



**Offset Verification Report**

CAFR5337-CAR1257 Finite Carbon – Rowland IFM

Reporting Period:

August 7, 2020 – August 6, 2021

Prepared for:

Rowland Land Company, LLC and Finite Carbon Corporation

August 2, 2022

Ruby Canyon Environmental, Inc.

743 Horizon Ct. Suite 385

Grand Junction, Colorado 81506

(970) 241-9298

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

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## **1.0 Introduction**

Ruby Canyon Environmental, Inc. (RCE) was contracted to perform the verification of the CAFR5337-CAR1257 Finite Carbon – Rowland IFM project (Project) for the reporting period from August 7, 2020 through August 6, 2021 to the California Air Resource Board’s (ARB) Compliance Offset Protocol for U.S. Forest Projects (June 25, 2015) (Protocol). RCE is an accredited verification body (H2-19-008) under the California Cap-and-Trade Program and this verification was conducted under Regulation requirements in addition to the requirements of the Protocol. The Project, which takes place on land owned by Rowland Land Company, LLC, commits to greenhouse gas (GHG) emission reductions through forest management in accordance with the Protocol. The Project is currently listed on the Climate Action Reserve (Reserve), an ARB-approved Offset Project Registry (OPR).

RCE teamed with FRST Corporation (FRST) as subcontractors to assist in the completion of this verification.

### ***1.1 Project Background & Site Description***

The Project entails improved forest management (IFM) on over 35,466 acres of mainly hardwood and conifer forests located in Raleigh, Fayette, Wyoming, Nicholas, Webster, Wayne, and Boone counties, WV.

### ***1.2 Responsible Parties***

#### Offset Project Operator (OPO)

Rowland Land Company, LLC (Rowland)  
405 Capitol Street, Suite 609  
Charleston, WV 25301

#### Technical Consultant (TC)

Finite Carbon Corporation (Finite)  
435 Devon Park Drive, 700 Building  
Wayne, PA 19087

### ***1.3 Verification Team***

The RCE Verification Team consisted of the following individuals:

Lead Verifier: Zach Eyler, RCE (ARB ID: H2-19-116)

Professional Forester, Biometrician: Andrea Eggleton, FRST (CA RPF ID:3003, SAF CF ID: 169646, ARB ID: H2-20-194, WV RF #797)

Project Specialist: Christian Eggleton, FRST (CA RPF ID: 3073, ARB ID: H2-21-220)

Forest Analyst: Tim Facemire, FRST (ARB ID: H2-20-248)

Independent Reviewer: Phillip Cunningham, RCE (H2-20-186)

### ***1.4 Objectives***

The goal of the verification activities was to ensure that the OPO’s total reported GHG reductions are free of offset material misstatement (as defined in the Regulation §95802(a)(244)) and that the Forest Project Monitoring Report conforms to the requirements of the Protocol and the Regulation.

### ***1.5 Scope***

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

- Review the Project documentation against the Verification Criteria listed in Table 1 and develop a verification plan and sampling plan
- Review Project ownership documentation
- Review Project eligibility
- Review data management and monitoring systems
- Check calculation results and methods to assess the correctness of the emission reductions from site prep and sequestration activities
- Desktop Verification Activities:
  - Review data management and monitoring systems
  - Check calculation results and methods to assess the correctness of the baseline and emission reductions claimed
  - Review records and additional documentation (permits, legal documentation, harvest support data, etc.)
  - Assess Project for compliance to the Protocol and the Regulation
  - Review Offset Project Data Report for compliance to the Protocol and the Regulation
- Submit requests for corrective actions, additional documentation and clarifications, as necessary, and document all items in the Issues Log; and,
- Issue an Offset Verification Report (OVR), Issues Log, and Offset Verification Statement (OVS) to Rowland, Finite and the Reserve.

## 1.6 Verification Criteria

**Table 1 – Verification Criteria**

| Criteria                                  | Details                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Standard of Verification</b>           | <ul style="list-style-type: none"> <li>• Compliance Offset Protocol for U.S. Forest Projects (June 25, 2015)</li> <li>• Final Regulation Order, Subchapter 10 Climate Change, Article 5, Title 17, California Code of Regulations, Sections 95800-96022 (April 1, 2019)</li> </ul>                                                                                                                                                                 |
| <b>Guidance Documents</b>                 | <ul style="list-style-type: none"> <li>• ARB Technical Guidance for Offset Verifiers Verification of Offset Project Data Reports (October 2013)</li> <li>• Compliance Offset Program for U.S. Forest Offset Protocol Frequently Asked Questions (October 29, 2013)</li> </ul>                                                                                                                                                                      |
| <b>Level of Assurance</b>                 | Reasonable assurance                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Inventory Minimum Quality Standard</b> | Inventory must pass the sequential sampling requirements found in Section 10 of the Protocol.                                                                                                                                                                                                                                                                                                                                                      |
| <b>Offset Material Misstatement (ARB)</b> | <p>A discrepancy, omission, misreporting, or aggregation of the three, identified in the course of offset verification services that leads an offset verification team to believe that an OPDR contains errors resulting in an overstatement of the reported total GHG emission reductions or GHG removal enhancements greater than 5 percent.</p> <p>Forest Projects are not eligible to receive a qualified positive verification statement.</p> |

