

# VALIDATION AND VERIFICATION REPORT

## *American Carbon Registry*

### *ACR 922 – Double Bar IFM*

**Reporting Period:**

**16 June 2023 to 30 September 2023**

**Prepared for:**

**Terra Verde Inc.**

**15 November 2024**



AMERICAN CARBON REGISTRY

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## Executive Summary

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This report describes the validation and initial verification services provided by SCS Global Services for the Double Bar IFM project (“the project”), an Improved Forest Management (IFM) project located in Wheeler County, Oregon. 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 GHG emission reductions/removal enhancements, claimed by the project proponent, Double Bar Inc, for the reporting period from 16 June 2023 to 30 September 2023 against relevant ACR standards and the approved methodology. The validation and verification engagements began with the opening meeting on 24 October 2023 and were carried out through a combination of document review, interviews with relevant personnel and on-site inspections. As part of the validation and verification engagements 30 findings were raised: 8 Non-Conformity Reports, 21 New Information Requests and 1 Observations. These findings are described in Appendix A of this report. The project complies with the validation and verification criteria, and SCS holds no restrictions or uncertainties with respect to the compliance of the project with the validation and verification criteria.

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# 1 Introduction

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## 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 nearly 400 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.

## 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).
- Any significant changes to the project procedures or criteria since the last verification.
- Any significant changes in the GHG project's baseline emissions and emission reductions/removal enhancements since the last verification.

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 of 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 of 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 spread-sheets 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 8.0
- Improved Forest Management Methodology for Quantifying GHG Removals and emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands, Version 2.0 ("the methodology")

- Improved Forest Management Methodology for Quantifying GHG Removals and emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands, Version 2.0, Errata and Clarifications (August 12, 2024)
- ACR Validation and Verification Standard, Version 1.1
- ACR Reversal Risk Tool, Version 1.0

## 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, developed by Terra Verde Inc for the project proponent Double Bar Inc, is located in Wheeler County, Oregon and is aimed at generating GHG emissions reductions or removals by reducing harvesting in the project area to small fuel reduction projects, with no anticipated commercial harvesting.

## 2 Assessment Process

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### 2.1 Method and Criteria

The validation and verification services began with the opening meeting on 24 October 2023 and 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 an evidence gathering plan following a proprietary evidence gathering plan template developed by SCS which includes a strategic analysis and risk assessment. In accordance with the evidence gathering plan, the audit team identified the risk of a material misstatement or nonconformity with the criteria and considered the results of the materiality assessment (see Section 1.6 above). Sampling and data testing activities were planned to address areas of inherent, control, and detection risk. The audit team then created a verification plan that took the evidence gathering plan into account.

### 2.2 Document Review

The GHG project plan (version 10 dated 08 November 2024; "PP") and monitoring report (version 8 signed 15 November 2024; "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	ACR922 Double Bar GHG Project Plan_v10_sig.pdf	1
Monitoring Report	ACR922 Double Bar Monitoring Report_v8_sig.pdf	2
Baseline Live Projections	DoubleBarIFM_Baseline_Live_Stocks_Projections_06122024.xlsx	3
Baseline Dead Projections	DoubleBarIFM_BSL_DeadProjections_06122024.xlsx	4
Baseline HWP	DoubleBar_IFM_BSL_HarvestedWoodProducts_06122024.xlsx	5
NPV Analysis	DoubleBarIFM_NPV_06122024	6
Project Live Projections	DoubleBarIFM_Project_Live_Stocks_Projections_06132024.xlsx	7
Project Dead Stocks	DoubleBarIFM_RP1_Project_Dead_Stocks_05162024.xlsx	8
EORP/Inventory Live Stocks	DoubleBarIFM_RP1End_Project_Live_Stocks_05162024.xlsx	9
Start RP Live Stocks	DoubleBarIFM_RP1Start_Project_Live_Stocks_05302024.xlsx	10
Start RP and EORP Tree Lists	DoubleBarData_05302024.xlsx	11
Site Index	DoubleBarIFM_SiteIndex_05282024.xlsx	12
ERT Calculations	Appendix J - ACR922_ERTcalculator_v2.0_10162024.xlsx	13
Project Boundary	DoubleBar_ProjectBndry20230711.shp	14
Plots	DoubleBarIFM_Plots_v08072023.shp	15
Strata	CapeFoxIFM_Strata_06132024.shp	16
Road Buffers	RoadBuffers_06132024.shp	17
SMZ Buffers	StreamBuffersbyStrata_06132024.shp	18
FVS Inputs	Various FVS Input Files	19
FVS Outputs	Various FVS Output Files	20
Appendices	Appendices A - H	21
No harvesting attestation	Attestation of no harvesting.pdf	22
Stratification SOP	StratificationSOP.docx	23
Listing Form	ACR GHG Project Listing Form V3.0Double Bar_sigv2.pdf	24
Ownership Docs	Contents of "Land Title" folder	25
Master Services Agreement	2023 GSA Terra Verde_MA2023_Double_Bar_Carbon 20232505_fullyExecuted.pdf	26
Timber Harvest Trends	OR2017_BBER.pdf	27
Baseline Substantiation	ECOLOGYANDMANAGEMENTOF.pdf	28
Plot Level Notes	DoubleBarPlotNotes.xlsx	29
Approved Harvest Documents	Contents of "Approved Harvest Documents" folder	30
Supplemental Attestation	ACR-GHG-Project-Supplemental-Attestation-v1.0- 20241114_TV_sig.pdf	31

## 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
Dwight Chapman	American Forest Carbon	Project Developer	Throughout audit activities
Kyle Renner	Terra Verde Inc.	Project Team	Throughout audit activities
Ross Ryno	Double Bar Inc.	Landowner	Throughout site visit activities

### 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
Matthew Brown	Oregon Department of Forestry	Stewardship Forester	Throughout audit activities

## 2.4 Site Inspections

The objectives of the on-site inspections were as follows:

- Confirm the validity of the statements made in the GHG Plan and associated project documentation;
- Confirm the baseline conditions and project conditions.
- Interview project personnel to determine if the GHG Plan correctly identifies project activity and assess project personnel competencies;
- Select samples of data from on-the-ground measurements for verification in order to meet a reasonable level of assurance and to meet the materiality requirements of the Project; and

- Perform a risk-based review of the project area to ensure that the Project is in conformance with the eligibility requirements of the validation/verification criteria.

In support of the above objectives, the audit team performed an on-site inspection of the project area on the dates 13 November 2023 through 15 November 2023. 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 and taking averaged GPS coordinates at survey markers and other boundary reference locations.
  - 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.
- Assessment of project during the reporting period to confirm that the project scenario consists of maintain 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, 8 NCRs, 21 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

- Review of project documentation including the PP (Ref. 1), MR (Ref. 2), spatial information (Refs. 14-18), and calculation workbooks (Refs. 3-13) 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 performed to review the quantitative analyses undertaken by Terra Verde to convert the raw inventory data into emission reduction estimates during the reporting period (Refs. 3-13). This included a re-calculation of project emissions, ERTs, and uncertainty using inventory data as described below in Sections 2.1 and 2.2.
- 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.

## 3 Validation Findings

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### 3.1 Project Boundary and Activities

#### 3.1.1 Project Boundary and Procedures for Establishment

The project is located on approximately 26,510 acres in north central Oregon in Wheeler County. The property is predominantly a pine and fir forest, with some western juniper and mountain mahogany present. The project land is privately owned by Double Bar, Inc, the project proponent. 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 visiting a sample of corners or other ownership monuments and comparing actual locations to mapped locations. Likewise, during document review the audit team inspected project shapefiles (Refs. 14-18) 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, MR, and other project documentation which indicate potential infrastructure, activities, and technologies used within the project area. The project activity consists of small fuel reduction projects, with no anticipated commercial harvesting. Management under the project scenario is meant to maintain and enhance habitat for a variety of wildlife through snag retention and recruitment of coarse woody debris. 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 live biomass carbon	Included	CO <sub>2</sub>	Major carbon pool subjected to the project activity.
Below-ground live 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.
Below ground dead wood	Included	CO <sub>2</sub>	Major carbon pool subjected to the project activity.

