RUBY CANYON ENVIRONMENTAL

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FIRST CORP

Validation and Verification Report

ACR596 Bluesource - Boone Forestlands Improved Forest Management Project

May 4, 2022

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1 INTRODUCTION

Bluesource LLC (Bluesource) contracted with Ruby Canyon Environmental, Inc. (RCE) to perform the validation and verification of the ACR596 Bluesource – Boone Forestlands Improved Forest Management Project (Project) for the reporting period of October 19, 2019 – February 28, 2021 and a crediting period of October 19, 2019 – October 18, 2039 under the American Carbon Registry (ACR) program. Bluesource acts as the project developer for the landowner and project proponent, Boone Forestlands, LLC (Boone Forestlands). 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 Project Plan "Bluesource – Boone Forestlands Improved Forest Management Project" dated February 16, 2022. For the verification, RCE ensured that the GHG assertion was materially correct, that the data provided to RCE was well documented, and that if Bluesource made any material errors, that these errors were corrected.

RCE worked with Forest Resource Solutions and Technologies (FRST) to complete this validation and verification.

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);
- The following elements of the GHG Plan:
    - Project boundary and procedures for establishing the project boundary;
    - Physical infrastructure, activities, technologies, and processes of the project;
    - GHGs, sources, and sinks within the project boundary;
    - Temporal boundary;
    - Description of and justification for the baseline scenario;
    - Methodologies, algorithms, and calculations that will be used to generate estimates of emissions and emission reductions/removal enhancements;
    - Process information, source identification/counts, and operational details;
    - Data management systems;
    - QA/QC procedures;
    - Processes for uncertainty assessments; and
    - Project-specific conformance to ACR eligibility criteria.
- 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 38,272 acres of mixed hardwood forests in southeastern Kentucky. The project is spread across 11 counties in the state: Bell, Breathitt, Clay, Harlan, Jackson, Knox, Leslie, Letcher, Owsley, Perry, and Whitley. Nearby population centers include Harlan, Hyden, and Pineville, Kentucky.

Typical of southern Appalachia, the project area consists particularly of cove forest with significant yellow poplar and chestnut oak components. Timber and energy resource development and extraction (coal, oil, gas) dominate regional industry. The project area has been actively managed for both timber and energy extraction for the past 100 years. Management decisions of the forest focus on sustainable, natural forest growth and non-commercial forest maintenance for essential activities and forest health. The project ensures long-term sustainable management of the forests, which could otherwise undergo significant commercial timber harvesting.

1.3 Responsible Party

Project Proponent

Boone Forestlands, LLC
PO Box 9162, Chapel Hill, NC 27515
Dave Fehringer, Regional Director
919-929-2497

Project Developer

Bluesource LLC
582 Market St., Suite 1505
San Francisco, CA
Josh Strauss, Vice President
949-233-1501

1.4 Validation and Verification Team

Lead Validator and Verifier: Zach Eyler
Biometrician: Andrea Eggleton, FRST
Professional Forester: Christian Eggleton, FRST
Forestry Analyst: Tim Facemire, FRST
Internal Reviewer: Phillip Cunningham

1.5 Validation and Verification Criteria

1.5.1 Validation and Verification Standards, Guidelines, and Tools

- Bluesource – Boone Forestlands Improved Forest Management Project Plan (February 16, 2022)

- Bluesource – Boone Forestlands Improved Forest Management Project Monitoring Report (February 9, 2022)
- ACR Standard, Version 7.0 (December 2020)
- ACR Validation and Verification Standard Version 1.1 (July 2019)
- Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non‐Federal U.S. Forestlands v.1.3, April 2018
- Errata and Clarifications - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non‐Federal U.S. Forestlands v.1.3, September 30, 2021
- ISO 14064-3:2006 "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 a COI form on August 9, 2021 to identify any potential conflict of interest with the Project or Project Developer. The COI form was approved by ACR on August 10, 2021.
- RCE and Bluesource held a validation/verification kick-off meeting on August 12, 2021. During the kick-off meeting RCE reviewed the validation/verification 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 August 16-21, 2021. During the site visit the Verification Team performed key personnel interviews, conducted sequential sampling 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:

        - FRST:
            - Tim Facemire
    - During the site visit, the Verification team met with the following individuals:
        - Bluesource
            - Ian Hash
        - Advantage Timberland
            - Seth Douthat
        - The Forestland Group
            - Cakey Worthington
- 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, GHG management and monitoring systems and eligibility documentation.
- RCE conducted interviews and had conversations with Project personnel during the verification. Personnel interviewed include:
    - Tim Hipp – Bluesource
    - Ian Hash – Bluesource
    - Ben Parkhurst – Bluesource
    - Liz Lott – Bluesource
- RCE submitted requests for corrective actions, additional documentation, and clarifications as necessary to Bluesource 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 statement, and List of Findings.
- RCE held an exit meeting with Bluesource.

3 VALIDATION AND VERIFICATION FINDINGS

3.1 PROJECT BOUNDARY AND ACTIVITIES

The Project is located on 38,272 acres of mixed hardwood forests in southeastern Kentucky. 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 October 19, 2019 – October 18, 2039.

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 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
Standing dead wood	CO_2	Major carbon pool in unmanaged stands for the 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 by reviewing the project proponent's 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 October 19, 2019.
- Minimum Project Term: The minimum project term is 40 years.
- Crediting Period: The crediting period is 20 years as specified by the Methodology, October 19, 2019 – October 18, 2039.
- Real: RCE confirmed that the GHG reductions follow the ACR methodology and are verifiable.
- Emission or Removal Origin: RCE confirmed that Boone Forestlands owns and has control over, or document 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 Project Proponent (Boone Forestlands), which 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 non-federally owned private forestland.
- Boone Forestlands controls the timber rights on the forestland and can legally harvest.
- The Project will have harvesting, but Boone Forestlands is certified by the Forest Stewardship Council (FSC) for all their lands.
- 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.
- Boone Forestlands owns 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 Standard 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 geographic region for the Project includes southeastern Kentucky. Throughout the geographic region, industrial forestland is heavily cut, often through clear-cutting and high-grading, and is managed to maximize NPV of the forestland investment. The project is an industrial, forestland ownership. Without the Project the property would have been likely managed for timber production and would resemble typical industrial forestlands in the region. With Project implementation the forestland carbon stocks will exceed the common practice found in the region.