## 2.0 Verification Activities Summary

As the first step in verification activities, RCE developed a verification plan (Appendix A) to be followed throughout the verification. The verification plan consisted of the following activities:

- RCE submitted the original COI and NOVS forms to the Reserve, ARB and the OPO/TC on September 13, 2021. The Reserve approved the forms on October 28, 2021. RCE submitted revised forms during the verification process.
- RCE held a verification kickoff meeting with Rowland and Finite on October 28, 2021. This meeting was the start of verification activities and was after the OPDR was submitted. During the kickoff meeting, RCE reviewed the verification objectives, verification process, and the verification schedule. This meeting was attended by:
  - Ruby Canyon Environmental
    - Zach Eyler
  - Finite
    - Stephen Purvis
  - Rowland
    - David Clapp
- The Verification Team performed a strategic review and risk assessment of the received data and support documents in order to understand the scope and areas of potential risk in the GHG emissions reductions. Specifically, the Verification Team determined the following risks:

**Table 2 – Risk Identification**

| # | Identified areas of risk:                                                                           | Qualitative narrative for reason that risk exists                                                                                                                                            | Level of Risk (high, med, low) |
|---|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| 1 | Data acquisition equipment                                                                          | Risk is more related to human error/inconsistencies in using measuring equipment (clinometers/ dbh tape, etc.) than in the equipment itself.                                                 | Medium                         |
| 2 | Data sampling and frequency                                                                         | Plot data must be updated on a 12-year basis, or up to 18-years given certain restrictions.                                                                                                  | Medium                         |
| 3 | Data processing and tracking                                                                        | Data tracking is complex and involves several steps. Info taken by hand in electronic devices, transferred into databases and excel, which is transformed into CO2 data through calculations | Medium                         |
| 4 | Project baseline and annual GHG emissions, GHG reductions, and GHG removal enhancement calculations | Were calculations performed according to Protocol equations?                                                                                                                                 | Medium                         |
| 5 | Data reporting                                                                                      | Has the project provided all the required documentation for verification to the OPR and ARB?                                                                                                 | Low                            |
| 6 | Nat. forest mgmt. requirements                                                                      | Must meet NFM requirements provided in protocol.                                                                                                                                             | Low                            |

|   |                                                                            |                                                                                                                           |        |
|---|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--------|
| 7 | Sustainable harvest requirements                                           | Forestry only. No harvests this RP                                                                                        | Low    |
| 8 | Management policies or practices in developing Offset Project Data Reports | Does the report contain any material misstatements? Does it contain all required sections?                                | Medium |
| 9 | Regulatory Compliance                                                      | Were there any violations on the Project lands during the reporting period? Does the project have all applicable permits? | Low    |

- Pursuant to §95977.1(b)(3)(G)(2) of the Regulation, the Verification Team developed a ranking of GHG emissions sources, GHG sinks, and GHG reservoirs (SSRs) within the offset Project boundary by percent contribution to total CO<sub>2</sub>e emissions, GHG reductions, and GHG removal enhancements. The Verification Team also ranked GHG emissions sources, GHG sinks, and GHG reservoirs by calculation uncertainty. RCE used these rankings to target areas for document reviews and data checks. The methods of the reviews and checks were noted, and the information analyzed was summarized in the sampling plan. The full SSR table in the sampling plan can be found in Appendix B.
- Pursuant to §95977.1(b)(3)(G) of the Regulation, RCE developed a risk-based sampling plan based upon the strategic review and risk assessment. The verification plan and sampling plan were used throughout the verification and were revised as needed based upon additional risk assessments.
- The Verification Team reviewed a variety of documents and files provided by Finite and Rowland throughout the verification process. These documents were provided at the start of verification activities or were provided to RCE in response to items noted in the Issues Log. All documents and files reviewed by the Verification Team as part of the verification can be found in Appendix C. RCE retains sampling plans for a minimum of 15 years, per §95977.1(b)(3)(K) of the regulation.
- Pursuant to §95977.1(b)(3)(D)(2)(f) of the Regulation, the Verification Team performed a comprehensive desk review of the submitted verification documents and relevant regulations and to confirm that the Project complied at all times with all local, state, or federal environmental regulatory requirements, including health and safety regulations.
- Pursuant to §95977.1(b)(3)(L), the Verification Team performed data checks (more detail on data checks performed is provided in following report sections). The minimum data checks pursuant to section 95977.1(b)(3)(L)(3) were completed.
- Pursuant to §95977.1(b)(3)(O) and 95977.1(b)(3)(M) of the Regulation, the Verification Team submitted corrective action requests (CARs), non-material findings (NMs), additional documentation requests (ADRs) and clarification requests (CRs) to Finite as necessary throughout the verification and all requests are documented in the Issues Log.
- Pursuant to §95977.1(b)(3)(R)(2) of the Regulation, RCE's Independent Reviewer conducted a review of all verification activities, verification sampling, data checks, verification Issues Log, OVR, and OVS. The Independent Reviewer maintained independence from the offset verification services prior to conducting the review.
- The Verification Team produced a final OVR and OVS.
- Pursuant to §95977.1(b)(3)(D)(4)(d) of the Regulation, RCE held a verification exit meeting with Rowland and Finite.