Harvested wood product	Included	CO <sub>2</sub>	Major carbon pool subjected to the project activity.
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**3.1.4 Temporal Boundary**

Chapter 3 of the ACR Standard details the start date criteria for AFOLU based projects. The start date of June 16, 2023, project coincides with the date that the project proponent (Double Bar Inc.) entered a contractual relationship with the project developer (Terra Verde Inc) to initiate the project. SCS reviewed the PP, MR, and relevant contractual documents (Ref 26) for authenticity and to confirm that each document consummated “a contractual relationship” to implement a carbon project and the date the agreement was signed by both parties is June 16, 2023. SCS concludes that the documents provided indicate 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 also 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.

**3.2 Description of and Justification for the Baseline Scenario**

The baseline scenario utilizes an overstory removal that is applied to non-constrained acres (acres outside SMZs), that harvests saw logs greater than 7 inches in diameter. In the outer zone of the SMZ, a thinning prescription is applied that thins from below to a residual basal area of 60 square feet per acre, per the requirements listed in the Oregon Forest Practices Act. Through the review of regional forestry documents and an interview with a regional forester, the audit team has concluded that the baseline scenario is legally permissible and common practice for industrial timber ground in the region. Additionally, the baseline scenario aligns with the historic management of the property. Management history of the property was discussed with the regional forester and a land owner representative throughout the audit and site visit activities.

**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
Start 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 2023, 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: 1. Land acquisition or easement enrollment date. 2. The date that the Project Proponent or project participant began to apply the land management regime to increase carbon stocks and/or reduce emissions relative to the baseline. 3. The date that the Project Proponent first demonstrated good faith effort to implement a GHG project. Such a demonstration must include documented evidence of.  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 coincides with the date that the Project Proponent entered into a contractual relationship with the project developer to implement the carbon project. This satisfies the requirements in section 2.3 of the methodology.
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 an other 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	Review of the PP to confirm that the minimum term is 40 years, as required.



	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.	
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> <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>	Review of the PP to confirm that the crediting period is 20 years, as required given the project type.
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.	Review of the GHG Plan and the provided ownership documents (Refs. 1, 25) to confirm that the Project Proponent has control over the GHG sources/sinks from which the emissions reductions or removals originate on the property.
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.	Review of the GHG Plan, MR, and provided ownership docs (Refs. 1, 2, 25) to confirm that the project proponents ownership of offsets and the property are undisputed.
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 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"> <li>1. Exceed regulatory/legal requirements;</li> <li>2. Go beyond common practice; and</li> <li>3. Overcome at least one of three implementation barriers: institutional, financial, or technical.</li> </ol>	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 for the project during the reporting period (RP1), the audit team found no indication of any violations regarding regulatory compliance. EPA, ECHO, and OSHA were checked, and no violations were observed. Additionally, a regional forester that is familiar with the property was interviewed and indicated that the project proponent operates within the guides of all regulations that pertain to their operations.</p>

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 24% 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 24% 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 GHG Plan 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 30% leakage deduction was applied which is consistent with market leakage per the methodology. No activity shifting leakage was also confirmed through review of an attestation provided by the client which claims that no commercial harvesting will occur on any lands owned by the project proponent during the crediting period.
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	Confirmed by reviewing the GHG Plan, MR, and Appendix E (Refs. 1, 2, 21) which indicate that the project has no

	<p>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>	<p>anticipated negative community or environmental impacts.</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 6 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 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 were not implemented.

## 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 GHG Plan and inventory methodology (Refs. 1, 21) describe the process including sample size, determination of plot numbers, plot layout, data collected, and measurement techniques. Through site visit, data, and document review (Refs. 3-18, 21), 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 GHG Plan and the datasets submitted that the data management systems are in place as described.

### **3.5.4 QA/QC Procedures**

Section D of the GHG Plan, along with the inventory methodology, identifies field and desk QA/QC procedures. The field QA/QC procedure includes an audit of at least 5% of the samples collected to check the cruisers conformance against the inventory methodology. If the cruiser proves to be out of compliance, the project developer will provide remedial training to the cruiser and the cruiser will rework failed plots. After a second check cruise, if the problem persists, then the project developer will reject all work from the cruiser and they will be asked to leave the project.

Additional QA/QC procedures are discussed in section E6 of the GHG Plan (Ref. 1).

### **3.5.5 Processes for Uncertainty Assessments**

Section E5 of the GHG Plan describes the process to calculate baseline and project uncertainty. Per the GHG Plan, uncertainty in the combined carbon stocks in the baseline is calculated using equation 12 of the methodology. Uncertainty in the combined carbon stocks in the project during the reporting period is calculated using equation 20 of the methodology. The total project uncertainty is calculated using equation 22 of the methodology. SCS confirmed that the approaches for assessing uncertainty that are identified in the GHG plan are in conformance with the quantification methods required by the methodology.

## **4 Verification Findings**

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### **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<sub>t</sub>) was independently verified using equation 22 in the methodology.

	SCS Values	Client Values	Difference
Reporting Period	UNCT	UNCT	
RP1	11.85%	11.85%	0%

#### 4.1.2 Materiality

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

$$\% \text{ Error} = \frac{(776,865 - 772,551)}{772,551} * 100 = \frac{4,314}{772,551} * 100 = .5584\%$$

## 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 the emissions reduction by conducting the following analysis:

- Recalculate the live aboveground, live belowground, and standing dead and below ground carbon pools using Jenkins et al. 2003 equations and decay class information using the inventory data provided by the client (Ref. 9)
- Recalculate tree and plot-level live aboveground and standing dead tree defect (Ref. 8, 9)
- Recalculate site index for all plots using the appropriate site index equations for the species chosen as site trees (Ref. 12)
- Use the Forest Vegetation Simulator (FVS) to degrow the raw inventory to the project start date (Refs. 9-11, 19, 20)
- Remodel the entirety of the baseline and project scenario using FVS and follow methodologies specified in the GHG Plan to calculate carbon stocks. Compare to the client's calculations for the baseline and project scenarios (Refs. 3-5, 7-13, 19, 20). Because the entire baseline and project was remodeled, no correction factor was calculated or applied.
- Calculate the change in the baseline carbon stock stored in live trees and standing dead trees using equations 1 and 2 of the methodology. Calculate the 20-year average value of carbon remaining stored in wood products 100 years after harvest using equation 3 (Refs. 5, 13)
- With the outputs from equations 1, 2 and 3, calculate the long-term average baseline stocking level for the crediting period using equation 5 of the methodology. Use equation 7 to calculate the annual change in the baseline carbon stock (Ref. 13)
- Calculate the baseline uncertainty in the combined carbon stocks in the baseline using equation 12 (Ref. 13)
- Calculate the change in project carbon stock stored in live and dead trees using equations 13 and 14 (Ref. 13)

- Calculate the change in the project carbon stock and GHG emissions during the reporting period using equation 15 (Ref. 13)
- Calculate the percentage uncertainty in the combined carbon stocks in the project during the reporting period using equation 20 (Ref. 13)
- Calculate the total project uncertainty (percentage) during the reporting period using equation 22 (Ref. 13)
- 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 24 in the methodology (Ref. 13)

### 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

SCS confirmed that the applicable market leakage factor of .3 was applied. The leakage deduction was calculated as follows:

$$\text{Leakage Deduction} = (\Delta C_{P,t} - \Delta C_{BSL,t}) * LK$$

$$\text{Leakage Deduction} = (55,692 - (-)1,446,890) * 0.3 = 450,775$$

### 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 24%. 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 with 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, that project is not located on public or tribal lands
B	4%	Confirmation, through site inspections, 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%	Confirmation, through independent review of documentation, that conservation easement does not cover entire project area.
E	8%	Confirmation, through independent review, that 2 fires over 1,000 acres and within 30 miles of the project area occurred during RP1.
F	4%	Confirmation, through independent review of documentation, that epidemic disease or infestation is not present within project area, or within 30 mile radius of project area
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

Terra Verde Inc. is responsible for the preparation and fair presentation of the GHG statement in accordance with the criteria. The audit team asserts, with no qualifications or limitations, that

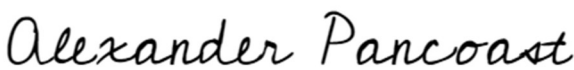

- The PP conforms, in full, to the validation criteria.
- The quantification of GHG emission reductions and/or removal enhancements, as reported in the MR, conforms to the verification criteria and is without material discrepancy.