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, Boone Forestlands loses the ability to monetize timber harvests during the life of the Project. Bluesource provided a financial assessment comparison of NPV between the baseline scenario with harvesting and the project scenario without 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 and FRST 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.

RCE and FRST also confirmed that the Project committed to a 40-year agreement with ACR by signing the AFOLU Carbon Project Reversal Risk Mitigation Agreement. Through this agreement and the ACR Tool the Project adequately addressed potential causes of unintentional reversals.

3.6 LEAKAGE

RCE and FRST confirmed that the Project correctly accounted for leakage. The Project demonstrated that that there is no activity-shifting leakage since there is an entity-wide management certification that covers all entity owned lands. The Project also correctly accounted for market leakage per the Methodology – since wood products decreased by greater than 25%, the market leakage is 40%.

3.7 ENVIRONMENTAL AND COMMUNITY IMPACTS

The 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.

3.8 LOCAL STAKEHOLDER CONSULTATION

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

3.9 MONITORING PLAN

The 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 Bluesource 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. Bluesource and Boone Forestlands implemented the monitoring plan as stated in the Project Plan during Project activities.

3.10 BASELINE SCENARIO

The Project's baseline scenario represents aggressive industrial harvests with stricter parameters than recommended state practices, targeted to maximize net present value at a 6% discount rate for 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, shelterwood removal, single tree selection, variable retention, clearcut, and diameter limit.

Bluesource utilized the USDA's Forest Vegetation Simulator (FVS) Southern variant to model harvests and yields. Growth was calibrated using tree cores taken on or near plots, which were used to assign site index values calculated from site index curves and associated equations from Carmean et al 1989. National Resources Conservation Service (NRCS) soil survey site index data supplemented tree core data where cores did not produce a valid sample. FRST reviewed all data and calculations related to site index 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.

3.11 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 three forested strata. The Verification Team confirmed that stocking and vegetation comprising a particular stratum were consistent with descriptions in inventory data and the Project Plan. FRST randomized the plot order and measured at least one plot in each stratum during the site visit.

The current inventory contains 265 permanent, fixed-radius plots. At each plot location, trees were measured in two nested plots: a larger 1/15th acre plot with radius of 30.4 feet, and a smaller 1/100th acre plot with radius of 11.8 feet. The larger plot measured all trees greater than or equal to 5 inches DBH while the smaller, nested plot measured all living trees between 1-4.99 inches.

Given this sample design and Project size, the Verification Team was required to achieve a minimum of fourteen plots within the project to successfully verify inventory stocking levels. The Project did indeed pass a paired t-test with the fourteen minimum plots.

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 Bluesource 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.

3.12 Project Data and GHG Emissions Reduction Assertion

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

3.12.1 Baseline Emissions

RCE and FRST confirmed that the baseline emissions were correctly calculated. See more detail in section 3.9.

3.12.2 Project Emissions

RCE and FRST confirmed that the project emissions were correctly calculated.

3.12.3 Emissions Reductions

RCE verified that Bluesource calculated emissions reductions according to relevant Methodology equations and that the methods are included in the Project Plan.

RCE and FRST assessed quantitative uncertainty of the emission reduction calculations and the methodologies and applicable data sets and sources. RCE and FRST confirmed that the Project has appropriate measures in place to address uncertainty and that the sampling error associated with the mean of the estimated emission reductions/removals was less than +/-10%. RCE and FRST also confirmed that all defaults, projections, and other data used were correct and consistent with expectations.

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

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). Bluesource 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 ACR596 Bluesource – Boone Forestlands Improved Forest Management Project 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 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 October 19, 2019 – February 28, 2021 can be considered in conformance with the:

- ACR Standard, Version 7.0 (December 2020)
- 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 v.1.3, April 2018
- Errata and Clarifications - Improved Forest Management Methodology for Quantifying GHG Removals and Emission Reductions through Increased Forest Carbon Sequestration on Non‐Federal U.S. Forestlands v.1.3, September 30, 2021
- ISO 14064-3:2006 "Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions"

Table 2 provides a summary of the Emission Reduction Tons (ERTs).

Table 2. Total ERTs

Vintage	Removal ERTs ($mtCO_2e$)	Other ERTs ($mtCO_2e$)	Total GHG Reductions and Removals ($mtCO_2e$)		Risk Buffer ($mtCO_2e$)	Final ERTs ($mtCO_2e$)
2019	15,794	53,931	69,725		12,550	57,175
2020	78,118	266,739	344,857		62,075	282,782
2021	12,380	42,269	54,649		9,837	44,812
Total	**106,292**	**362,939**	**469,231**		**84,462**	**384,769**

Note: Totals might not sum due to rounding.