## 3.0 Project Overview

### 3.1 Assessment of the GHG Reduction Project Operations

The Project entails improved forest management (IFM) on over 35,466 acres of mainly hardwood forests. The Project area comprises two supersections: Allegheny & North Cumberland Mountains and Southern Allegheny Plateau. The strata include Cove Forests (708 ac.), Mixed Hardwoods (13,159 ac.), Northern Hardwoods (18,355 ac.) and Oak-Hickory (3,244 ac.)

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

GHG emission reductions for the Project are quantified by comparing actual onsite carbon stocks against modeled baseline onsite carbon stocks and baseline carbon in harvested wood products. The difference in these Project and baseline carbon stocks year over year is the basis for calculating the Project's primary goal of maintaining and enhancing forest GHG pools. Secondary effects made up of un-intentional GHG emissions from the Project (e.g. harvest leakage to non-Project lands) are also taken into account. Net GHG reductions and removals for each year are the sum of the Project's primary and secondary effects.

According to the Protocol, carbon dioxide (CO<sub>2</sub>) is the only GHG considered within the boundary for the baseline and Project activities. Table 3 lists the sources of GHG emissions that RCE confirmed during the verification of the Project as required by the Protocol and §95977.1(b)(3)(D)(2)(a) of the Regulation.

**Table 3 Project GHG Sources, Sinks, and Reservoirs for IFM Projects**

| Activity | GHG Sources, Sinks & Reservoirs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Baseline | <ul style="list-style-type: none"><li>IFM-1: Modeled standing live carbon (CO<sub>2</sub>) in all portions of living trees.</li><li>IFM-3: Modeled standing dead carbon (CO<sub>2</sub>) in all portions of dead, standing trees.</li><li>IFM-7: Modeled estimates of carbon (CO<sub>2</sub>) in in-use forest products (100-yr average).</li><li>IFM-8: Modeled estimates of carbon (CO<sub>2</sub>) from forest products stored in landfills (100-yr average).</li><li>IFM-17: Biological emissions from decomposition of forest products.</li></ul> |
| Project  | <ul style="list-style-type: none"><li>IFM-1: Measured standing live carbon (CO<sub>2</sub>) in all portions of living trees.</li><li>IFM-3: Measured standing dead carbon (CO<sub>2</sub>) in all portions of dead, standing trees.</li><li>IFM-14: Biological emissions from changes in harvesting on forestland outside the Project area (default 20% leakage).</li></ul>                                                                                                                                                                            |

### 3.3 Project Type – Improved Forest Management

The Project meets the definition and requirements of an IFM Project as specified in the Protocol, Section 2.1.2. It meets the requirements because:

1. The Project takes place on land that has greater than 10 percent canopy cover.
  - a. This was verified through on-site reconnaissance during the verification site visit, review of aerial photography, and verification sampling of the inventory.
2. The Project employs natural forest management practices, as defined in Section 3.8.2 of the Protocol.
  - a. See Sections 4.6 and 4.7 of this report for documented verification of this requirement.

3. The Project does not employ broadcast fertilization.
  - a. Rowland has attested to this in the Listing Form. Further, FRST witnessed no evidence of broadcast fertilization during the previous reporting period verification site visit.

## **4.0 Eligibility Rules and Other Requirements**

The Protocol specifies eligibility rules and other requirements that a Forest Project must meet in order to register reductions with ARB: Additionality, Offset Project Commencement, Project Crediting Period, Project Life and minimum Time Commitment, Project Location, Regulatory Compliance, Sustainable Harvesting Practices, and Natural Forest Management. The Project meets all the rules specified in the Protocol. Below is a summary of the Project's compliance to each requirement.

### **4.1 Additionality**

IFM Projects are considered additional if they meet the legal requirement and the performance tests. The Legal Requirement Test requires that forest Projects achieve GHG reductions and removals beyond those that would result from state, federal or local laws, regulations and ordinances. There are no legal requirements requiring activities that maintain or enhance forest carbon stocks in West Virginia. By passing the Protocol's legal requirement test, the Project also meets the regulatory additionality requirements pursuant to §95973(a)(2)(A) of the Regulation.

The Performance Test requires all Improved Forest Management Projects to achieve GHG reductions and removals beyond those resulting from "business as usual" activities defined in the Protocol. Under the Protocol, all IFM Projects that meet the requirements for baseline estimation pass the performance standard test. This Project meets the Protocol baseline estimation requirements (see Section 6.1 of this report), so the Project passes the performance test.

### **4.2 Offset Project Commencement, Crediting Period and Project Life**

This Project was submitted for listing on April 28, 2017, which, per the Protocol is a qualifying activity delineating a change in management from the baseline management activity. The Project commencement date and the first reporting period date is August 7, 2017. This date reflects a transfer of property ownership recorded on August 7, 2017. The Project was never previously registered as an early action project. Project crediting period and Project life are tied to the initial reporting period under the Compliance Protocol and the Project's crediting period is 8/7/2017 to 8/6/2042.

### **4.3 Project Location and Project Area**

RCE/FRST verified that the Project is located on private lands in Raleigh, Fayette, Wyoming, Nicholas, Webster, Wayne, and Boone counties, WV, USA. RCE/FRST also reviewed maps submitted to the OPR as part of the Application for Listing documentation to confirm that the maps provided meet Protocol requirements.

### **4.4 Regulatory Compliance**

Section 3.7 of the Protocol and §95977.1(b)(3)(D)(2)(f) of the Regulation require that all Projects follow applicable laws during all periods for which they attempt to claim credit. RCE confirmed that the Project received no violations during the reporting period through a review of EPA ECHO database. There is a low risk of any potential compliance issues as there was no harvesting on the property during this reporting period.

#### **4.5 Forest Owner & OPO**

RCE/FRST reviewed documents demonstrating Rowland's ownership of timber and carbon rights in the Project areas, thus documenting they had the authority to operate as the OPO.

#### **4.6 Sustainable Harvesting Practices**

The Protocol requires that, at the time commercial harvesting is either planned or initiated within a Project area, that the Project meets certain sustainable harvest requirements. The verification team confirmed that no harvesting occurred during this reporting period. During onsite interviews, the landowner's consulting forester also stated that no harvesting was planned at this time.

#### **4.7 Natural Forest Management**

The Protocol requires that all Projects promote and maintain a diversity of native species and utilize management practices that promote native, natural forests diverse in structure, species composition and age class.

RCE/FRST confirmed that the Project meets the native species requirement that forest projects must consist of at least 95% native species based on a review of the inventory tree list. Additionally, RCE/FRST confirmed the Project has met the requirement that no single species exceeds the "Species Diversity Index" value.

RCE/FRST confirmed that the Project meets the "Distribution of Age Classes/Sustainable Management" requirement in Table 3.2 of the Protocol through third party certification as discussed in section 4.6 of this report.

RCE/FRST confirmed that the Project meets the requirement for age distribution during the site visit and aerial imagery.

Finally, RCE/FRST confirmed that the Project working toward the requirements for diversity of natural structural elements across the forested landscape including maintaining sufficient levels of standing and lying dead wood. The Project demonstrated that current standing dead stocks are 1.46 mt/acre or 3.12% of standing live carbon stocks, which exceeds the 1 mt/acre and 1% thresholds for structural elements.

#### **4.8 Balancing Age and Habitat Classes**

RCE/FRST confirmed that the Project area meets the requirements of COP 3.8.4 as there is no planned harvesting.

### **5.0 Interviews**

RCE and FRST held interviews with Finite throughout the verification process. Discussions included an overview of their data management system, their inventory calculations, and modeling, pursuant to §95977.1(b)(3)(D)(2)(b) and §95977.1(b)(3)(D)(2)(c) of the Regulation. These overviews enabled the Verification Team to undertake an independent review of their modeling procedure, inventory process and calculations. During the site visit for the previous reporting period, FRST interviewed representatives of the forest owner who manage the site, the foresters that performed the inventory as well as other related parties. These interviews allowed FRST to ground-truth elements of inventory data management and modeling, Project management, non-Project activities that may affect carbon stocking, and application of the inventory field methodology.

## **6.0 Quantitative Review of Emission Reductions/Removals Enhancements Assertion**

Pursuant to §95977.1(b)(3)(L) of the Regulation, several elements of the Project were reviewed by RCE/FRST to ensure Project compliance with the Protocol's guidance for determining emission reduction and removal enhancements. The primary components of this review are confirmation of on-site inventory sequential sampling, inventory and project carbon calculation review, review of the risk of reversal rating, assessment of GHG emission reduction calculations, and the assertions made in the OPDR. Each of these elements is reviewed below.

### **6.1 *Baseline Modeling***

The baseline modeling was not reviewed in this verification. The baseline values remained unchanged from RP1 and the initial verification.

### **6.2 *Inventory and Modeling Updates***

RCE/FRST reviewed the OPO/TC growth model to confirm the current reporting period carbon stocks. During discussions with the OPO/TC, RCE/FRST confirmed there were no new plot data in the inventory, and during sampling confirmed consistent plots and trees from a previous reporting period.

### **6.3 *Actual Harvested Wood Product***

The Project area did not undergo harvesting during this reporting period.

### **6.4 *On-site Inventory Verification Check***

The current reporting period was a desk review only and did not include a site visit.

### **6.5 *Inventory and Calculation Review***

RCE and FRST conducted a risk-based review of the Project inventory and emission reduction calculations to ensure conformance with Protocol requirements and agreement with emission reductions/removals reported in the OPDR. Tree volumes are converted to biomass and carbon CO<sub>2</sub> equivalents based on the suite of equations provided by ARB or separately approved by ARB in cases where equation documentation/versioning varies. RCE/FRST confirmed that the baseline values, as verified in the initial verification, for all carbon stocks were used for this reporting period.

RCE and FRST confirmed proper calculation of inventory sampling error (4.95% at the 90% confidence interval). However, since this is a Compliance Offset Protocol for U.S. Forest Projects (June 25, 2015) project, the Confidence Deduction must remain 0.1% as it was since the last full verification for RP2.

### **6.6 *Forest Offset Reversal***

RCE/FRST did not find any evidence of carbon stock reversal during this reporting period.

### **6.7 *Project Reversal Risk Rating***

RCE and FRST reviewed the eight individual types of risk identified in the Protocol; ensuring the correct default or assessment area-specific factors were applied and then recalculated the Project's reversal risk rating. RCE/FRST confirmed the Project's use of 17.59% reversal risk rating.

## **6.8 Assessment of GHG Emissions Reductions Calculation and OPDR**

Pursuant to §95977.1(b)(3)(L) of the Regulation, RCE and FRST used data checks to ensure that the appropriate methodologies and GHG emission factors were applied in calculating the Project's annual GHG emissions, Project emissions, and GHG reductions. RCE and FRST's emission reduction calculations assessment included a check of the inputs into the Offset Project Data Report uploaded to the OPR for the reporting period. RCE and FRST confirmed that Finite appropriately filled out the worksheet based on its baseline and Project calculations for all required pools. RCE and FRST separately recalculated the total GHG emission reductions and compared the results to Finite's calculations. See Appendix D for recalculations. RCE and FRST found no discrepancies, omissions or misreporting. RCE concludes that the offset Project data is free of any Offset Material Misstatement.

### RCE/FRST Recalculations

Total emission reductions/removals confirmed: 45,607 tCO<sub>2</sub>e

Buffer Pool Contribution: 8,022 tCO<sub>2</sub>e

Net emission reductions: 37,585 tCO<sub>2</sub>e

% Error =  $([\sum \text{Discrepancies} + \sum \text{Omissions} + \sum \text{Misreporting}] \times 100\%) / \text{Total Reported Emission Reductions and Removal Enhancements}$

% Error =  $[0 + 0 + 0] \times 100\% / 45,607 \text{ tCO}_2\text{e} = \mathbf{0.00\%}$

## **6.9 Offset Project Data Report**

RCE/FRST confirmed that the OPDR was submitted by Finite/Rowland within four months after the end of the reporting period. RCE/FRST reviewed the Listing Form and final version of the OPDR to confirm its accuracy.

RCE also confirmed that the Project is not listed with any other carbon registries.

## **7.0 Issues Log**

During the verification process, RCE/FRST submitted corrective action requests (CARs), non-material findings (NMs), additional documentation requests (ADRs) and clarification requests (CRs), as needed to Finite. Finite sufficiently addressed all items and the details of the requests are documented in the Issues Log shown in Appendix E.

## **8.0 Conclusion**

RCE conducted a risk-based analysis of the CAFR5337-CAR1257 Finite Carbon – Rowland IFM including a strategic review of the Project data and evidence. Based upon the processes and procedures and the evidence reviewed, RCE concludes with a reasonable level of assurance that the Project emission reductions resulting from the Project activities during the reporting period from August 7, 2020 through August 6, 2021 are:

- In conformance with the ARB's Compliance Offset Protocol for U.S. Forest Projects (June 25, 2015)
- In conformance with Final Regulation Order, Subchapter 10 Climate Change, Article 5, Title 17, California Code of Regulations, Sections 95800-96022,
- Without Offset Material Misstatement, and
- Verified to a reasonable level of assurance.

**Table 4 – GHG Reductions & Removal Enhancements (tCO<sub>2</sub>e)**

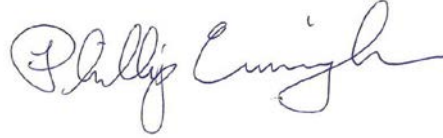
| Reporting Period                | Total GHGs |
|---------------------------------|------------|
| August 7, 2020 – August 6, 2021 | 45,607     |

**Lead Verifier Signature**



**Zach Eyler**

**Independent Reviewer Signature**



**Phillip Cunningham**

## Appendix A – Verification Plan

### CAFR5337 – CAR1257 Finite Carbon – Rowland IFM

Verification Sampling Plan for Reporting Period 8/7/2020 – 8/6/2021

| <u>Timing of Offset Verification Services</u>          | <u>Proposed Date</u>                          |
|--------------------------------------------------------|-----------------------------------------------|
| Contract award                                         | 9/13/2021                                     |
| Submit COI and NOVS forms to OPR/ARB                   | 9/13/2021                                     |
| Planning meeting                                       | 10/28/2021                                    |
| Site visit                                             | N/A                                           |
| Provide Issues Log to OPO                              | Mid-November 2021                             |
| Complete Issues Log                                    | Early January 2022 (updated to mid-June 2022) |
| Provide draft deliverables to OPO                      | Early January 2022 (updated to mid-June 2022) |
| Final meeting and submittal of deliverables to OPR/ARB | Early January 2022 (updated to mid-June 2022) |

| <u>Information Requirement</u>                                                                                                                                                                                                                 | <u>Information Provided by the OPO/APD</u>                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Information to allow the offset verification team to develop a general understanding of offset project boundaries, operations, project baseline emissions, and annual GHG reductions and GHG removal enhancements                              | Project OPDR and attachments                                                                |
| Information regarding the training or qualifications of personnel involved in developing the Offset Project Data Report                                                                                                                        | CV and website information                                                                  |
| The name and date of the Compliance Offset Protocol used to quantify and report project baselines, GHG reductions, GHG removal enhancements, and other required data as applicable in the Compliance Offset Protocol;                          | California Air Resources Board Compliance Offset Protocol Forestry Projects (June 25, 2015) |
| Information about any data management system, offset project monitoring system, and models used to track project baselines, GHG reductions, GHG removal enhancements, and other required data as applicable in the Compliance Offset Protocol. | OPDR and all supplemental information                                                       |

| <b>Pre-Engagement</b>                                               |          |
|---------------------------------------------------------------------|----------|
| RCE Management has completed and signed the V&V team selection form | Complete |