Based upon the information made available to SCS and the analyses completed during the verification, SCS was able to reach a positive opinion, with a reasonable level of assurance, that the emission reductions represented by the Project Proponent during the monitoring period of 16 June 2023 to 30 September 2023 are free from material misstatement and in conformance with the assessment criteria.

The following provides a summary of the total emission reductions/removals for this Reporting Period including the buffer pool/reserve account contributions, and net emission reductions/removals:

Annual Emission Reductions and Removals in Metric Tons (tCO <sub>2</sub> e) during Reporting Period 1							
Vintage	Start Date	End Date	Total Emission Reductions/ Removals (tCO <sub>2</sub> e)	Buffer Pool/ Reserve Account Contribution (tCO <sub>2</sub> e)	Net Emissions Reductions/ Removals (tCO <sub>2</sub> e)	Removals Subset (If Applicable) (tCO <sub>2</sub> e)	Emission Reductions Subset (If Applicable) (tCO <sub>2</sub> e)
2023	16 June 2023	30 September 2023	1,022,191	245,326	776,865	38,261	983,930
Total for Reporting Period*			1,022,191	245,326	776,865	38,261	983,930

\*Note: Final numbers are rounded for simplicity and totals may not sum due to rounding.

Lead Auditor Approval	 Alexander Pancoast, 15 November 2024
Internal Reviewer Approval	 Alexa Dugan, 15 November 2024

## 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.

### **OBS 1 Dated 30 Nov 2023**

**Standard Reference:** ACR Improved Forest Management in Non-Federal U.S. Forestlands version 2.0

**Document Reference:** N/A

**Finding:** ACR Improved Forest Management in Non-Federal U.S. Forestlands version 2.0 states “The resampled carbon stock measurements must statistically agree with the project’s carbon stock measurements using a two-tailed Student’s t-test at the 90% confidence interval. If the project’s forest inventory is comprised of permanent plots that may be efficiently relocated by the verifier, this test shall be paired. Otherwise, this test shall be unpaired, requiring installation of resampling plots at new locations;”

During the site visit (November 13 – 15, 2023) the audit team observed that the inventory crew had truncated DBH measurements, or rounded down to the nearest 1/10”, for the sake of conservativeness. Because of this, a portion of resampled trees had either grown or swelled causing the DBH to measurement to increase by 1/10”. This led to 9 of the 13 plots resampled to show an increase of carbon ranging from 0.2% to 1.0%. All other plot measurements found to be nearly identical, with a few exceptions for minor difference in defect estimates. Because the variability in plot measurements was so small, and the presence of a conservative trend averaging less than 0.5%, the paired two-tailed Student’s t-test failed (p-value = 0.029, CI bounds = (-0.5, -0.09)).

The audit team has determined that the t-test failing is not an accurate representation of the quality of the inventory based on the accuracy of the plot measurements described above. This observational finding is issued to memorialize the situation and decision made by the audit team. SCS has reached out to the Registry regarding the limitations of using this paired T-test statistical approach to evaluate the accuracy of inventories. Additional guidance may be requested from the Registry. No further action is required and the finding is closed.

**Project Personnel Response:**

**Auditor Response:**

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

**NIR 2 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** ACR922 Double Bar GHG Project Plan\_v2.docx**Finding:** Section 2.3 of the methodology states:

“The project start date may be denoted by one of the following:

- The date that the Project Proponent First Demonstrated good faith effort to implement a carbon project. Such demonstrations must include documented evidence of:
  - o The date the Project Proponent initiated a forest inventory for a carbon project;
  - o The date that the Project proponent entered into a contractual relationship or signed a corporate or board resolution to implement a carbon project; or
  - o The date the project was submitted to ACR for listing review.”

Section A5 of the client's GHG plan states, “The project start date is June 15, 2023, which is the date that the project proponent entered a contractual relationship to initiate a carbon project with project developer Terra Verde...”

The audit team requests the client provide the appropriate documentation that denotes the project start date.

**Project Personnel Response:** Please see the fully executed contract document: 2023 GSA Terra Verde\_MA2023\_Double\_Bar\_Carbon 20232505\_fullyExecuted.pdf, as well as the copy of the email on June 15, 2023 that had the signed signature page. Terra Verde Carbon Agreement.pdf

**Auditor Response:** Thank you for providing this information. This finding is closed. Please see NCR 26.  
**Bearing on Material Misstatement or Conformance (M/C/NA):** C

**NIR 3 Dated 15 May 2024****Standard Reference:** IFM Methodology v2.0**Document Reference:** ACR922 Double Bar GHG Project Plan\_v2.docx, ACR922 Monitoring Report\_v1.docx Strata.shp**Finding:** Section 5.4 of the Methodology states:

“Information shall be provided, and recorded in the GHG Project Plan, to establish:

- The geographic coordinates of the project boundary (and any stratification inside the boundary) are established, recorded, and archived. This may be achieved by field mapping (e.g., GPS), or by using georeferenced spatial data (e.g., maps, GIS datasets, orthorectified aerial photography, or georeferenced remote sensing images);”

The acres reported in section E1.3 of the client's GHG plan is a total of 26,150 acres, with 17,602 acres falling in the “DENS” strata and 8,908 acres falling in the “SPAR” strata. The same total and strata-specific acres are reported in section IV of the client's monitoring report. The audit team attempted to recalculate strata a project-level acres in ArcPro using the provided Strata.shp shapefile. The audit team calculated the acres within ArcPro, then subtracted the acres in the “Roads”, “Inner\_Buff”, and “Outer\_Buff” columns to arrive at a net acreage. When summarized, the net acres by strata recalculated by SCS matched the “Net” column in the client's strata shapefile when summarized by strata. The “DENS” strata contains 17,493.35 acres and the “SPAR” strata contains 8,889.46 acres, per the provided strata shapefile. This varies from the reported acres in the GHG plan and the monitoring report. Can you speak to this apparent acreage discrepancy? The audit team requests additional information as to how the project area was calculated.

**Project Personnel Response:** New shapefiles have been submitted to clarify how acreages are summarized in the GIS. DoubleBarIFM\_GIS\_v05152024.gdb

The 17602 and 8907.5 are used because there is some harvesting that can take place within the outer zone of the buffer, and the inner zone is still putting on growth. The Rpt column represents what could be un-restricted harvested.

**Auditor Response:** Thank you for this explanation. This finding is closed.

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

**NIR 4 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** StreamBuffer.shp, Appendix F – ACR 922 Modeling Description.docx**Finding:** Section 4.1.1 of the Methodology discusses what the GHG plan must contain, which includes “The geographic extent of each constraint;”.

The audit team has compared the acres calculated in the stream buffer shapefile with those reported in Appendix F and has discovered an 80-acre difference. The audit team also noticed that there are stream buffers extending beyond the project area. Can you please clarify the reason for this apparent discrepancy and explain why there are stream buffers outside of the project area?

Additionally, it should be noted that the distance of the outer zone of the buffer starts from the outside of the inner zone, not from the stream bank. So, a stream with a 30’ inner zone and a 70’ outer zone would have a total buffer of 100’ per side of the stream.

**Project Personnel Response:** A new hydrography later has been submitted.

Nearby\_Hydrography\_Flow\_Line\_NAD

**Auditor Response:** Thank you for providing this new hydrography layer. Can you explain what attributes in Nearby\_Hydrography\_Flow\_Line\_NAD.shp were used to determine buffer widths? The shapefile doesn't explicitly say the size of the stream or whether fish are present. The fields "FishPresen" and "FPASStreamS" contain numbers that do not correlate to the stream types listed in the Eastern Oregon Stream RMA Matrix.