Lead Validator and Verifier Signature

Zach Eyler

Internal Reviewer Signature

Phillip Cunningham

6 APPENDIX A—DOCUMENTS REVIEWED

1. 2019 Forest Health Highlights
2. 92 Patch - American Beech Tie - Scarlet Oak Saw
3. 92 Patch - Mixed Hardwood Pulp
4. Bell County recorded deed
5. Big Branch - Yellow Poplar Peeler
6. Boone Carbon Summary Report
7. Boone_100Yr_calcs_series
8. Boone_10yr plan_2012
9. Boone_ACR_GHGPlan_series
10. Boone_Boundary_ shapefile
11. Boone_CC_series
12. Boone_DL_series
13. Boone_Forest_Boundary_Maintenance_012017 shapefiles
14. Boone_FVS_Plots_series
15. Boone_GROW
16. Boone_IndTreeGrow
17. Boone_INVENTORY
18. Boone_invStrata_shapefile
19. Boone_Parameters_Inputs
20. Boone_Plots_shapefile
21. Boone_Regeneration_Calcs
22. Boone_RMZ_shapefile
23. Boone_RP_ERT_HWP_series
24. Boone_RP1_HarvestData_081221
25. Boone_RP1_Harvests_050521 shapefile
26. Boone_RP1_MonitoringReport_series
27. Boone_SHW60_series
28. Boone_SHW70_series
29. Boone_Soil_series shapefile
30. Boone_START
31. Boone_Start_RP_CO2_08_12_2021_SiteVisit
32. Boone_Start_RP_CO2_series
33. Boone_Strata_shapefile
34. Boone_STS75BA10
35. Boone_Voluntary_CarbonPlot_Methodology_01_13_21
36. Boone_VT_10BA_series
37. Boone_VT_20BA_series
38. BoundarySignPoints_prj shapefiles
39. Breathitt County deed
40. Clay County recorded deed
41. East Road Fork - White Oak Saw - Black Oak Tie
42. Estill County recorded deed

43. Forest Conservation Act Statutes
44. Harlan county recorded deed
45. HFA VII Resolutions-Boone Elk Carbon Sale (002)
46. Hobbs Hollow - Black Walnut Saw
47. Hobbs Hollow - Chestnut Oak Saw
48. Jackson County deed
49. Kenny Ridge - Mixed Hardwood Saw
50. Kentucky Agriculture Water Quality Plan
51. Knob Top - Basswood Peeler
52. Knob Top - Soft Maple Tie
53. Knob Top - Yellow Poplar Saw
54. Knox County recorded deed
55. Lee County deed
56. Leslie County recorded deed
57. Letcher County recorded deed
58. Magoffin County deed
59. ManagingSustainableForestsinKY
60. Owsley County deed
61. Pace Branch - White Oak Tie - Soft Maple Saw
62. Perry County recorded deed
63. Peters Branch - Black Oak Saw
64. Peters Branch - Hard Maple Tie
65. Plot169Removal_Upper Jacks Creek Owner Ship
66. processFVSoutput
67. RE Boone and Elk Forest Projects Start Date
68. Rockcastle County deed
69. SiteIndex_Wcores_series
70. Talley Hollow - American Beech Tie - White Ash Tie
71. TFG-OwnershipChart_Elk&Boone_Redacted
72. TFG-OwnershipChart_Elk&Boone_Redacted (1)
73. The Forestland Group FSC FM_COC Certificate 17.12.2019
74. Timber Mart South Annual 2019
75. UnevenAgeManagement_Ky
76. West Road Fork - Hickory Tie
77. Whitley County recorded deed
78. Wolf Ridge - Chestnut Oak Tie
79. Wolf Ridge - Hemlock Saw

7 APPENDIX B—LIST OF FINDINGS

Includes Corrective Action Requests, Non-Material Findings, Additional Documentation Requests, and Clarification Requests, as necessary.

