Validation and Verification Report

ACR848 NativState - Bottomland Forests of the Louisiana Plains (PDA)

December 20, 2024

TÜV SÜD America, Inc.

Ruby Canyon Environmental, Inc.

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1 INTRODUCTION

NativState, LLC contracted with Ruby Canyon Environmental, Inc. (RCE) to perform the validation and verification of the ACR848 NativState - Bottomland Forests of the Louisiana Plains (PDA) (Project) for the reporting period of April 19th, 2022 – September 30th, 2023 and a crediting period of April 19th, 2022 – April 18th, 2042 under the American Carbon Registry (ACR) program. RCE was acquired by TÜV SÜD America, Inc. (TÜV SÜD) in 2023. RCE will be used throughout this report. NativState, LLC acts as the project developer and project proponent for the landowners. This report is documentation of validation and verification activities that RCE performed for the Project. For the validation, RCE reviewed the project information as described in the GHG Project Plan. For the verification, RCE ensured that the GHG assertion was materially correct, that the data provided to RCE was well documented, and that if NativState, LLC made any material errors, that these errors were corrected.

RCE teamed with FRST as subcontractors to assist in the completion of this validation and verification. FRST was acquired by TÜV SÜD in February 2024.

1.1 OBJECTIVES

The objectives of the validation are to evaluate:

- Conformance to the ACR standard and the approved ACR Methodology for Improved Forest Management (Methodology).
- GHG emissions reduction project planning information and documentation in accordance with the applicable ACR-approved methodology, including the project description, physical infrastructure, activities, technologies, and processes of the Project, baseline, eligibility criteria, monitoring and reporting procedures, process information, source identification/counts, operational details, and quality assurance/quality control (QA/QC) procedures.
- Reported GHG baseline, ex-ante estimated project emissions and emissions reductions/removal enhancements, leakage assessment, and impermanence risk assessment and mitigation (if applicable).

The objectives of the verification are to evaluate:

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

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

1.2 PROJECT BACKGROUND

The Project is located on approximately 19,590 carbon credit producing acres across seven parishes in Louisiana (Avoyelles, Franklin, Madison, Morehouse, Ouachita, Richland, and Tensas) and five counties in Mississippi (Claiborn, Humphreys, Issaquena, Jefferson, and Yazoo). This project area is owned by multiple private landowners. The Project ensures long-term sustainable management of the forests.

1.3 Responsible Party

Project Proponent/Developer
NativState, LLC
1510 Mill Street Conway, AR 72034
Robert Stainton

1.4 Validation and Verification Team

Lead Validator and Verifier: Zach Eyler
Biometrician: Andrea Eggleton
Professional Forester: Christian Eggleton
Forest Carbon Projects Manager: Tim Facemire
Team Member: Andrew Russo, Thomas Christopher, Ben Miller
Internal Reviewer: Bonny Crews

1.5 Validation and Verification Criteria

1.5.1 Validation and Verification Standards, Guidelines, and Tools

- ACR Standard, Version 7.0 December 2020 (validation), ACR Standard, Version 8.0 July 2023 (verification)
- ACR Validation and Verification Standard Version 1.1 (May 2018)
- Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands, Version 2.0, July 2022
- ACR v2.0 IFM Errata and Clarifications, August 2024
- ACR Aggregation and Programmatic Development Approach Guidance for Improved Forest Management, Jan 2021
- ACR Tool for Risk Analysis and Buffer Determination, v1.0
- ISO 14064-3:2019 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions”

1.5.2 Level of Assurance

The verification was conducted to a reasonable level of assurance.

1.5.3 Materiality

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

2 VALIDATION AND VERIFICATION PROCESS

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

- RCE completed Project Proponent COI form for the validation on October 18th, 2023 to identify any potential conflict of interest with the Project or Project Developer. The original COI form was approved by ACR on October 31st 2023, RCE also submitted a COI form for the verification on October 30th, 2023 and it was approved on November 1st 2023.
- RCE and NativState, LLC held a validation/verification kick-off meeting on October 31st 2023. During the kick-off meeting RCE reviewed the validation objectives and process, reviewed the schedule, and submitted an initial document request.
- RCE performed a strategic review and risk assessment of the received data and support documents to understand the scope and areas of potential risk in the GHG emissions reductions.
- RCE developed a risk-based sampling plan based upon the strategic review and risk assessment. The validation/verification plan and sampling plan were used throughout the process and were revised as needed based upon additional risk assessments.
- The validation/verification team conducted the site visit to the Project to verify the inventory quality and forest management practices from November 13-17, 2023. During the site visit the Verification Team performed key personnel interviews, conducted 90% t-test of inventory plots, conducted reconnaissance of the Project area boundary, observed elements of natural forest management, and observed harvest locations (if applicable) during and preceding the reporting period.
    - The site visit was attended by the following verification team personnel:
        - TÜV SÜD (formerly FRST):
            - Ben Miller
            - Andrew Russo
    - During the site visit, the Verification team met with the following individuals:
        - NativState, LLC
            - Tim White
            - Surya Adhikari
            - Robby Buffington
            - Trey Franks
            - Cole Shamburg
            - Robert Stainton
- RCE performed a risk-based desktop review of the submitted validation/verification documents. The desktop review included an assessment of the GHG calculation methods and inputs, source data completeness, data management system and monitoring systems and eligibility documentation.
- RCE conducted interviews and had conversations with Project personnel during the verification. Personnel interviewed include:
    - Robert Stainton – NativState, LLC
    - Anil Koirala – NativState, LLC

- RCE submitted requests for corrective actions, non-material findings, additional documentation, and clarifications as necessary to NativState, LLC throughout the validation/verification.
- RCE's internal reviewer conducted a review of the validation/verification sampling, report, and statement.
- RCE issued a final validation/verification report, verification opinion, and List of Findings.
- RCE held an exit meeting with NativState, LLC.

3 VALIDATION AND VERIFICATION FINDINGS

3.1 PROJECT BOUNDARY AND ACTIVITIES

The Project entails improved forest management on 19,590 carbon credit producing acres across seven parishes in Louisiana (Avoyelles, Franklin, Madison, Morehouse, Ouachita, Richland, and Tensas) and five counties in Mississippi (Claiborn, Humphreys, Issaquena, Jefferson, and Yazoo). GHG emission reductions for the Project are quantified by comparing actual onsite carbon stocks against modeled baseline onsite carbon stocks and baseline carbon in harvested wood products. The difference in these Project and baseline carbon stocks year over year is the basis for calculating the Project's primary goal of maintaining and enhancing forest GHG pools.

The Project's temporal boundary is the crediting period from April 19th, 2022 – April 18th, 2042.

3.2 GHG SOURCES SINKS, AND RESERVOIRS

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

Table 1. GHG Emissions Sources

Source	GHG	Description
Above-ground biomass	CO_2	Major carbon pool for project activity
Below-ground biomass	CO_2	Major carbon pool for project activity
Harvest wood products	CO_2	Major carbon pool for project activity
Market Effects	CO_2	Reductions in project outputs due to project activity may be compensated by other entities in the marketplace. Those emissions must be included in the quantification of project benefits.

3.3 ELIGIBILITY

3.3.1 ACR Eligibility

RCE confirmed the following ACR eligibility criteria listed in the ACR Standard, Version 7.0 (validation) and ACR Standard, Version 8.0 (verification) by reviewing the project proponent's GHG Project Plan, Monitoring Report, and calculations as well as other supporting documentation described throughout this report (a full list of documents reviewed is in Appendix A).