**Project Personnel Response 2:** The Hydrography Flow Line from OR DOF attribute table is used to filter and select streams. The Eastern Oregon Stream RMA Matrix is used by using the Standard Practice Width. The major factors if stream size, and if the stream is fish bearing. To filter the Hydrography Flow Line, FishPresen is used. A value of 1 indicates the presence of fish, and a value of 2 indicates a non-fish bearing stream. StreamPerm is stream permanence. A value of 1 is equal to perennial and 2 is intermittent. FPASStreamS indicates stream size. A value of 1 is equal to small, 2 is equal to Medium, and 3 is equal to large. Additionally, the DistanceTo field is used to identify Small Np streams that flow into a Type F stream. Terminal and Lateral were treated the same and conservatively given the larger buffer distance. See attached statewide-flowline-layer-faq.pdf

**Auditor Response 2:** Thank you for providing this additional explanation. Looking at the "FPASStreamS" field in the attribute table for the shapefile Nearby\_Hydrography\_Flpw\_Line\_NAD.shp it appears that only large (FPASStreamS = 3) streams are included in this shapefile. Are there no small or medium-sized streams present in the project area? Additionally, it appears that the stream buffer widths are not in compliance with the OFPA. This finding remains open. Please refer to language in the original finding.

**Project Personnel Response 3:** Verification Response\_V06122024

Hydrography\_Flow\_Line.shp Meta Data

Fish:

Attribute Label: FishPresence

Attribute Definition: Specifies whether fish are present in the stream segment

Attribute Definition Source: ODF

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: 1

Enumerated Domain Value Definition: Fish

Enumerated Domain:

Enumerated Domain Value: 2

Enumerated Domain Value Definition: Nonfish

Attribute Alias: FishPresen

Permanence:

Attribute Label: StreamPermanence

Attribute Definition: Stream flow permanence classification

Attribute Definition Source: ODF

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: 1

Enumerated Domain Value Definition: Perennial

Enumerated Domain:

Enumerated Domain Value: 2

Enumerated Domain Value Definition: Seasonal

Attribute Alias: StreamPerm

Distance To Fish:

Attribute:

Attribute Label: DistanceToFish

Attribute Definition: Starting at the furthest upstream vertex of the line segment, this is the downstream distance (in feet) to a segment identified as containing Fish

Attribute Definition Source: ODF

Attribute Alias: DistanceTo

FPA Stream Size:

Attribute:

Attribute Label: FPAStreamSize

Attribute Definition: Stream size classification for use in FPA regulations

Attribute Definition Source: ODF

Attribute Domain Values:

Enumerated Domain:

Enumerated Domain Value: 3

Enumerated Domain Value Definition: Large

Enumerated Domain:

Enumerated Domain Value: 2

Enumerated Domain Value Definition: Medium

Enumerated Domain:

Enumerated Domain Value: 1

Enumerated Domain Value Definition: Small

Attribute Alias: FPAStrea\_1

In summary to address the confusion, the FPAStrea\_1 column should be used with the corresponding values:

3 = Large

2 = Medium

1= Small

The buffers used correspond to the Eastern Oregon Stream RMA Matrix as follows:

Size/Type	Inner	Outer	GIS Inner	GIS Outer
Medium Type F	30	70	30	100
Small Type F	30	45	30	75
Small Type Np*	30	30	30	60

\*All Small Type Np streams were conservatively treated as terminal and followed the selection shown in statewide-flowline-layer-faq.pdf

The GIS Buffer is the total buffer from the stream, for example a Small Type F is buffered by 75' (30'+45')

This has been updated to reflect the 6 Medium Type F streams that did not receive a sufficient buffer.

A new buffer was installed, with the additional acreage added to the RMZ strata. Please see AdditionalMediumTypeFBuffer.shp. The regime acres were updated as follows:

The Regime Acres have been updated in All Workbooks for the Baseline Scenario.

Strata	Prior Acres	Change	Current Acres
ECHV115824.5	-4.5	5820	
ECHV126090	-2.2	6087.8	
ECRZ11 67.1	+4.5	71.6	
ECRZ12 62	+2.2	64.2	

**Auditor Response 3:** Thank you for this breakdown. This finding is closed.

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



**NIR 5 Dated 15 May 2024****Standard Reference:** ACR Standard V8.0**Document Reference:** DoubleBarIFM\_NPVCalculations.xlsx, ACR 922 Double Bar GHG Project Plan\_v2.docx**Finding:** Section 2.A in the Standard States the Principle of Consistency as “Enable meaningful comparisons in GHG-related information. Use consistent methodologies for meaningful comparisons of emissions over time. Transparently document any changes to the data, boundary, methods, or any other relevant factors.”

Cell C2 in all tabs of the client's NPV calculation workbook has a value of 26,383 project acres. Section B3 of the clients GHG plan reports the project acres as 26,510. Can you speak to this apparent discrepancy?

**Project Personnel Response:** The new GIS has been submitted to more clearly show acreage breakdown, and values updated in GHG plan.**Auditor Response:** Per Finding Responses for V1.docx, the acres used in the NPV analysis represent the "non-constrained acres". This value does not match the non-constrained acres calculated and reported in the response to NIR 3.**Project Personnel Response 2:** Please see the updated NPV Workbooks. The values used for acres to compare silviculture regimes on a per acre basis and are only those non-constrained acres {26,024}. This differs from the original documentation due to an update in the stream buffer acres. A tab was created to show the project scenario as a whole, included both accounting for costs incurred across forested acres that are constrained, as well as included the minimal additional volume from riparian zone harvest. This is the total Net Acres in the project {26,510}**Auditor Response 2:** This finding will be revisited upon the closure of NIR 4.**Project Personnel Response 3:** See updated NPV.**Auditor Response 3:** This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** M/C

**NIR 6 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** ACR922 Double Bar GHG Project Plan\_v2.docx**Finding:** Section 1.3 of the methodology details the sustainable management requirements that all projects must adhere to over the crediting period.

Section B2. Of the clients GHG plan states, “Double Bar lands are not currently certified, as no commercial harvesting is planned.”

The audit team requests a demonstration from the project proponent/landowner that no commercial harvesting is planned during the crediting period.

Section 5.4 of the methodology states:

“If the project decreases wood product production by greater than 5% relative to the baseline then the Project Proponent and all associated landowners must demonstrate that there is no activity shifting leakage beyond de minimis within their operations – i.e., on other lands they manage/operate outside the boundaries of the carbon project. This demonstration is not required if the Project Proponent and associated landowner(s) enroll all their forested landholdings, owned and under management control, within the carbon project.”

Section A3 of the clients GHG Plan states, “Double Bar, Inc (Double Bar) owns and manages 30,293 of commercial forestland acres in Wheeler County, Oregon. The project area includes a total of 26,510 acres of forestland and is situated within parts of five watersheds.”

Considering not all forested landholdings that the project proponent owns are enrolled in the project, the audit team requests that the client demonstrates that no activity shifting leakage is occurring.

**Project Personnel Response:** See attestation from landowner that no harvesting is occurring. No harvesting has occurred for over X (waiting for confirmation) years anywhere on the properties. It is possible that harvesting will occur to sell logs from fuel reduction projects. Appropriate land certification would be obtained if this were to happen. This question has been submitted to ACR and is currently being addressed by ACR as they prepare their formal approach to certification (pers comm with Andrew Taylor from ACR).

**Auditor Response:** What attestation? Please provide the document you are referring to.

**Project Personnel Response 2:** Attestation of no harvesting.pdf

**Auditor Response 2:** Thank you for providing this document. This finding is closed.

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

**NIR 7 Dated 15 May 2024****Standard Reference:** ACR Tool for Risk Analysis and Buffer Determination v1.0**Document Reference:** ACR922 Double Bar GHG Project Plan\_v2.docx**Finding:** Regarding fire risk, The ACR Tool for Risk Analysis and Buffer Determination v1.0 states:

- “8% if project is located in an area where fire greater than 1000 acres has occurred within 30 mile radius of project area in prior 12 months
- 4% if project is located in high fire risk region
- 2% if project is located in low fire risk region (verifiable evidence must be provided)
- 1% for agriculture and grassland projects only”

Section B8 of the client’s GHG plan calculates the project risk score as 20%, with a fire risk score of 4% which corresponds to the project being in a “high risk fire region”. The audit team identified two fire incidents that were over 1,000 acres and within a 30-mile radius of the project area. These fires both occurred in July of 2023, within the temporal bounds of RP1. The Alder Creek fire and the Devils Butte fire were 1,627.55 and 2,864.16 acres respectively, and within 30 miles of the project area. Please justify the use of a 4 % fire risk score.