Corrective Action Request, Non-Material Finding, Additional Documentation Request, or Clarification Request ID#	Finding	Client response	RCE response	Additional client response	Additional RCE response	Open or Closed
CAR 1	Approximately 60 acres of project area overlap CARB IFM project CAFR5315.	This overlap has been excised from the project area.	Thank you for making this correction. This item may be closed.			Closed
CAR 2	In 'Boone_100Yr_calcs_07_21_2021 on the Baseline_Summary tab, the values for Average annual harvested CO2 (B12:B17), are being scaled to their respective years twice. For example: Cell B12 =(5*Baseline_Harvest_CO2e!D5+10*SUM(Baseline_Harvest_CO2e!E5:M5)+5*Baseline_Harvest_CO2e!N5)/100 But the values on D5:N5 are already divided by the years in which they represent, so a simple average calculation should suffice for these calculations. The same issue is occurring on the 'Financial' tab from M8:M14.. And on tab 'HarvestRevenue' in cells B7, B9, B15, B17, and B22.	The current weighted average formulas in the Baseline Summary and the Financials tab are correct. The formulas in 'Baseline Summary' (as well as the other tabs) take the annual values, scale them up to periodic values, add up all the periodic values, then divide by 100 to obtain the annual average over the 100-year projection. In investigating the issue, it was noted that the formulas in the Project Summary were using simple averages, not weighted averages, so these formulas were updated to align with Baseline Summary formulas in the template.	Apologies for any confusion. Consistency between Baseline and Project modeling is the intended objective. Thank you for making these changes. This item may be closed.			Closed
CAR 3	In 'Boone_RP_ERT_HWP_07_30_2021' on the 'Actual_RP1_HWP_Step_2_3' and the 'Baseline_HWP_Step_1_2_3' tabs there is no weighting of harvested wood products off of the acreage in the associated supersection as seen in row 20. As seen by the relative percentage is 100% of total acreage for both supersections.	The equation has been updated so that the total of row 20 adds up to 100%, not 200%. Note that row 20 is used only to determine relative HWP between categories, so the HWP outputs are unaffected.	This change has been made in the Baseline tab, but the Actual tab now has an additive value of 0.5, this issue may be transitioned to a RFI.			Closed
CAR 4	The 100-year storage factors values in the ACR IFM Methodology_v1.3 are being used.	The 100-year storage factors have been updated to include the factors referenced in the ACR IFM Methodology v1.3, not the ARB storage factors.	This has been updated in the Baseline quantification, but not the Project. In 'Boone_RP_ERT_HWP_11_22_21' on the 'Actual_RP1_HWP_Step_4_5' tab the values are still the ARB values.	Project 100 year storage factors updated in the Baseline as well as Project quantification to include the factors referenced in ACR IFM Methodology v1.3. This change applies to the 'Actual_RP1_HWP_Step_4_5' tab, as noted.	Thank you for making this correction. This item may be closed.	Closed
CAR 5	In the 'Boone_ACR_GHGPlan_08_02_21' document Table E1-7 references a prescription SHW80. After reviewing the FVS key and out files as well as the 100Yr calcs, there is no SHW80 prescription made. Please clarify/correct.	The project should have a SHW60 and not SHW80. Table E1-7 is updated in the GHG plan.	Thank you for making this correction, this item may be closed.			Closed
CAR 6	In 'Boone_RP_ERT_HWP_07_30_2021' on the ACR_IFM_ERT_Calcs tab the value in the ACR Parameters uncertainty for dead is untraceable. Uncertainty for dead is correct in 'Boone_Start_RP_CO2_08_12_2021'.	This was due to the discrepancy between the version of models where broken trees calculation was updated in CO2 calculations. ERT sheet was not updated there on. Current versions have the uncertainty values that match between the two sheets.	Further updates will be needed pending incorporation of other outstanding issues.	Uncertainty for dead used in ERT sheet now match the uncertainty for dead in the"Boone_Start_RP_CO2" workbook, in cell T17 of the 'Stats_StartDate'. The CO2 calcs workbook has updated broken tree records.	Thank you for making this correction. This item may be closed.	Closed
CAR 7	In 'Boone_RP_ERT_HWP_07_30_2021' on the ACR_IFM_ERT_Calcs tab on row 14 - sum stocks baseline, it appears that the yearly value of HWP Baseline is being counted for every preceding year as well as the current for sum stocks. After discussion with ACR, the cumulative HWP Baseline is only incorporated upon the year the baseline stocks drop below the average baseline. For clarification, row 14 is the sum stocks, and the equation should not change after the year the sum stocks drop below the 20 year average. Also, this value informs row 16, so 2023 should be the year with the value "1" as this is the year the yearly stocks drop below the 20 year average.	Row 14 equation has been updated. Also note that the equation in row 17 was not aligned with the ACR v1.3 template, and this equation has also been updated.	Thank you for making this correction. This item may be closed.			Closed
CAR 8	In 'Boone_RP_ERT_HWP_07_30_2021' on the ACR_IFM_ERT_Calcs tab the value in cell C40 does not match the value on the 'Boone_Start_RP_CO2_08_12_2021' document, tab Stats_RPDate L10.	The discrepancy was because the trees with broken tops were updated in the Co2 calc sheet for site visit but ERT and 100 year calcs were not updated. It has now been updated to match the numbers in both the sheets.	Further updates will be needed pending incorporation of other outstanding issues.	With the broken tree records updated in Co2 calcs sheet, the Live CO2 and Dead CO2 values/acre in the following cells now match: * ERT workbook: cells C40/C41 of 'Baseline_Project_40Yr_CO2e' tab. * CO2 workbook: cells N2/O2 of 'Stats_RPDate' tab.	Thank you for making this correction. This item may be closed.	Closed
CAR 9	Please update the GHG Plan for the following: - Table 3.1, section A8, table A-3, all currently state verified by S&A Carbon, please update. - to reflect the use of R or other software (as discussed in interviews with Bluesource) in the QC procedures or data management procedures.	These updates have been made to the GHG Plan.	Page 5 of the 'Boone_ACR_GHGPlan_11_22_21' in the section 'Independently Validated and Verified' still states, "In accordance with ACR Methodology, the project benefits will be verified by S&A Carbon, LLC." It does not appear that these modeling details have been included. Also, in section E1. The 'entire project acreage (38,377 acres)' does not match the total project acreages in the table nor calculations.	Apologies, these updates have now been made to the GHG plan, inclusive of the acre discrepancy.	Thank you for making these changes. This item may be closed.	Closed
CAR 10	In 'Boone_RP_ERT_HWP_11_22_21' on the 'Baseline_Project_40YR_CO2e' tab the values used in the Baseline Live CO2e per acre (row 15) from year 2025 and onward appears to be using the Project modeled values, and not the Baseline modeled values to determine yearly growth.	"Baseline_40YR_Co2e" , baseline live CO2 per acre from year 2025 now uses the baseline modeled value and not project modeled value.	Thank you for making this correction. This item may be closed.			Closed
CAR 11	In 'Boone_RP_ERT_HWP_12_22_2021' on the 'ACR_IFM_ERT_Calcs' tab in cell D25, the baseline uncertainty is calculating the HWP baseline portion of the equation twice instead of the uncertainty from Baseline logging slash burning: =SQRT(($D10*$D$2)^2+($D11*D3)^2+($E12*$D$2)^2+($E12*D2)^2) This does not match the ACR calculation template.	Resolved via email 1/20/22.	Thank you, confirmed. This item may be closed.			Closed