- Start Date: The project start date is April 19th, 2022.
- Minimum Project Term: The minimum project term is 40 years.
- Crediting Period: The crediting period is 20 years as specified by the Methodology, April 19th, 2022 – April 18th, 2042.
- Real: RCE confirmed that the GHG reductions follow the ACR methodology and are verifiable.
- Emission or Removal Origin: RCE confirmed that the individual landowners within the PDA own and has control over or documented effective control over the GHG sources/sinks from which the emissions reductions or removals originate.
- Offset Title: RCE confirmed that all Project lands are owned directly by the individual landowners within the PDA, and they hold full legal title.
- Additional: RCE confirmed that the project is additional as described in Section 3.4.
- Regulatory Compliance: RCE confirmed that the Project was in compliance with all applicable regulations.
- Permanent: RCE confirmed that the Project correctly applied the ACR Tool for Risk Analysis and Buffer Determination to account for permanence. A total risk score of 18% was confirmed.
- Net of Leakage: RCE confirmed that the Project correctly accounted for leakage per the Methodology.
- Independently Validated and Verified: RCE is a third-party validation and verification body that the project proponent has contracted to validate and verify the Project.
- Environmental and Community Assessments: RCE reviewed project impacts as described in section 3.6 of this report.

3.3.2 Methodology Eligibility

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

- The Project is located on private forestland.
- The individual landowners control the timber rights on the forestland and can legally harvest.
- The Project property has not been harvested in the first reporting period.
- The Project is not on tribal lands.
- The Project is not on public non-federal lands.
- The Project does not use non-native species where adequately stocked native stands were converted for forestry or other land uses after 1997.
- The Project has not drained or flooded wetlands on or after the project start date.
- The individual landowners own all lands and timber rights on the Project area.
- The Project's stocking levels will increase well above the baseline conditions for the duration of the Project and by the end of the Crediting Period.

3.4 ADDITIONALITY

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

3.4.1 Regulatory Surplus Test

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

3.4.2 Common Practice Test

The Project area is similar to surrounding private forestland that is regularly harvested as it reaches viable diameter thresholds and has a history of some timber harvesting.

The project's geographic region for timber production extends in all directions. Throughout this private forestland is heavily cut, often through shelterwood, single tree selection and clear-cutting, and is managed to maximize NPV of the asset. Wood products including hardwood, sawtimber and softwood pulpwood are distributed to mills throughout this region and demand is strong and steady.

3.4.3 Implementation Barriers Test

The Project chose to assess the financial barriers test per the ACR Standard and Methodology. RCE confirmed that carbon funding is reasonably expected to incentivize the Project's implementation. Due to the Project being implemented, the individual landowners lose the ability to monetize timber harvests at a rate similar to business-as-usual practices during the life of the Project. NativState, LLC provided a financial assessment comparison of NPV between the baseline scenario with harvesting and the project scenario with a lower amount of harvesting but including revenue from carbon credits. The baseline scenario NPV was significantly greater demonstrating that carbon funding is integral to the project activity.

3.5 Permanence

RCE confirmed that the Project correctly applied the ACR Tool for Risk Analysis and Buffer Determination to account for permanence. A total risk score of 18% was confirmed.

3.6 Environmental and Community Impacts

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

3.7 Local Stakeholder Consultation

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

3.8 Monitoring Plan

The GHG Project Plan includes a Monitoring Plan that identifies all monitored data and parameters. RCE confirmed that the monitoring parameters and approaches conform to the methods required by the Methodology. The plan includes all relevant data parameters and appropriately identifies units of measurements, data sources, methodologies, uncertainty, monitoring frequency and procedures, and QA/QC procedures. After discussions with NativState, LLC and reviews of project documents, RCE

determined that the Monitoring Plan accurately reflects how Project data is monitored and recorded and there are no deviations relevant to the Project activity against the requirements of the Methodology. NativState, LLC implemented the monitoring plan as stated in the GHG Project Plan during Project activities.

3.9 Baseline Scenario

The Project's baseline scenario represents an aggressive harvest regime, targeted to maximize net present value at a 5% discount rate for non-industrial private lands. The baseline scenario applies harvesting across the Project area as allowed by the Methodology to maximize NPV.

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

Stands were modeled for several different prescriptions, including no-harvest, clearcut, commercial thinning, and shelterwood removal, with restrictions on rotation ages, retention, and minimum harvest volumes.

NativState, LLC utilized the USDA's Forest Vegetation Simulator (FVS) Southern variant to model harvests and yields. Growth models were calibrated using site index values calculated from the USDA Web Soil Survey intersection with the project area. RCE reviewed the Site Index calculations and confirmed that a reasonable species and site index for the region was assigned on an individual plot basis to appropriately calibrate growth. The process was confirmed to be consistently and systematically applied to each plot.

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

3.10 On-site Inventory Verification Check

In preparation for and during the site visits, the Verification Team reviewed evidence necessary to verify Project inventory estimates.

The Project inventory consists of thirteen forested strata which FRST sampled using a random sampling method.

The current inventory contains 628 permanent, fixed-radius plots. At each plot location, trees were measured in two nested plots: a larger 1/20th acre plot (26.3' radius), and a smaller 1/100th acre plot (11.78' radius). The larger plot measured all living and trees greater than or equal to 5 inches DBH that met or exceed a height of 4.5 feet while the smaller, nested plot measured all living trees between 1-4.9 inches.

Given this sample design and Project size, the Verification Team was required to achieve a minimum of 26 successful plots within the project to successfully verify inventory stocking levels. The Verification Team successfully verified site data after measuring a total of 26 site plots. The Project passed the t-test during the site visit.

Project Area

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

3.11 Project Data and GHG Emissions Reduction Assertion

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

3.11.1 Baseline Emissions

RCE and FRST confirmed that the baseline emissions were correctly calculated. Baseline emissions were calculated by reviewing input and output files for every FVS baseline modeling prescription, including forest codes, diameter breaks, merchantability thresholds, rotation lengths, regen/spouting, FVS harvest triggers on individual plots, site indices, treelists, and plotlists modeled over 100 years. The output workbook (ERT_Calculator) was then independently recreated in the data checks confirming proper calculation of assigned plot level outputs allocated to prescription based independently confirmed SMZ constrained and unconstrained acres. These values were then compiled into yearly baseline values for live as reflected in the ERT monitoring calculation sheet. A secondary output of this process was the 100-years of modeled harvesting based off Best Management Practices (BMP) constrained acreages which was then run through the prescribed harvested wood product calculations customized for the project region(s). These calculations were made on 40-year time intervals as well as 100-year intervals and they were appropriately incorporated into the ERT monitoring calc sheet. See additional information relevant information in section 3.9.

3.11.2 Project Emissions

RCE and FRST confirmed that the project emissions were correctly calculated. The methods to confirm project emissions follow what is described in section 3.11.1 above.

3.11.3 Emissions Reductions

RCE and FRST verified that NativState, LLC calculated emission reductions according to relevant Methodology equations and that the methods are included in the GHG Project Plan.

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

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

3.11.4 Leakage Assessment

RCE and FRST recalculated and confirmed the leakage for the project in accordance with the ACR Validation and Verification Standard version 1.1 section 6.F and 9.H.

4 VALIDATION AND VERIFICATION RESULTS

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

5 VALIDATION AND VERIFICATION CONCLUSION

RCE conducted a risk-based validation and verification of the NativState - Bottomland Forests of the Louisiana Plains (PDA) that included a strategic review of the project data, documentation, and emission reduction calculations. The objective of the validation activities was to assess the project design, baseline scenario, and monitoring plan and to ensure compliance of the GHG Project Plan to the assessment criteria defined in Section 1.5.1. The objective of the verification activities was to conduct an independent assessment of the Project's initial reporting period and resulting ex-post GHG emission reductions.

Based on the review and the historical evidence collected, RCE concludes to a reasonable level of assurance that the Project's GHG assertion is free of material misstatement. The emission reductions resulting from the reporting period 4/19/2022- 9/30/2023 can be considered in conformance with the:

- ACR Standard, Version 7.0 December 2020 (validation), ACR Standard, Version 8.0 July 2023 (verification)
- ACR Validation and Verification Standard Version 1.1 (May, 2018)
- Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non-Federal U.S. Forestlands, Version 2.0, July 2022
- ACR v2.0 IFM Errata and Clarifications, August 2024
- ACR Aggregation and Programmatic Development Approach Guidance for Improved Forest Management, Jan 2021
- ACR Tool for Risk Analysis and Buffer Determination, v1.0

- ISO 14064-3:2019 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions”

Table 2 provides a summary of the emissions reductions.