**Project Personnel Response:** The fire risk rating has been updated to 24%**Auditor Response:** ACR922\_ERTcalculator\_v05172024.xlsx is still using a 20% buffer deduction rate. Additionally, "Appendix B - Fire History.pdf" does not contain the fires identified within 30 miles of the project area. This finding remains open.**Project Personnel Response 2:** ERT Calculator has been updated, as well as the map. The Alder creek fire was not available in the ODF dataset, so an online source was added.**Auditor Response 2:** Thank you for updating this. This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** M/C

**NIR 8 Dated 15 May 2024****Standard Reference:** ACR Standard v8.0, ACR IFM Methodology V2.0**Document Reference:** DoubleBarIFM\_SiteIndex.xlsx**Finding:** Section 4.1 of the IFM Methodology v2.0 states:

“The ISO 14064-2 principle of conservativeness must be applied for the determination of the baseline scenario. In particular, the conservativeness of the baseline is established with reference to the choice of assumptions, parameters, data sources, and key factors so that project emission reductions and removals are more likely to be under-estimated rather than over-estimated, and that reliable results are maintained over a range of probable assumptions.”

Additionally, section 2.B.2 of the ACR Standard 8.0 states:

“Consistent with ISO 14064-2:2019, Project Proponents shall consider all relevant information that may affect the accounting and quantification of GHG emission reductions and removals, including estimating and accounting for any decreases in carbon pools and/or increases in GHG emission sources.”

In the workbook “DoubleBarIFM\_SiteIndex.xlsx” under tab “DF\_Site”, it appears that the site index equation from Cochran (1979) is not being applied correctly, resulting in site index values that are not conservative. The last portion of the equation as it is displayed in Cochran (1979) reads as follows:

$$(HT - 4.5) (0.52032 - 0.0013194 \text{ age} + 27.2823/\text{age})$$

It appears that the clients equation has switched a “-” with a “+”, and reads as follows:

$$(HT - 4.5) (0.52032 + 0.0013194 \text{ age} + 27.2823/\text{age})$$

This results in site index values that are not conservative. Can you speak to this apparent divergence from the peer reviewed document being used to estimate site index for Douglas-fir?

Furthermore, in the clients site index workbook under tab “GF\_Site” the audit team noticed a portion of the equation for “x1” missing. The equation for “x1” in the site index workbook ends at “(loge age)9” and it’s missing the following portion of the equation:

$$+ 0.0000000000000000001187 (\text{loge age})^{24}$$

Can you speak to this apparent divergence from the peer reviewed document being used to estimate site index for grand fir?

**Project Personnel Response:** Statistics have been updated for new workbooks.

**Auditor Response:** Thank you for updating this. Section E2.5 of the clients GHG plan states, "Trees were greater than 30 years old and healthy." The Summary tab of DoubleBarIFM\_SiteIndex\_05162024.xlsx contains the average site index by strata. The averages include site index values from trees less than 30 years old. Please justify the decision to include trees less than 30 years old in average site index calculations, given the language presented in section E2.5 of the GHG plan.

**Project Personnel Response 2:** Trees less than 30 years of age were removed from the dataset and Site Index was recalculated for all strata.

**Auditor Response 2:** Thank you for updating this. This finding is closed.

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

#### **NCR 9 Dated 15 May 2024**

**Standard Reference:** IFM Methodology V2.0

**Document Reference:** DoubleBarIFM\_RP1Start\_Project\_Live\_Stocks\_11102023.xlsx

**Finding:** The IFM Methodology defines a tree as “A perennial woody plant with a diameter at breast height (4.5’) greater than or equal to 1” ...”

In the workbook “DoubleBarIFM\_RP1Start\_Project\_Live\_Stocks\_11102023.xlsx” in tab “TreeCalcs”, carbon is being calculated for trees that have been degrown to a DBH that is less than 1 inch. The carbon values for these trees that are less than 1 inch at DBH are being rolled up to the plot level and subsequently being used in the “Summary” tab of the workbook to calculate average stocking by strata and uncertainty. Including carbon values from trees with a DBH less than 1 inch represents a non-conformity with the methodology.

**Project Personnel Response:** Trees under 1-inch have been removed from the degrow.

**Auditor Response:** This finding is closed.

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

#### **NIR 10 Dated 15 May 2024**

**Standard Reference:** IFM Methodology V2.0

**Document Reference:** DoubleBarIFM\_RP1Start\_Project\_Live\_Stocks\_11102023.xlsx,  
DoubleBarIFM\_RP1End\_Project\_Live\_Stocks\_11102023.xlsx

**Finding:** Section 4.4 of the methodology states:

“It is assumed that uncertainties associated with the estimates of various carbon pools are available, either as estimates based on sound statistical sampling, or as default values given in IPCC Guidelines (2006) or IPCC GPG-LULUCF (2003). Uncertainties arising from the measurement and monitoring of carbon pools and changes in carbon pools must be quantified.”

Standard error (SE) is calculated by taking the standard deviation (SD) of the sample and dividing it by the square root of the number of samples (n).

$$SE = SD/\sqrt{n}$$

The standard error directly affects the outcome of the uncertainty calculation. In cell C12 of the “Summary” tabs in both “DoubleBarIFM\_RP1Start\_Project\_Live\_Stocks\_11102023.xlsx” and “DoubleBarIFM\_RP1End\_Project\_Live\_Stocks\_11102023.xlsx” where the client calculates the standard error for strata 2, it appears that the standard deviation is not being used in the numerator. Can you please speak to this apparent divergence between the generally accepted equation for SE and the approach taken to calculate SE in cell C12 in the aforementioned workbooks?

**Project Personnel Response:** Statistics have been updated for new workbooks.

**Auditor Response:** Thank you for updating this. This finding is closed.

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

**NCR 11 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** DoubleBarIFM\_RP1Start\_Project\_Live\_Stocks\_11102023.xlsx;  
DoubleBarIFM\_RP1End\_Project\_Live\_Stocks\_11102023.xlsx;  
DoubleBarIFM\_RP1\_Project\_Dead\_Stocks\_11102023.xlsx**Finding:** The description of the eBSL, TREE, 0 and eBSL, DEAD, 0 in section 4.4 under equation 12 states that “Percentage uncertainty expressed as 90% confidence interval percentage of the mean of the carbon stock in above and belowground live/dead trees...”. The generally accepted z-value for a 90% confidence interval is 1.645. In cells B11 and C11 in the summary tabs of the workbooks listed in the document reference cell, the z-value being used to calculate the “percentage uncertainty expressed as 90% confidence interval percentage” is 1.65. This represents a non-conformity with the methodology.**Project Personnel Response:** Statistics have been updated for new workbooks.**Auditor Response:** Thank you for updating this. This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** M/C**NIR 12 Dated 15 May 2024****Standard Reference:** ACR Standard V8.0**Document Reference:** ACR 922 Double Bar GHG Project Plan\_v2.docx; Contents of clients “Appendices” folder**Finding:** Section 6.B of the ACR Standard V8.0 states:

“Project proponents shall use the most recently published ACR GHG Project Plan template and include the following information:

- For AFOLU projects, description of the inventory methodology and subsequent calculations steps used to measure and estimate carbon stocks for all relevant GHG sources, sinks and pools;”

The audit team noticed while reading section D1. Of the GHG plan, the appendix reference for the inventory methodology was off. After further investigation, the audit team noticed many of the appendix references differ from what is present in the provided “Appendices” folder. Can you speak to these apparent discrepancies?

