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# Validation and Verification Report

## ACR505 Bluesource - Sharp Bingham Improved Forest Management Project

January 17, 2022

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# 1 INTRODUCTION

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Bluesource LLC (Bluesource) contracted with Ruby Canyon Environmental, Inc. (RCE) to perform the validation and verification of the ACR505 Bluesource – Sharp Bingham Improved Forest Management Project (Project) for the reporting period of June 6, 2019 – June 5, 2020 and a crediting period of June 6, 2019 – June 5, 2039 under the American Carbon Registry (ACR) program. Bluesource acts as the project developer for the landowner and project proponent, The Nature Conservancy (TNC). 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 – Sharp Bingham Improved Forest Management Project dated November 29, 2021. 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);
- GHG emissions reduction project planning information and documentation in accordance with the applicable ACR-approved methodology, including the project description, baseline, eligibility criteria, monitoring and reporting procedures, and quality assurance/quality control (QA/QC) procedures;
- Reported GHG baseline, ex ante estimated project emissions and 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 3,912.5 acres of southern hardwood forests in the Jackson Mountains of Northern Alabama. The property is named after the two major mountain peaks within the property, Sharp and Bingham peaks. 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.

### 1.3 RESPONSIBLE PARTY

#### Project Proponent

The Nature Conservancy  
2100 1st Avenue North, Suite 500  
Birmingham, AL 35203  
Keith Tassin, Interim State Director Alabama  
205-251-1155

#### Project Developer

Bluesource LLC  
2825 E Cottonwood Pkwy 400  
Salt Lake City, UT 84121  
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  
Professional Forester: Christopher Cartwright, TLM Management (TLM)  
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 – Sharp Bingham Improved Forest Management Project Plan (November 29, 2021)
- Bluesource – Sharp Bingham Improved Forest Management Project Monitoring Report (November 12, 2021)
- ACR Standard, Version 6.0 (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

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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 November 9, 2020 to identify any potential conflict of interest with the Project or Project Developer. The COI form was approved by ACR on November 13, 2020.
- RCE and Bluesource held a validation/verification kick-off meeting on November 18, 2020. 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 December 1-2, 2020. 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
    - TLM
      - Christopher Cartwright
  - During the site visit, the Verification team met with the following individuals:
    - Bluesource
      - Ian Hash
    - TNC
      - Thomas Reddick
      - Keith Tassin
- 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:
  - Jocelyn Laflamme – Bluesource
  - Ian Hash – Bluesource
  - Ben Parkhurst – Bluesource
  - Liz Lott – Bluesource
  - Megan Finlay - 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

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#### 3.1 PROJECT BOUNDARY AND ACTIVITIES

The Project entails improved forest management on over 3,192 acres in northern Alabama. 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 June 6, 2019 – June 5, 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 <sub>2</sub>	Major carbon pool for project activity
Below-ground biomass	CO <sub>2</sub>	Major carbon pool for project activity
Standing dead wood	CO <sub>2</sub>	Major carbon pool in unmanaged stands for the project activity
Harvest wood products	CO <sub>2</sub>	Major carbon pool for project activity
Market Effects	CO <sub>2</sub>	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 6.0 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 June 6, 2019.
- Minimum Project Term: The minimum project term is 40 years.
- Crediting Period: The crediting period is 20 years as specified by the Methodology, June 6, 2019 – June 5, 2039.
- Real: RCE confirmed that the GHG reductions follow the ACR methodology and are verifiable.
- Emission or Removal Origin: RCE confirmed that TNC 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 (TNC), 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.
- TNC controls the timber rights on the forestland and can legally harvest.
- The Project does not have commercial timber harvesting occurring on or after the project start date, but TNC is certified by 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.
- TNC 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 Project has two portions of area that have different management and ownership history. The most recent area acquired by TNC is similar to industrial forestland, while the larger portion of the Project area has been owned by TNC for many years and managed with conservation goals in mind (wildlife habitat, mature forest generation, etc.).

The geographic region for the Project includes North Central Alabama and the Northwest corner of Georgia. Throughout this region industrial forestlands are heavily cut and managed for maximizing NPV of the forestland investment. Wood products including sawtimber and pulpwood are distributed to mills throughout this region. In recent years, forests have been harvested and replanted across conservation lands in the project region where timber productivity drives the management, and where pine and hardwood stands have reached or passed their maturity. Even aged timber management is equally as common as uneven aged management across the state.

Without the Project the property would have been likely managed for timber production, wildlife, and underrepresented species benefits on the legacy acreage, and NPV maximizing harvesting on the recently acquired acres. 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, TNC 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.



### 3.6 ENVIRONMENTAL AND COMMUNITY IMPACTS

The Project Plan includes a summary of the Project activity's net positive environmental and community impacts. The Project area is part of the southern tip of the Cumberland Plateau, the furthest south extension of the Appalachian Mountains, which makes it a geologically unique area with a karst topography containing over 30 caves supporting extraordinary and rare animals that are unique to the Southern Cumberland Plateau. The Project is not expected to cause any negative environmental impacts.

### 3.7 LOCAL STAKEHOLDER CONSULTATION

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

### 3.8 MONITORING PLAN

The 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 TNC implemented the monitoring plan as stated in the Project Plan during Project activities.

### 3.9 BASELINE SCENARIO

The Project's baseline scenario represents a combination of aggressive industrial harvests and conservation management regimes, each with stricter parameters than recommended state practices, targeted to maximize net present value at a 4% discount rate for non-governmental organizations. The baseline scenario applies harvesting across the Project area as allowed by the Methodology to maximize NPV. The baseline also included the prohibition of harvesting within a 0.25-mile radius of northern long-eared bat hibernation sites and slope restrictions.

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, variable retention, single tree selection, and shelterwood removal.

Bluesource utilized the USDA's Forest Vegetation Simulator (FVS) Southern variant to model harvests and yields. Growth models were calibrated using site index values obtained from National Resources Conservation Service (NRCS) soil survey data. FRST reviewed the NRCS Web Soil Survey spatial data and Site Indices and confirmed that a reasonable species and site index for the region was assigned on an individual plot basis to appropriately calibrate growth. The process was confirmed to be consistently and systematically applied to each plot.

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

### 3.10 ON-SITE INVENTORY VERIFICATION CHECK

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

The Project inventory consists of 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. Two of the three strata were sampled during the site visit – OT, and UN. FRST chose plots from these strata per a random sampling method.

The current inventory contains 151 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 1-4.9 inches.

Given this sample design and Project size, the Verification Team was required to achieve a minimum of eight successful plots within the project to successfully verify inventory stocking levels. The Verification Team successfully verified site data after measuring a total of 22 site plots. The Project originally passed the t-test during the first site visit.

#### Project Area

During the site visit, the Verification Team conducted boundary-line reconnaissance by visiting Project boundary edge lines and points, plotting edge points with GPS receivers, and determining whether there were discrepancies with the digital Project boundary files provided by 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.

### 3.11 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.

#### 3.11.1 Baseline Emissions

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

#### 3.11.2 Project Emissions

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

### 3.11.3 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 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

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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

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RCE conducted a risk-based validation and verification of the Bluesource – Sharp Bingham 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 June 6, 2019 - June 5, 2020 can be considered in conformance with the:

- ACR Standard, Version 6.0 (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 emissions reductions.

**Table 2. Emissions Reductions**

<b>Vintage</b>	<b>GHG Reductions and Removals (mtCO2e)</b>	<b>Risk Buffer (mtCO2e)</b>	<b>Emission Reductions (mtCO2e)</b>
2019	13,972	2,515	11,456
2020	10,495	1,890	8,606
<b>Total</b>	<b>24,467</b>	<b>4,405</b>	<b>20,062</b>

Note: Totals might not sum due to rounding.

**Lead Validator and Verifier**



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Zach Eyler

**Internal Reviewer**



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Phillip Cunningham

## 6 APPENDIX A—DOCUMENTS REVIEWED

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1. 2007\_BMP\_Manual
2. BI So - TNC SharpBingham CDMA v 2.0\_Final\_FullyExecuted
3. DRAFT\_SharpBingham\_RP1\_MonitoringReport\_series
4. General Warranty Deed Clemmons 1
5. johnson deed\_20091209155527
6. Sharp Bingham Audits
7. Sharp Bingham Pest and Disease Outbreak Attestation\_02\_14\_20
8. SharpBingham\_100Yr\_calcs\_series
9. SharpBingham\_Boundary\_1\_20\_21 shapefile
10. SharpBingham\_CarbonPlot\_Methodology\_1\_20\_21
11. SharpBingham\_FVS\_Plots\_series
12. SharpBingham\_GHG\_Plan\_series
13. SharpBingham\_GROW
14. SharpBingham\_IndTreeGrow
15. SharpBingham\_invStrata\_5\_7\_21
16. SharpBingham\_manualwaterbodies shapefile
17. SharpBingham\_nhdstreams shapefile
18. SharpBingham\_nhdwaterbodies shapefile
19. SharpBingham\_Plots\_Strata\_Class\_5\_10\_21 shapefile
20. SharpBingham\_Regeneration\_Calcs
21. SharpBingham\_RP\_ERT\_HWP\_series
22. SharpBingham\_SHW70\_series
23. SharpBingham\_SiteVisit\_Date\_CO2\_11\_12\_2021
24. SharpBingham\_STS60BA10\_series
25. SharpBingham\_STS60PINE
26. SharpBingham\_VT\_10BA
27. SharpBingham\_VT\_20BA
28. Timber Mart South Annual 2019
29. Warranty Deed - Clemmons 2018 w-QCD
30. Warranty Deed - TNC fr Johnson.pdf
31. Warranty Deed Bragg
32. Warranty Deed Clemmons 2
33. Warranty Deed Cox
34. Warranty Deed Miller
35. wss\_aoi\_2020-08-10\_15-54-472020 EPA equipment list

## APPENDIX B—LIST OF FINDINGS

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Includes Corrective Action Requests (CAR), Additional Documentation Requests (ADR), and Clarification Requests (CR)

Corrective Action Request, Non-material Finding, Additional Documentation Request, or Clarification Request ID#	Finding	Client response	RCE response	Additional Client response	Additional RCE response	Additional Client response	Additional RCE response	Open or Closed
CAR 1	RP Degrow dates are not correct for plots 151-159. It appears they are missing the grow portion allocated to July.	Yes, these plots were not including the grow portion allocated to July. The equation has been updated to correct this discrepancy.	Thank you for making this change, this item may be closed.					Closed
CAR 2	In 'SharpBingham_100yr_calcs_11_16_20' on the 'Harvest_Schedules' tab, cell F99 is not including all the values it should be.	The Harvest_Schedules tab in the SharpBingham_100yr_calcs workbook has been updated so that all wood products are included in the total value in cell F99 of the 'Harvest_Schedules' tab. In making this update, it was noted that Pulp was being double counted. The P's output databases have an MCuFt field, and an SCuFt field. The SCuFt value was correctly converted to Sawtimber volume/CO2, but the MCuFt field was incorrectly used for Pulp volume/CO2. In reality, MCuFt is the total merchantable volume, and pulp volume is (MCuFt - SCuFt). Pulp CO2 is now correctly calculated from (MCuFt-SCuFt).	Thank you for making this change, this item may be closed.					Closed
CAR 3	In 'SharpBingham_RP_ERT_HWP_11_16_20_v2' on the 'Baseline_HWP_Step' tabs are using the 'Southeast' Mill efficiencies. Alabama is located in south central by the 'inefficienciesdata.xlsx' document on the ACR website. This change would also need to be made in the GHG Plan Table E1k.	The workbook (SharpBingham_RP_ERT_HWP) and GHG Plan Table E1k have been updated to use the southern central mill efficiencies.	Thank you for making this change, this item may be closed.					Closed
CAR 4	Please update the GHG Plan for the following: -Tables A3.1 and A8 of the GHG Plan to Ruby Canyon Environmental and associated personnel. -to reflect the use of R or other software (as discussed in interviews with Biosource) in the QC procedures or data management procedures. -Other potential changes to GHG Plan noted in CR8	The GHG Plan has been updated to address the verifier's comments.	It appears that FRST is still listed as the verifier. Please update to RCE.	This has been updated in the most recent version of the GHG plan.	This change has been made. This item may be closed.			Closed
CAR 5	In 'SharpBingham_RP_ERT_HWP_08_09_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.	This has been corrected.	Row 14 in the 9_29 version is now correct until 2027, which is the year that it goes underneath the 20 year average baseline value. There appears to be a misunderstanding in the first revision of the IL item.  Row 14 is the sum stocks, and the equation should not change after the year the sum stocks drop below the 20 year average. This can be seen by tracking the values in row 14 from 653,866 in 2019 gradually decreasing to 502,005 in 2026; it does not make sense to have an 8,000 stock jump suddenly in 2027.  Also, this value informs row 16, so 2027 should be the year with the value "1" as this is the year the yearly stocks drop below the 20 year average.	This issue beginning in 2027 has been corrected. Row 14 has been changed for years 2027 and after. The calculation now shows the Baseline stocks below the 20-year average in 2027.	Thank you for making this change. This item may be closed.			Closed
CAR 6	In 'SharpBingham_RP_ERT_HWP_08_09_2021' on the ACR_IFM_ERT_Calcs tab on row 17 - deltaC baseline, the equation for when threshold 1 is met is zeroing out the cumulative HWP baseline, instead of subtracting emissions. The equation in cell L17 reads: =IF(L16>1.15*(K10-K11+SUM(SD12:K12)+SUM(SD12:K12))... Where SD12:K12 is HWP Baseline.	This has been corrected.	It does not appear to be corrected. The previous equation referenced in this IL item was correct outside of taking the values "+SUM(SD12:K12)+SUM(SD12:K12)". This collective value is zero.  Per the 'ACR IFM ERT calculator Methodology v1.3' as found on the ACR website the values subtracted from the sum of 20yr Avg Baseline HWP (SUM(SD12:K12)) is the sum of the 20yr Avg Baseline GHG emissions (SUM(SD13:K13)) which is zero for this project.	This equation issue in row 17 has been corrected. The equation has been reverted to the 8_09 version, with the single change to SUM(SD13:K13) correction. The value in cell L17 has changed.	Thank you for making this change. This item may be closed.			Closed
NM 1	Site Visit grow dates are not correct for plots 151-159.	This issue has been corrected - see CAR 1.	Thank you for making this change, this item may be closed.					Closed
NM 2	Tree 1891 is <1" DBH in the RP calcs.	Tree 1891 now has CO2 calcs all = 0 for RP date, since DBH is <1" DBH on RP date.	Thank you for making this change, this item may be closed.					Closed
ADR 1	In the 'SharpBingham_RP_ERT_HWP_11_16_20_v2' document, on the 'ACR_IFM_ERT_Calcs' tab there are ACR parameters associated with uncertainty in live and dead stocking. Please provide the raw uncertainty calculations.	Detailed calcs for uncertainty calcs (cells D2 and D3 in the ACR_IFM_ERT_Calcs workbook) can be found in the Start_RP_CO2 workbook. Uncertainty for live CO2 stock in Year 1 (cell D2 in ACR_IFM_ERT_Calcs) is copied directly from: (Start_RP_CO2 workbook, Stats_RPDate tab, cell T9). Uncertainty for dead CO2 stock in Year 1 (cell D3 in ACR_IFM_ERT_Calcs) is copied directly from: Start_RP_CO2 workbook, Stats_RPDate tab, cell T15).	Thank you for providing this information. This item may be closed.					Closed
ADR 2	Please add a description of the project area strata and stratification methods to the project's GHG Plan (see CR 9) and provide supporting documentation as necessary.	The stratification methods, with a link to the source forest type data, are now including the E.1 Baseline, Baseline Stratification section of the updated GHG plan.	Thank you for this update. It appears that the project area encompasses three land cover classification types. Please add a description as to why some classes have been merged and the spatial manipulation that has been affected to the GAP dataset since it does not match the project strata dataset. What is meant by the statement that the strata were "verified through inventory updates"? Though it is not required, it is recommended to add a description of the GAP dataset to the GHG plan.	The method of stratification and description of strata has been updated in section E1. "Baseline Stratification", please see the most updated version of the GHG plan.	Thank you for making this change, please update the first paragraph of section E1 on page 36, it currently states there are only 2 strata.	This has been updated in the most recent version of the GHG plan.	Thank you for making this change. This item may be closed.	Closed
ADR 3	Please provide the source data/description for the RM2 spatial information.	The RM2s were updated to account for the changes to the property boundary (see CRS, SharpBingham_RM2_02_08_21.shp). The RM2s are based on NHD stream (SharpBingham_rhdstreams.shp) and waterbody (SharpBingham_rhdwatbodies.shp) shapefiles downloaded from the USDA Geospatial Data Gateway. Additional waterbodies (SharpBingham_mnawaterbodies.shp) were manually digitized and also included. The buffer widths around all streams and waterbodies were 35 feet on each side, based on Alabama's Best Management Practices for Forestry, and the baseline modelling assumed no harvesting within these buffers. Additional constrained acres are also included in the RM2 layer.	How were stream orders determined and aligned with the AL BMPs? It appears that only perennial or intermittent streams are addressed in the BMP language on page 5, though the image on page 4 suggests protection for ephemeral streams as well. It is suggested citations are added to Figure A-2 of the GHG Plan. Additionally, it appears that the RM2 spatial file includes bat buffers (1/2-mile radius circles). Please provide the source data (file and citation) for the bat buffers. It is assumed that these are known occurrences? Please add the reference to the GHG Plan.  Will check against new PAB when provided (CR 9).	Figure A-2 of the GHG plan and the RM2 buffers were based on the NHD dataset, which includes all streams of 4th order and above. The figure has been updated to reference the data source. For the RM2s, we applied a 35 ft buffer (the maximum buffer width from the BMPs) around all streams in the NHD dataset for conservation and because the data did not distinguish between perennial, intermittent and ephemeral streams. The bat buffers were based on sensitive location data from the Alabama Natural Heritage Program, which cannot be shared or referenced due to a data sharing agreement with the organization.	Thank you for providing this context and these documents, this item may be closed.			Closed
ADR 4	Please provide evidence of the 5% field QA/QC procedures, including documents like checked cruise cards.	An excel sheet documenting the plots that were QA/QC'd in the field has been uploaded (Sharp Bingham Audits.xlsx).	Thank you for providing this document, this item may be closed.					Closed

ADR 5	Table E1.1 Timber prices of the GHG Plan references a Timber Mart South Datamart 2019 annual report which is not publicly available. Please provide.	The Timber Mart South Annual.pdf has been uploaded to the verification folder.	Thank you for providing this document. Why is a non-hardwood species (Eastern Redcedar) being provided the pulp price USD/ton of Alabama hardwood species? Also it does not appear that the Sweetgum value of 40 matches the "Species Detail" chart of 34 on page 11?	The eastern redcedar price has been adjusted to the same price as pine (7.52/ton, instead of 17.65/ton). Also, sweetgum value was adjusted to match the "Species Detail" chart on page 11 of the report. Table E1.1 Timber Prices has been removed from the GHG plan. Slumpage prices used can be found in tab "Slumpage_Prices" of the most updated "SharpBingham_100Yr_calcs" Workbook.	Thank you for making this change, this item may be closed.			Closed
ADR 6	In 'SharpBingham_Start_BP_CO2_11_16_20' spreadsheet tab there is a plot list with associated species to determine site index where compared to live BA on the plot there are perceived inconsistencies. The soils data from the WSS and the species index soils report PDFs are requested.	The requested information has been provided, however, we did not utilize the species index soils report PDFs, only direct outputs from the soils database were used which is included in the WSS data. Please note that when using the soils data, we utilize the project area basal area, not the plot-level basal area due to the sample size of a single plot. Also, when there is only a single species listed for a soil type, we use that species and site index.	The verifier performed an intersection of the SSURGO data with the plot locations and found a number of discrepancies with the soil type that aligns with the plot location and the species and site indices provided in SharpBingham_Start_BP_CO2_08_09_2021.xlsx. For example, plots 16 and 17 align with Ram/522950 soil. An SI for shortleaf pine is the only SI species provided for this soil (for species present in the inventory). The project data uses yellow poplar SIs of 100 and 96, respectively. Please clarify the methods to determine plot SI.	The discrepancy occurred because our modeling process pulls incorrectly directly from the most recently available Soils data. We have reverted back to the site index data used for the CO2 calcs in the site visit, which was downloaded from the WSS website. The site indices used now line up with both the site visit CO2 calcs, as well as the submitted WSS soil database.	We still have discrepancies with species/SI intersect with WSS data on the following plots: 64, 65, 76, 85, 91, 94, 95, 99, 103, 107, 113, 114, 115, 116, and 134. Please clarify the potential source/reason for this discrepancy.	Corrected.	Thank you. Confirmed.	Closed
ADR 7	The Monitoring Plan of the GHG Plan states that the project area is derived from GPS coordinates. Please provide this source spatial data.	The project area was derived from a combination of GPS points, surveys, and county level parcel data where GPS and surveys were unavailable. The GHG Plan has been updated to reflect this. A survey was conducted on the southern half of the property in which a series of GPS coordinates were taken at corner points and used to georeference the survey. The GPS points and survey have been added to the shared folder as "Survey_Points_06_17_20.shp" and "PAINT ROCK STUDY BNDY.dwg". The remainder of the property utilized a combination county level parcel data and non-georeferenced surveys to best delineate the property boundaries. The county level parcel data and non-georeferenced surveys have been added to the shared folder as "Sharp_Bingham_Parcel_Data_Jackson_Co_20210423.shp", "Sharp_Bingham_Parcel_Data_Madison_Co_20210423.shp", "smith_dyer_survey.pdf", and "Clemmons_phase2_survey.pdf".  The most updated boundary file was provided to Bluesource by the landowner on 7/10/20, it is the most accurate and up to date boundary available, and has been provided in the shared folder as "SharpBingham_Boundary_TNCupdate_07_10_20".	Thank you for this clarification. This item may be closed.					Closed
ADR 8	For others projects it was found that the SN Variant of FVS requires all 5 digits of the location code. The GHG Plan states "801." Please provide the input database for the FVS model runs and confirm the use of the Bankhead National Forest location code. Due to the elevation and relation to Appalachia, would it be more appropriate to use the Armuchee district of the Chattahoochee-Oconee NF?	In our methodology, we spatially analyze the proximity of each national forest for each plot, and use the national forest code that is closest. In this case, Bankhead National Forest is the location code that we used. The location code has been updated to 80101 in the GHG plan. The input database for the FVS model runs can be found in the verification folder here: SharpBingham_BP_Verification\FVS\FVS_Output\SharpBingham_START.db.	Thank you for this clarification and documentation. This item may be closed.					Closed
ADR 9	Because the "project Start Date is more than one year before the submission of the GHG plan, the Project Proponent shall provide evidence that GHG mitigation was seriously considered in the decision to proceed with the project activity. Evidence shall be based on official and/or legal documentation." Please provide relevant substantiation.	The Start Date is based on the date that the Carbon Development and Marketing Agreement between Bluesource, LLC and The Nature Conservancy. The document has been uploaded to the verification folder under "Project_Docs".	Thank you for this clarification and documentation. This item may be closed.					Closed
ADR 10	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."	An attestation provided by a professional forester in the region has been uploaded to the verification folder, which confirms that there are no major pest or disease within the project area or within 30 miles of the project area.	Thank you for this clarification and documentation. This item may be closed.					Closed
ADR 11	Please provide additional information to substantiate the Common Practice-Additionality test. The GHG statement "Wood products including sawtimber and pulpwood are distributed to mills throughout this region. The forest type for this project is most similar to industrial forestland ownership due to the size of the property and its status as a private landholding. Throughout the geographic region, the industrial forestland type is heavily cut and managed for maximizing NPV of the forestland investment," does not appear to adequately "demonstrate that the proposed project activity exceeds the common practice of similar landowners managing similar forests in the region," per the IFM Methodology. Please provide regional information about the regional land base and forest product industry and capacity. Is it suitable to evaluate the project area compared to industrial timberland owners since this property is owned by a conservation non-profit?	The Common Practice Additionality Test section of the GHG plan has been revised to reflect updates to the baseline modeling, and provide more detail demonstrating that the proposed project activity exceeds the common practice of similar landowners managing similar forests in the region. For the recently acquired portion of the property, and for supporting evidence of the regional land base and forest product industry and capacity, please see the information provided below by the regional forester and Director of Forest Management of TNC AL that was interviewed.  Thomas Reddick (Director of Forest Management, The Nature Conservancy Alabama), the regional forester we interviewed for the project, described how market pressures have resulted in aggressive harvesting of most privately owned forests in Jackson and Madison counties over the past 50 years, demonstrating the economic drive for forest industry to liquidate the forests in the region. These forests are composed mostly of hardwood stands, which are often converted to plantations and has occurred on several forest tracts nearby the project area. Common practice by private landowners in the region also often include clearcutting and high-grading, with management focused on maximizing the NPV of the forestland investment. Alabama has 23 million acres of commercial forestland, and is the second largest producer of pulp and paper in the US (Alabama's Forest Products Industry Factsheet, Economic Development Partnership of Alabama). Alabama has a strong hardwood market, as well as a softwood market for pine. There are five mills within Madison and Jackson counties - three hardwood sawmills, one softwood sawmill and two pulp and paper mills (Primary Forest Industry Listing, Alabama Forestry Commission), and recent investments in new mills are increasing the region's processing capacity (Alabama's Forest Products Industry Factsheet, Economic Development Partnership of Alabama).  The implementation of a forest carbon project on the Sharp Bingham property has allowed The Nature Conservancy to create revenue from the property without harvesting. The project demonstrates additionality by ensuring that the forests are not acquired by forest management companies that would aggressively harvest, as has occurred in almost all productive forests in the surrounding region. Further, funding from the carbon project prevents The Nature Conservancy from harvesting at all on the property, as they (and other conservation non-profit organizations) indicated would be the case during this period of financial stress in order to fill voids in their budget.	Thank you for this information. This item may be closed.					Closed
ADR 12	Please provide the attestation referenced in part D2 of the GHG Plan.	The updated annual Monitoring Report template now includes the language referred to in the attestation mentioned in part D2 of the GHG Plan. The language of the GHG Plan has been updated to reflect that the attestation is now part of the annual Monitoring Report.	Thank you for this clarification. This item may be closed.					Closed
CR 1	In 'SharpBingham_CarbonPlot_Methodology_11_8_19' there are 4 decay classes (1-4) described, but in the data provided in 'SharpBingham_Start_BP_CO2_11_16_20' there are 5 (1-5). Why are these not in agreement?	The carbon plot methodology has been updated (SharpBingham_Carbon_Plot_Methodology_1_20_21.pdf) to reflect the 5 decay classes used in the inventory and the calculations.	Thank you for making this change. Please also update the GHG Plan.	The GHG plan has been updated to also reflect the 5 decay classes used.	Thank you for making this change. This item may be closed.			Closed
CR 2	The Inventory Methodology states: "If a plot falls in an area that is unsafe or impossible to measure where it falls, it should be moved one chain (66 feet) in a cardinal direction (starting with north and moving clockwise) towards an area that is safe, and within the project boundaries, and the new plot location should be recorded in the GPS unit." Did this occur?	No plots were moved from their original location.	This item may be closed.					Closed



CR 3	In 'SharpBingham_100Yr_calcs_11_16_20' on the "Financials" tab there is a row called "Revenue", but when you see where these values come from it would appear to be a listing of discounted costs over time, is this row appropriately labeled?	The workbook has been corrected to appropriately calculate revenue. The row called "Revenue" was using a function that looked up an incorrect row.	Thank you for correcting this workbook, the values in rows 11 and 12 are mismatched in the 02_26_2021 version. Annual Fixed costs are non-zero per the calculations.  VERIFIER ALSO STILL CONDUCTING OTHER REVIEW OF THIS ITEM	The headers in rows 11 and 12 have been corrected in the latest version of the "SharpBingham_100Yr_calcs"	Thank you for making this change. This item may be closed.				Closed
CR 4	In 'SharpBingham_RP_ERT_HWP_11_16_20_v2' on the 'Baseline_HWP_Step_4_5' in Table C.2 100-year average storage factors, there are factors used that I can not track their origin for. The reference provided is the ARB Forest Protocol Appendix C.3 and C.4 but none of those values match. Is there a different source document causing this discrepancy? If these values need to be corrected, please ensure that Table E1.m in the GHG Plan is updated as well.	The storage factor values have been corrected in both 'SharpBingham_RP_ERT_HWP' and Table E1.m in the updated GHG plan.	The values provided are the ARB values, these are not the storage factors as provided by ACR. Please see the screen captures to the right:	This has been corrected.	Thank you for making this change. This item may be closed.				Closed
CR 5	In 'SharpBingham_RP_ERT_HWP_11_16_20_v2' on the 'Baseline_HWP_Step_1_2_3' The row labels for rows 18-22 do not appear to be correct. Weighted average should be the last row, with the wood types shifting up a row, or is the table being misunderstood?	The row labels have been corrected in the updated workbook.	Thank you for correcting these values. This item may be closed.						Closed
CR 6	In 'SharpBingham_RP_ERT_HWP_11_16_20_v2' on the 'Baseline_HWP_Step_1_2_3' tab the calculated values in step C.3 for CO2 in wood products for the hardwoods (B12-G12) is using the weighted average (superiority) percentages and not the relative product percentages based off of wood products. The softwood values (H12-O12) are using the relative product percentage which appears to be correct. Why are hardwood products calculated differently than softwood products?	The calculations for hardwood products have been corrected to match the softwood calculations in the updated workbook. For the calculations in Row 12 of the "Baseline_HWP_Step_1_2_3", hardwood products are calculated using rows 21,22, and softwood products are calculated using rows 23-24.	Thank you for correcting these values. This item may be closed.						Closed
CR 7	In 'SharpBingham_RP_ERT_HWP_11_16_20_v2' on the 'Baseline_HWP_Step_1_2_3' tab, the values used for the weighted averages of wood products generated are rounded to whole percentages and hard pasted in, not reflecting the values as referenced by the ARB Wood Products Generated table.	This issue has been updated, values are no longer rounded to the nearest whole percentage. Values now match the ARB Wood Products Generated table.	Thank you for correcting these values. This item may be closed.						Closed
CR 8	There are errors in consistency in the GHG Plan document. For example: 1) Section E1 states the project has 150 plots, whereas the following table lists the 151 2) "Baseline Stratification" on page 42 states "The Project is a Homogenous forest type, therefore there is only one strata." (See ADR 2) 3) "D1 Monitored Data A1 Acres" is using value 3,913.1 which does not appear to match total project acreage. 4) In the QA/QC section under technical review there is mention of an Offset Project Data Report (OPDR) and final ARBOC calculations, which is not the document nomenclature for ACR projects.	The errors have been corrected in the updated GHG plan.	1) Thank you for making this change. 2) Thank you for making this change. 3) Thank you for making this change. 4) There is still a reference to ARBOCs, please update to ACR terminology.  Additionally, please address the following: 5) Growth Model Overview states an incorrect project start date. 6) Page 41 of GHG Plan grow description: intervals incorrect. 7) GHG Plan Baseline Harvest Schedule Scenario Overview states "Only volume from merchantable species count toward costs and revenue for regeneration harvest (i.e., hardwood species are not included)." Please update. 8) Page 47 of the GHG Plan makes reference to the FVS-AK variant. 9) The Inventory Methodology makes reference to offsets and an OPDR 10) The Inventory Methodology states that roads are removed from the project area, which they are not.	The errors have been corrected in the updated GHG Plan and Inventory Methodology.	Thank you for making this change. This item may be closed.				Closed
CR 9	Please confirm the project area boundary screenshot as shown to the right, specifically the area circled in red. It seems there are cutouts for private parcels, but the parcel for the house with the grey roof seems potentially small and the patches of trees south of these buildings between the pastures seems odd.	The region in question has been removed from the boundary. The boundary, strata and other files have been updated accordingly.	Please provide the shapefiles of the updated boundary.	The updated boundary shapefile has been added to the verification folder.	Thank you for making this change. This item may be closed.				Closed
CR 10	The inventory methodology states that the minimum mapping unit is 2.5 ac. It appears the smallest stratum area is scattered equilateral triangles 0.15 ac.	The minimum mapping unit is used when removing non-forest regions from the project area, and does not apply to the stratification polygons.	Thank you for this clarification. Modification of the "Stratification" section of the Carbon Plot Methodology is recommended to reflect this distinction.						Closed
CR 11	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.	No, the project is not encumbered by any easements or rights of way that would limit management or incur changes to carbon stocks.	Thank you for this confirmation, this item may be closed.						Closed
CR 12	In 'SharpBingham_Start_RP_CO2_02_26_2021' excel document on the 'YdTreeGrow' tab there has been a change in the growth of the trees, but the justification for this change is unknown. Why we're these growths changed from previous versions?	It is not clear exactly which changes are referred to - there have been changes made to the modeling inputs based on findings. This issue may not still be relevant given the significant changes to prescriptions and baseline modeling in the latest submission. Please provide more details on which exact difference if this is still remaining issue.	After rerunning the dataset after all the updates, this issue is resolved.						Closed
CR 13	In the 'SharpBingham_100Yr_calcs_02_26_2021' excel document there are averaged values calculated in column M of the "Financials" tab and in the "HarvestRevenue" column B, that are not weighted correctly to the time periods they represent. