

# VALIDATION AND VERIFICATION REPORT

## *American Carbon Registry*

### *ACR 673: Anew – Two-Hearted Forestry Project*

**Reporting Period:**

**19 July 2019 to 30 September 2021**

**Prepared for:**

**Anew Climate, LLC**

**02 May 2023**



AMERICAN CARBON REGISTRY

*Prepared by:*

**James Cwiklik | Lead Auditor**

Greenhouse Gas Verification Program

+1.510.452.8000

[jcwiklik@scsglobalservices.com](mailto:jcwiklik@scsglobalservices.com)

**SCS**global  
SERVICES  
*Setting the standard for sustainability™*

2000 Powell Street, Ste. 600, Emeryville, CA 94608 USA

+1.510.452.8000 main | +1.510.452.8001 fax

[www.SCSglobalServices.com](http://www.SCSglobalServices.com)

<b>Project Title</b>	Anew – Two-Hearted Forestry Project
<b>Client</b>	Anew
<b>Prepared By</b>	SCS Global Services
<b>Date of Issue</b>	31 March 2023
<b>Contact</b>	2000 Powell Street, Suite 600, Emeryville, CA 94608, USA <a href="http://www.scsglobalservices.com">http://www.scsglobalservices.com</a> Email: <a href="mailto:CPollet-Young@scsglobalservices.com">CPollet-Young@scsglobalservices.com</a> Telephone: +1 (510) 452-8000
<b>Audit Team</b>	Lead Auditor: James Cwiklik Auditor: Alexander Pancoast Auditor: Carolin Stark Technical Specialist: Kyle Hampton Internal Reviewer: Michael Hoe

## Executive Summary

---

This report describes the verification services provided for the Anew – Two-Hearted Forestry Project (“the project”), an Improved Forest Management (IFM) project located in the upper peninsula of Michigan, that was conducted by SCS Global Services. The project proponent is the Nature Conservancy. 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 19 July to 30 September 2021 against relevant ACR standards and the approved methodology. The verification engagement began on 26 October 2021, it was carried out through a combination of document review, interviews with relevant personnel and on-site inspections. As part of the verification engagement 3 findings were raised: 2 Non-Conformity Reports, 1 New Information Requests and 0 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.

## Table of Contents

---

	<b>Introduction .....</b>	<b>1</b>
	About SCS Global Services .....	1
	Objectives.....	1
	Scope.....	2
<b>1</b>	Validation and Verification Criteria.....	3
1.1	Level of Assurance .....	4
1.2	Treatment of Materiality .....	4
1.3	Summary Description of the Project.....	5
1.4		
1.5		
1.6	<b>Assessment Process.....</b>	<b>5</b>
1.7	Method and Criteria.....	5
<b>2</b>	Document Review .....	5
2.1	Interviews.....	5
2.2	Site Inspections .....	7
2.3	Resolution of Findings.....	8
2.4	Techniques and Processes Used to Test the GHG Information and GHG Assertion .....	8
2.5		
2.6		
<b>3</b>	<b>Validation Findings .....</b>	<b>8</b>
3.1	Project Boundary and Activities .....	9
3.2	Description of and Justification for the Baseline Scenario .....	10
3.3	Project-Specific Conformance to ACR Eligibility Criteria .....	11
3.4	Demonstration of Additionality .....	16
3.5		
<b>4</b>	Processes for Emission Reductions/Removal Enhancements Quantification .....	17
4.1		
4.2	<b>Verification Findings.....</b>	<b>19</b>
4.3	Results of Quantitative Uncertainty Assessment .....	19
4.4	Analysis of the Quantification Methodologies and Applicable Data Sets and Sources.....	20
4.5	Basis of Data and Information Supporting the GHG Assertion.....	20
<b>5</b>	Leakage Assessment .....	21
	Risk Assessment .....	21
	<b>Conclusion.....</b>	<b>22</b>
	<b>Appendix A: List of Findings .....</b>	<b>24</b>

## Introduction

---

### About SCS Global Services

- 1** 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 CO<sub>2</sub>e, 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.

