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Validation and Verification Report

ACR595 Bluesource - Elk Forest Improved Forest Management Project

April 27, 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 ACR595 Bluesource – Elk Forest 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, Elk Forest, LLC (Elk Forest). 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 – Elk Forest Improved Forest Management Project" dated April 19, 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:
 - o Project boundary and procedures for establishing the project boundary;
 - o Physical infrastructure, activities, technologies, and processes of the project;
 - o 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;
 - o Process information, source identification/counts, and operational details;
 - o 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 ~14,230 acres of mixed hardwood forests in southeastern Kentucky. The project is located in four counties in the state: Bell, Clay, Knox and Leslie. Nearby population centers include Harlan, Hyden, and Pineville, Kentucky.

Typical of southern Appalachia, the project area consists particularly of cove and oak-hickory 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. Elk were re-established in the region in the late 1990s and today the property boasts a thriving elk herd. The Project ensures long-term sustainable management of the forests, which could otherwise undergo significant commercial timber harvesting.

1.3 RESPONSIBLE PARTY

Project Proponent

Elk Forest, 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 Elk Forest Improved Forest Management Project Plan (April 19, 2022)
- Bluesource Elk Forest Improved Forest Management Project Monitoring Report (April 26, 2022)
- 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"

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
 - Tim Hipp
 - The Forestland Group
 - Cakey Worthington
 - Advantage Timberland
 - Seth Douthat
- 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 14,230 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 Elk Forest 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 (Elk Forest), 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.
- Elk Forest controls the timber rights on the forestland and can legally harvest.
- The Project will have harvesting, but Elk Forest 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.
- Elk Forest 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, Elk Forest 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 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 Elk Forest 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. 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 201 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 eleven plots within the project to successfully verify inventory stocking levels. The Project did indeed pass a paired t-test with the eleven 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 ACR595 Bluesource – Elk Forest 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 ₂ e)	Other ERTs (mtCO ₂ e)	Total GHG Reductions and Removals (mtCO ₂ e)	Risk Buffer (mtCO₂e)	Final ERTs (mtCO₂e)
2019	6,311	24,557	30,868	5,556	25,311
2020	31,212	121,457	152,669	27,481	125,188
2021	4,946	19,247	24,193	4,355	19,839
Total	42,469	165,261	207,730	37,392	170,338

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. 10. Special Warranty Deed.CV01
- 2. 11. Corrective Special Warranty Deed.CV01
- 3. 13. Special Warranty Deed.CV01
- 4. 14. Corrective Special Warranty Deed.CV01
- 5. 16. Special Warranty Deed.CV01
- 6. 17. Corrective Special Warranty Deed.CV01
- 7. 7. Special Warranty Deed.CV01
- 8. 8. Corrective Special Warranty Deed.CV01
- 9. Beaver Pond Yellow Poplar Saw
- 10. Brier Branch Chestnut Oak Tie
- 11. Buffalo Branch Sassafras Tie
- 12. Elk Forest_10yrplan
- 13. Elk_100Yr_calcs_series
- 14. Elk ACR GHGPlan series
- 15. Elk_Boundary_series shapefile
- 16. Elk_CC_2019
- 17. Elk CC 2024
- 18. Elk CC 2029
- 19. Elk_DL_2019
- 20. Elk DL 2024
- 21. Elk DL 2029
- 22. Elk_FVS_Plots_07_21_2021
- 23. Elk GROW
- 24. Elk IndTreeGrow
- 25. Elk_Parameters_Inputs
- 26. Elk Plots series shapefile
- 27. Elk_Regeneration_Calcs
- 28. Elk_RMZ_series shapefile
- 29. Elk_RP_ERT_HWP_series
- 30. Elk RP1 HarvestData 081221
- 31. Elk_RP1_Harvests_050521 shapefile
- 32. Elk_RP1_MonitoringReport_series
- 33. Elk SHW60 2019
- 34. Elk SHW60 2024
- 35. Elk_SHW60_2029
- 36. Elk SHW70 2019
- 37. Elk_SHW70_2024
- 38. Elk_SHW70_2029
- 39. Elk Start RP CO2 series
- 40. Elk Start SiteVisit CO2 series
- 41. Elk_Strata_series shapefile
- 42. Elk STS75BA10

