCLUSION

RCE conducted a risk-based verification of the ILTF/NICC & SIG Fond Du Lac Band Forest Carbon Project that included a strategic review of the project data, documentation, and emission reduction calculations. The objective of the verification activities was to conduct an independent assessment of the Project's second reporting period and resulting ex-post GHG emission reductions.

Based on the review and the historical evidence collected, RCE concludes to a reasonable level of assurance that the Project's GHG assertion is free of material misstatement. The emission reductions resulting from the reporting period January 9, 2021 – January 8, 2022 can be considered in conformance with the:

- ACR Standard, Version 7.0 (December 2020)
- ACR Validation and Verification Standard Version 1.1 (May 2018)
- Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non - Federal U.S. Forestlands v.1.3, April 2018
- Errata and Clarifications - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non - Federal U.S. Forestlands v.1.3, September 30, 2021
- ISO 14064-3:2006 "Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions"

Table 2 provides a summary of the emissions reductions.

Table 3. Total ERTs

Vintage	Removal ERTs (mtCO ₂ e)	Other ERTs (mtCO ₂ e)	Total GHG Reductions and Removals (mtCO ₂ e)		Risk Buffer (mtCO ₂ e)	Total GHG Reductions and Removals (mtCO ₂ e)
2021	15,493	72,688	88,180		16,797	104,978
2022	316	1,483	1,800		343	2,142
Total	15,809	74,171	89,980		17,140	107,120

Note: Totals might not sum due to rounding.

Lead Verifier


Zach Eyler

Internal Reviewer


Phillip Cunningham

APPENDIX A—DOCUMENTS REVIEWED

1. ERTs-FdL-Breakdown_RP2_2022.09.15
2. FDL_MonitoringReport_RP2_2022.09.22
3. FDL_Monitoring Report_RP2_Signed_2023.04.19
4. FDL_Monitoring Report_RP2_Signed_2023.04.24
5. Fond du Lac RP2 Change log
6. PC368_FDL14_ERTs_Strata_MaxNPV_RP2 Update_20220926

APPENDIX B—LIST OF FINDINGS

Includes corrective actions (CAR), non-material findings (NM), additional documentation (ADR), and clarification requests (CR), as necessary.

Corrective Action Request, Nonmaterial Item, Additional Documentation Request, or Clarification Request ID#	Finding	Client response	RCE response	Open or Closed
CAR 1				
NM 1				
ADR 1				
CR 1	Have there been any changes in the project boundary, stratification, plot layout, SMZs, or other applicable shapefiles?	No, there are no changes to the project boundary, stratification, plot layout, SMZs, or other applicable shapefiles.	Thank you for the confirmation, this item may be closed.	Closed
CR 2	Has there been any harvesting, or other disturbance larger than the minimum mapping unit that occurred over the course of this RP?	No, there has been no harvesting or other disturbance in this RP.	Thank you for the confirmation, this item may be closed.	Closed