### Objectives

**1.2**

#### 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

- 1.4**
- 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.

### 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

## Level of Assurance

The level of assurance was reasonable.

## Treatment of Materiality

### 1.5

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

### 1.6

- 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.

## Summary Description of the Project

The project is located on 23,294 acres of northern hardwood forests and conifer bogs distributed mostly in Luce County Michigan, with one unit in Marquette County Michigan. This area is owned by The Nature Conservancy. The improved management practices of this project focus on sustainable, commercial harvests, natural forest growth, and maintenance harvests for essential activities, recreation, wildlife habitat and forest health. Management considerations for the project area will promote uneven-aged silviculture practices.

## Assessment Process

### 2 Method and Criteria

**2.1** 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

**2.2** team then created a validation and verification plan that took the sampling plan into account.

## Document Review

The GHG project plan (dated 29 March, 2023; "PP") and monitoring report (dated 13 March, 2023; "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	TwoHearted_GHGPlan_05_01_23.pdf	1
Monitoring Report	TwoHearted_MonitoringReport_05_01_23_Signed.pdf	2
CO2 Calcs	TwoHearted_Start_RP_CO2_01_11_2023.xlsx	3

2.3

ERT Workbook	TwoHearted_RP_ERT_HWP_01_23_2023.xlsx	4
100 year Calc Workbook	TwoHearted_100Yr_calcs_01_11_2023.xlsx	5
Regeneration Calculations	TwoHearted_Regeneration_Calcs.xlsx	6
Site Index Calculations	TwoHearted_SiteIndex_06_14_22.xlsx	7
Project Boundary Shapefile	TwoHearted_Boundary_06_09_22.shp	8
Plots Shapefile	TwoHearted_Plots_06_09_22.shp	9
RMZ Shapefile	TwoHearted_RMZ_06_09_22.shp	10
Strata Shapefile	TwoHearted_Strata_06_09_22.shp	11
Inventory Methodology	TwoHearted_Carbon_Plot_Methodology_2_3_2021.pdf	12
Forest Management Plans	TwoHeartedFSCForestManagementPlan_09-2015 (Repaired).pdf MulliganHFR_CFA_PLAN_11_30.pdf	13
Various FVS years for the following database files, out files, and key files.	TwoHearted_START.db TwoHearted_GROW.db TwoHearted_CC_2019 TwoHearted_SHW_2019	14
Ownership Information	Subject Property Legal Descriptions 5.24.19.xlsx	15
Deviation Request	ACR673 Two-Hearted RP1 Deviation Request 2022.07.26 Approved	16
Supporting Timber Sale and Management Docs	137.20.02_Bluesource_Two_Hearted_Report_9_30_20.pdf TimberMartNorth_Vol 25 No 2.pdf	17
Addendum: Programmatic Development Approach (PDA)	TwoHearted_ACR_PDA_PDD_03_16_23.pdf	18

## 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
Megan McKinley	Anew	Manager	Throughout Audit

Josh Clark	Anew	Director	Throughout Audit
Ben Parkhurst	Anew	Technical Specialist	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
Keith Magnusson	Michigan Department of Natural Resources	Forester	10/13/2022

## Site Inspections

2.4 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 31 October 2021 through 1 November 2021. 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 CO<sub>2</sub>e/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.

## 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

**2.5** 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, 2 NCRs, 1 NIRs and 0 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

**2.6** for the closure of each such finding, are described in Appendix A of this report.

## 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. 8-11), and calculation workbooks (Refs. 3-6) 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 Anew to convert the raw inventory data into emission reduction estimates during the reporting period (Refs. 3-7). 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 III.4 of the monitoring report).
- Attention was paid to the common practice assessment including local silvicultural trends, market wood demands, and regional mill capacities.

### 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 23,294 acres of northern hardwood forest, mixed forests, and conifer bog in Luce and Marquette Counties Michigan. The project land is owned and managed by the project proponent, The Nature Conservancy. 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 (Refs. 8-10) 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 natural forest management focusing on sustainable forest growth and maintenance harvest for essential

activities and forest health. 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 <sub>2</sub>	Major carbon pool subjected to the project activity.
Below-ground biomass carbon	Included	CO <sub>2</sub>	Major carbon pool subjected to the project activity.
Standing dead wood	Included	CO <sub>2</sub>	Major carbon pool in unmanaged stands subjected to the project activity.
Harvested wood product	Included	CO <sub>2</sub>	Major carbon pool subjected to the project activity.
Burning of biomass	Included	CO <sub>2</sub>	Non-CO <sub>2</sub> 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.

In ACR the minimum project term is 40 years and the eligible crediting period for this type of project is listed as 20 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.

## 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 a harvest regime designed to maximize the annual cashflows from a 100-year Net Present Value (NPV) at a 4% discount rate, subject to operational considerations in the region. Only volume from merchantable species count toward costs and revenue for regeneration harvest (i.e., hardwood species are not included). The area selection for each prescription by plot was determined using a linear programming model (IpSolve package), which found the combination of prescriptions that maximizes the NPV over 100 years. There are 5 silvicultural prescriptions in the linear programming model, shown in Table E1-7.” 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 (Ref. 17).

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 great 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 19 July 2019, the start date of the project according to the PP. Note that the review was delayed, and a deviation request (Ref. 16) was submitted and approved by ACR.
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: 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. 2. The date that the Project Proponent initiated a forest carbon inventory. 3. The date that the Project Proponent entered into a contractual relationship to implement a carbon project. 4. The date the project was submitted to ACR for listing review. Other dates may be approved by ACR on a case by case basis.	The start date is 19 July 2019, the date by which “coincides with the landowner’s intent to commence a carbon project.” This was verified by reviewing harvest activities since the start date as compared with the older management plans (Ref. 13).
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	The Crediting Period for non-AFOLU projects shall be 10 years. All AR projects shall have a Crediting Period of 40 years. All IFM projects shall have a Crediting Period of 20 years.	Review of the PP to confirm that the crediting period is 20 years, as required given the project type.



	<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> <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>	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.
Emission or Removal Origin (Direct Emissions)	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.	Reviewed the supporting documentation, as described in the PP, and a sample of the ownership documentation provided (Ref. 15) to confirm that Project Proponent have control over the GHG sources/sinks from which the emissions reductions or removals originate on their respective properties. Evidence of land title for each parcel in the project area was provided and confirmed (Refs.8, 15).
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>	Not applicable; the project is not reducing or removing non-energy indirect emissions.

Offset Title (All Projects)	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.	Confirmed by reviewing that no offsets exist or were sold prior to registration of the project (Refs. 2, 15).  Reviewed land title documents (Refs. 15) along with an independent review of ownership using the ArcGIS web developer database which included property data, county assessor data, and up to date maps.
Land Title (AFOLU Projects Only)	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 land title; ACR may require a legal review by an expert in local law.  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.  AFOLU projects that result only in the crediting of avoided emissions with no risk of reversal may not require demonstration of land title.	
Additional	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:  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	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	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 Michigan Department of Natural Resources (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

	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.	reviewed the regulatory compliance section of the MR submitted (Ref. 2).
Permanence (All AFOLU Projects)	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.	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, Avoided Conversion Projects)	Proponents of terrestrial sequestration or avoided conversion projects shall mitigate reversal risk by contributing ERTs to the ACR Buffer Pool or using another ACR-approved insurance or risk mitigation mechanism.	Confirmed a total risk percentage of 18% using the ACR Tool for Risk Analysis and 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	The PP has been independently validated by SCS, an accredited, ACR-approved validation/verification body.

	once during each Crediting Period and prior to issuance of ERTs.	
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	<p>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.</p> <p>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 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>	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.

### 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.

3.5 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.

## 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. 12) 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, 12), the audit team verified the forest inventory methodologies and application.

The inventory data was then run within the Forest Vegetation Simulator with baseline prescriptions to project the baseline condition and a grow-only scenario to estimate the project scenario. 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 senior forester review of field collected data and remeasurement of any plots that cannot be reconciled. Further the PP states that “At least 10% of the plots will be checked by a different forester than cruised the plot, specifically by someone senior to the field crew. This involves full plot measurement to identify any problems with determining in/out trees, species calls, defect measurements, DBH measurements, and height measurements. A summary report of the cruise checks is to be provided to Anew at the end of the inventory.” These field QA/QC procedures were confirmed on-site and during interviews.

The PP identifies three stages of desk QA/QC procedures including an independent forester review, a technical review, and a senior management review. These include independent checks on the inventory data, model runs, carbon calculations, and document text and formatting.

The QA/QC procedures and the quantification approach employed by the project team conform to the parameters and quantification methods required by the Methodology. SCS determined that the Project Proponent sufficiently documented and quantified each parameter. Section D of the PP also provides in detail a monitoring and data management plan for each parameter throughout the reporting period.

### **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. 3-

5). The percentage uncertainty in the combined carbon stocks in the project during the reporting period is calculated using equation 18 of the methodology (Refs. 3-5). The total project uncertainty (percentage) during the reporting period is quantified using equation 19 of the methodology (Ref. 3-5). 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.

## Verification Findings

### Results of Quantitative Uncertainty Assessment

4

4.1 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<sub>t</sub>) value of 4.58% 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 <sub>t</sub> Client Values	UNC <sub>t</sub> SCS Values	Difference
2021	4.58%	4.58%	0.00%

*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.

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

$$\% \text{ Error} = \frac{(120,313 - 117,130)}{117,130} * 100 = \frac{3,183}{117,130} * 100 = 2.7\%$$

## 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 4.2 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 of individual trees.
- Recalculate the live aboveground, live belowground, and standing dead carbon pools using Jenkins 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 CO<sub>2</sub>e) during the reporting period and during each annual vintage using equation 20 in the methodology.
- Multiple FVS models were ran to assess their silvicultural prescriptions in both the baseline and project scenarios. This included, among other things, a review of site index calculations, harvest parameters, NPV values, interpolation methods, defect calculations, and any assumptions used.
- The resulting differences from the FVS model runs were then aggregated into a correction factor for both live and dead stocks in both the project and baseline scenario.

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.



## Leakage Assessment

Section E3 of the GHG Plan states: “Quantification of leakage is limited to market leakage, as no activity-shifting leakage is allowed by the methodology beyond de minimis levels. This is demonstrated by the project proponent having entity wide forest certification that requires sustainable practices on all of

### 4.4 their landholdings.

The audit team verified the claims made above by quantifying the merchantable carbon removed in both scenarios. The audit team also confirmed the project demonstrated that there is no leakage within their operations through an entity wide management certification that requires sustainable practices that covers all entity owned lands.

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

## Risk Assessment

- 4.5 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

## Conclusion

5

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.

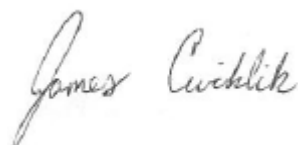
The following provides a summary of the annual emission reductions and removals issuance for the current Reporting Period with the Leakage deduction included and the Buffer deductions excluded (Gross ERTs):

Annual Emission Reductions and Removals in Metric Tons (tCO <sub>2</sub> e) during Reporting Period 1				
Vintage	Start Date	End Date	Gross GHG Emission Removals (tCO <sub>2</sub> e)	Gross GHG Emission Reductions (tCO <sub>2</sub> e)
2019	19 July 2019	31 December 2019	25,389	4,869
2020	1 January 2020	31 December 2020	55,978	10,734
2021	1 January 2021	30 September 2021	41,754	8,007
Total			123,121	23,610


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 <sub>2</sub> e) during Report Period 1				
Vintage	Start Date	End Date	Net GHG Emission Reductions/Removals (tCO <sub>2</sub> e)	Quantity of Buffer Credits (tCO <sub>2</sub> e)
2019	19 July 2019	31 December 2019	24,811	5,447
2020	1 January 2020	31 December 2020	54,704	12,008
2021	1 January 2021	30 September 2021	40,804	8,957
Total			120,319	26,412

Lead Auditor Approval



James Cwiklik, 02 May 2023

<p>Internal Reviewer Approval</p>	 <p>Michael Hoe, 02 May 2023</p>
---------------------------------------	---

## 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.

### **NCR 1 Dated 19 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:** TwoHearted\_Start\_RP\_CO2\_06\_14\_2022.xlsx

**Finding:** The audit team discovered that Plot #262 is assigned to the “LOW” stratum in the “Stats\_StartDate” and Stats\_RPDate” tabs in the “TwoHearted\_Start\_RP\_CO2\_06\_14\_2022.xlsx” workbook, while Plot #262 is assigned to the “NHW” strata in the “StartDate\_Tree\_CO2”, “RP\_Tree\_CO2”, “Start\_TreeList”, and “RP\_TreeList”. This leads to minor inconsistencies in stratum and project level CO2e estimates.

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." While this error alone yields an immaterial difference in the overall all CO2e estimate, correcting the error will yield a less uncertain estimation of the overall GHG emission reduction. Please correct this error.

**Project Personnel Response:** Plot #262 is now assigned to the "LOW" stratum in all tabs of the TwoHearted\_Start\_RP\_CO2.xlsx. workbook. All calculations files and reporting forms have been updated accordingly.

**Auditor Response:** The updates appear to have corrected the error. This finding is now closed.

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

**NIR 2 Dated 14 Oct 2022**

**Standard Reference:** Errata and Clarifications for ACR IFM Methodology v1.3 - 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:** TwoHearted\_GHGPlan\_10\_12\_22.pdf

**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 land owners 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 enroll 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  $\geq 24$  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: "Quantification of leakage is limited to market leakage, as no activity-shifting leakage is allowed by the methodology beyond de minimis levels.

Market leakage was determined by quantifying the merchantable carbon removed in both the baseline and with-project cases. Carbon in long-term storage in in-use wood products and landfills, calculated above, was used to assess relative amounts of "total wood products produced" in the two scenarios. The decrease in wood production relative to the baseline was then calculated and the applicable market leakage discount factor was determined."

Please demonstrate how "that there is no leakage within their operation - i.e., on other lands they manage/operate outside the bounds of the ACR carbon project" using one of required options.

**Project Personnel Response:** There is no activity-shifting leakage within The Nature Conservancy's operations on other landholdings they own outside of the project area as they have entity-wide forest certification. Please see certification documents within the PropertyDocuments folder. A clarifying statement has been made in section E3. of the GHG plan.

**Auditor Response:** The certification has been verified, the finding is now closed.  
**Bearing on Material Misstatement or Conformance (M/C/NA):** C

**NCR 3 Dated 14 Oct 2022**

**Standard Reference:** Errata and Clarifications for ACR IFM Methodology v1.3 - 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:** TwoHearted\_RP\_ERT\_HWP\_08\_25\_2022.xlsx

TwoHearted\_RP\_ERT\_HWP\_10\_12\_2022.xlsx

**Finding:** The Errata and Clarifications for ACR IFM Methodology v1.3 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."

It was noticed that three different equations are being used to calculate the vintages by year for reductions and removals. I note that our calculated value, which uses the equations referenced above, results in differences for Vintage 2019 and 2021. Please update to be within conformance to the methodology.

**Project Personnel Response:** The formula has been updated and made consistent with equations referenced in the Errata and Clarifications. Please refer to the new 'TwoHearted\_RP\_ERT\_HWP.xlsx' file in the verification folder. There are a total of 805 days within this reporting period, 166 in 2019, 366 in 2020, and 273 in 2021. The reporting period ERTs have been broken out in to each of these vintages and weighted accordingly.

**Auditor Response:** The vintage calcs have been updated properly in accordance with the methodology. This finding is closed.

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