|                                                                                                                          |          |
|--------------------------------------------------------------------------------------------------------------------------|----------|
| Complete the Evaluation of Conflict of Interest for Offset Projects form and submit to Offset Project Registry           | Complete |
| Individual COIs for all team members (and subcontractors) are in the folder for this client                              | Complete |
| Save COI-Determination letter and or renewal email received from the OPR/ARB                                             | Complete |
| Send the Notice of Offset Verification Services form to the OPR and ARB at least 10 days prior to beginning verification | Complete |
| Non-Disclosure Agreement (NDA) - execute agreement (Both parties agree to the NDA)                                       | N/A      |
| <b>Create Verification Service Agreement (VRSA)</b>                                                                      |          |
| The original proposal is included as an exhibit with the correct scope of work defined in the Assumptions table.         | Complete |
| Both parties agree to and sign the VRSA                                                                                  | Complete |
| <b>Planning meeting and required documents</b>                                                                           |          |
| OPDR has been uploaded to the Registry website                                                                           | Complete |
| Planning meeting agenda sent to client                                                                                   | Complete |
| Verification Process Overview (with terms and definitions table correctly completed)                                     | Complete |
| Team Roster                                                                                                              | Complete |
| Schedule provided to client                                                                                              | Complete |
| Request data and supporting documentation (if applicable)                                                                | Complete |
| Record minutes of planning meeting & save in Project file                                                                | Complete |
| <b>Verification Plan and Sampling Plan</b>                                                                               |          |
| Created sampling plan based on the project assumptions                                                                   | Complete |
| Ranking of GHG emission sources, GHG sinks, and GHG reservoirs                                                           | Complete |
| Qualitative narrative of uncertainty risk assessment                                                                     | Complete |
| Identification of sources, sinks, and reservoirs targeted for document reviews and explanation of why they were chosen   | Complete |
| Summary of information analyzed in data checks and document reviews                                                      | Complete |
| Samples identified in the sampling plan                                                                                  | Complete |
| Data checks                                                                                                              | Complete |
| Verification of GHG assertion with any discrepancies identified and percent error calculated                             | Complete |
| Approved and protected by the Lead Verifier                                                                              | Complete |
| <b>Issues Log</b>                                                                                                        |          |

|                                                                            |          |
|----------------------------------------------------------------------------|----------|
| All Corrective Actions are closed or the status is marked appropriately    | Complete |
| All Clarifications are addressed                                           | Complete |
| All document requests are received                                         | Complete |
| <b>Verification Documents</b>                                              |          |
| Issue Verification Report and Statement                                    | Complete |
| Emission totals match in Report and Statement                              | Complete |
| Report and Statement signed by both Lead Verifier and Independent Reviewer | Complete |
| <b>Independent Review</b>                                                  |          |
| Mandatory items approved and all findings closed by Independent Reviewer   | Complete |

## Appendix B – SSR Ranking and Review

| SSR #                | SSR Description                                                                                  | Ranking and Reason                                                                                      | Ranking for Uncertainty | Selected for Document Review | Selected for Data Checks/Calc Review | Method                                                                                              | Summary of Review                                   | Quantity of Data Reviewed        | Documents Reviewed     | Discrepancies Identified | Discrepancy Description & Reason |
|----------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-------------------------|------------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------|------------------------|--------------------------|----------------------------------|
| <b>IFM Reservoir</b> |                                                                                                  |                                                                                                         |                         |                              |                                      |                                                                                                     |                                                     |                                  |                        |                          |                                  |
| IFM - 1              | Standing live carbon in all portions of living trees                                             | #1 This SSR generates the majority of project emission reductions (~96%) and presents permanence risks. | 1                       | Yes                          | Yes                                  | Recalculate all carbon calculations from grown-forward treelist modeled in FVS. FVS model verified. | Concurrence between OPO and verifier for all calcs. | All live trees calculated.       | Calculation workbooks. | None.                    | N/A                              |
| IFM - 3              | Standing dead carbon in all portions of dead, standing trees                                     | #2 This SSR is a small component (~3%)                                                                  | 2                       | No                           | Yes                                  | Recalculate all carbon calculations of snags.                                                       | Concurrence between OPO and verifier for all calcs. | All snags recalculated.          | Calculation workbooks. | None.                    | N/A                              |
| <b>Sources</b>       |                                                                                                  |                                                                                                         |                         |                              |                                      |                                                                                                     |                                                     |                                  |                        |                          |                                  |
| IFM - 14             | Biological emissions/ removals from changes in harvesting on forestland outside the Project Area | #3 This SSR is not significant (<1%).                                                                   | 3                       | Yes                          | Yes                                  | Climate Action Reserve ARBOC calc sheet automatically calculates in Excel sheet row 40.             | Concurrence between OPO and verifier for all calcs. | All calculations in ARBOC sheet. | Calculation workbooks. | None.                    | N/A                              |
| <b>Sinks</b>         |                                                                                                  |                                                                                                         |                         |                              |                                      |                                                                                                     |                                                     |                                  |                        |                          |                                  |
| N/A                  |                                                                                                  |                                                                                                         |                         |                              |                                      |                                                                                                     |                                                     |                                  |                        |                          |                                  |