Table 2. Total ERTs

Vintage	Total Emission Reductions / Removals	Buffer Pool / Reserve Account Contribution	Net Emission Reductions / Removals	Removals Subset	Emission Reductions Subset
2022	194,432	34,998	159,434	23,883	170,549
2023	205,781	37,041	168,740	25,277	180,504
Total	**400,213**	**72,039**	**328,174**	**49,160**	**351,053**

Note: Totals might not sum due to rounding.

Lead Validator and Verifier

Zach Eyler

Internal Reviewer

Bonny Crews

APPENDIX A—DOCUMENTS REVIEWED

#	Documents Reviewed Title
1.	NS_ACR848_GHGPlan_12112024
2.	NS_ACR848_AppendixA_Multi-Site-Design-Document_Redacted
3.	NS_ACR848_AppendixC_SDG-Cont-Report-AFOLU-Project
4.	NS_ACR848_MonitoringReport_12112024
5.	NS_ACR848_ERT_12112024
6.	ACR848_NativeState Timber Inventory SOPs series
7.	ACR848_Map_Package_series
8.	NS_848_ERT_series
9.	NS_ACR848_InvDate_StartDate_RP1EndDate_CO2e_Calc_series
10.	CA 3C Ranch LLC & KC Investments
11.	Surf Own Report WITH DEEDS 3C Ranch LLC & KC Investments
12.	Fitler Timber Co - Carbon Agreement
13.	Surf Own Rep Fitler Timber with deeds
14.	Alexis Faith Haring Trust CA
15.	Haring Family Rev Tr - CA
16.	Surf Own Rep w deeds Haring Fam Tr & Alexis Faith Trust
17.	Lamendola Bluff LLC - CA
18.	Lamendola Bluff LLC Surface Own Rep w deeds
19.	Mallard Farms LLC - Carbon Agreement
20.	Surf Own Rep w deeds Mallard Farms
21.	Brown - LA Carbon Agreement
22.	Brown - MS Carbon Agreement
23.	Surf Own Rep w deed Mark Brown (MS tract)
24.	Surface Ownership Report Mark Brown (LA tracts) with vesting deeds
25.	Martin Family Real Estate Trust - CA
26.	Surf Own Rep w deeds Martin Fam RE Tr
27.	LA Surface Own Rep WITH DEEDS Martin Michael & Judith
28.	Martin, Michael M & Judy, LA Carbon Agree
29.	Martin, MichaelM & Judy MS Carbon Agree
30.	MS Surface Own Rep WITH DEEDS Martin Michael
31.	Morehouse Parish School Board - Carbon Agreement
32.	Surf Own Rep w vest deeds Morehouse Parish Sch Board
33.	EE Pepper Co, LLC Carbon Agree
34.	Surf Own Rep w vest deeds EE Pepper Co
35.	Surface Own Report with deeds Charles Thomas, Sr. & Susie Pepper
36.	Thomas, Charles & Susie Petter Carbon Agreement
37.	Surface Ownership Report Rich Land Seed Co
38.	Southside Land Co of MS - CA
39.	Surface Own Report with Deeds Southside Land Co of MS

40. Swan Lake Inc, Hi Tree Farms, LLC Australia Island Plantation Surface Ownership Report
41. Triple F Properties LLC - Carbon Agreement
42. Triple F Properties LLC Surface Ownership Report with deeds
43. ACR848_ACR-Project-Deviation-Request
44. ERT_BaselineTest_AsIs_Harv
45. ERT_BaselineTest_OTs_Harv
46. 848 check cruise
47. NS_ACR848_AppendixA_Project_Design_Document_Final
48. NS_ACR848_AppendixB_SDG-Cont-Report-AFOLU-Project
49. NS_ACR848_Mill Capacity
50. NS_ACR848_AppendixE_MillCapacityReport
51. NS_ACR848_CO2_Calc_SiteVisit_Final_02282024
52. Soils docs. LA009, LA041, LA065, LA067, LA073, LA083, LA107, MS021, MS053, MS055, MS063, MS163
53. Explore Location resources (all properties) T&E
54. RE Franklin Bettie Jones
55. 4 - T Catfish Farms CA
56. Alexis Faith Haring Trust CA
57. Haring Family Rev Tr - CA
58. Surf Own Rep w deeds 4T Catfish Farms
59. Surf Own Rep w deeds Haring Fam Tr & Alexis Faith Trust
60. Prevalence of invasive tree species-848
61. ACR848_Soil_Mukey
62. ATFS all Properties
63. ACR 848_Common Practice-Baseline Management Questionnaire_series
64. 30_mile_buffer
65. ACR848 - Forest Insect & Disease Conditions
66. ACR848_Disease_&_Insects
67. ACR848_Infected_Areas
68. FVS Base Harvest
69. FVS IFM Constrained
70. FVS Base Constrained
71. FVS IFM
72. FVS MBTF Base Thin
73. Document Retention Policy V2
74. 60_miles_buffer
75. Forisk_Mill-Database-Full-Q1-2024
76. Mill Locations
77. NS_ACR848_NPV_202X_agebased
78. NS_ACR848_AppendixB_Reversal-Risk-Analysis
79. NS_ACR848_ AppendixA_Multi-Site-Design-Document_Final

APPENDIX B—LIST OF FINDINGS

Includes Corrective Action Requests (CAR), Non-Material Findings (NMs), Additional Documentation Requests (ADR), and Clarification Requests (CR), as necessary.

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Project ID & Name:	**ACR 848 NativState – Bottomland Forests of the Louisiana Plains (PDA)**
Project Developer:	**Nativstate**
Reporting Period:	**1**
List of Findings version:	**8.0**

This document is a private working document generated by Ruby Canyon Environmental (RCE) that lists all the material and non-material findings, requests for additional documentation, requests for clarification, and recommendations for improvement in order to complete the project verification. No information in this document will be made public by RCE or CAR.