- 43. Elk_VT_10BA_2019
- 44. Elk_VT_10BA_2024
- 45. Elk_VT_10BA_2029
- 46. Elk_VT_20BA_2019
- 47. Elk_VT_20BA_2024
- 48. Elk_VT_20BA_2029
- 49. Forest Conservation Act Statutes
- 50. Going Broke Mixed Hardwood Saw
- 51. HFA VII Resolutions-Boone Elk Carbon Sale (002)
- 52. Kentucky Agriculture Water Quality Plan
- 53. processFVSoutput
- 54. RE Boone and Elk Forest Projects Start Date
- 55. SiteIndex_Wcores_series
- 56. Spruce Branch Ridge Clay Soft Maple Saw
- 57. Spruce Branch Ridge Leslie Red Oak Saw
- 58. Spruce Gap Mixed Hardwood Pulp
- 59. Take 2 White Oak Tie
- 60. TFG-OwnershipChart Elk&Boone Redacted
- 61. The Forestland Group FSC FM_COC Certificate 17.12.2019

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	OPO/APD response	RCE response	Additional OPO/APD response	Additional RCE response	Open or Closed
CAR 1	Approximately 60 acres of project area overlap CARB IFM project CAFR5315 including plot 68 (order #158 for site visit).	Corrected.	Confirmed, this item may be closed.			Closed
CAR 2	In 'Elk_RP_ERT_HWP_12_22_2021' on the 'ACB_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*\$D\$3)^2+(\$E12*\$D\$2)^2+(\$E12*\$D\$2)^2) This does not match the ACR calculation template.	Corrected via email exchange, 1/20/2022.	Confirmed, this item may be closed.			Closed
CAR 3	In 'Elk_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.	Equation updated to not include preceding year in the sum stocks of HWP Baseline in row 14.	Confirmed, this item may be closed.			Closed
CAR 4	In 'Elk_ACR_GHGPlan_12_23_21' there are errors. D2 General Monitoring lists 202 plots, there are not. D1. Decay class (Parameters) and Table E1-3, please clarify that 5 decay classes were used during the inventory. This is also showing up in the 'DRAFT_Elk_RP1_MonitoringReport_12_23_21' document in the Decay class Parameter section. As well, in 'Elk_RP_ERT_HWP_01_20_22' on the GHG_Plan_Tables tab, the value in cell S3 is not reflective of the Actual Project HWPs.	Thank you, these fixes have been made.	Thank you for making these changes, confirmed. This item may be closed.			Closed
NM 1	In 'SiteIndex_Wcores_12_21_21' on the 'Species_Averages' tab the pivot table which calculates the Total Age Site Index value in cells K9:M28 is not wholly inclusive of the dataset. The average generated from this table for RM and HI is substituted into the SI equations and needs to be corrected.	Site index calculation updated to include the species averages of all the calculated total site index species and plot. Model was rerun after SI update.	Thank you for updating the pivot table. There is still one question that persists, cell 1147 on the 'Species_Averages' tab is a hickory value of 56.0388, despite that tree lacking a field verified height measurement. Where is this value being calculated, as it is being used to determine the species average in the pivot table, and thus the actual SI for plot 160.	Thank you for pointing out species average calculation. We have now removed plot 160 from species average calculation. The model were rerun with updated SI The updated Site Index calculation file is now in the Verification folder (SiteIndex_Wcores_1_31_22.xlsx). The FVS output files have also been updated	Thank you for making this change. This item has been corrected and we have 100% concurrence. This item may be closed.	Closed
				CO2 calculation updated with values		
ADR 1	Upon final submission of the growth model, please provide an updated grown-to site visit date quantification workbook, to confirm that the site visit verification still passes.	An updated Site Visit CO2 calculation workbook has been provided. The 'InvDate' tab grows the tree data to the first day of the site visit, 8/16/2021.	Will wait on resolution of NM1.	grown to the site visit date. It is in the Verification/Calcs folder, as Elk_SiteVisit_CO2_02_11_2022. Note that the Site Visit Date used in the InvOate tab, cell J3, is August 17, 2021.	Thank you for this change. This item may be closed.	Closed
ADR 2	Please provide evidence of the QA/QC procedure as it is laid out in the Inventory Methodology.	A summary report provided by the inventory crew has been shared to the Inventory Methodology folder.	Confirmed, Elk Carbon Summary Report reviewed. This item may be closed.			Closed