## Appendix C – Documents/Files Reviewed

| # | Document                                                             | Reviewed By       | Reviewed At |
|---|----------------------------------------------------------------------|-------------------|-------------|
| 1 | CAR1257 Annual OPDR RP4 v1.3_Draft_No_SD_20220616.pdf                | Verification Team | Desk Review |
| 2 | CAR1257 RP4 Monitoring_Calculation_Worksheet_v1.0.xlsx               | Verification Team | Desk Review |
| 3 | CAR1257 RP4 Monitoring_Calculation_Worksheet_v1.3-No SD Sapling.xlsx | Verification Team | Desk Review |
| 4 | CAR1257 RP4 OPDR Worksheet Calculations v1.0.xlsx                    | Verification Team | Desk Review |
| 5 | CAR1257 RP4 OPDR Worksheet Calculations v1.4 No SD Saplings.xlsx     | Verification Team | Desk Review |
| 6 | CAR1257_RP4_GIS.mdb                                                  | Verification Team | Desk Review |

## Appendix D – Recalculations

| Calculating GHG Reductions/Removals for Onsite Carbon Stocks - All Project Types                                               | OPO/APD   | RCE/FRST  |
|--------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|
| Sampled Onsite Carbon Stocks (metric tons CO <sub>2</sub> e)                                                                   | 6,299,606 | 6,299,606 |
| Confidence Deduction                                                                                                           | 0.1%      | 0.1%      |
| Adjusted Sampled Onsite Carbon Stocks (adjusted for confidence deduction) (metric tons CO <sub>2</sub> e)                      | 6,293,306 | 6,293,306 |
| Soil Carbon Emissions                                                                                                          | 0         | 0         |
| Increment in Actual Onsite Carbon Stocks (metric tons CO <sub>2</sub> e)                                                       | 100,400   | 100,400   |
| Baseline Onsite Carbon Stocks (metric tons CO <sub>2</sub> e)                                                                  | 3,876,666 | 3,876,666 |
| Increment in Baseline Onsite Carbon Stocks (metric tons CO <sub>2</sub> e)                                                     | -         | -         |
| Quantified GHG Reductions / Removals for Onsite Carbon Stocks (metric tons CO <sub>2</sub> e)                                  | 100,400   | 100,400   |
| Calculating Carbon Stored in Wood Products Including Market Effects and Leakage - All Project Types                            |           |           |
| Actual Carbon in Trees Harvested for Wood Products (metric tons CO <sub>2</sub> e)                                             | -         | -         |
| Baseline Carbon in Trees Harvested for Wood Products (metric tons CO <sub>2</sub> e)                                           | 150,801   | 150,801   |
| Actual Carbon in Harvested Wood Delivered to Mills (metric tons CO <sub>2</sub> e)                                             | -         | -         |
| Baseline Carbon in Harvested Wood Delivered to Mills (metric tons CO <sub>2</sub> e)                                           | 74,614    | 74,614    |
| Actual Carbon Stored Long-term in Wood Products (tonnes CO <sub>2</sub> e) - Excl Landfill                                     | -         | -         |
| Actual Carbon Stored Long-term in Wood Products (tonnes CO <sub>2</sub> e) - Incl Landfill                                     | -         | -         |
| Baseline Carbon Stored Long-term in Wood Products (tonnes CO <sub>2</sub> e) - Excl Landfill                                   | 13,478    | 13,478    |
| Baseline Carbon Stored Long-term in Wood Products (tonnes CO <sub>2</sub> e) - Incl Landfill                                   | 30,790    | 30,790    |
| Diff Between Actual and Baseline Carbon in Harvested Wood (tonnes CO <sub>2</sub> e) - Excl Landfill                           | (13,478)  | (13,478)  |
| Difference Between Actual and Baseline Carbon in Harvested Wood (tonnes CO <sub>2</sub> e) - Incl Landfill                     | (30,790)  | (30,790)  |
| Difference in Actual and Baseline Carbon Stored in Wood Products (tonnes CO <sub>2</sub> e) - Landfill Adj                     | (30,790)  | (30,790)  |
| GHG Reductions / Removals for Carbon Stored in Wood Products (tonnes CO <sub>2</sub> e) w/ mkt response                        | (24,632)  | (24,632)  |
| Calculating Other Secondary Effects - Improved Forest Management Projects                                                      |           |           |
| Difference Between Actual and Baseline Carbon in Trees Harvested for Wood Products (tonnes CO <sub>2</sub> e)                  | (150,801) | (150,801) |
| Other Secondary Effects Emissions (shifting activities/materials) IFM Projects (tonnes CO <sub>2</sub> e)                      | (30,160)  | (30,160)  |
| Quantified GHG Reductions and Removals                                                                                         |           |           |
| Annual GHG Reductions/Removals Net of Discounts and Secondary Effects (tonnes CO <sub>2</sub> e)                               | 45,607    | 45,607    |
| Cumulative GHG Reductions/Removals; <u>not</u> incl.neg. carryover or reversals (tonnes CO <sub>2</sub> e)                     | 2,197,471 | 2,197,471 |
| Cumulative Negative Carryover from Prior Year (tonnes CO <sub>2</sub> e)                                                       | 0         | 0         |
| ARBOCs Issued - <u>Net</u> of Negative Carryover, <u>bef.</u> Buffer or adjust for Reversals (tonnes CO <sub>2</sub> e)        | 45,607    | 45,607    |
| Calculation of Buffer Pool Contribution                                                                                        |           |           |
| Project Specific Reversal Risk Rating                                                                                          | 17.590%   | 17.590%   |
| Buffer Pool Contribution                                                                                                       | 8,023     | 8,022     |
| Accounting for Reversals                                                                                                       |           |           |
| Annual Reversals (metric tons CO <sub>2</sub> e)                                                                               | 0         | 0         |
| Total "Intentional Reversals" to be compensated by the OPO (metric tons CO <sub>2</sub> e)                                     | 0         | 0         |
| Compensating for Intentional Reversals                                                                                         |           |           |
| "Intentional Reversals" compensated by retirement of Offset Credits in the OPO's CITSS Account (metric tons CO <sub>2</sub> e) | 0         | 0         |
| Carryover "Intentional Reversals" which need to be compensated by OPO (metric tons CO <sub>2</sub> e)                          | 0         | 0         |
| Offset Credits Issued to Offset Project Operator                                                                               |           |           |
| Annual Offset Credits Issued to Offset Project Operator (metric tons CO <sub>2</sub> e)                                        | 37,584    | 37,585    |