Corrective Action Request (CAR), Non-Material Finding (NMF), Additional Documentation Request (ADR), or Clarification Request (CR) #	Finding and Date	Section of Protocol/ Methodology or Program Document	Project Developer Response and Date	RCE response and Date	Additional Project Developer Response and Date	Additional RCE Response and Date	Additional Project Developer Response and Date	Additional RCE Response and Date	Additional Project Developer Response and Date	Additional RCE Response and Date	Open or Closed
CAR 1											
CAR 2											
CAR 3											
NMF 1											
NMF 2											
NMF 3											
ADR 1	Please provide 'Appendix A. Project Design Document" that is referenced in 'NS_ACR848_GHGPlan_Draft_10272023'	GHG plan	2/28/24 - Please see Revised Documents>GHG Plan for Appendix A	Thank you for providing this document, this item may be closed.							Closed
ADR 2	Please provide relevant soil geodata for site index analysis.	4.2.1	2/22/24-Database in Revised Documents>Soils folder	Thank you for providing this information, the verifier is having issues correlating the access database outputs and mukey with the prescribed species level site index species and values. Please elaborate on which access outputs are being used	5/2 - The soil database Mukey file has been developed and uploaded In the "ACR 848\Round 2 Revised Documents\Quantification\Site Index" folder	Thank you for providing this documentation, it has been confirmed. This item may be closed.					Closed
ADR 3	Please provide the mill capacity analysis.	4.2.4	2/23/24 - Please see Revised Documents>Mill Capacity	Thank you for providing this document (NS_ACR848_Mill Capacity). In cell C27 of the 'Louisiana' tab, there is an error, cell F8 is being multiplied by 0.8 twice. Also upon review of the mills provided, there are biomass and pellet specific mills. It does not seem appropriate to include these mills in the consideration of harvested wood product capacity as they do not support the wood products intended. See tab 'ADR 3' for additional details	4/25 - Please see updated mill capacity report	Thank you for this updated report, please provide the corresponding/updated excel document to inform the level of replication needed.	6/20 - Please see Round 3 Revised Documents>Mill Capacity for Forisk database	Thank you for providing this document, it has been confirmed. This item may be closed.			Closed
ADR 4	Please provide the ATFS certificates associated with the varied parcels within the project area.	1.3	2/22/24 - Included in Appendix A	Thank you for providing this information, it has been confirmed. This item may be closed.							Closed
ADR 5	Please provide the contact information for the local forest practices inspector.	1.3	2/13/24 - Tim Gables, RF, tgables@nativstate.com, (870) 260-2943	Thank you for providing this information. This item may be closed.							Closed
ADR 6	Based off of recent information from ACR, please provide an ACR Project Deviation Request for non-native species inventory exclusion.	4.2	2/28/24-Please see in Revised Documents>Deviation Request folder	Please confirm, the sensitivity analysis provided in the second half of the deviation request is based on S&J Taylor plot modeling. Is this justification appropriate for a distinct stand-alone project?	4/25 - Please see updated Dev. Req	Thank you for drafting this document, it has been confirmed. This item may be closed.					Closed
ADR 7	Please provide evidence of the checked 5 plots per cruiser as laid out in the QA/QC procedures of the 'ACR848_NativeState_Timber Inventory SOPs'.	5.1	2/23/24 - Please see Revised Documents>Forest Inventory SOPs>848 check cruise.xlsx	Thank you for providing this document, upon its review there were only 3 cruisers evaluated on the project, were there really only 3 cruisers for 654 plots?	4/25 - Yes, RB, TF, and CS. That's it!!	Thank you for the clarification. This item may be closed.					Closed
ADR 8	Please provide inventory procedures to plots that potentially cross operable/inoperable area boundaries.	5.1	2/13/24 - Please see updated SOPs Section 5.3	Walkthrough has been incorporated into the SOPs, and language suggests that it is reliant on property boundaries, not necessarily operability lines. Is there any consideration for operability/nonoperability for walkthrough designation? If so, please incorporate this into the SOPs.	5/20 - The entire project area is considered operable. If plot center fell within the operable area it was considered operable unless forester's notes indicated otherwise, then the plot was removed. All inoperable areas were removed from the project area. Hence, operability/inoperability was not considered during walkthrough designation.	Apologies for the misunderstanding, the issue is restated here: The language in Section 5.3 appears to be contradictory. "In the event the plot falls closer than 26.3' to the delineated boundary, the walkthrough method, as described by Ducey, Gove and Valentine, Forest Science 50(4) 2004, will be employed" and in the next paragraph, "When a tallied object (tree) is close to the boundary of the tract, in the sense that it may be closer to the boundary than the sample point (center of plot), a walkthrough is conducted", these two statements are contradictory as a tree can be 26' from plot center and an additional 25.9' from a boundary (in a straight line from plot-tree-boundary) and be counted for walkthrough. Second, the language in 'the boundary of the project tract' and 'a clear delineation of the property boundary' has ambiguity in this project because acres within a given property have been classified as 'inoperable' and lacking inclusion to the quantified project area despite being within the overall property. For the purposes of walkthrough, is the 'boundary of the project tract' or the 'property boundary' just limited to what is currently represented by the 'Operable' shapefile? If so, please see item CR 35.	6/24 - Thank you for the note. We've changed the language in the SOP. The carbon project boundary is just limited to what is currently represented by the "Operable" shapefile. Updated SOPs in Round 3 Revised Documents>Inventory SOPs	The first issue still exists, 'In the event the plot falls closer than 26.3' to the delineated boundary, the walkthrough method...will be employed'. Walkthrough would need to be considered for any boundary that is within 2 limiting distances (52.6'), correct? A diagram has been included in tab 'ADR 8', to provide guidance in modifying the language. Thank you for the change in language in relation to the 'Operable' requirement, it has been confirmed.	7/11/2024 - The SOPs have been modified to state "In the event the plot **boundary** falls closer than 26.3' to the delineated boundary...."	Thank you for making this change, it has been confirmed. This item may be closed.	Closed
ADR 9	Please provide GHG plan Appendix A for land ownership deed review and/or copies of deeds from the landowners in the project.	1.2	12/23/24 - Please see Revised Documents>Contracts & Deeds folder	Thank you for providing this documentation, it has led to an extensive review of deeded acreage. Any additional findings will be tracked in other items. This item may be closed.							Closed
ADR 10	Please provide documentation supporting the values captured in cells B29:B30 of the 'Mississippi' tab of 'NS_ACR848_Mill Capacity'.	4.1	4/25 - Please see updated Mill Capacity Report	Upon review of 'NS_ACR848_MillCapacityReport_052124' there is no additional documentation clarifying the source of the SW and HW lb/ft3 values referenced in this original item. Please provide the documentation to support this. It is important to note that an updated version of 'NS_ACR848_Mill Capacity' has not been provided as of 6/19	7/1 - Original report has been updated and values in question (HW & SW lb/ft3) are no longer applicable. Updated report can be found in Round 3 Revised Documents>Mill Capacity folder.	Thank you for the clarification, the new documentation has been confirmed. This item may be closed.					Closed
ADR 11	As the growth has changed since the previous version of calculations (02282024), please provide the updated CO2 calculation for the site visit data to confirm a pass.	4.1	6/21 - The new CO2 file contains 3 new tabs with trees grown to site visit dates. Please check "Verification_TreeData", "Verification_Tree_CO2", and "Verification_Summary" tabs.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
ADR 12	Upon review of 'NS_ACR848_MillCapacityReport_052124' it mentions there are attestations available for review. Please provide attestations that support the feasibility and plausibility of the prescribed baseline cut, including local mill capacity, logger capacity, and logistics such as road building from certified professional foresters local to the project area.	4.1	7/1 - Please see attestation in Revised Documents>Attestations folder	Thank you for the document. Attestations are expected to be signed by the respective professional forester, please provide an attestation document that fits this constraint. Also upon review, it does not appear that this document explicitly discusses the regions referenced mill capacity in relation to the modeled baseline wood products, nor to the baseline prescriptions being applied. Please provide an attestation(s) that supports the quantified baseline model and its prescriptions.	7/11 - Attestation has been signed. Please see Revised Docs>Attestations.	Thank you for providing this documentation, it has been confirmed. This item may be closed.					Closed

