

VALIDATION AND VERIFICATION REPORT

American Carbon Registry

ACR 701: Finite Carbon - Windrock Land Company

Reporting Period:

16 June 2021 to 1 March 2022

Prepared for:

Finite Carbon

4 November 2022



AMERICAN CARBON REGISTRY

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Executive Summary

This report describes the verification services provided for the Finite Carbon – Windrock Land Company IFM (“the project”), an Improved Forest Management (IFM) project located in Tennessee, that was conducted by SCS Global Services. The project proponent is the Windrock Land Company. The overall goal of the validation engagement was to review impartially and objectively the GHG project plan against the requirements laid out in the ACR Standard and relevant methodology. The overall goal of the verification engagement was to review impartially objectively the claimed GHG emission reductions/removal enhancements for the reporting period from 16 June 2021 to 1 March 2022 against relevant ACR standards and the approved methodology. The verification engagement began on 6 May 2022, it was carried out through a combination of document review, interviews with relevant personnel and on-site inspections. As part of the verification engagement 10 findings were raised: 1 Non-Conformity Reports, 8 New Information Requests and 1 Observations. These findings are described in Appendix A of this report. The project complies with the verification criteria, and SCS holds no restrictions or uncertainties with respect to the compliance of the project with the verification criteria.

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1 Introduction

1.1 About SCS Global Services

SCS Global Services (SCS) is a global leader in third-party certification, auditing, testing services, and standards. Established as an independent third-party certification firm in 1984, our goal is to recognize the highest levels of performance in environmental protection and social responsibility in the private and public sectors, and to stimulate continuous improvement in sustainable development. In 2012, Scientific Certification Systems, Inc. began doing business as SCS Global Services, communicating its global position with offices and representatives in over 20 countries.

SCS' Greenhouse Gas (GHG) Verification Program has been verifying carbon offsets since 2008 and to date has verified over 290 million tonnes of CO₂e, providing GHG verification services to a wide array of industries including manufacturing, transportation, municipalities, and non-profit organizations. The GHG Verification Program draws upon SCS's established expertise to serve the global carbon market.

1.2 Objectives

1.2.1 Validation Objectives

The overall goal of third-party validation was to review impartially and objectively the GHG project plan against the requirements laid out in the ACR Standard and relevant methodology. SCS independently evaluated the project design and planning information, based on supporting documentation and GHG validation best practices.

The objectives of validation were to evaluate

- Conformance to the ACR Standard.
- GHG emissions reduction project planning information and documentation in accordance with the applicable ACR-approved methodology, including the project description, baseline, eligibility criteria, monitoring and reporting procedures, and quality assurance/quality control (QA/QC) procedures.
- Reported GHG baseline, ex ante estimated project emissions and emission reductions/removal enhancements, leakage assessment, and impermanence risk assessment and mitigation (if applicable).

SCS reviewed any relevant additional documentation provided by the project proponent to confirm the project's eligibility for registration on ACR.

1.2.2 Verification Objectives

The overall goal of third-party verification was to review impartially and objectively the claimed GHG emission reductions/removal enhancements against relevant ACR standards and the approved

methodology. SCS independently evaluated the GHG assertion, based on supporting evidence and GHG verification best practice. The objectives of verification were to evaluate

- Reported GHG baseline, project emissions and emission reductions/removal enhancements, leakage assessment, and impermanence risk assessment and mitigation (if applicable).
- Common practice claims, silvicultural prescriptions used in the baseline/project scenarios, and local mill capacities and wood product market trends.
- Ownership documentation, regulatory compliance requirements, and project boundaries.

SCS reviewed the GHG project plan, GHG assertion, and any additional relevant documentation provided by the client to determine

- That the reported emissions reductions and/or removal enhancements are real.
- Degree of confidence in and completeness of the GHG assertion.
- That project implementation was consistent with the GHG project plan.
- Eligibility for registration on ACR.
- Sources and magnitude of potential errors, omissions, and misrepresentations, including the
 - Inherent risk of material misstatement.
 - Risk that the existing controls of the GHG project would not have prevented or detected a material misstatement.

1.3 Scope

1.3.1 Scope of Validation

The validation included examination of all the following elements of the GHG project plan:

- Project boundary and procedures for establishing the project boundary
- Physical infrastructure, activities, technologies, and processes of the project
- GHGs, sources, and sinks within the project boundary
- Temporal boundary
- Description of and justification for the baseline scenario
- Methodologies, algorithms, and calculations that will be used to generate estimates of emissions and emission reductions/removal enhancements
- Process information, source identification/counts, and operational details
- Data management systems
- QA/QC procedures
- Processes for uncertainty assessments
- Project-specific conformance to ACR eligibility criteria

1.3.2 Scope of Verification

Verification included examination of some or all the following elements of the GHG project plan:

- Physical infrastructure, activities, technologies, and processes of the GHG project
- GHG SSRs within the project boundary
- Temporal boundary
- Baseline scenarios
- Methods and calculations used to generate estimates of emissions and emission reductions/removal enhancements
- Original underlying data and documentation as relevant and required to evaluate the GHG assertion
- Process information, source identification/counts, and operational details
- Data management systems
- Roles and responsibilities of project participants or client staff
- QA/QC procedures and results
- Processes for and results from uncertainty assessments
- Project-specific conformance to ACR eligibility criteria

SCS examined the reported data, quantification methodologies, calculation spreadsheets or databases, source data, project data management systems, data quality controls in place, measurement and monitoring systems, and records pertaining to emissions quantification. Calculation and error checks, site inspections, interviews with project participants, an iterative risk assessment, sampling plan, and audit checklist were performed to the extent necessary for SCS to develop an understanding of how data are collected, handled, and stored for a specific project.

Finally, as a full verification, the verification services included a field visit to the project site and

- Such carbon stock measurements as SCS required to provide a reasonable level of assurance that the GHG assertion is without material discrepancy (per ACR's materiality threshold of $\pm 5\%$).
- Updated assessment of the risk of reversal and an updated buffer contribution.

1.4 Validation and Verification Criteria

The validation and verification criteria were comprised of the following:

- ACR Standard, Version 7.0
- Improved Forest Management (IFM) on Non-Federal U.S. Forestlands, Version 1.3 ("the methodology")
- ACR Tool for Risk Analysis and Buffer Determination, Version 1.0
- ACR Validation and Verification Standard, Version 1.1

1.5 Level of Assurance

The level of assurance was reasonable.

1.6 Treatment of Materiality

For validation purposes, a material misstatement was declared if any of the following circumstances were detected:

- The physical or geographic boundary of the GHG project plan was not reasonably accurate.
- In respect of the project baseline,
 - The procedures for determining baseline emissions were not technically sound.
 - Data representative of the operations and activities had not been used, either from a single year or a multi-year average.
 - The baseline scenario chosen was not one for which verifiable data are available.
- In respect of the quantification methodology,
 - The quantification method for each data type was not clearly defined, and/or the degree of supporting documentation provided was inadequate to support a reasonable level of assurance.
 - Methods were not appropriate for accurately quantifying each data type:
 - Activity data had not been correctly applied from the original documentation.
 - The most accurate activity data readily available had not been used.
 - The quantification methodology did not account for all variations in activity data over the relevant crediting period.
 - Any emission factors used did not meet the requirements of the approved methodology and/or are not appropriate to the activity.
 - Any emission factors used had not been correctly applied from the original documentation to the relevant activity data.
 - The most appropriate factors readily available had not been selected.
 - Where there was a choice among equally defensible emission factors, the principle of conservativeness had not informed the choice of emission factors.
 - Methods were not applied consistently to develop estimates of emission reductions and removal enhancements.
 - The ISO principle of conservativeness was not applied, i.e., the choice of assumptions, calculation methods, parameters, data sources, and emission factors was not more likely to lead to an underestimation than overestimation of net GHG emission reductions and removal enhancements.