**Project Personnel Response:** Reference to Appendices has been updated.**Auditor Response:** Thank you for updating this. This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** NA

**NCR 13 Dated 15 May 2024****Standard Reference:** ACR Standard V8.0**Document Reference:** Contents of "FVS\_Keywords\_DoubleBar" folder**Finding:** Section 2.A in the Standard States the Principle of Consistency as “Enable meaningful comparisons in GHG-related information. Use consistent methodologies for meaningful comparisons of emissions over time. Transparently document any changes to the data, boundary, methods, or any other relevant factors.”

The Audit Team has noted that there is a discrepancy between the time intervals and number of cycles used in the FVS simulation between the baseline and project modelling scenarios (10-year cycles vs 5-year cycles). This is in non-conformance with the principle of Consistency as stated in the Standard.

**Project Personnel Response:** The modelling has been updated to use identical time intervals.**Auditor Response:** After reviewing the updated modelling parameters, it appears that the riparian zone RX does not share the same time intervals as the rest of the RXs. This finding remains open.**Project Personnel Response 2:** The RZ Run has been set to a 100-year time period rather than a 40-year time period to match all other runs.**Auditor Response 2:** Thank you for updating this. This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** C**NIR 14 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** Appendix E – ACR 922 Baseline Description, Appendix F – ACR 922 Modeling Description, contents of “FVS\_Keywords\_DoubleBar” folder**Finding:** Section 4.1.1 of the methodology states, “The GHG Project Plan must include the following baseline metrics:

- Descriptions of baseline silvicultural prescription, including trees retained, harvest frequency, and regeneration assumptions.”

In the baseline description and modelling description docs, the client lists regeneration by trees per acre (TPA) by species. The audit team requests an explanation as to how the client arrived at the species specific TPA regeneration values used in the baseline modelling scenario.

**Project Personnel Response:** This was an assumption that a dry site like this project is best suited to ponderosa pine and that regeneration would be Ponderosa Pine, also assumed Ponderosa Pine due to the plantations being all Ponderosa Pine. To update, an analysis for small diameter trees has been done and utilized a proportion by species for the remodel.**Auditor Response:** Thank you for this explanation. This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** M/C

**NIR 15 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** StreamBuffer.shp, NHD\_H\_Oregon\_State\_GDB.gdb, Appendix E – ACR 922 Baseline Description.docx**Finding:** Section 4.1 of the methodology states, “All legally binding constraints to forest management must be considered in baseline modeling.”

The client has provided spatial data for the stream buffer and the stream data used to create the stream buffers. However, the stream data provided by the client does not include the stream types mentioned in the Eastern Oregon Stream RMA Matrix that the client uses to determine buffer widths. The audit team is requesting an explanation of the process used to determine the stream classes and subsequently, the selection of streams to buffer.

**Project Personnel Response:** Buffer has been updated and document included describing the buffer. See FindingResponses for V1.docx**Auditor Response:** Please see the response to NIR 4. Finding remains open.**Project Personnel Response 2:** Please see the response to NIR 4.**Auditor Response 2:** This finding is being closed because it has merged with NIR 4. NIR 4 remains open.**Bearing on Material Misstatement or Conformance (M/C/NA):** M/C**NIR 16 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** DoubleBarIFM\_Project-LiveStock\_Projections\_11102023.xlsx, DoubleBarIFM\_BSL\_DeadProjections.xlsx**Finding:** Section 4.2.2 of the methodology states, “To ensure accuracy and conservative estimation of the mean aboveground live biomass per unit area within the project area projects must account for missing portions of the tree in both the ex ante and ex post baseline and with-project scenarios.”

The audit team is unable to arrive at the same strata level defect values as the client. Can you please provide an explanation as to how you arrived at strata level defect? Additionally, it does not appear that defect is being applied to the dead carbon stocks in the baseline scenario. Can you please justify excluding defect from the dead stocks in the baseline scenario?

**Project Personnel Response:** Strata level defect, and dead defect have been recalculated, and explained in the FindingResponses for V1. docx**Auditor Response:** Thank you for providing an explanation. This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** M



**NIR 17 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** DoubleBarIFM\_BSL\_DeadProjections.xlsx,  
DoubleBarIFM\_BSL\_HarvestWoodProducts.xlsx**Finding:** Section 4.2.4 of the methodology states, "If a volume measurement is used, multiply the cubic foot volume by the appropriate green specific gravity by species from table 5-3a of the USFS Wood Handbook."

In the clients workbook DoubleBarIFM\_BSL\_DeadProjects.xlsx, tab SpeciesList, the client indicates that they used the average oven dry weight for Utah juniper in their calculations for western juniper. The client got this value from Miles and Smith 2009. Average oven dried weight is calculated as follows:

Avg oven dried weight = 62.4 lb/cf \* species-specific specific gravity

For example, the Miles and Smith value for average oven-dry weight of western larch is 30. The green specific gravity of western larch listed in table 5-3a of the USFS Wood Handbook is .48, thus:

Avg oven-dry weight of western larch = 62.4 lb/cf \* .48 = 29.95

Table 4 in Miles and Smtih 2009 lists the specific gravity for western juniper. Please justify your decision to use the average oven-dry weight value for Utah juniper rather than calculating the average oven-dry weight for western juniper.

Additionally, the tab SpeciesList in the aforementioned workbook indicates that the average oven-dry weight for mountain mahogany was sourced from [www.wood-datebase.com](http://www.wood-datebase.com). The audit team was unable to identify what the client is referring to and requests additional information to verify the lb/cf value for mountain mahogany.

**Project Personnel Response:** See FindingsResponses for V1.docx for discussion.**Auditor Response:** Thank you for clarifying. This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** M/C

**NIR 18 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** DoubleBarIFM\_BSL\_HarvestedWoodProducts.xlsx, Appendix E – ACR 922 Baseline Description.docx, DoubleBarIFM\_NPVCalculations.xlsx**Finding:** Section 4.2.4 of the Methodology states:

“There are five steps required to account for the harvesting of trees and to determine carbon stored in wood products in the baseline and with-project scenarios:

1. Determining the amount of carbon in trees harvested that is delivered to mills;”

The clients HWP workbook, tab HWP\_Calcs, it is clear that western juniper is being rolled up into the total harvested wood products for the baseline scenario. Additionally, in the clients Appendix E baseline description doc and NPV calculation workbook, there is no mention of a western juniper stumpage value. Is western juniper being delivered to a mill? Please justify your decision to include western juniper in harvested wood products.

**Project Personnel Response:** Western Juniper is used by some local owners, however there exists limited evidence to include in the production deliveries to mills. Thus, Western Juniper has been removed from the harvested wood products calculations. Additionally, Mountain Mahogany and Cherry Species are also excluded.

**Auditor Response:** This finding is closed.

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

**NIR 19 Dated 15 May 2024****Standard Reference:** ACR Standard V8.0**Document Reference:** DoubleBarIFM\_NPVCalculations.xlsx,  
DoubleBarIFM\_BSL\_HarvestedWoodProducts.xlsx**Finding:** Section 2.A in the Standard States the Principle of Transparency as “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.”

After reviewing the input volumes in the client's NPV analysis workbook, the audit team noticed that the volumes from the harvests in the outer zone of the riparian area are not included. Can you please explain why these harvest volumes are not included in the NPV analysis?

Additionally, the audit team is requesting an explanation for the client's basis for the \$20/acre harvest admin value and a 2% inflation rate.

**Project Personnel Response:** The riparian zone was excluded from the NPV calculation as it was assumed to represent a constant between regimes and provides minimal additional volume. The NPV calculation largely provided a framework to show the overwhelming choice of thinning from above whenever the minimum volume threshold was met. Please see the additional NPV that is representative the project crediting period. The Admin rate of \$20 was determined by estimating the salaries for the minimum management of 3 salaried employees that work the ranch, as well as the inclusion of taxes. The inflation rate of 2% was selected as 2% is the federal inflation target. See FindingsResponses for V1.docx for discussion. We are also waiting on information from the landowners costs to reconsider the Admin costing.

**Auditor Response:** What do you mean by "Please see the additional NPV that is representative the project crediting period."? Please clarify.

**Project Personnel Response 2:** As mentioned prior, the Riparian Zone was excluded from original calculations that compared silviculture methods as it contributes minimally. As mentioned in the response to Finding 5, an additional tab as been added to show the economics of the baseline scenario within the project to include those riparian acres and additionally costs incurred on other constrained acres. The thinning from above is an overwhelmingly more attractive silvicultural regime, and has historically been practiced on inland ground in the western US. Additionally, it has been shown to provide a profitable revenue stream both during the project lifetime and the full 100-year cycle. Additionally, please the refined estimates for the rotation age that maximizes NPV for a clearcut silviculture regime. An approach was taken that included refined acres calculations and a weight by acres average by variant. This resulted in a maximum NPV being reached in the year 2112, the 2nd rotation clearcut harvest was thus scheduled for the year 2113 to align with growth and reporting intervals within the model. Estimates for inflation were conservatively estimated to be 2%, a standard set by the Federal Government. Additionally, the NPV calculator is set up to allow for inflation and wood price appreciation to affect wood pricing. Even with higher inflation rates such as today's market, one would expect to also see wood appreciation as well. Estimates for administration costs were conservatively estimated to be \$20 an acre, to account for property taxes as well as management costs incurred including equipment, salaries, etc. This was developed by an estimate from the landowner as to operational costs, and was conservatively increased as to not overstate the potential revenue returns of a timber harvest.

**Auditor Response 2:** Thank you for this explanation. This finding is closed.

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

**NIR 20 Dated 15 May 2024****Standard Reference:** ACR Standard V8.0**Document Reference:** Appendix E – ACR 922 Baseline Description.docx**Finding:** Section 2.A in the Standard States the Principle of Transparency as “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.”

Page 5 of the clients Appendix E states, “Regional mill capacity for eastern Oregon (Blue Mountains and Central Region) is 357 Million board feet,...” Can you provide the source of this information?

**Project Personnel Response:** This value is from Table 9 in Oregon’s Forest Products Industry and Timber Harvest 2017 with Trends Through 2018, General Technical Report PNW-GTR-997, PNW Research Station, USDA, USFS. October 2021. This value represents the level of harvests that are currently occurring in the Central and Blue Mountains region and would be expected to replace. This does not take into account additional un-utilized capacity or additional export markets.

**Auditor Response:** Thank you for providing the source of this information. This finding is closed.

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

**NCR 21 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** ACR922 Double Bar GHG Project Plan\_v2.docx

**Finding:** Section 1.4 of the methodology lists carbon pools and sources and indicates whether they should be included or excluded from the project. Per section 1.4 of the methodology, CH<sub>4</sub> gases emitted from the burning of biomass should be excluded. Section B4 of the clients GHG plan indicates that CH<sub>4</sub> is included in the project. This represents a non-conformity with the methodology.

**Project Personnel Response:** CH<sub>4</sub> has been removed

**Auditor Response:** This finding is closed.

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

**NCR 22 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** ACR 922 Double Bar GHG Project Plan\_v2.docx**Finding:** Section 3 of the IFM methodology states, “If stratification is used, a stratification standard operating procedures (SOP) document detailing relevant design, inputs, parameters, rules, and techniques must be provided as an attachment to the initial GHG project Plan for validation.”

Section E2.2 of the client's GHG plan briefly discusses the stratification of the project. However, this brief overview of stratification does not meet the requirements of the stratification SOP document as listed in section 3 of the IFM methodology and represents a non-conformity.

**Project Personnel Response:** Verbiage has been added to the GHG report: The underlying basis for developing the stratification was to utilize the traditional timber typing to characterize the stand shape. Then an ocular estimate provided based on a determination of “Dense” or “Sparse” based on tree size and canopy cover.

**Auditor Response:** A stratification SOP document has not been provided and thus does not meet the requirements of the methodology. This finding remains open.

**Project Personnel Response 2:** Please see the StratificationSOP.docx.

**Auditor Response 2:** Thank you for providing this document. This finding is closed.

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

**NIR 23 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** ACR922 Double Bar GHG Project\_v2.docx, Appendix E – ACR 922 Baseline Description.docx**Finding:** Section 4.1.1 of the methodology states:

“The GHG Project Plan must include the following baseline metrics:

- Descriptions of baseline silvicultural prescriptions, including trees retained, harvest frequency, and regeneration assumption. One or more of the following sources must substantiate the choice of baseline silvicultural prescriptions and their relevance to the ecological conditions of the project area:
  - o Publications, statements, or attestations from state or federal agencies;
  - o Written statements or attestations from a regional professional forester(s);
  - o Peer-reviewed or academic publications;
  - o Management records of the silvicultural prescriptions applied in similar forest conditions within the last 10 years; or
  - o Other verifiable evidence that the baseline silvicultural prescriptions have been employed in similar forests of the region.”

The audit team has requested that the client provide all necessary documentation to support the baseline scenario. The audit team also requests the client provide the page numbers containing the evidence that supports the baseline.

**Project Personnel Response:** Clearcutting and overstory removal are forestry practices throughout Oregon. See ECOLOGYANDMANAGEMENTOF.pdf in attachments. Page 22 discusses clearcutting and overstory removal in Eastern Oregon. Additionally, overstory removal has occurred on this property in the past, as can be seen in the data by the scarce presence, but not absence, of extremely large diameter trees.

**Auditor Response:** Thank you for providing this. This finding is closed.

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

**NCR 24 Dated 15 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** Appendix D – Double Bar Forest Carbon Inventory Protocol.pdf**Finding:** Section 4.2.2 of the methodology states:

“An inventory SOP document must be developed and attached to the GHG Project Plan for validation that describes the inventory process, including the following:

- \* Sample size;
- \* Determination of plot locations and numbers;
- \* Plot size and design, in-field location procedures, and monumentation;
- \* Whether plots are permanent or temporary;
- \* Data collected and measurement tools used;
- \* Detailed measurement procedures such that measurements are repeatable;
- \* Decay classification of standing dead wood, if applicable;
- \* Process for recording missing volume, or tree class code as applicable, and how corresponding deductions for unsound wood were applied;
- \* Biomass estimation technique (section 4.2.2.1);
- \* Data management systems and processes, including QA/QC procedures; and
- \* Procedures for updating the forest inventory, including following harvests or disturbances.”

Section 5.2 of the methodology states, “The inventory SOP document must describe how the project will update the forest inventory data following harvests or disturbances.”

The document “Appendix D – Double Bar Forest Carbon Inventory Protocol” does not include the sample size, whether plots are permanent or temporary, what biomass estimation technique will be used, or procedures for updating the forest inventory. This is out of conformance with the methodology.

**Project Personnel Response:** The inventory SOP contains most of this information, but has been updated to include: the sample size was 150 plots, plots are permanent, biomass was estimated by Jenkins, and plots will be updated by revisiting the plot after disturbance or within 6-12 years

**Auditor Response:** Thank you for updating this. This finding is closed.

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

**NCR 25 Dated 15 May 2024****Standard Reference:** ACR\_Monitoring-Report-v5.0.docx**Document Reference:** ACR922 Double Bar Monitoring Report\_v2.docx**Finding:** Section VIII of the ACR Monitoring Report Template V5.0 states under “Instructions” to “Provide the name of the Validation/Verification Body for this Reporting Period.” In Section VIII of the client's monitoring report, they do not state the validation/verification body. This is out of conformance with the required template.**Project Personnel Response:** This verbiage will be added once modelling has been approved. Final acreages and numbers will then be added to the current Monitoring report template after modelling is completed.**Auditor Response:** Awaiting updated MR. Finding remains open.**Project Personnel Response 2:** Updated Version 3 of Monitoring Report included.**Auditor Response 2:** Thank you for updating this. This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** C



**NCR 26 Dated 24 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** ACR922 Double Bar GHG Project Plan\_v3.docx, 2023 GSA Terra Verde\_MA2023\_Double\_Bar\_Carbon 20232505\_fullyExecuted.pdf, Terra Verde Carbon Agreement.pdf**Finding:** Section 2.3 of the methodology states:

“The project start date may be denoted by one of the following:

- The date that the Project Proponent First Demonstrated good faith effort to implement a carbon project. Such demonstrations must include documented evidence of:
  - o The date the Project Proponent initiated a forest inventory for a carbon project;
  - o The date that the Project proponent entered into a contractual relationship or signed a corporate or board resolution to implement a carbon project; or
  - o The date the project was submitted to ACR for listing review.”

Section A5 of the client's GHG plan states, “The project start date is June 15, 2023, which is the date that the project proponent entered a contractual relationship to initiate a carbon project with project developer Terra Verde...”

The first paragraph of "2023 GSA Terra Verde\_MA2023\_Double\_Bar\_Carbon 20232505\_fullyExecuted.pdf" states, "THIS PROFESSIONAL SERVICES AGREEMENT ('Agreement') made and entered into in duplicate this 16th day of June, 2023 (the 'Effective Date')..." This indicates that the effective date of this contract is June 16, 2023. Additionally, the Terra Verde, Inc representative did not sign the contract until June 16, 2023, indicating the execution date of the contract. Having a start date of June 15th, 2023 is out of conformance with the methodology.

**Project Personnel Response:** The email with the signed page was received on June 15. But PP acknowledges that the return email did not go out until the 16th, so the project start date has been updated.

**Auditor Response:** The start date in ACR922\_ERTcalculator\_v1.1\_05312024.xlsx still reflects the incorrect start date. Additionally, section H1 of V4. of the clients GHG plan reports the wrong start date. This finding remains open.

**Project Personnel Response 2:** ERT Calculator has been updated.

**Auditor Response 2:** Section H1 of the GHG plan still contains an incorrect start date. This finding remains open.

**Project Personnel Response 3:** Date has been corrected.

**Auditor Response 3:** Thank you for updating this. This finding is closed.

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

**NIR 27 Dated 24 May 2024****Standard Reference:** ACR Standard V8.0**Document Reference:** DoubleBar\_IFM\_BLS\_HarvestedWoodProducts\_05172024.xlsx,  
DoubleBar\_IFM\_BSL\_DeadProjections\_05172024.xlsx,  
DoubleBar\_IFM\_BSL\_Live\_Stocks\_Projections\_05172024.xlsx,  
DoubleBarIFM\_Project\_Live\_Stocks\_Projections\_05172024.xlsx**Finding:** Section 2.A in the Standard States the Principle of Transparency as “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.”

It appears that an update has been made to the "RegimeAcres" tab in the workbooks in the document reference cell. The audit team requests a breakdown of how the regime acres were calculated including a description of the spatial analysis that took place, accompanied by any supplementary spatial data as appropriate.

**Project Personnel Response:** Regime Acres were recalculated due to an updated stream layer being used which resulted in a change in the buffer acres within each stratum. A description of the breakdown was available in the previously delivered FindingResponseforV1.docx, which follows a classical forest inventory workflow, taking the total acres within the strata, nets out those areas that contained roads, then provides for buffered acres, and results in reportable acres (or non-constrained).**Auditor Response:** This finding will be revisited upon the closure of NIR 4.**Project Personnel Response 2:****Auditor Response 2:** This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):** M/C

**NIR 28 Dated 24 May 2024****Standard Reference:** IFM Methodology V2.0**Document Reference:** ACR922 Double Bar GHG Project Plan\_v3.docx**Finding:** Section 3 of the IFM methodology states, "The stratification SOP document should contain information necessary such that the stratification can be examined and duplicated as necessary to provide reasonable assurance of the validity and non-bias of associated techniques."

Section E2.2 of the clients GHG plan states, "The underlying basis for developing the stratification was to utilize the traditional timber typing to characterize the stand shape. Then an ocular estimate provided based on a determination of "Dense" or "Sparse" based on tree size and canopy cover."

The audit team requests an explanation about how an ocular estimate represents a non-biased approach to stratification that could be replicated.

**Project Personnel Response:** An ocular estimate has long been used in the process of timber typing. Before the advent of geospatial products that could provide raster level estimates of measurements such as canopy cover or tree height or diameter, an ocular estimate was used when viewing aerial imagery and drawing timber stand maps. This estimate relies on a forester's ability to observed the forest within the polygon and then assign it to one of any number of calls. In the case of this stratification, a simple 2 classification system was used. Dense – which the forester would assign the polygon a call of if he or she felt that the polygon was represented by complete, or mostly complete forest coverage. Or Sparse, which the forester would assign the call if he or she felt the polygon contained forested area, but the forest was broken, or mostly broken. This was done using aerial imagery and did not contain a raster layer that could provide a numerical estimate of the metrics that commonly inform timber stratification such as tree height or canopy cover, and thus the foresters professional judgement must be relied upon. This has been a standard in timber stratification historically. This is subjective, but this is repeatable. The key here is consistency. A measure of forest metrics through view of aerial imagery alone with no additional analysis will remain objective and subject to an individual forester.

Additionally, strata assignment was performed after the stand boundaries were drawn, but prior to any inventory or to any knowledge of the standing volume of the stand. Thus, this approach remains non-biased.

**Auditor Response:** Thank you for this explanation. This finding is closed.

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

**NIR 29 Dated 25 Jun 2024****Standard Reference:** ACR Standard V8.0**Document Reference:** Appendix D - ACR 922 Modeling Description.docx, DoubleBarIFM\_BSL\_HarvestedWoodProducts\_06122024.xlsx, contents of "FVS\_Outputs" folder**Finding:** Section 2.A in the Standard States the Principle of Transparency as "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."

Appendix D - ACR 922 Modeling Description.docx states, "A thinning prescription for the outer band of the riparian management zone was selected that thinned from below to a residual basal area of 60 Square Feet as dictated by the Oregon Forest Practices Act. This thinning occurred whenever adjacent acres were harvested. "

Reviewing the FVS out files and the workbook

"DoubleBarIFM\_BSL\_HarvestedWoodProducts\_06122024.xlsx", it is apparent that the riparian zone harvest is not being triggered as described in the modelling description. Using the "Key" column as an identifier in the aforementioned workbook, we can see that BMHV11 was harvested in 2023 and 2042. This is further substantiated in the FVS out file "BMHZ\_FVSoutput.txt". Given the description on the modelling description, this leads the audit team to believe that a riparian zone entry should occur in 2023, under the Key BMRZ11. The aforementioned HWP workbook only contains HWP entries for Key BMRZ11 for 2042, despite the adjacent acres being harvested in 2023. Can you speak to this apparent discrepancy between the language provided in the modelling description and the HWP data output from FVS?

**Project Personnel Response:** BMHZ11 (a typical thinning from above) does occur in 2023 and 2042. BMRZ11 (the riparian entry) does not occur in 2023 due to FVS finding insignificant trees to remove. The prescription is to thin from below to a 60, harvesting trees only 7" and greater. It is the analytical teams belief that FVS did not find trees over 7" to remove that would keep the BA at an appropriate value. The BMRZ Output can be referenced to see that the initial thin is ignored. Also looking at the stand summary, one can see that the QMD of the stand is well below 7.0, also indicated a likely inability to thin from below, with a minimum DBH of 7.0" and to maintain a BA of 60. We used a minimum harvest of 1500 board feet per acre to be "economical" for the region. The RMZ harvest would not have produced this and that is the reason it is skipped (as evidence by the small QMD and lower BA).

**Auditor Response:** Thank you for this explanation. This finding is closed.

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

**NIR 30 Dated 25 Jun 2024****Standard Reference:** ACR Standard V8.0**Document Reference:** Appendix D - ACR 922 Modeling Description.docx**Finding:** Section 2.A in the Standard states the Principle of Completeness as "Include all relevant GHG emissions and removals. Include all relevant information to support criteria and procedures."

"Appendix D - ACR 922 Modeling Description.docx" contains out of date information that has changed due to recent updates in other aspects of the project. Can you justify your decision not to update Appendix D with this new information?

**Project Personnel Response:** Updating was an oversight. Plan has been updated. Appendix D - ACR 922 Modeling Description\_v1.1**Auditor Response:** Thank you for updating this. This finding is closed.**Bearing on Material Misstatement or Conformance (M/C/NA):**