CAR 12	In 'Boone_RP_ERT_HWP_01_20_22' on the ACR_IFM_ERT_Calcs tab on row 14 - sum stocks baseline, it appears that the yearly value of HWP Baseline is being counted for every preceding year as well as the current for sum stocks. After discussion with ACR, the cumulative HWP Baseline is only incorporated upon the year the baseline stocks drop below the average baseline.	Thank you, this has been fixed in the latest iteration of the workbook and has been shared to the verification folder.	Thank you, confirmed. This item may be closed.			Closed
CAR 13	In 'Boone_ACR_GHGPlan_01_20_22' there are errors. Section D, A1 Acres values is 38377 which does not match quantified project area. Table E1-2, there are also plots that have the FVS code 80213 Berea. Table E1-3, please clarify that 5 decay classes were used during the inventory. This is also showing up in the 'DRAFT_Boone_RP1_MonitoringReport_1_25_22' document in the Decay class Parameter section, as well as GHG section D1 parameters. As well, in 'Boone_RP_ERT_HWP_01_24_22' on the GHG_Plan_Tables tab, the value in cell S3 is not reflective of the Actual Project HWPs. **Update: Please correct the following issues in the GHG Plan: -Update the project proponent contact in A8 -Please clarify the specific SDG Goal # for each found in F1.	Thank you, these have all been fixed in the reporting forms and ERT workbook.	Thank you, confirmed. This item may be closed.			Closed
NM 1	The list trees to the right are not coded for broken tops in the carbon calculations.	Tree records updated to code for broken top.	It does not appear that in 'Boone_Start_RP_CO2_11_19_2021' Column U on 'TreeData' has been updated to include a '1' for broken tops. This directly impacts defect calculation.	Apologies for not updating the TreeID field in the first round. TreeID has been updated due to the removal of plot 169. Updated TreeID has been added for the tree records in column K.	Thank you for making this change. This item may be closed.	Closed
NM 2	Plot 35 is 2/8 on TreeData and 2/4 in InvDate.	Plot 35 recorded inventory date is 4/05 and same across TreeData and InvDate	Thank you for making this change, this item may be closed.			Closed
NM 3	The coefficient for Moisture Content (MC) of species 998 as seen in the 'SG_MC_BR' tab does not match the source material as provided in the CRM coefficients database provided by ARB. As well, the bark volume % value (BR) on the same tab does not match NRS 38 Table 4. The same issue is occurring for species 299 MC.	MC, SG and BR updated to match the CRM coefficient database provided by ARB for 998 and 299.	On the SG_MC_BR tab, the values used in the moisture content column for 299 and 998 come from different tables of the Miles Smith paper NRS 38. Species 299 per Table 4 is 74, and per Table 5 is 74.28. Species 998 per Table 4 is 75, and per Table 5 is 75.12. Mixed Softwood is 74.28 (table 5), Mixed Hardwood is 75 (table 4). Should these moisture contents have the same source table data?	Table 4 has values by FIADB reference species whereas Table 5 has values by Genus. To be consistent, we have now used moisture content values for FIA Codes 299 and 998 from Table 4.	Thank you for making this correction. This item may be closed.	Closed
NM 4	In 'Boone_RP_ERT_HWP_12_22_2021' on the 'Actual_RP1_HWP_Step_2_3' tab the values in cells B5 and B6 are switched and do not match the source data on the Step_1 tab. This is an issue because step C.2 is multiplying those values by the opposite mill efficiencies, which is incorporated into final HWPs.	We have corrected this cell reference and updated the Monitoring Report accordingly.	Thank you for making this correction. This item may be closed.			Closed
ADR 1	Please provide the OUT files for the FVS prescriptions 'Boone_STS75BA10', 'Boone_DL_20XX', 'Boone_VT_10BA_20XX', and the 'Boone_VT_20BA_20XX' series.	Out files provided for all the prescriptions.	Thank you for providing these documents, this item may be closed.			Closed
ADR 2	Please provide evidence of the 5% field QA/QC procedures, including documents like checked cruise cards.	A summary report provided by the inventory crew has been shared to the Inventory Methodology folder.	Thank you for providing this document. This item may be closed.			Closed
ADR 3	The GHG Plan references a Timber Mart South Datamart 2019 annual report which is not publicly available. Please provide.	2019 Timber Mart South annual report has been provided.	Thank you for providing this information, it is unclear where the Sawtimber($/Mbf) values in the 'Stumpage_Prices' tab of the 'Boone_100Yr_calcs_11_19_2021' come from. Please provide the source data for these sawtimber values, as the pulp values have been confirmed through the Timber Mart South report.	$/Ton values for Sawtimber were used from Timber Mart South report which were converted into ($/Mbf) used in 100 year calculations.	Thank you for this clarification. This item may be closed.	Closed
ADR 4	In 'Boone_Start_RP_CO2_08_12_2021' SiteIndex tab there is a plot list with associated species to determine site index where compared to live BA. The soils data from the WSS and the species index soils report PDFs are requested.	The Data Source should be core data. Calculations for Site Index provided in the verification folder.	It is possible the soils data was missed by the verifier and guidance to its title and location within dropbox is appreciated, otherwise, the SSURGO source for the data used to create the 'Soil_SI' tab within 'SiteIndex_Wcores_11_12_21' is requested as this dataset is independently updated.	Soils data has been used for plots where the core data is missing. Soil data used for the Site Index calculations has been provided.	Thank you for providing this information, it has been confirmed. This item may be closed.	Closed
ADR 5	The Monitoring Plan of the GHG Plan states that the project area is derived from GPS coordinates. Please provide this source spatial data.	This is an erroneous statement and has been corrected in the GHG Plan and Monitoring Report.	Thank you for this correction. This item may be closed.			Closed

ADR 6	For the buffer contribution, what evidence is available to substantiate that, "None of these major pests or diseases are currently reported as having a significant effect within the project area or within 30 miles of the project area."	The project proponent monitors their forestlands for pests and disease as described in the management plan. While pests and diseases common to the region can be found in and near the project area, epidemic-level infestations have not been discovered nor reported by the project proponent. The 2020 Kentucky Forest Health Highlights Report produced by the Kentucky Division of Forestry notes Emerald Ash Borer and Hemlock Wooly Adelgid as a primary worry in the state for affected species. The inventory cruise revealed only 3 plots with evidence of emerald ash borer (206, 221, 228), but cruisers noted no other instances of pests or disease in the plot notes. Hemlock spp. and Ash spp. constitute <2% each of the total basal area within the project area. The report discussed common native pests and diseases as well, noting that all are at manageable or mild levels in the state. This report has been added to the shared verification folder ('Regional Forestry Docs').	Thank you for this information. This item may be closed.			Closed
ADR 7	Please provide scale tickets justifying the harvest wood product quantities captured in 'Boone_RP_ERT_HWP_07_30_2021' on the Actual_RP1_HWP_Step 1 tab.	Bluesource clarified with the verifier if they wanted all scale tickets for all HWPs in the referenced file, or a sample. The verifier responded with a sample selection via email on 11/11/2021. This request has been forwarded to the project proponent.	Thank you for providing these scale slips, included are questions about them: The Wolf Ridge Hemlock Saw, the scale slip is coded as Hickory with 'Hemlock' written over it, is this intentional/correct? The Pace Branch - White Oak Tie - Soft Maple Saw slip only includes one value, "Wormy Soft Maple" despite values for "Soft Maple" also being included. Clarification could prove useful. The East Road Fork - White Oak Saw - Basswood, the sum of the WO values is larger than the Harvest Volume value, and the sum of the BA (Basswood) is smaller than the listed value. Clarification could be useful. There are other tickets that we can not find a combination of components to meet the developers value. They are Talley Hollow American Beech Tie 2.253 vs. verifier 3.135; Wolf Ridge - Chestnut Oak Tie 12.078 vs. 11.938, Knob Top Yellow Poplar Saw 8.463 vs. 8.942, and Knob Top Soft Maple Tie, 10.6 vs. 13.874. Clarification on the developers values is requested for these scale slips.	Wolf Ridge: Yes, we confirmed with the proponent that these were mis-coded when processed (difference between HI and HE). Hemlock is the correct call. Pace Branch: The slip shows 140bf of Wormy Soft Maple, and an additional 55bf of Soft Maple. Those 55bf are included in the full harvest reported volume under Soft Maple Tie. East Road Fork: The product request for East Road Fork was White Oak Saw and Black Oak Tie. We double checked the White Oak total and it matches for us. We did not request the Basswood slips from the proponent. Talley Hollow American Beech Tie: We double checked this amount, and our tally matches the reported value. These are our boardfoot totals by page in the PDF: 81, (72, 361), 162, (60, 98), 452, 796, 171. Knob Top Soft Maple Tie: We double checked this amount, and it appears there are two duplicate pages (pages 6 and 7 are duplicates of pages 2 and 4, respectively). We have removed the duplicate pages from the compiled PDF. The boardfoot value on those pages is 1814 + 1458 = 3272, so the total should match the reported volume now (13874 – 3272 = 10602). Wolf Ridge Chestnut Oak Tie: We double checked this amount, and came up with the same values as you did. We asked the proponent about these and they believe these mismatches are likely due to product coding input difference/error – as is similar to the 'Wormy Soft Maple' issue described above. The 140bf of 'missing' Chestnut Oak Tie as shown in the scale slip values is very likely coded as Chestnut Oak Saw volume for Wolf Ridge. This saw total is 52.033 MBF, so combined with the 12.078 MBF reported tie volume, the 140bf accounts for only 0.2% of the CO saw volume. Since all saw log products (tie, peeler, other grades) are all treated the same in the HWP calculations, the carbon stored in these products is equal. Knob Top Yellow Poplar Saw: We double checked this amount, and came up with	Wolf Ridge - Thank you, confirmed. Pace Branch - Thanks for the clarification. East Road - Thank you, confirmed. Talley Hollow - Thank you confirmed. Knob Top - Thank you confirmed. Wolf Ridge - Thank you, confirmed. Knob Top - Thank you, confirmed.	Closed
ADR 8	If available, please provide the earliest iteration of field data used in quantification to confirm data management practices.	Please see the TreeList tab in the CO2 calcs file for the tree list. Providing early uncleaned versions of the inventory data is not a requirement of the methodology. If there is any evidence that the data management practices were not followed, please provide specific issues that have been identified in the tree data or from the site visit.	Plot 16 has 28 live trees total, 4 of which are large (>5" DBH), but they are all classified as Other Live/Dead Hardwood. There are no notes suggesting what these species might be, but this data is very strange. Can this species classification be correct? Throughout the inventory, there are 61 other large, live, OH trees. Cruisers generally provide notes if a species is other or unknown but no information appears to have been provided on any of them. Could this have been some kind of error?	Based on feedback from the crew, these are Tree of Heaven (Ailanthus altissima) or Empress Tree/Paulownia (Paulownia tomentosa), which crosswalk to Other Hardwood in the Southern variant for FVS. Apologies that was not clear in the data. The crew coded these species as OH in the field.	Thank you for following up on this concern. As plots/stands can be dominated by these species' this item may be closed.	Closed
ADR 9	Since there is harvesting on property please provide the FSC/SFI/ATFS certificate.	The project area is owned and managed by The Forestland Group which maintains a group certificate for its holdings. The group certificate and ownership structure has been shared with the verifier (see 'Attestations' and 'PropertyDocs').	Thank you for providing this document. This item may be closed.			Closed
ADR 10	Please provide the contact information of the local forest practice inspector in relation to harvests.	Kentucky Division of Forestry, Pineville or Hazard Field Offices	Contacted Nick Valentine (502-682-3706) of Bell county, KY 1/4/2022 and he stated he is not aware of any harvest violations involving			Closed

CR 1	Please clarify the ownership overlaps as identified in the PADUS2_0Fee file as identified in the screenshot to the right.	The PAB has been adjusted to remove any lands not owned by the Project Proponent.	There appears to be remaining overlaps in both the Fee and Proclamation layers of the PadUS shapefiles. This is using 'Boone_strata_11_08_21' shapefile. Further details are captured on the next tab, CR 1.	Apologies for not addressing the table to the right initially. Boone Forestlands, the project proponent, is owned by The Forestland Group (TFG) - referred to slightly erroneously in the table as 'Forestlands Group'. The project proponent purchased the project area from Begley Properties LLC, as described in the property deeds. It seems the PADUS data is not current. Overlaps with Molpus are incidental slivers and misalignments (<5 acres). Given the uncertainty in the PADUS data, we find it imprudent to remove these areas of overlap from the project area. Overlaps with the USFS are similarly mostly slivers and minor misalignments along borders. However, we did have the project proponent investigate some of these overlaps (inclusive of the large one described by the verifier on the next tab), and discovered evidence to support changing the project area boundary in some areas, and maintaining it as drawn in others. Note: plot 169 was removed from the project area and calculations following these spatial edits. Blue Source's Tim Hipp and TFG's Director of Forest Carbon at the time, Cakey Worthington, inspected the specific area referenced in the next tab during the verification site visit. They documented TFG-posted signage indicating ownership throughout this area and did not find any evidence of USFS ownership. A small area to the NW was further investigated by the proponent and evidence of a USFS border was found. This area was removed from the project area as shown in the 11_08_21 version of the project boundary. Supporting documentation for these edits and 'non-edits' has been provided to the verifier (see 'Property Docs'). Most subfolders have 'ReadMe.txt' files with some further explanation.	Thank you for providing this additional detail and ground-truthing the boundaries of this project. This item may be closed.	Closed
CR 2	Please clarify why there are no HWP values captured in 'Actual_RP1_HWP_Step_4_5' and 'Actual_20YR_HWP_Step_4_5' cells E27:E29.	The formulas in the "Actual_20YR_HWP_Step_4_5" tab in cells E27, E29, and B37 were incorrectly referencing cells N20/N21, instead of cells O20/O21. These formulas have been updated to reference the correct cells.	Thank you for making this change. This item may be closed.			Closed
CR 3	Please clarify for the computation of HWPs for the baseline not using the 100-year growth average, and instead using the 20-year growth average as seen on the 'Baseline_Project_40YR_Co2e' tab of both the 'Boone_RP_ERT_HWP_07_30_2021' and 'Boone_100Yr_calcs_07_21_2021' documents. Particularly when considering that the 100-year average storage factors these values are multiplied by are based off of 100 years, not 20 in the calculations captured in the 'Baseline_HWP_Step...' tabs.	Please see section C3 Equation 3 which requires that project proponents calculate the Twenty-year average value of annual carbon remaining stored in wood products 100 years after harvest (in metric tons of CO2).	Thank you for this clarification. This item may be closed.			Closed
CR 4	In 'Boone_RP_ERT_HWP_07_30_2021' is it appropriate to project the same harvested wood products over a 20 year period for the project as quantified in RP1, as seen on the ACR_IFM_ERT_Calcs cells F21:X21? Please clarify why this is done.	This is an estimate of the project harvest levels, and will be updated annually as actual harvest levels (and associated HWP) are known. The project proponent plans to maintain annual harvest rates at the same level applied in RP1, so this estimate was applied for forward projections.	Thank you for this clarification. This item may be closed.			Closed
CR 5	In 'Boone_RP_ERT_HWP_07_30_2021' on the ACR IFM ERT Calcs tab why is the calculation for uncertainty in baseline stocks changing from the initial to RP1 in cell D25:E25? This does not match the ACR IFM ERT calculator Methodology. Also starting in 2021 (column E) the Project uncertainty is calculating off the previous years stats and continuing across the 20 years, why is this? It does not match the ACR IFM ERT calculator Methodology.	Latest update on the sheets match the equations used in ACR IFM ERT calculator methodology.	Thank you for making this correction. This item may be closed.			Closed
CR 6	In 'Boone_RP_ERT_HWP_07_30_2021' on the 'GHG_Plan_Tables' tab the total t CO2e calculated in I25 is not using the total acreage value. Is this intentional?	The equation in the cell has been updated to reference total acres.	Thank you for making this correction. This item may be closed.			Closed
CR 7	In the 'Boone_Voluntary_CarbonPlot_Methodology_01_13_21' document it states that, "If a plot falls in an area that is unsafe to measure where it falls, note the reason for the safety issue and record a video or take photos if safe to do so. If the safety issue is temporary and can be addressed by the addition of specific safety equipment or returning at a later time, then revisit the plot once these issues can be addressed. If a plot is deemed permanently unsafe and in such a way that safety equipment or revisiting at a later time cannot address, do not measure the plot. Please contact Bluesource for guidance on how to address any plots deemed permanently 'unsafe'." Did this occur during measurement?	No, no plots were moved for safety or any other reason.	Thank you for this confirmation. This item may be closed.			Closed
CR 8	Is the project area encumbered by any easements that could potentially limit management or incur changes to carbon stocks (such as mine conversion) such as powerline ROWs, mineral rights, hunt clubs, etc?	As is typical in Appalachian forests, the project proponent owns the timber and surface rights of the project area, absent the mineral rights. These reservations and exceptions are described in the property deeds. Changes in carbon stocks due to mining operations, including the expansion of associated ROWs, may occur. This is a risk accepted by the project proponent and they will report annually any and all advance of mining harvest operations as well as any permanent conversion of project area to non-forest area.	Thank you for this confirmation. This item may be closed.			Closed

CR 9	There are no apparent harvesting limitations modeled into the Baseline. A review of the USFWS ESA website reveals the potential occurrence of listed species. How are these accounted for in the Baseline? Please also address state required forest practice rules or BMPs.	No ESA species have been discovered in the project area by the project proponent per their management plan and proponent's forester interviews (at least those that affect restrictions on timber management). The Baseline need not model all potential future limitations to harvest, therefore presence of ESA is not considered in the Baseline. BMPs are described in the GHG plan and in the provided documentation produced by the State of Kentucky. BMPs are enforced in the Baseline and Project scenarios via the restrictions (aka RMZ) shapefile.	Thank you for this confirmation. This item may be closed.			Closed
CR 10	Please provide justification for the assumption that "Fixed cost estimates for the property were estimated to be $8.88/acre."	This figure was provided by the project proponent. It is their average, fixed, annual administrative costs, inclusive of property taxes.	Thank you for this confirmation. This item may be closed.			Closed
CR 11	In 'Boone_RP_ERT_HWP_11_22_21' on the 'Baseline_Project_40YR_CO2e' tab there does not appear to be an adjustment to the 2019-2021 year duration within the dead quantification (C16:E16), like there is with the live quantification. Why is this?	Dead quantification in Baseline_Project__40YR_CO2e sheet of ERT calcs is now adjusted to 2019-2021 year duration.	Thank you for making this correction. This item may be closed.			Closed
CR 12	In 'Boone_RP_ERT_HWP_11_22_21' on the 'Baseline_Project_40YR_CO2e' tab on cell F16 the value is supposed to be for 2024, but this value does not match the provided 2024 value in cell B4, why is this? All remaining values in row 16 also appear to be incorrect.	Value in cell F16:V16 should match the value in cell C4:C11. With reference to CR11, the dead quantification has also been adjusted to 2019-2021 duration.	Thank you for making this correction. This item may be closed.			Closed
CR 13	There is no Yellow birch within the inventory, but yellow birch Carmean curves have been substituted for sweet birch site indices in 'SiteIndex_Wcores_11_12_21'; as there are no sweet birch curves in the Carmean document, please provide reasonable assurance that yellow birch is appropriate.	We have now replaced the plots with sweet birch to include site index information from the soil data as sweet birch does not have Carmean curves and yellow birch was not present in the inventory.	Thank you for making this change, this has been confirmed. This item may be closed.			Closed
CR 14	In 'SiteIndex_Wcores_11_12_21' there are tree core ages in the teens and 20s. For example, Plot 184 has a cored RM of 3" DBH, age of 11 years, and a rounded DBH site index value of 130, well outpacing the curves used to calculate the appropriate site index per the referenced Carmean paper. Site index curves are "defined as...total height of dominant and codominant trees at 50 years total age". Please justify why this current approach is appropriate.	Agreed, after close consideration, the Carmean site curves do not appear to be appropriate for Plot 184. The site index for Plot 184 was replaced with soil site index data instead of using cored sapling data. For other plots with tree core ages 20-29 years (all red maple), core ages fall within the charted x-axis range for red maple in the Carmean paper. Note that higher Site Index values (e.g., Red Maple plot 65 with SI of 140) are capped in FVS, and is noted in the FVS SN documentation. For example, Red Maple site index is capped at 85.	Thank you for making this change. This item may be closed.			Closed
CR 15	In 'SiteIndex_Wcores_11_12_21' the plots which use Shortleaf pine for the SI tree are not incorporating the Carmean paper correctly/consistently. Calculated SI from 56-75 uses 5 years, and 76+ uses 4 additional years. This impacts plots 139 and 245. See the screen grab to the right.	Years added to compute total age were not calculating correctly for shortleaf pines for calculated SI 76+. We have now updated the Site Index workbook to use the correct values from the Carmean paper.	Thank you for making this change, this has been confirmed. This item may be closed.			Closed
CR 16	It appears that roads are removed from the project area per GIS and the CarbonPlot_Methodology states, "All roads, right-of-ways, major water bodies, and other non-forested areas are removed from the project area". There is a region around plot 267 that has a substantial road network with none of the area removed. Is this intentional?	Road and other non-forest removals were done by the project proponent. Reasonable efforts are made to remove all permanent roads along with other non-forested areas from the project area. The area around Plot 267 appears to be well-forested, albeit does include what appear to be temporary, harvest operations roads. Such roads are generally left in the project area, and plots that include these areas may be less stocked than other similar areas. Therefore, we feel it is a reasonable accounting of the carbon stocks to keep these areas in the project area.	Thank you for the clarification. This item may be closed.			Closed
CR 17	There are 17 plots that fall within harvest areas per 'Boone_RP1_Harvests_050521' shapefile: 1, 2, 3, 6, 27, 44, 49, 57, 80, 82, 119, 120, 126, 127, 149, 150, and 153. But the 'HarvestedTrees' tab of the 'Boone_Start_RP_CO2_11_19_2021' shows no trees harvested. Can this be confirmed seeing as the Treatments are either Overstory removal or Clearcut Retention?	The inventory data collection period did not occur until the spring of 2021, after the reporting period end date (2/28/2021). Therefore, trees removed in these harvest operations would not have been measured in the inventory.	Thank you for the clarification. This item may be closed.			Closed
CR 18	The stratification layer was based off of forest age classes, young medium and old, what is the data source for this stratification?	Data source used was the stands layer provided by the project proponent.	Thank you for the clarification. This item may be closed.			Closed
CR 19	In 'Boone_RP_ERT_HWP_12_22_2021' on the 'Baseline_Project_40YR_CO2e' tab the value in E64 is used to project yearly HWPs in later RPs which feeds the ERT sheet, but only includes the value from Hardwood Sawtimber, despite the actual RP1 quantities including Hardwood Sawtimber, and Hardwood Pulpwood. Why aren't all timber types that are calculated included in these future projections, or at least both the hardwood types which would reflect actual harvesting?	Resolved via email 1/20/22.	Thank you, confirmed. This item may be closed.			Closed
CR 20	Per ACR IFM 1.3, "The baseline management scenario shall be based on silvicultural prescriptions recommended by published state or federal agencies". Was the baseline informed by state or federal guidance, and if so, please provide the supporting documentation.	Documentation provided via email.	Thank you for providing this information. The prescriptions applied fall within the state guidance. This item may be closed.			Closed