For verification purposes, it was required that discrepancies between the emission reductions/removal enhancements claimed by the project proponent and estimated by SCS be immaterial, i.e., be less than ACR's materiality threshold of $\pm 5\%$, as calculated according to the equation in the ACR Standard.

1.7 Summary Description of the Project

The project is located on 63,980 acres of forests distributed across Campbell, Anderson, Morgan, and Roane counties in eastern Tennessee. The project area is owned by the Windrock Land Company and is certified by the Forest Stewardship Council. The improved forest management practices of this project focus on sustainable management practices to encourage improvements in forest health and restoration, while also providing recreational opportunities.

2 Assessment Process

2.1 Method and Criteria

The validation and verification services were provided through a combination of document review, interviews with relevant personnel and on-site inspections, as discussed in Sections 2.2 through 2.4 of this report. At all times, an assessment was made for conformance to the criteria described in Section 1.2 of this report. As discussed in Section 2.5 of this report, findings were issued to ensure conformance to all requirements.

The audit team created a sampling plan following a proprietary sampling plan template developed by SCS. The audit team identified areas of "residual risk"—those areas where there existed risk of a material misstatement (see Section 1.6 above) that was not prevented or detected by the controls of the project. Sampling and data testing activities were planned to address areas of residual risk. The audit team then created a validation and verification plan that took the sampling plan into account.

2.2 Document Review

The GHG project plan (dated 30 Aug. 2022; "PP") and monitoring report (dated 08 April 2022; "MR") were carefully reviewed for conformance to the validation and verification criteria. The following provides a list of additional documentation, provided by project personnel in support of the aforementioned documents, that was reviewed by the audit team.

Documentation Reviewed During the Course of Validation and Verification Activities		
Document	File Name	Ref.
GHG Plan	ACR701 GHG Project Plan_draft_11022022.pdf	1
Monitoring Report	ACR701 RP1 Monitoring Report_11012022_updated.pdf	2
Calculations Workbook (ERTs, Leakage, Uncertainty, HWPs, NPV)	ACR701 GHGPP Calculations v1.2_11012022.xlsx	3

Baseline Harvest Schedule	ACR701 Windrock Baseline Harvest Schedule Calculation.xlsx	4
Forest Inventory Workbook	ACR701 Inventory Data.xlsx	5
Carbon Development Services Agreement	Redacted CDSA (6-16-2021) Executed.pdf	6
Project GIS database	ACR701_RP1.gdb	7
Inventory Methodology	ACR701 Appendix B. Inventory Specifications.pdf	8
Figures A1-A6 and Associated Maps	ACR701 Appendix C. Project Maps	9
Baseline FVS Input and Output databases	ACR701 Windrock Baseline Modeling Package v 1.0.zip ACR701 Windrock FVS Output DB v1.0 04012022.accdb ACR701 Windrock FVS Input DB v1.0 04012022.accdb Windrock_BaselineRxs_04012022.key	10
FVS model out/key files from Test runs for Verification	Test10132022B_OUT Test10132022B.key	11
Supersection/Assessment Area Workbook	Windrock_Supersection_CP.xlsx	12

2.3 Interviews

2.3.1 Interviews of Project Personnel

The process used in interviewing project personnel was a process wherein the audit team elicited information from project personnel regarding (1) the work products provided to the audit team in support of the PD and MR; (2) actions undertaken to ensure conformance with various requirements and (3) implementation status of the project activities. The following provides a list of personnel associated with the project proponent who were interviewed.

Interview Log: Individuals Associated with Project Proponent			
Individual	Affiliation	Role	Date(s) Interviewed
Eric Downing	Finite Carbon	Vice President of Voluntary projects	Throughout Audit
Nathan Hanzelka	Finite Carbon	Associate Director	Throughout Audit
Brian Sharer	Finite Carbon	Director	Throughout Audit

2.3.2 Interviews of Other Individuals

The process used in interviewing individuals other than project personnel was a process wherein the audit team made inquiries to confirm the validity of the information provided to the audit team. The

following personnel not associated with the project proponent. The following provides a list of individuals not associated with the project proponent who were interviewed.

Interview Log: Individuals Not Associated with Project Proponent			
Individual	Affiliation	Role	Date(s) Interviewed
Joe Johnson	Tennessee Department of Agriculture	Area Forester	10/21/2022

2.4 Site Inspections

The objectives of the on-site inspections were to evaluate:

- Reported GHG baseline, project emissions and emission reductions/removal enhancements, leakage assessment, and impermanence risk assessment and mitigation (if applicable)
- Any significant changes to the project procedures or criteria from the project start date
- Any significant changes in the GHG project's baseline emissions and emission reductions/removal enhancements since the project start date.

In support of the above objectives, the audit team performed an on-site inspection of the project area on the dates 16 May 2022 through 19 May 2022. The main activities undertaken by the audit team were as follows:

- Interviewed project personnel (see Section 2.3.1 of this report) to gather information regarding the monitoring procedures and project implementation
- Carried out on-site inspections of the project's measurement and/or monitoring methodologies through the following activities:
 - Toured the project area, visually observing the canopy cover, forest health issues, and assessed accuracy of provided maps
 - Selected samples of inventory data using simple random selection methods.
 - At each selected sample location, took on the ground measurements.
 - Verified the sample by running a paired sample t-test on the independently calculated Mt CO₂e/acre on each plot.
- Review of management's commitment to the carbon project.
- Discussed operating methods and restrictions relating to baseline harvesting.
- Assessment of project during the reporting period to confirm that the project scenario consists of maintaining above baseline carbon stocks through carbon sequestration.

2.5 Resolution of Findings

Any potential or actual discrepancies identified during the audit process were resolved through the issuance of findings. The types of findings typically issued by SCS during this type of validation and verification engagement are characterized as follows:

- **Non-Conformity Report (NCR):** An NCR signified a discrepancy with respect to a specific requirement. This type of finding could only be closed upon receipt by SCS of evidence indicating that the identified discrepancy had been corrected. Resolution of all open NCRs was a prerequisite for issuance of a validation and/or verification statement.
- **New Information Request (NIR):** An NIR signified a need for supplementary information in order to determine whether a material discrepancy existed with respect to a specific requirement. Receipt of an NIR did not necessarily indicate that the project was not in compliance with a specific requirement. However, resolution of all open NIRs was a prerequisite for issuance of a validation and/or verification statement.
- **Observation (OBS):** An OBS indicates an area where immaterial discrepancies exist between the observations, data testing results or professional judgment of the audit team and the information reported or utilized (or the methods used to acquire such information) within the GHG assertion. A root cause analysis and corrective action plan are not required, but highly recommended. Observations are considered by the audit team to be closed upon issuance, and a response to this type of finding is not necessary.

As part of the audit process, 1 NCRs, 8 NIRs and 1 OBS were issued. All findings issued by the audit team during the audit process have been closed. All findings issued during the audit process, and the impetus for the closure of each such finding, are described in Appendix A of this report.

2.6 Techniques and Processes Used to Test the GHG Information and GHG Assertion

The audit team applied various techniques and processes to test the GHG information and the GHG assertion over the course of the audit, listed below:

- Review of project documentation including the GHG Plan (Ref. 1), MR (Ref. 2), spatial information (Refs. 7), and calculation workbooks (Refs. 3-5) to check for project-specific conformance to ACR standard and methodology, appropriateness of methodologies and tools applied, accuracy of GHG information and assertion
- Assessment of any disturbances or forest management activities, including a discussion with project personnel on any harvest activities.
- Review of sources, sinks and reservoirs of GHG emissions within the project boundary.
- Assessment of eligibility, additionality, GHG emission reduction assertion and underlying monitoring data to determine if either contained material or immaterial misstatements.
- Assessment of the emission reduction calculation inputs and procedures was performed to review the quantitative analyses undertaken by Finite Carbon to convert the raw inventory data into emission reduction estimates during the reporting period (Refs. 3-5). This included a re-calculation of project emissions, ERTs, and uncertainty using inventory data as described below in section 3.1 and 3.2.

- Baseline scenario modeling and ex ante estimates were also reviewed, recalculated, and remodeled. This included a look at the feasibility financially and physically to accomplish the claims made in the baseline scenario.
- Communicate with project personnel and project proponent via interviews, emails, and meetings to gain a better understanding of the project team's methodologies.
- Examine the data management and quality control processes and its controls for sources of potential errors and omissions.
- Review of project documentation including risk assessment and regulatory compliance (section IX of the monitoring report).
- Attention is paid to the common practice assessment as well.

3 Validation Findings

3.1 Project Boundary and Activities

3.1.1 Project Boundary and Procedures for Establishment

A description of the physical boundary of the project was provided, which is located on 63,980.1 forested acres in eastern Tennessee. The forests are primarily composed of mature and mixed age class oaks, yellow popular, pine, hickory, cherry, and maple tree. The project spans Campbell, Anderson, Morgan, and Roane Counties. The project land is owned and managed by the project proponent, Windrock Land Company. The audit team confirmed that the boundaries were well documented throughout both the document review and site visit activities. During the site visit the audit team independently checked the accuracy of spatial information on ownership, as used in delineation of the project area, by reviewing ownership deeds, shapefiles, and ground truthing project boundaries when possible. Likewise, during document review the audit team inspected project shapefiles (Ref. 7) to confirm project boundaries are accurately represented as compared to boundaries mapped during the site visit, maps provided in the PP, and available satellite imagery.

3.1.2 Physical Infrastructure, Activities, Technologies and Processes

The audit team reviewed the PP and project documentation (Refs. 1-2) which indicate potential infrastructure, activities, and technologies used within the project area. The project activity consists of reducing timber harvest levels to encourage forest health, timber value, and carbon storage. The project area is heavily used for recreational opportunities and is an important ecological habitat for wildlife. The audit team concluded that project activities, infrastructure and technologies will be an improvement in the carbon storage and sustainable forest practices of the area.

3.1.3 GHGs, Sources, and Sinks within the Project Boundary

The GHG sources, sinks and/or reservoirs that are applicable to the Project were confirmed. The sources, sinks, and reservoirs of GHG emissions within the project boundary are listed in the table below. This is the case for both the baseline and project scenarios.

Description	Included/Excluded	Gas	Justification
Above-ground biomass carbon	Included	CO ₂	Major carbon pool subjected to the project activity.
Below-ground biomass carbon	Included	CO ₂	Major carbon pool subjected to the project activity.
Standing dead wood	Included	CO ₂	Major carbon pool in unmanaged stands subjected to the project activity.
Harvested wood product	Included	CO ₂	Major carbon pool subjected to the project activity.
Burning of biomass	Included	CO ₂	Non-CO ₂ gas emitted from biomass burning. Note that no burning is planned in the project.

3.1.4 Temporal Boundary

The ACR Standard indicates that the project must have a validated/verified Start Date of 01 January 2000 or after. Also, in accordance with Chapter 3 of the ACR Standard, the start date is defined as the date that the Project Proponent began to apply the land management regime to increase carbon stocks and/or reduce emissions relative to the baseline. SCS was able to review the PP, and MR for authenticity and to confirm that the management regime has been put in place since the start of the project. SCS concluded that the project start date is eligible (June 16, 2021).

In ACR the minimum project term is 40 years and the eligible crediting period for this type of project is also listed as 40 years. SCS confirmed that the PP included a timeline with a first crediting period of 20 years and a minimum project term of 40 years.

3.2 Description of and Justification for the Baseline Scenario

The methodology defines the baseline scenario as an estimation of the GHG emissions or removals that would have occurred if the Project Proponent did not implement the project. The PP indicates that “The baseline scenario represents an aggressive industrial harvest regime, targeted to maximize net present value at a discount rate of 6%, typical of practices in the project region on industrial private lands. More information on the baseline scenario is provided in E1. BASELINE.” The audit team confirmed that the claims related to annual acreage restrictions, silvicultural prescriptions, and general mill capacity are common in the area as well as recommended under published sources.

During the site visit and through interviews with local managers the audit team verified the harvesting practices of owners managing similar forest types with comparable species and wood product types. The audit team reviewed the justification of the baseline scenario with attention to detail to confirm the claims made regarding harvest types, volume of sawlogs, as well as the capacity of local mills to accept the wood. The audit team also conducted a financial feasibility assessment of the baseline scenario by obtaining regional stumpage rates and tax rates to independently verify NPV. SCS determined that the harvesting rate indicated in the baseline scenario would be feasible and is comparable to the common practice in the region.

3.3 Project-Specific Conformance to ACR Eligibility Criteria

The audit team reviewed the demonstration of conformance, as set out in the PP, to each of the relevant eligibility criteria listed in the ACR Standard. The audit team confirmed the full conformance of the project with the relevant eligibility criteria. A more detailed assessment of the audit team’s findings is provided below.

Actions Undertaken to Confirm Conformance to Eligibility Criteria		
Criterion	ACR Requirement	Validation Activities
Date, All Projects	Non-AFOLU Projects must be validated within 2 years of the project Start Date. AFOLU Projects must be validated within 3 years of the project Start Date.	Confirmation that this report was issued less than 3 years after 16 June 2021, the start date of the project according to the PP.
Start Date Definition, Non-AFOLU Projects	ACR defines the Start Date for all projects other than AFOLU as the date on which the project began to reduce GHG emissions against its baseline.	Not applicable; this project is an AFOLU project.
Start Date Definition, AR or Wetland Projects	For AR or Wetland restoration/revegetation projects, the Start Date is when the Project Proponent began planting or site preparation.	Not applicable; the project is not an AR or wetland project.
Start Date Definition, IFM Projects	For IFM, the Start Date may be denoted by one of the following:	The start date is 16 June 2021, the date by which “The date on which a Carbon Development Services Agreement between the Project Proponent and a

	<p>1. The date that the Project Proponent began to apply the land management regime to increase carbon stocks and/or reduce emissions relative to the baseline.</p> <p>2. The date that the Project Proponent initiated a forest carbon inventory.</p> <p>3. The date that the Project Proponent entered into a contractual relationship to implement a carbon project.</p> <p>4. The date the project was submitted to ACR for listing review.</p> <p>Other dates may be approved by ACR on a case by case basis.</p>	purchaser of the ERTs was fully executed.” This was verified by reviewing the agreement referenced.
Start Date Definition, Avoided Conversion Projects	For Avoided Conversion of non-forest, the Start Date is when the Project Proponent implemented the project action physically and/or legally, such as securing a concession or placing a land conservation agreement on the project land.	Not applicable; the project is not an avoided conversion project.
Start Date Definition, Other Agricultural Land-based Projects	For other Agricultural Land-based projects, the Start Date is the date by which the Project Proponent began the Project Activity on project lands, or the start of the cultivation year during which the Project Activity began.	Not applicable; the project is not another agriculture land-based project.
Minimum Project Term (AFOLU Projects Only)	Project Proponents of AFOLU projects with a risk of reversal shall commit to a Minimum Project Term of 40 years. The minimum term begins on the Start Date, not the first or last year of crediting. This requirement applies only to AFOLU projects that have had ERTs issued that are associated with GHG removals (sequestration). AFOLU projects that have claimed only avoided emissions are not subject to this requirement.	Review of the PP to confirm that the minimum term is 40 years, as required.
Crediting Period	<p>The Crediting Period for non-AFOLU projects shall be 10 years.</p> <p>All AR projects shall have a Crediting Period of 40 years.</p> <p>All IFM projects shall have a Crediting Period of 20 years.</p> <p>Avoided Conversion projects on both forest and non-forest land with land conservation agreements in place shall have a Crediting Period of 40 years, unless otherwise specified in chosen methodologies.</p>	Review of the PP to confirm that the crediting period is 20 years, as required given the project type.

	<p>Wetland Restoration/Revegetation projects shall have a Crediting Period of 40 years.</p> <p>The Crediting Periods for agriculture projects that avoid emissions by changing to lower GHG practices and those that include a soil sequestration component will be specified in the applicable methodology.</p>	
Real	<p>GHG reductions and/or removals shall result from an emission mitigation activity that has been conducted in accordance with an approved ACR Methodology and is verifiable.</p> <p>ACR will not credit a projected stream of offsets on an ex-ante basis.</p>	<p>Review of the emission mitigation activity, as described in the PP, to confirm that it conforms to the requirements of the methodology and will be verifiable if implemented as described.</p>
Emission or Removal Origin (Direct Emissions)	<p>The Project Proponent shall own, have control over, or document effective control over the GHG sources/sinks from which the emissions reductions or removals originate. If the Project Proponent does not own or control the GHG sources or sinks, it shall document that effective control exists over the GHG sources and/or sinks from which the reductions/ removals originate.</p>	<p>Reviewed the supporting documentation, as described in the PP, and a large sample of the project area was confirmed to be owned by the Project Proponent, which indicated they have control over the GHG sources/sinks from which the emissions reductions or removals originate on their respective properties.</p>
Emission or Removal Origin (Indirect Emissions)	<p>For projects reducing or removing non-energy indirect emissions, the following requirement applies:</p> <p>The Project Proponent shall document that no other entity may claim GHG emission reductions or removals from the Project Activity (i.e., that no other entity may make an ownership claim to the emission reductions or removals for which credits are sought).</p>	<p>Not applicable; the project is not reducing or removing non-energy indirect emissions.</p>
Offset Title (All Projects)	<p>The Project Proponent shall provide documentation and attestation of undisputed title to all offsets prior to registration. Title to offsets shall be clear, unique, and uncontested.</p>	<p>Confirmed by reviewing that no offsets exist or were sold prior to registration of the project (Ref. 2).</p> <p>Performed an independent review of ownership using the ArcGIS web developer database and onX Hunt which included property data, county assessor data, and up to date maps.</p>
Land Title (AFOLU Projects Only)	<p>For U.S. projects with GHG emissions reductions resulting from terrestrial sequestration, Project Proponents shall provide documentation of clear, unique, and uncontested land title. For international projects, Project Proponents shall provide documentation and/or attestation of</p>	

	<p>land title; ACR may require a legal review by an expert in local law.</p> <p>Land title may be held by a person or entity other than the Project Proponent, provided the Project Proponent can show clear, unique, and uncontested offsets title.</p> <p>AFOLU projects that result only in the crediting of avoided emissions with no risk of reversal may not require demonstration of land title.</p>	
Additional	<p>Every project shall use either an ACR-approved performance standard and pass a regulatory surplus test, or pass a three-pronged test of additionality in which the project must:</p> <ol style="list-style-type: none"> 1. Exceed regulatory/legal requirements; 2. Go beyond common practice; and 3. Overcome at least one of three implementation barriers: institutional, financial, or technical. 	Confirmation that the project meets all relevant additionality requirements (see Section 3.4 below for more details).
Regulatory Compliance	<p>Projects must maintain material regulatory compliance. To do this, a regulatory body/bodies must deem that a project is not out of compliance at any point during a reporting period. Projects deemed to be out of compliance with regulatory requirements are not eligible to earn ERTs during the period of non-compliance. Regulatory compliance violations related to administrative processes (e.g., missed application or reporting deadlines) or for issues unrelated to integrity of the GHG emissions reductions shall be treated on a case-by-case basis and may not disqualify a project from ERT issuance. Project Proponents are required to provide a regulatory compliance attestation to a verification body at each verification. This attestation must disclose all violations or other instances of non-compliance with laws, regulations, or other legally binding mandates directly related to Project Activities.</p>	<p>After performing extensive regulatory compliance checks during this reporting period, the audit team found no violations on file with EPA, ECHO, OSHA or with the Tennessee Department of Agriculture (Forestry Division). In addition, a local forester was interviewed about any regulatory compliance issues on the project area, forestry practices, and a discussion of the regional forestry trends and activity. The audit team also reviewed the regulatory compliance section of the MR submitted (Ref. 2).</p>
Permanence (All AFOLU Projects)	<p>AFOLU Project Proponents shall assess reversal risk using ACR's Tool for Risk Analysis and Buffer Determination, and shall enter into a legally binding Reversal Risk Mitigation Agreement with ACR/Winrock that details the risk mitigation option selected and the requirements for reporting and compensating reversals.</p>	Confirmed a total risk percentage of 18% using the ACR Tool for Risk Analysis and Buffer Determination as required by the ACR methodology.
Permanence (Terrestrial Sequestration,	<p>Proponents of terrestrial sequestration or avoided conversion projects shall mitigate reversal risk by contributing ERTs to the ACR</p>	Confirmed a total risk percentage of 18% using the ACR Tool for Risk Analysis and

Avoided Conversion Projects)	Buffer Pool or using another ACR-approved insurance or risk mitigation mechanism.	Buffer Determination as required by the ACR methodology.
Permanence (Geologic Sequestration Projects)	Proponents of geologic sequestration projects shall mitigate reversal risk during the project term by contributing ERTs to the ACR Reserve Account and post-project term by filing a Risk Mitigation Covenant, which prohibits any intentional reversal unless there is advance compensation to ACR, or by using another ACR-approved insurance or risk mitigation mechanism.	Not applicable; the project is not a geologic sequestration project.
Permanence (All Projects)	All projects must adhere to ongoing monitoring, reversal reporting, and compensation requirements as detailed in relevant methodologies and legally binding agreements (e.g., the ACR Reversal Risk Mitigation Agreement).	Confirmed that section D of the PP includes a detailed Monitoring Plan relevant to the methodology.
Net of Leakage	ACR requires Project Proponents to address, account for, and mitigate certain types of leakage, according to the relevant sector requirements and methodology conditions. Project Proponents must deduct leakage that reduces the GHG emissions reduction and/or removal benefit of a project in excess of any applicable threshold specified in the methodology.	Confirmed that a 40% leakage deduction was applied which is consistent with market-leakage per the methodology. Confirmed that all project proponent owned lands have a valid entity wide management certification that requires sustainable practices.
Independently Validated	ACR requires third-party validation of the GHG Project Plan by an accredited, ACR-approved VVB once during each Crediting Period and prior to issuance of ERTs.	The PP has been independently validated by SCS, an accredited, ACR-approved validation/verification body.
Independently Verified	Verification must be conducted by an accredited, ACR-approved VVB prior to any issuance of ERTs and at minimum specified intervals.	The PP has been independently verified by SCS, an accredited, ACR-approved validation/verification body.
Environmental And Community Assessments	ACR requires that all projects develop and disclose an impact assessment to ensure compliance with environmental and community safeguards best practices. Environmental and community impacts should be net positive, and projects must “do no harm” in terms of violating local, national, or international laws or regulations. Project Proponents must identify in the GHG Project Plan community and environmental impacts of their project(s). Projects shall also disclose and describe positive contributions as aligned with applicable sustainable development goals. Projects must describe the safeguard	Confirmed by reviewing the GHG plan and monitoring report (Refs. 1-2) which indicate that the project has no anticipated negative community or environmental impacts.

	<p>measures in place to avoid, mitigate, or compensate for potential negative impacts, and how such measures will be monitored, managed, and enforced.</p> <p>Project Proponents shall disclose in their Annual Attestations any negative environmental or community impacts or claims thereof and the appropriate mitigation measure.</p>	
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3.4 Demonstration of Additionality

The audit team reviewed the demonstration of additionality, as set out in the PP, and confirmed that the additionality requirements set out in the ACR Standard have been met. A more detailed assessment of the audit team's findings is provided below.

3.4.1 Regulatory Surplus Test

A regulatory review of the Project was conducted by the audit team. There are no laws, statutes, regulations, court orders, environmental mitigation agreements, permitting conditions, or other legally binding mandates requiring the project activities.

3.4.2 Performance Standard Test

Not applicable.

3.4.3 Common Practice Test

The Project demonstrated that the predominant forest industry technologies and practices that exist within the project's geographic region are similar in comparison to forest type, ecological condition, and species or forest product type.

Through interviews with local managers and a detailed review of published data for the region, the audit team verified the timber harvesting practices involving the silvicultural prescriptions claimed in the baseline scenario are common practice in the region. Additionally, the audit team verified the feasibility of the local mill capacity to accept the different wood products created in the baseline scenario.

3.4.4 Implementation Barriers Test

The "financial barrier" option was chosen by the project proponent as an implementation barrier. SCS Global Services received guidance from ACR personnel, in an email dated 06 June 2019, stating the following:

The intent of the financial implementation barrier test encompasses the interpretation and wording in Table 2, in which "carbon funding is reasonably expected to incentivize the implementation of the project scenario", yielding increased carbon stocks compared to the baseline. A quantitative assessment demonstrating forgone profit as a result of employing the project scenario suffices for passing this test.

Given this guidance, a financial barrier was demonstrated through a quantitative assessment demonstrating foregone profit as a result of employing the project scenario (i.e., demonstrating that the net present value of the baseline scenario was higher than the project net present value of the project scenario). The audit team's findings regarding this assessment are provided below.

The audit team independently conducted a financial feasibility assessment by using local stumpage prices to verify that the baseline scenario could feasibly occur in the project area in the lifetime of the carbon project if the project was not implemented. The audit team also verified the physical feasibility of the harvests proposed as well as verified that the silvicultural in the baseline scenario is from published state and federal sources.

3.5 Processes for Emission Reductions/Removal Enhancements Quantification

3.5.1 Methods, Algorithms, and Calculations To Be Used to Generate Estimates of Emissions and Emission Reductions/Removal Enhancements

The audit team validated the methodologies applied to quantify GHG emissions and emission reductions in the baseline and project scenarios. The objective was to determine whether the methods are clearly defined with supporting documentation, appropriate for accurately quantifying each data parameter, applied consistently, and result in a conservative estimate of GHG emissions reductions and removal enhancements.

Section 4.2 provides further detail on the methods, algorithms, and calculations used to generate and validate emissions reductions estimates.

3.5.2 Process Information, Source Identification/Counts, and Operational Details

The forest inventory serves as the primary source of data and information used to quantify emissions reductions. The PP and inventory methodology (Ref. 8) describe the process including sample size, determination of plot numbers, plot layout, data collected, and measurement techniques. Through site visit and document review (Refs. 1, 8), the audit team verified the forest inventory methodologies and application.

The inventory data was then run within the Forest Vegetation Simulator with various prescriptions to simulate the baseline and project scenarios. The audit team confirmed that the baseline prescriptions were feasible and representative of common practice conditions in the region (see section 3.4.2).

3.5.3 Data Management Systems

SCS verified through review of the PP and the datasets submitted that the data management systems are in place as described.

3.5.4 QA/QC Procedures

Section D of the PP identifies field and desk QA/QC procedures. The field QA/QC procedures include an internal audit of the field data by a contractor. The audit consists of a minimum of 5% of the samples collected with a focus on individual cruisers who are found to be consistently out of compliance. Additional audits may be conducted if warranted. Finite Carbon may at their discretion, join the contractors during the audit. Then an audit report is composed consisting of a tabular report and a narrative report that highlight errors in data and corrective actions taken (Ref. 8). An outline of the audit procedures is outlined in the provided Appendix B (Ref. 8).

3.5.5 Processes for Uncertainty Assessments

The PP describes how baseline and project uncertainty were calculated. The PP states that uncertainty in the combined carbon stocks in the baseline is quantified using equation 10 of the methodology (Refs. 1, 3). The percentage uncertainty in the combined carbon stocks in the project during the reporting period is calculated using equation 18 of the methodology (Refs. 1, 3). The total project uncertainty (percentage) during the reporting period is quantified using equation 19 of the methodology (Ref. 1, 3). SCS confirmed that the approaches for assessing uncertainty that are identified in the PP are in conformance with the quantification methods required by the Methodology.

Further detail on uncertainty quantification is in sections 4.1.

4 Verification Findings

4.1 Results of Quantitative Uncertainty Assessment

SCS devoted a portion of the verification assessment to the review of the manner and propriety by which the project proponent quantified uncertainty associated with the individual GHGs in the project, in addition to the uncertainty of the calculation of GHG emission reductions and removals.

The audit team also calculated the total materiality of the GHG reduction and removal assertion.

4.1.1 Project Uncertainty

The reported total Project Uncertainty (UNC_t) value of 7.82% value reported by the client for 2021 was independently re-quantified by SCS using equation 19 in the methodology. The audit team found this difference reasonable and immaterial.

Year	UNC _t Client Values	UNC _t SCS Values	Difference
2021	7.82%	7.73%	0.09%

Note: final numbers are rounded for simplicity.

4.1.2 Materiality

The total materiality of the GHG reduction and removal assertion was also calculated for the reporting period.

$$\% \text{ Error} = \frac{(\text{Project Emission Reduction Assertion} - \text{Verifier Emission Reduction Recalculation})}{\text{Verifier Emission Reduction Recalculation}} * 100$$

$$\% \text{ Error} = \frac{(752,021 - 752,139)}{752,139} * 100 = \frac{-118}{752,139} * 100 = -0.016\%$$

4.2 Analysis of the Quantification Methodologies and Applicable Data Sets and Sources

The audit team re-quantified project emissions, emissions reductions, and project uncertainty from the raw inventory data provided by the client. This process entailed verifying that the methods detailed in the MR were applied as indicated. The team confirmed that the emissions reduction by conducting the following analysis:

- Calculate the end of reporting period diameter and heights of individual trees.
- Recalculate the live aboveground, live belowground, and standing dead carbon pools using Woodall equations and decay class information.
- Calculate the change in project carbon stock stored in above and below ground live trees using equation 11 in the methodology
- Calculate the change in project carbon stock stored in above ground dead trees using equation 12 in the methodology
- Calculate any greenhouse gas emission resulting from the implementation of the project in the reporting period using equation 13 in the methodology
- Calculate the change in the project carbon stock and GHG emissions during the reporting period using equation 14 in the methodology.
- Calculate the percentage uncertainty in the combined carbon stocks in the project during the reporting period using equation 18 in the methodology
- Calculate the total project uncertainty (percentage) during the reporting period using equation 19 in the methodology.
- Calculate the net greenhouse gas emission reductions (in metric tons CO₂e) during the reporting period and during each annual vintage using equation 20 in the methodology.
- FVS model outputs were assessed by running simulations collaboratively with the Client and comparing the outputs to those used in ERT calculations. This approach was chosen because the Audit Team was unable to configure a computing environment to accommodate the older version of FVS that the Client elected to use, and the results between the older version (2013)

and modern version (2022) are incompatible (see Finding NCR 5). Through the collaborative approach, the Audit was able to verify that the Client's simulation results are valid.

- Additional checks included, among other things, a review of site index calculations, harvest parameters, NPV values, interpolation methods, defect calculations, and any assumptions used.

4.3 Basis of Data and Information Supporting the GHG Assertion

The data and information supporting the GHG assertion were based on industry defaults, future projections, and actual historical records. The future projections are a result of a combination of tree inventory data, site index data, and other data modelled over time. Industry defaults are used in the harvested wood products as well as growth rates for the region. Actual historical records are used to assess stumpage prices, common practice, and boundary assessment.

4.4 Leakage Assessment

A finding was issued regarding the leakage assessment of the project. The audit team confirmed that project activities decrease total wood products produced by the project relative to the baseline by 25% or more over the Crediting Period. The audit team also reviewed the provided entity-wide management certification that requires sustainable practices.

SCS confirmed that the applicable market leakage factor of 0.4 was applied.

4.5 Risk Assessment

The reported value of the total risk score, as determined based on the risk analysis documented in the PP and MR, was 18%. The audit team performed a complete review of the risk assessment against the requirements of the ACR Tool for Risk Analysis and Buffer Determination. The audit team concludes that the assignment of risk scores is appropriate and in conformance to the ACR Tool for Risk Analysis and Buffer Determination. A more detailed review of the audit team's conclusions may be found below.

Actions Undertaken to Evaluate Whether the Risk Assessment Has Been Conducted Correctly		
Risk Category	Value Selected	Verification Activities
A	4%	Confirmation, through site inspections and verifying ownership documents, that project is not located on public or tribal lands
B	4%	Confirmation, through site inspections and verifying ownership documents, that project is not located on public or tribal lands
C	2%	Confirmation, through site inspections, that the project is not located outside the United States
D	0%	The project has not entered a conservation easement
E	2%	Confirmation, through interviews with local personnel and/or foresters and review of fire maps, that the project has a low fire risk

F	4%	Confirmation, through research of local forest health publications, that the project is not within a 30-mile radius of an epidemic disease or pest infestation
G	0%	Confirmation, through site inspections, that project is not a wetland project or a forest project where more than 60% of the project area is not a forested wetland
H	2%	Confirmation that default value has been applied in the risk assessment calculation

5 Conclusion

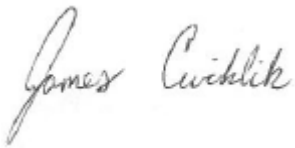

The audit team asserts, with no qualifications or limitations, that the quantification of GHG emission reductions and/or removal enhancements, as reported in the MR, conforms to the verification criteria and is without material discrepancy.

The following provides a summary of the annual emission reductions and removals issuance for the current Reporting Period with the Leakage deduction included and the Buffer deductions excluded (Gross ERTs):

Annual Emission Reductions and Removals in Metric Tons (tCO ₂ e) during Reporting Period 1				
Vintage	Start Date	End Date	Gross GHG Emission Removals (tCO ₂ e)	Gross GHG Emission Reductions (tCO ₂ e)
2021	16 June 2021	31 December 2021	81,315	623,329
2022	1 January 2022	1 March 2022	24,517	187,938
Total			105,832	811,267

The following provides a summary of the ERT issuance for the current Reporting Period with the Leakage and the Buffer deduction included (Buffer credits shown separately):

Annual Emission Reduction in Metric Tons (tCO ₂ e) during Report Period 1				
Vintage	Start Date	End Date	Net GHG Emission Reductions/Removals (tCO ₂ e)	Quantity of Buffer Credits (tCO ₂ e)
2021	16 June 2021	31 December 2021	577,808	126,836
2022	1 January 2022	1 March 2022	174,213	38,242
Total			752,021	165,078

Lead Auditor Approval	 James Cwiklik, 4 November 2022
Internal Reviewer Approval	 Doug Baldwin, 4 November 2022

Appendix A: List of Findings

Please see Section 2.5 above for a description of the findings issuance process and the categories of findings issued. It should be noted that all language under “Project Personnel Response” is a verbatim transcription of responses provided to the findings by project personnel.

NIR 1 Dated 12 Aug 2022

Standard Reference: Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands. v1.3

Document Reference: ACR701 GHG Project Plan_draft_040822

Finding: The Errata and Clarifications for ACR IFM Methodology v1.3 specifies states:

"There may be no leakage beyond de minimis levels through activity shifting to other lands owned, or under management control, by the timber rights owner. If the project decreases wood product production by >5% relative to the baseline then the Project Proponent and all associated landowners must demonstrate that there is no leakage within their operations – i.e., on other lands they manage/operate outside the bounds of the ACR carbon project. This demonstration is not applicable if Project Proponent and associated landowners enrol all of their forested landholdings, owned and under management control, within the ACR carbon project.

Such a demonstration must include one or more of the following:

- Entity-wide management certification that requires sustainable practices (programs can include FSC, SFI, or ATFS). Management certification must cover all entity owned lands with active timber management programs;

- Adherence to an ACR approved long-term forest management plan or program as specified in section A.2;

- Forest management plans prepared ≥ 24 months prior to the start of the project showing harvest plans on all owned/managed lands paired with records from the with-project time period showing no deviation from management plans; or

- Historical records covering all Project Proponent ownership trends in harvest volumes paired with records from the with-project time period showing no deviation from historical trends over most recent 10-year average."

The GHG plan states: "No activity-shifting leakage is allowed by the ACR IFM methodology beyond de minimis levels. The project includes a moderate level of harvest activity within the first reporting period, and moderate levels are projected for future reporting periods, as well. Forest management plans and historical records provided for verification demonstrate no deviation from management plans or from historical trends.

The quantification of leakage for the project is limited to market leakage. Where project activities decrease total wood products produced by the project relative to the baseline by 25% or more over the Crediting Period, the market leakage deduction is 40%."

Please provide the forest management plans and historical records referenced above for verification. And note, the specific requirements above.

Bearing on Material Misstatement or Conformance (M/C/NA): C

Bearing on Material Misstatement or Conformance (M/C/NA): C

NIR 3 Dated 12 Aug 2022

Standard Reference: ACR Standard v7.0

2.A Guiding Principles for GHG Accounting Table 1.

“COMPLETENESS: Include all relevant GHG emissions and removals. Include all relevant information to support criteria and procedures.”

Document Reference: ACR701 GHG Project Plan_draft_040822

Finding: Table E4.1 states there are 154 plots in the HW Strata, the inventory data shows 152. Please clarify the 2 plot discrepancy.

Project Personnel Response: FC has uploaded 'ACR701 Inventory Data.xlsx' as the inventory data source and there were 154 HW plots. Please doublecheck the plot count.

Auditor Response: Plot counts now match. This finding is closed.

Bearing on Material Misstatement or Conformance (M/C/NA): C

NIR 4 Dated 12 Aug 2022

Standard Reference: ACR Standard v7.0

2.A Guiding Principles for GHG Accounting Table 1.

“TRANSPARENCY: Disclose sufficient and appropriate GHG-related information to allow intended users to make decisions with reasonable confidence. Disclose any relevant assumptions and make appropriate references to the accounting and calculation methodologies and data sources used.”

Document Reference: ACR701 GHG Project Plan_draft_040822

Finding: Please provide reference for how the regeneration estimates are derived.

Project Personnel Response: A revised version of the GHG Plan document has been drafted (ACR701 GHG Project Plan_draft08302022.docx) with added description of the regeneration estimation procedures.

Auditor Response: A description of the regeneration estimation procedure has been provided. This finding is now closed.

Bearing on Material Misstatement or Conformance (M/C/NA): C

NCR 5 Dated 12 Aug 2022**Standard Reference:** ACR Standard v7.0**2.B.3 Uncertainty, Accuracy, and Precision.**

The Project Proponent shall reduce, as far as is practical, uncertainties related to the quantification of GHG emission reductions or removal enhancements.

Document Reference: ACR701 GHG Project Plan_draft_040822

Finding: The audit team is observing large differences in growth and yield projections in the “Grow Only” and “Canopy Thin” yield curves, which appear to be caused by FVS versioning. The Client appears to be using a release version dated 7/15/2013. These differences tend to compound overtime. We have noted at least 4 updates in the FVS change log related to the calculation of SDI, volume equation implementation, and background mortality rates, which apply to the Southern Variant and directly affect carbon quantification. These changes were implemented in May 2018, October 2018, March 2019, and October 2020. Additionally, the last FVS release which supported the “legacy software” was in April 2020. The legacy software is no longer available for download on the FVS website. The ACR principle of Uncertainty, Accuracy, and Precision states “The Project Proponent shall reduce, as far as practical, uncertainties related to the quantification of GHG emission reductions or removal enhancements.” This exact issue has been communicated to Finite Carbon in past projects. It seems reasonable, practical, and ideal to use the latest and most accurate free software available. Otherwise, it appears that the current approach taken to quantify data does not conform to the ACR Standard Chapter 2: Accounting and Data Quality Principles.

Please demonstrate how the quantification approach is within conformance to the guiding principles for GHG Accounting.

Project Personnel Response: FC acknowledges these versioning updates and subsequent differences between quantification values. Efforts are currently underway to update our workflows using the more recent, online-based FVS platform. That said, the vintage of inventory software used on this project is still fully in conformance with ACR v1.3 (published April 2018) and also complies with the latest ARB protocols. If desirable, FC can provide the audit team with a copy of the FVS.exe file(s) associated with this software vintage.

Auditor Response: After various discussions with the FVS help desk, and acquiring the FVS .exe version utilized in the provided model runs, it is concluded that the version of FVS is within the scope of the methodology. However, it should be noted that this is difficult to replicate without a specific 2010 Access Database engine on more recent computers.

Bearing on Material Misstatement or Conformance (M/C/NA): C

NIR 6 Dated 12 Aug 2022

Standard Reference: Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands. v1.3

Document Reference: ACR701 GHG Project Plan_draft_040822

Finding: The methodology states "The IFM baseline is the legally permissible harvest scenario that would maximize NPV of perpetual wood products harvests. The baseline management scenario shall be based on silvicultural prescriptions recommended by published state or federal agencies to perpetuate existing onsite timber producing species while fully utilizing available growing space. Where the baseline management scenario involves replacement of existing onsite timber producing species (e.g. where forest is converted to plantations, replacing existing onsite timber-producing species), the management regime should similarly be based on silvicultural prescriptions recommended by published state or federal agencies, and must adhere to all applicable laws and regulations."

"Heavy Thin: The "Heavy Thin" regime simulates a value-extracting removal of merchantable overstory trees to a residual target of 40 square feet of basal area. The thinning is specified as a thin-from-above treatment where the largest diameter classes are harvested first until the target BA is met. The stand is allowed to regenerate naturally and grow until the next overstory tree removal. The treatment does not discriminate against any particular species, so trees retained at harvest will maintain relatively the same species composition as the before treatment species composition. A stand was eligible for this type of treatment if removable harvest volume was at least 3000 board feet per acre. Hardwood regeneration was simulated with natural sprouting in the model. Advanced regeneration from conifer species in the softwood strata was simulated in FVS. For more information about how conifer regeneration was simulated see the 'FVS Settings' section of this appendix. This treatment type was only applicable for unencumbered (non – SMZ) upland stands.

Canopy Thin: A "Canopy Thin" was defined as a thin-from-above cutting designed to simulate removal of merchantable trees in areas where a heavy thin was not applicable, primarily in riparian (Stream Management Zone) areas. A residual canopy cover of 50% is specified to adhere to best management practices. The treatment does not discriminate against any species, so trees retained at harvest will maintain relatively the same species composition as the before treatment species composition. A stand was eligible for this type of cutting if the harvest volume was at least 600 cubic feet per acre' This treatment type was designed primarily for SMZ buffer areas but could be utilized in upland stands as well."

Please provide evidence from published state or federal agencies with which these prescriptions were based on. This includes specific references to which sections of the publications are being referenced for the baseline silvicultural prescriptions.

Project Personnel Response: In the baseline harvest schedule, 63,979.7 of the 63,980.4 of the project acres were assigned the “Canopy Thin” regime, while 0.7 acres entered into the “Heavy Thin” regime. The Canopy Thin regime is also known as a “crown thin” regime, and it is described as a recommended silvicultural treatment for upland hardwood stands, such as found in Tennessee, on page 55 of Hicks, R. R., Conner, W. H., Kellison, R. C., & Van Lear, D. (2004). Silviculture and management strategies applicable to southern hardwoods. In: Gen. Tech. Rep. SRS-75. Asheville, NC: US Department of Agriculture, Forest Service, Southern Research Station. Chapter 7. p. 51-62. To quote directly from this USFS General Technical Report, “The crown-thinning method is defined ... as thinning that involves the removal of trees in the upper strata of the canopy to favor desirable trees in the same canopy range. In crown thinning, the focus is on the better trees (crop trees) that are to be provided with additional growing space and resources” (Hicks et al 2004, p. 55). This description is consistent our application of the FVS keyword “THINCC”, which is described in the GHG project plan document.

The heavy thin regime is designed to mimic a financially-driven diameter-limit cut or a “thin from above”, a practice which mimics the very common silvicultural practice of “high-grading” used throughout the range of Appalachian southern hardwoods. According to page 7 of Mercker, D (2006). Sustainable Forestry versus Diameter Limit Cutting. University of Tennessee Extension. PB 1848., there are limited occasions to apply these practices in conjunction with sustainable forestry, such as when a 2-aged stand condition exists consisting of an over-mature overstory which is suppressing growth of an understory with desirable qualities. It is reasonable to assume that such stand conditions might occur on 0.7 acres (or more) of a 63,980.4 acre landscape. From an NPV-maximizing standpoint, as this extension publication points out, the high initial revenues plus limited need for investment in reforestation and future stand development, so-called “high grading” approach is an easy choice for most private landowners; however, this regime tends to not be picked much in the baseline scenario because of the need to maintain sustainable harvested wood flows which do not exceed market capacity in any given year.

Auditor Response: The provided references and arguments satisfy the requirements of the methodology. Both the “thin from above” and “canooy thin” are well known and recognized acceptable sivicultural prescriptions when proper conditions warrant their methods. This finding is closed.

Bearing on Material Misstatement or Conformance (M/C/NA): C

NIR 7 Dated 12 Aug 2022

Standard Reference: Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands. v1.3

Document Reference: ACR701 GHG Project Plan_draft_040822

Finding: The methodology states "The common practice test requires Project Proponents to evaluate the predominant forest industry technologies and practices in the project's geographic region. The Project Proponent shall demonstrate that the proposed project activity exceeds the common practice of similar landowners managing similar forests in the region."

The GHG plan states "The project is located in eastern Tennessee. Demand for wood, including sawtimber and pulpwood, from mills throughout the Southeast drives investment in timberland, with industrial forestland owners seeking to maximize the NPV of their investments through intensive management practices. Investment return requirements can lead to significantly higher harvest levels and were the project not implemented the intensive management and resulting lower onsite carbon stocks associated with that level of harvest activity could very well occur within the project area. As described in A6. PROJECT ACTION the project will exceed common practice in the region."

Please demonstrate, with verifiable data/information, the claims above related to common practice.

Please provide a reference such as mill quotas or some other timber harvest data for verification purposes to confirm the claimed harvests would be realistic with the mills in the region. Additional information such as DNR stumpage reports and/or interviews with local foresters should be available for review as well.

Project Personnel Response: The 2022 Q2 North American Forest Industry Capacity Database from Forisk, a third-party forest industry information consultant, was leveraged to help inform market capacity. FC conducted spatial analyses via ArcPro to estimate the total wood capacity of mills within the proximity of the project area. Total capacity of wood utilizing facilities was calculated at a specified radius surrounding project area (further detail provided in the 'MillCapacityAnalysis' workbook). To sum, the proposed baseline harvest levels would be well-within the bounds of regional market capacity. Associated documents will be uploaded to VaultRoom as additional information.

Please see workbook Windrock_Supersection_CP for comparison of project stocks to regional Common Practice stocking levels derived from FIA data and what is used in ARB projects. This analysis is to demonstrate the project stocking level exceeded the common practice of similar landowners managing similar forests in the region.

Auditor Response: After reviewing the provided workbook, the claims are validated. The finding is now closed.

Bearing on Material Misstatement or Conformance (M/C/NA): C

NIR 8 Dated 2 Nov 2022**Standard Reference:** ACR Standard v7.0

2.B.3 Uncertainty, Accuracy, and Precision.

Document Reference: ACR701 GHG Project Plan_draft_040822**Finding:** Section D1. Monitored Data and Parameters references a "Annual updates as needed, see D2. MONITORING AND UPDATING FOREST CARBON STOCKS AND ENVIRONMENTAL IMPACTS"

However, this section currently does not exist within the document. Please provide this information for verification purposes.

Project Personnel Response: Nate went ahead and brought in the D2 section of the Monitoring Plan. This came up on another project recently, so we've already built this section out, adapted from existing monitoring plans developed for ARB. I've attached the updated GHG plan here and it's also in the data room along with the Monitoring Report and GHG workbook that were updated yesterday.

Auditor Response: Section D2 has been added.**Bearing on Material Misstatement or Conformance (M/C/NA): C****NIR 9 Dated 2 Nov 2022****Standard Reference:** Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands. v1.3 - Erratum & Clarifications**Document Reference:** ACR701 GHGPP Calculations v1.0 04082022.xlsx**Finding:** Section G. Calculation of ERTs states "ERT's by vintage shall then be determined by prorating Reporting Period calendar days within vintage year t (21), applying the non-permanence buffer deduction (Equation 22) and subtracting ERT's by vintage year from the non-permanence buffer deduction (Equation 23). Buffer pool ERTs will be deposited by vintage, if this is the risk management option the Project Proponent has chosen."

Please follow the equations listed to properly calculate the vintage years for ERTs, buffer, and Removals.

Project Personnel Response: We're all set with our update to vintages and the removals/emission reductions split. Look to rows 65 through 83 for where we've added the necessary calculations. As soon as you can, please confirm that we're on the same page. Nate is updating the Monitoring Calc workbook now and will send that along as well.

Auditor Response: Vintages have been updated and appropriately calculated. This finding is now closed.**Bearing on Material Misstatement or Conformance (M/C/NA): C**

OBS 10 Dated 3 Nov 2022

Standard Reference: Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands. v1.3

Document Reference: ACR701 GHGPP Calculations v1.0 04082022.xlsx

Finding: Section 3.2 Wood Products Calculations step 3 and 4 both state: "Assign a percentage to each product class for hardwoods and softwoods according to mill data or default values for the project." It was noticed in both the baseline and project harvested wood products calcs that this step assumes the same percentages for both hardwoods and softwoods. Overall, the differences are small and tend to be more conservative. It is recommended that future projects calculate hardwood and softwood specific percentages to each product class.

Project Personnel Response: Thanks for bringing this to our attention. Our allocation of harvested C after milling to the wood product class defaults is done the same way across our ARB and ACR projects. The approach was implemented specifically to meet the interpretations of ARB staff and verifiers per Apdx C of the compliance offset protocol, but has been approved by verifiers and ACR staff for the ACR IFM methodology as well. If there are alternative interpretations for how the allocation should be done, it's good for us to be made aware so we can request further guidance from ACR and/or make necessary modifications to our quantification procedures. I'd respectfully request this be treated as an OBS as opposed to a finding that requires an update to the calculations. The usage of the defaults actually represents a slight decrease to carbon stored in HWP's for the project scenario when compared to the baseline, so it should also be considered reasonably conservative or non-material.

Auditor Response: The method technically falls within compliance to the methodology and is more conservative. However, SCS recommends adjusting in future projects.

Bearing on Material Misstatement or Conformance (M/C/NA): C