CR 1	In 'NS_848_ERT_113023' on the 'TreeDataClean' tab there are issues. Cell R86 is not an active formula, but a hard coded value. This is happening in cell R95 as well. Please clarify.	4.2.2.1	2/14/24 - Thank you, formulas corrected.	Thank you for correcting this issue, it has been confirmed. This item may be closed.								Closed
CR 2	In comparing treelists between 'InvDate_TreeData' and 'TreeDataClean' tab of the 'NS_848_ERT_113023' there are discrepancies in species. Plot 12, Tree 5, 12_5 is a pin oak per the defect tab, but a southern red oak per the treeData tab. 87_6 is a Nuttall Oak per defect, and a southern red oak per TreeData. 7_5 is a Nuttall oak per the defect tab, and a southern red per the TreeData tab. 8_10 is a Nuttall oak per the defect tab, and a southern red per the TreeData tab. 66_6 is a Nuttall oak per the defect tab, and a southern red per the TreeData tab. 52_1 is a Nuttall oak per the defect tab, and a southern red per the TreeData tab. 16_21 is a willow oak per the defect tab, and a water oak per the TreeData tab. 4_3 is a willow oak per the defect tab, and a water oak per the TreeData tab. 13_2 is a Nuttall oak per the defect tab, and a southern red per the TreeData tab Please clarify why the treelist species are not in alignment	4.2.2.1	2/22/24-Pin Oak, Nuttall Oak, and Willow Oak are not in the 90 tree species recognized by the Southern Variant. FVS automatically remaps these species to Southern Red Oak.	Thank you for the clarification, this has been confirmed. This item may be closed.								Closed
CR 3	There appears to be a difference in how species 998 is quantified between start/RP/site visit tree calcs (NS_ACR848_SiteVisit_CO2e_1182023) and the distinct Jenkins calculation for defect ('TreeDataClean' tab of the 'NS_ACR848_ERT_113023'). The start/RP/site visit are confirmed as using the FVS Jenkins coefficient 'mo', where the defect calculation is using 'mh'. Please clarify.	4.2.2.1	2/20/24- This has been updated. Species 998 Jenkins coefficients are now same across all files.	Thank you for making this change, it has been confirmed. This item may be closed.								Closed
CR 4	In the 'Plot_Level_Defect' tab of 'NS_ACR848_InvDate_StartDate_RP1EndDate_CO2e_Calc_1 2012023' there are two additional plots that are assigned defect that are not being quantified in the 'RP1End_Summary' tab, MMF-2_10 and MMF-2_26. These two plot level defects come from 3 trees recorded and quantified for defect in the 'TreeDataClean' tab of 'NS_848_ERT_113023'. If these trees were recorded on plots that are no longer quantified please remove them from this list, otherwise please clarify.	4.2.2.1	2/12/24 - Apologies, these plots have been removed.	Thank you for removing these plots. There were two other plots removed from defect quantification SL-7_9 and SL-7_21. This item may be closed.								Closed
CR 5	The DBH Grown in 2028 or 1- FVS Cycle (in) of the 'FVS_GrowRun' tab of 'NS_ACR848_InvDate_StartDate_RP1EndDate_CO2e_Calc_1 2012023' does not match the same value in the 'FVS_IndTreeGrow' tab of 'NS_ACR848_SiteVisit_CO2e_102723'. Please clarify.	4.2.1/5.2	2/21/24 - This was because of copying and pasting from the FVS output database. This has been fixed. Both CO2 calc files have same values now.	Thank you for making this change, it has been confirmed. This item may be closed.								Closed
CR 6	In 'Operable Acres.shp' and 'ACR848 Forest Carbon Plots.shp' the Australia Island Plantation and the Hi Tree Farms have their own tract/strata designation, AI and HTF. In 'ACR848 Forest Carbon Plots.shp' and the excel workbooks plots in the AI and HTF tracts/strata appear to be designated as part of the Swan Lake project/strata. Please clarify.	4.4	2/13/24 - Swan Lake, AI, and HTF are all under same ownership/contract and were lumped together	Thank you for the clarification. This item may be closed.								Closed
CR 7	The acres allocated to each subsection of the project in 'Operable Acres.shp' and 'Project_Area' tab of 'NS_ACR848_InvDate_StartDate_RP1EndDate_CO2e_Calc_1 2012023' do not match. Several examples are highlighted in tab CR 7. Please clarify.	2.2	2/22/24 - All now match	There appears to have been an overhaul in project area. This item may be closed.								Closed
CR 8	In the 'Management' tab of 'NS_848_ERT_113023', harvests following 2023 are shown in to occur in three strata in 2082. However in the 'Baseline', M Harv Avg Per Acre does not show up (after the initial harvest) again until 2087 and have values across all strata instead of just those outlined in the 'Management' tab. Please clarify.	4.2.4	2/14/24 - Management tab updated	Thank you for making this change, it has been confirmed. In the 'Baseline Scenario Harvest Schedule' section of the GHG plan there is inclusion of a SMZ cut to 50BA, which does not appear in the 'Management' tab or the baseline model. Please clarify.	4/25 - Please see updated Management Tab	Language has been updated in the 'Hardwood Harvest' description to include the 50ft2 BA for constrained plots. This item may be closed.						Closed
CR 9	Upon review of 'ACR848_NativeState Timber Inventory SOPs' it appears that nonnative tree species were not inventoried or quantified. Please clarify the relative occurrence of these species within the project and how it impacts carbon quantification within the model.	4.2.2	2/22/24-Please see deviation request	It does not appear that this analysis (ACR848_ACR-Project-Deviation-Request) is specific to LA PDA in relation to nonnative occurrence which was the nature of this CR. Please clarify.	4/25 - Please see updated Dev. Req	Thank you for tailoring this analysis to this project and the modeled condition, it has been confirmed. This item may be closed.						Closed
CR 10	After an intersection of 'Operable Acres.shp' and federal geodata, there appears to be 13.85 acres of overlap with federal property. Please clarify. See tab CR 10 for details.	2.2	2/22/24 - Our ownership boundaries are based off legal descriptions from deeds and are correct. Please see revised Section A4 and Contracts & Deeds document, provided separately	Thank you for this additional information, these are dominantly slivers and the deeds support the acreages quantified. This item may be closed.								Closed
CR 11	Are there any easements, hunt clubs, mineral rights, or other restrictions that would limit management that have not already been addressed in the GHG plan?	2.4	2/14/24 - According to Foresters and Landowners there are no other restrictions than those addressed in GHG plan	Thank you for the clarification and confirmation. This item may be closed.								Closed
CR 12	Are there any known endangered or threatened species on property that need to be accounted for in the baseline model?	4.1	2/22/24 - Please see Section C1 and Revised Documents>T&E Review folder.	Thank you for the additional information, it has been confirmed. This item may be closed.								Closed
CR 13	What, if any, is the minimum amount of area that a disturbance must be for it to alter the recorded number of forested acres?	5.1	2/14/23 - Please see updated Inventory SOPs	25 acres, thank you for this information. If there are any unidentified disturbances found in independent GIS analysis other items will be generated. This item may be closed.								Closed
CR 14	Have there been any harvests in RP 1? If not, please provide an attestation to confirm such.	5.3.1	2/12/24 - There were no harvests during RP1. RP1 monitoring report shows no harvests and by signing we attest this to be true.	Thank you for the confirmation, this has been supported by a Sentinel analysis, item may be closed.								Closed
CR 15	In an intersection flat area and damage points of the region 8 2022 USFS forest health damage surveys and the required 30 mile radius around the project for credit buffering, a total of approximately 633 acres were found to be killed by southern pine beetle within said radius. Please clarify the assignment of a forest health buffer amount of 4% in the GHG plan. See tab CR 15 for visual example. USFS data from https://www.fs.usda.gov/foresthealth/applied-sciences/mapping-reporting/detection-surveys.shtml#dsdownloads .	8	2/13/24 - According to the "US Forest Service's Forest Health Highlights, 2022" for the state of Louisiana, the southern pine beetle (SPB) activities in the state has been insignificant since the late 1990's. Please refer to page 2 of the following reference. https://www.fs.usda.gov/foresthealth/docs/fhh/LA_FHH_2022.pdf	Thank you for the additional information, this has been confirmed by the verifiers on site. The property does not appear to have epidemic levels of infestation, therefore this item may be closed.								Closed

CR 16	Upon review of the provided .out files: Base_constraint_FVSoutput, Baseline_FVSoutput, Grow_FVSoutput, IFM_constraint_FVSoutput, and IFM_FVSoutput, there are multiple FVS warnings. FVS03 for an inappropriate location code. FVS14 for a failure to recognize the ecoregion. Please clarify.	4.2.1	2/14/24 - Codes had been omitted. Have been included with model updates.	Thank you for correcting these inputs, they have been confirmed. This item may be closed.							Closed
CR 17	Upon review of the 'Base_constraint_FVSoutput' .out file there are plots that have no initial stocking and over the course of the model never regain any, either through sprouting or plant regen, please clarify. Example plots are listed on the tab 'CR 17'.	4.2.1	2/14/24 - These plots are 2 of 22 "Zero Carbon Plots". These plots had no trees during inventory. All plots will be re-inventoried within next 5 years capturing natural regeneration.	This response is valid for project inventory in future RPs, but this does not ameliorate the concern with 100 year baseline modeling. Something is going to grow on these plots and should be accounted for in the unchanging baseline model. Please clarify.	5/17 - Upon further review of the spatial files and reconfirming with our inventory crew, one of these plots, MP-6_30 fell in the middle of a creek. Since no trees will grow in that plot in the future, we decided to drop plot from the inventory. The remaining 21 null plots are now assigned one tree of 0.5-inch dbh each in order for FVS to allow some growth in future years. Tree species were decided using the highest basal area species in the respective strata.	Thank you for adding a placeholder tree, they have been confirmed. This part of the item may be closed. To drop a plot from the inventory (MP-6_30), the plot itself can not be counted for acreage towards any stocking calculation. At this time, the area that contains the plot center and area is within the 'Forested SMZs' strata and has not been excluded from the project. If this plot is truly without the potential to grow carbon, this acreage needs to be excluded from the project. If this plot is being excluded new shapefiles are expected, including plot and 'Operable acres'.	6/20 - Plot fell in small area of open water that would not grow trees so was dropped. Corresponding acreage has now been removed. Please see update dated GIS in Round 3 Revised Documents>GIS	Thank you for making these changes, they have been confirmed. This item may be closed.			Closed
CR 18	Upon review of the 'IFM_constraint_FVSoutput' .out file there appears to be an issue. SMZ plots are currently being clearcut in 2063 in the Project model .out files, which does not meet the BMPs or the description in the GHG plan. A series of screenshots has been provided in tab 'CR 18'.	4.2.1	2/22/24-Included in model updates	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 19	Upon review of the 'IFM_FVSoutput' .out file there does not appear to be any minimum harvest criteria for clearcut in 2063 as described in section F1. of the GHG Plan. There also is not a 60 year period between reentry as described. Please clarify.	4.2.1	2/22/24-Included in model updates	Thank you for including the minimum harvest criteria, that has been confirmed. Upon review, the language in the GHG Plan and the .out file still aren't matching. The E2. Project Scenario Harvest Schedule makes no mention of a Project clearcut at year 2063, but the .out file absolutely has this. A clearcut in 2063 in the Project model is acceptable, just make the language match the math, see tab 'CR 19'.	4/25 - Removed CC in 2063. Please see updated language in Section E2	GHG Plan has not been provided, will wait to close until can be confirmed.	7/1 - Please see GHG Plan in Revised Documents>GHG Plan & Documents folder	Thank you for making this change, it has been confirmed. This item may be closed.			Closed
CR 20	Upon review of the 'BaselineFVS' and 'Baseline' tabs in 'NS_848_ERT_113023' it does not appear that defect is incorporated into the Merch Removed quantification. As that value is based off of an undefected standing value, it is non-conservatively inflating baseline harvested wood products. Please clarify.	4.2.2	2/14/24 - Included in ERT calc updates	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 21	Upon review of the 'Baseline_HWP_Calc' tab of 'NS_848_ERT_113023' there are two assessment areas included that have no project acreage, SE Middle Mixed Forest Arkansas Valley (Area 1), and Ozark Broadleaf Forest-Meadow Boston Mountains (Area 2). Please clarify.	4.2.2	2/14/23 - We have provided the weighted average of the assessment areas in the 'Baseline_HWP_Calc' tab. The weighted average calculation now selects a total of three assessment areas that have projects acres. Please refer to cells "H71:I76" of 'Baseline_HWP_Calc' tab.	These other two supersections are relics and not actively used. Therefor this item may be closed.							Closed
CR 22	Upon review of the 'Baseline_HWP_Calc' tab of 'NS_848_ERT_113023' the baseline wood products are only being calculated upon Assessment Area '4' Mississippi River Delta (F3:F54), despite approx. 2,400 acres in two other supersections. Please clarify why assessment area weighting wasn't used.	4.2.2	2/14/24 - Please see CR 21. We have updated this in the new calculator.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 23	Upon review of the 'General Info' tab of 'NS_848_ERT_113023' the 'Softwood Saw' prices appear to reflect the 'Chip-n-saw' value, instead of the 'Pine Sawtimber' value in the chart. Please clarify.	2.4	2/14/24 - Prices updated in ERT calc updates.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 24	Upon review of the 'Baseline_ERTCalc_Inputs' tab of 'NS_848_ERT_113023' what is the source of the 2023 MCuFt and SCuFt values in A78:D7327 Also, the proportion method in E77:F77 does not appear valid. Please clarify.	4.2	2/14/24 - Values taken from FVS_Summary2_East tables for inventory year (2022) models	Thank you for weighting these values based off their appropriates acreages. This item may be closed.							Closed
CR 25	Upon review of the 'DefectCalc' tab of 'NS_ACR848_ERT_Final_02282024' there is a misalignment of species codes starting at cell H160 and continuing to H169. There was a tree that was quantified in TreeDefectDataClean row 167, SLC-2_64 a 43" 105' Hickory, that is missing from the 'Defect Calc tab, except its species is still being queried but for a 15.9" Water Tupelo. This appears to be in error, please clarify.	5.2	4/25 - Hickory entry was an error. Tree did not exist in inventory. Please see updated defect calculations	This has been corrected in the 'Defect_Calc_Clean' tab of 'NS_ACR848_ERT_Final_05162024' and the Baseline/IFM models, but unfortunately the 'Plot_Level_Defect' tab in 'NS_ACR848_CO2_5212024' has not been updated to this correction and appears to be the plot level defect value that is applied across the start/EORP1 carbon calcs. Please clarify.	6/21 - This has been resolved.	No, no this has not. The values in columns AG:AH of 'Defect_Calc_Clean' are hard coded and do not correlate to the values in col. AE (ironically these are also hard-coded but were calculated correctly as confirmed by the verifier). A screenshot has been included in tab 'CR 25', the red values are incorrect, the green are correct.	7/11/2024 - Thank you very much for pointing that out. The defect values are now correct in the CO2 calc file. We have also changed the incorrect values in the last column of the "Defect_Calc_Clean" tab of the ERT calculator.	Thank you for making this change, it has been confirmed. This item may be closed.			Closed
CR 26	in row 167 of the 'TreeDefectDataClean' tab in 'NS_ACR848_ERT_Final_02282024' there is tree SLC-2_64_6, the same 43" hickory from CR 25, that is being calculated for defect carbon. But this tree is not included in the quantified treelist of 'NS_ACR848_CO2_Calc_Final_02282024'. Please clarify.	5.2	4/25 - Hickory entry was an error. Tree did not exist in inventory. Please see updated defect calculations	Thank you for making this correction, it has been confirmed. This item may be closed.							Closed
CR 27	Upon review of the 'StartDate_Tree_CO2' tab, there are 449 trees that have been degrown under 1" DBH. Per the methodology, these trees should not be included in carbon quantification, please clarify.	Tree Definition	5/20 - Thank you very much for pointing this out. The issue has been corrected in the new CO2 file.	This has been corrected in the 'StartDate_Tree_CO2' tab but there are also two trees in the 'RP1End_TreeData' tab that were inventoried at 1" after the EORP1 date and are being properly degrown to less than 1". These trees should also be excluded from quantification of EORP1 carbon stocks, please clarify. The trees are PEE-3_3_9, and PEE-3_6_12.	6/21 - We were not able to fully execute a Carbon Agreement for PEE-3 (missing landowner), this parcel has been removed from project, thus all trees associated with PEE-3 have been deleted. Please check the new CO2 file.	This has been confirmed in both GIS and in the carbon quantification, this item may be closed.					Closed
CR 28	Upon review of the 'RP1End_Summary', and 'StartDate_Summary' tabs in 'NS_ACR848_CO2_Calc_Final_02282024' the plot level CO2 columns (D:E) are rounding to the nearest hundredths place, but the defect deduction is not. Please clarify the purpose of this rounding and make it consistent across calculations.	5.2	5/20 - Thank you. The new file has consistent rounding throughout.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 29	Upon review of the 'Project_Area' tab of 'NS_ACR848_CO2_Calc_Final_02282024' the acres value for Swan Lake, cell B14, does not match the calculate geometry from the updated GIS. Also, it is rounded to the hundredths place as opposed to all other values. Please clarify.	4.1	5/21 - The acres are correct. Please check this folder "ACR 848\Round 1 Revised Documents\GIS". The Swan Lake strata has 1,773.08 acres in both GIS and CO2 files.	The verifier is not calculating the same acres using the calculate geometry function only for Swan Lake. As the acres calculated is slightly higher on the verifier analysis, the developer value has been deemed conservative, and this item will be transitioned to an RFI and may be closed.							Closed

CR 30	Upon review of a combination of the GIS, Deed and Contracts documentation, and publicly available parcel information there are some questions that need clarification. There are approx. 1,712 ac in the 'Haring' strata but the deed paperwork only accounts for 490ac, there appears to be an ownership associated with 4-T Catfish Farms through publicly available parcel data. There are approx. 32 ac in the 'Richland' strata that appear to be owned by 'Stardust Investments', as well as an additional 40 acres owned by 'Franklin Bettie Jones' and 83 acres owned by 'Klein, Daisy and John'. Relevant parcel information was compiled through publicly available parcel data. Please clarify whether these parcels have recently changed ownership to Richland Seed Co.	4.1	5/21 - Tommy Haring is the principal in 4-T Catfish Farms. Carbon agreement and deeds now included in Round 2 Revised Documents>Contracts & Deeds>HF. Fred Franklin is the principal of both Rich Land Seed Co and Stardust Investments. Currently getting carbon agreement ratified by Fred Franklin as primary of Stardust Investments. Will be provided when available. The 83 acres owned by Kline is excluded in the deed. The Kline acres are west of Bayou Boeuf. Please see page 2 of the Vesting Deed titled 176-725 where it shows "Section 11 - All lying East of Bayou Boeuf" For Franklin Bettie Jones, please see email in Round 2 Revised Documents>Contracts & Deeds	Thank you for providing the deeds in relation to 4-T Catfish Farms, this part of the item may be closed. The 83 acres owned by Kline appear to be in the T17N R9E SE4 of SW4 and is included in the project area at this time (additional screenshots showing this have been included in tab 'CR 30'). The referenced documentation (176-725) is in T18 R5. Is this parcel owned by Richland, or any of the other owners, and if so, where is the deed information, please clarify. As well, this item will stay open, pending the carbon agreement ratified by Fred Franklin for Stardust Investments.	6/20 - 83 acres owned by Kline have been removed from Project. Ownership documentation updated for Stardust Investments, please see Round 3 Revised Documents>Contracts & Deeds	Thank you for removing these acres, they have been confirmed in GIS and quantification. This item may be closed.					Closed
CR 31	These properties are all listed under the ATFS certification and have forest management plans, please provide the forest management plans and elaborate upon how the series of baseline cuts fits within their constraints.	4.1	5/20 - Please see FMPs located in Round 2 Revised Documents>MSDD>strata folder. Management plans were written for Landowner's goals and objectives (IFM Project scenario) and do not include baseline prescriptions.	As of 6/19/24 there are no files in the MSDD folder on the sharepoint. Please provide these documents.	7/2 - These documents may be found in Round 3 Revised Documents>ATFS	Thank you for providing this documentation, it has been confirmed. This item may be closed.					Closed
CR 32	Upon review of the merchantable timber on property, the ratio of hardwood versus softwood basal area is 93.1% HW to 6.9% SW (tab 'Inventory_BasalArea_Calc' of CO2 doc). The mill capacity analysis is calculating roughly 61% of the available capacity as softwood specific and justifying that capacity as available for HWPs. This mill capacity analysis is not tailored to the wood products generated from the baseline prescriptions, and the quantity of volume is substantially higher in proportion to the available hardwood mill capacity. Please clarify the severity of the proposed cuts in relation to realistic mill capacity.	4.1	4/25 - Please see updated mill capacity report	An updated version of the mill capacity analysis excel document has not been provided as of this time (6/19), therefor proper mathematical replication has not been able to do be completed in support of the values in the pdf. The updated monitoring report does address the proportional wood product to mill capacity, and pending further findings from the excel analysis, this item may be closed.	6/20 - Please see Round 3 Revised Documents>Mill Capacity for Forisk database	Thank you for providing this documentation, as total yearly cut does not exceed 5% of regional mill capacity in the likely wood product classes this appears to fit within ACRs methodology. This item may be closed.					Closed
CR 33	Upon review of the 'NS_ACR848_ERT_Final_02282024' document the Baseline harvest is severe. At this time, live stocks are reduced to 7.8% of their original stocking within a single year of the project initiation. This does not appear to be plausible, and certainly does not follow the ISO 14064-2 principle of conservativeness that is required by the methodology, Section 4.1, please clarify. As well, please see section 4.1.1, the second bullet, for applicable information that can be used to support a proposed baseline.	4.1.1	5/20 - Baseline harvests remodeled to occur over a five year period	This has been confirmed. It is also important to note that total stocking is now only being reduced 88.9% of initial stocking (vs. 92.2%), this change is likely due to growth over that 5 year interval recovering post-harvest. This item is on hold pending further discussion.	6/21 - Economic models performed to update harvest analysis. Please see NPV folder in Round 3 Revised Documents	The proposed cutting regime in the 'NS_ACR848_ERT_Final_07022024' version of the document has been lessened to standing stock being reduced by 80% of initial stocks spread out over the first 6 RPs. Thank you for modifying this cutting regime and providing extensive economic models. This item may be closed.					Closed
CR 34	Upon review of the 'NS_ACR848_ERT_Final_02282024' document the Baseline harvest will require a substantial workforce, including loggers, truckers, foresters, and contractors, working in conjunction with at least 13 land owners. Please provide additional information and clarification upon the feasibility of each of these variables and how 92.2% of standing stocks may be cut in a calendar year.	4.1	5/20 - Baseline harvests remodeled to occur over a five year period	Thank you for spreading out this harvest over the first five years of this project, this takes significant strain off of the feasibility of this cut. Please incorporate a discussion of the workforce requirements previously mentioned into either the Mill Capacity analysis or the GHG Plan. This item will stay open until documentation is updated and confirmed.	7/2 - Please see updated Mill Capacity Report	Thank you for updating this report with additional pertinent information on the logistics necessary to facilitate this cut, it has been confirmed. Modifications/signatures to the attestation document are tracked in other items. This item may be closed.					Closed
CR 35	The walkthrough method sets a buffer of twice the total distance of the plot 26.33' x 2 = 52.6' and then assesses if a project boundary is closer to a tree than the plot center. Upon GIS analysis, there are 138 plots that fall within the walkthrough distance of an 'Operable' shapefile boundary. There are 12 plots that fall within the walkthrough distance of the 'ACR848 Project Boundary Enrolled Parcels - Approx. 29,242.68 acres' shapefile boundary, both sets of plots that could have a walkthrough tree are included in the tab titled 'CR 35'. If 'Inoperable' acres are outside of the project area, then wouldn't it make sense to include wallkthrough on any of the 138 plots where applicable given the tree/boundary orientation? Please provide a comprehensive list of plots that are classified as walkthrough. A treelist analysis does not appear to show walkthrough on any large plot trees through the 'Tree Count' column, and only 4 trees through tree characteristic analysis. Please clarify.	4.1	6/24 - The SOP language has been updated to eliminate the confusion. For ACR848, no plots were categorized as walkthrough plots by the inventory crew in the field.	Other SOP language modifications will be tracked in 'ADR 8'. As there is no provided evidence to suggest that cruisers identified a plot/operable boundary intersection to initiate the walkthrough procedure, as well as the fact that onsite verifiers passed the t-test, and that the resulting inventory lacking walkthrough trees is conservative from a total carbon standpoint, this item may be closed. It is encouraged that clarification of walkthrough methods be provided to the inventory crew in future inventories with the updated SOPs.						Closed
CR 36	Upon review of 'NS_ACR848_MillCapacityReport_052124' there has been a change in the mill capacity approach: the first is Arkansasian mills are now included, and second, it appears that the 75 mile buffer is now based on total project area polygons, not just the geographic center of the project (Rayville, LA). Please clarify.	4.1	7/2 - Based on attestation, economic haul distance changed to 60 miles. As shown in CR 36, not all properties were located within a 60 mile radius of project centroid. To more accurately assess mill capacity in the project area, we expanded the economic haul distance to accommodate a 60 mile haul distance from each ownership polygon.	This modification has been confirmed and deemed justifiable in relation to the proposed baseline harvest regime and project footprint. Modifications/signatures to the attestation document are tracked in other items. This item may be closed.							Closed
CR 37	Upon review of the 'ACR 848_Common Practice-Baseline Management Questionnaire_070124' there is discussion of appropriate 'Baseline Hardwood Management' which speaks of 2 thinnings of merch timber (>5") in years 25 and 50, and a final harvest at 75 years of age. Upon review of the management modeled in the baseline it is not clear that the stands receiving the clearcut prescription in the baseline are at the recommended 75 year age, nor are thinnings being incorporated into the model. There also appears to be no opinion/attestation in relation to 'Baseline Softwood Management'. If this document is to act as an attestation of the validity of the baseline model, the model should reflect the attestation or vice versa. Please clarify.	4.1	7/11 - Signed attestation says financial maturity (maximum NPV) or approximately 75 years. Thins are incorporated in modeling. NPV and baseline have been re-run and incorporated throughout. As there were no managed pine stands in the project and only 8 pine recorded, separate management for softwood species was not included.	Thank you for providing this document and the specificity involved in justifying the proposed baseline cut. It has been confirmed. This item may be closed.							Closed
CR 38	Upon review of 'NS_ACR848_ERT_07172024' on the 'Baseline_HWP_Calc' tab in the calculation of the final adjustment factors for assessment area three the full source data is not included in the calculation (cells D82:E82, and D84:E84). Please clarify.	4.1	7/22- This has been fixed. Please check the new ERT calculator.	Thank you for making this change, it has been confirmed on the 'Baseline_HWP_Calc' tab. Unfortunately, the same issue exists in the same cells on the 'IFM_HWP_Calc' tab of 'NS_ACR848_ERT_07252024'.	8/14/2024 - Thank you. The issue has been fixed in "IFM_HWP_Calc".	Thank you for the updated calculations, this item may be closed.					Closed

CR 39	Upon review of 'NS_ACR848_ERT_07172024' on the 'Baseline_ERTCalc_Inputs' tab in the calculation of baseline HWPs in the MM and MF strata (cells H81:H89) the baseline pulp/saw ratio used is for a later RP as opposed to all other strata harvested in the first five years of the project. Please clarify. As well, in later RPs (AD81:AG84, BC81:BF84, and C881:CE84) there are only four RPs worth of calculation, but the source data is being divided by 5. Please clarify.	4.1	7/22 - MM & MF now call correct pulp/saw ratios. Later RP harvests, now correctly spread across five years.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 40	Upon review of 'NS_ACR848_ERT_07172024' on the 'Baseline_ERTCalc_Inputs' tab in the calculation of baseline HWPs in the TPEP strata (cells I116:O119), a five year harvest interval is being applied to 7 years. Please clarify. As well, it appears that the harvests in later RPs for this strata are intended to be spread out over 5 year intervals but at this time the calculations are misaligned, see AF116:AL119, BE116:BK119, and CD116:CJ119. Please clarify.	4.1	7/22 - TPEP adjusted to occur over 5 years later RPs now appropriately aligned.	If 5 years is the intended interval for TPEP harvests, please modify the cells AL47, BK47, and CJ47 to be divided as all other values in this table and distributed accordingly.	8/14 - Thank you and done.	Thank you for the updated calculations, this item may be closed.					Closed
CR 41	Upon review of 'NS_ACR848_ERT_07172024' on the 'IFM_ERTCalc_Inputs' tab in the calculation of project HWPs in the MF, MM, MP strata (cells H81:H94) and TPEP (cells H116:H119), the baseline pulp/saw ratio that is being used is for a later RP as opposed to all other strata harvested in the first five years of the project. This is reflected until 2052 (col. AG), when the same pattern follows for these strata, in 2077 (col. BF), and 2102 (col. CE) again. Please clarify.	4.1	7/22 - This sheet now uses saw/pulp ratios from the project IFM model and calls appropriate years for harvest cycle.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 42	Upon review of 'NS_ACR848_ERT_07172024' on the 'IFM_ERTCalc_Inputs' tab in the calculation of project yearly harvested wood products it appears that the volumes are being overestimated. Tracing the values from cells H152:H155 back through the calculations it leads to the 2027 output values seen in cells CF4:CF16 on the 'IFM' tab. This value set appears to be the yearly harvest in a 5 year period (2022-2027), where it would be conservative to take this total value, divide by 5, and replicate it over each of the intervening RPs. At this time, these harvested yearly values are being added to one another, tab 'CR 42' has been included. Please clarify.	4.1	7/22 - Thank you, these values should have been divided by 5 to equally distribute across harvest years (as was baseline). All have been updated.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 43	Upon review of 'NS_ACR848_ERT_07172024' on the 'Select_Cut ERT Calc' tab there is a leakage assessed at 20%, per the methodology this leakage can only be applied when 'small private landowners (each owning less than 5,000 forested acres)' but the Richland Seed Company appears to own 5,285 acres. Please clarify.	5.3	7/22 - Area weighted market leakage now calculated in General Info tab to accommodate different market leakage value for RSC. New project level market leakage is ~23%. Note that all Site level calculators (with the exception of RSC) use 20% market leakage and RSC uses 30% market leakage.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 44	The live tree uncertainty (cell E6) on the 'Select_Cut ERT Calc' sheet in 'NS_ACR848_ERT_07172024' does not appear to correlate to the as-measured inventory as prescribed by the methodology. Tracing it back leads to the 'Uncertainty_Calc_Inventory' tab and then to the 'Baseline' tab, these sums are not based off of the 'invDate_Tree_CO2' tab of 'NS_ACR848_CO2_07172024'. Please clarify.	4.1	7/22 - The uncertainty calculation is now based on as-measured inventory data. There is a new tab 'Uncertainty_Inventory' in the CO2 file. The 'Uncertainty_Calc_Inventory' tab in the ERT file has been deleted.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
CR 45	Upon review of 'NS_ACR848_ERT_07252024' on the 'Baseline_ERTCalc_Inputs' and 'IFM_ERTCalc_Inputs' tabs there appears to be an additional doubling of merch harvested US tons in rows 166:169. Please clarify.	4.1	8/14/24 - Thank you, this issue has been fixed in both tabs.	Thank you for the updated calculations. The doubling is still tecnically occuring in C166:C169 in the "Baseline_ERTCalc_Inputs" tab, but it does not change any value, so this item may be closed.							Closed
CR 46	Upon review of 'NS_ACR848_ERT_07252024' on the 'IFM_HWP_Calc' tab the weighted adjustment factors (I73:I76) are all using 4 assessment areas worth of adjustments, which does not match the baseline model or the assessment areas of this project. Please clarify.	4.1	8/14/2024 - Thank you, the weighted adjustment factors are now fixed and are consistent with the baseline model.	Thank you for the updated calculations, this item may be closed.							Closed
CR 47	Upon review of 'NS_ACR848_ERT_07252024' on the 'Baseline_ERTCalc_Inputs' tab, there is interpolation of live standing stocks that appears to be erroneous. At this time the strata MF, MM, MP, TPEP, are all receiving harvest period incrementalizations despite two of the strata not experiencing a harvest in the time block in question (2028 to 2031, or I10:L17). Please clarify.	4.1	8/14/24 - Thanks, interpolation has been corrected.	Thank you for the updated calculations, this item may be closed.							Closed
CR 48	Upon review of 'NS_ACR848_ERT_07252024' on the 'Select_Cut ERT Calc' tab, and in the 'NS_ACR848_MonitoringReport_07222024' the vintage calculations are not built to meet an initial reporting period that is not equal to one year (4/19/2022 to 9/30/2023). Therefore, the credits for 2022 (257 days) is outweighing the credits for 2023 (272 days). Please clarify.	4.1	8/14/24 - Thanks for pointing this out. We have slightly changed the formula in the ERT calculator and added two rows showing the number of days in Vintage 1 and vintage 2. The total ERT value is now prorated based on number of days in each vintage. Please see the new ERT calculator.	Thank you for the updated calculations, this item may be closed.							Closed
CR 49	In the 'Select_Cut ERT Calc' tab of 'NS_ACR848_ERT_08142024', the Uncertainty Live Tree CO2 is updated from the initial inventory to year 10. Please clarify.	5.6	8/16 - 10 year uncertainty stocks set to equal to initial inventory.	Thank you for making this change, it has been confirmed. This item may be closed.							Closed
Recommendations for Improvement												
1	The Swan Lake total acreage recorded in the quantification documents does not appear to be generated directly from the shapefile provided when compared to verifier analysis, it is slightly lower; it is encouraged to recalculate geometry on this shapefile.											
2												