ADR 3	Please provide any information pertaining to ROWs, hunt clubs, mineral rights, or other easement/property-use rights on this property that could limit management or incur changes on carbon stocks and how these changes are tracked.	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. Changes such as these are tracked internally by the proponent and shared with Bluesource. No easements or other encumbrances limit the ability to harvest by the proponent or otherwise influence carbon stocks on the property.	Thank you for the clarification. This item may be closed.	Closed
ADR 4	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 documentation. This item may be closed.	Closed
ADR 5	Please provide the requested scale slips, as seen on the next tab.	The requested slips have been provided. Please note clarifications below: Buffalo Branch Sassafras Tie: The proponent discovered that this was a miskeyed species for the contract. The product should have been reported as almost entirely Scarlet Oak Tie, as indicated in the slips. There is one entry for Soft Maple Tie (56bf) which was mis-allocated to Sassafras as well. These species updates have been made to the reported HWPs in the ERT workbook, which have increased immaterially for RP1 (3,626 to 3,627 ERTs). Going Broke Mixed Hardwood Saw: The proponent has explained that various species, typically low grade, small amounts, are sometimes keyed this way. The respective amounts are starred in the respective PDF.	Thank you for this clarification and documentation. The volumes have been confirmed, this item may be closed.	Closed
CR 1	Please clarify the ownership overlaps as identified in the PADUS2_0Fee file as identified in the screenshot to the right.	These overlaps are along a boundary shared with Daniel Boone National Forest. The boundary is maintained by USFS and the proponent via paint blazes and signage. A documented maintenance line provided by the proponent has been shared ('Property Docs'). The project area shapefile aligns with this maintenance line, thus these overlaps appear to be erroneous within the PADUS database.	Thank you for the clarification. The maintenance line has been reviewed and this item may be closed	Closed
CR 2	In 'Elk_RP_ERT_HWP_12_22_2021' in tab 'Baseline_Project_40YR_CO2e' the Actual 20 year average CO2e in wood products in cell E64 only includes HWPs from Hardwood sawtimber, why are the other three classes excluded? Particularly when in RP1 there is hardwood pulpwood quantified in the actual HWPs.	Corrected via email exchange, 1/20/2022.	Confirmed, this item may be closed.	Closed
CR 3	"Elk_Start_RP_CO2_12_22_2021' tab despite the prescriptions	Yes, this is accurate. The inventory data collection period only overlapped the final month of the reporting period (February 2021), and the proponent has confirmed no plots were harvested between when they'd been measured and prior to the end of the reporting period.	Thank you for the clarification. This item may be closed	Closed
CR 4	A review of the USFWS ESA website reveals the potential occurrence of listed species. How are these accounted for in the Baseline?	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.	Thank you for the clarification. This item may be closed	Closed

	any plots moved or shifted for safety purposes during the tory, and where is this tracked if it was?	Only Plot 47 was moved for safety reasons. The crew called Bluesource staff about this plot for guidance and then recorded their procedure in the plot notes. The note accompanying Plot 47 reads 'plot offset 1 chain north due to original plot center being on the edge of dangerous highwall'	The emailed guidance from ACR on 2/11/2022 regarding plot offsetting for safety states, If "one or more plots were dropped or moved from their original locations, and the verification site visit has already occurred: These projects may continue to use their existing, already implemented inventory SOP (subject to VB evaluation); no updates required due to this guidance." Therefor, this item may be closed.			Closed
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