## **Appendix E – Issues Log**

| Corrective Action Request, Non-Material Finding, Additional Documentation Request, or Clarification Request ID# | Finding                                                                                                                                                                                                                                                                                                    | Section of Regulation or COP | Offset Material Misstatement (OMM) or Conformance (C) | OPO/APD response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | RCE response                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Additional OPO/APD response                                                                                                                                                                   | Additional RCE response                                                                                                                                                                                    | Open or Closed |
|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| CAR 1                                                                                                           | Please see the attached screenshots from recent Sentinel imagery and Google Earth of apparent mining expansion to the right. Due to the conversion of some project acres, these areas do not conform to the cited section of the COP.                                                                      | COP 2.2(b)(4)                | C                                                     | These expansions were communicated by the Coal company to occur outside the reporting period within RP5. However, coal companies often change timelines and as they are driven by orders for coal often causing them to move up timelines as in this case. The annual OPDR has been update along with the supporting documentation adjusting the stocks to reflect the non silvicultural conversion of the land to mine site. Documents have been uploaded to the vaultrooms site for your review along with a draft version of the updated annual OPDR. Upon closure of the issues log a signed version will be provided and uploaded to the registry site.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | GIS updates have been made and match Sentinel-2 L2A imagery captured 8/4/21 (2 days from the end of the RP). It was noted that plot 231 is ~100 feet from mine conversion. Due to the resolution of the imagery, the verifier had been concerned that this plot may actually be in the new mine area. However, plot 231 exhibits less carbon than its stratum average, therefore including it in the stratum average is conservative compared to removing it from the inventory. This item may be closed. |                                                                                                                                                                                               |                                                                                                                                                                                                            | Closed         |
| NM 1                                                                                                            |                                                                                                                                                                                                                                                                                                            |                              |                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                               |                                                                                                                                                                                                            |                |
| ADR 1                                                                                                           |                                                                                                                                                                                                                                                                                                            |                              |                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                               |                                                                                                                                                                                                            |                |
| CR 1                                                                                                            | Please confirm and describe implementation of the Monitoring Plan according to the project's Appendix A document including that no new mining conversions, land sales, or other significant disturbances have occurred within the PAB during RP4 greater than the defined minimum mapping unit of 5 acres. | COP 6(f)(3)                  | C                                                     | The property is managed by a Summit Forestry Group Inc and owned by the registered professional that also oversees the project carbon stocks report. This property is being managed by Summit and employs a team of professionals to track all activities and responsible for management including tracking all activities that could impact carbon stocks. This includes events such as harvesting, mining, and other disturbances. Currently the project does not employ any harvesting as they are focusing on carbon but are working to forest certification. All information of events that occur within the project area is stored by the consulting forester level as day to day management is handled by them. This includes communications with mine companies on current and future activities. No land sales currently planned, however the OPO is looking into purchasing additional properties and these activities are facilitated by the consulting forester/property manager. Once the reporting period ends an annual update is provided to the OPO/ Consulting forester by the technical consultant requesting the relevant data sets including all necessary gis datasets of any and all events that occur on the property. | Please see CAR 1 above. When were the mining companies last contacted?                                                                                                                                                                                                                                                                                                                                                                                                                                    | The most recent communication between Summit Forestry, the OPO Forestry Consultant, and Alpha Met Coal was October 28,2021. Before that the next most recent commincation was on July 20,2021 | Thank you for the clarification. The VB also discussed with the project's technical consultant that the Coal company was mistaken about the start date of this mining conversion. This item may be closed. | Closed         |
| CR 2                                                                                                            | Please provide the name and credentials of the qualified forester signing off on carbon stock reports for the project.                                                                                                                                                                                     | COP 9.1                      | C                                                     | Jeff Hutchinson is the West Virginia registered forester (#301) that is signing off on the carbon stocks report.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Jeff Hutchinson was confirmed on the WV Foresters roster updated 11/7/21 found at <a href="http://www.wvlicensingboards.com/foresters/roster.cfm">http://www.wvlicensingboards.com/foresters/roster.cfm</a> .                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                               |                                                                                                                                                                                                            | Closed         |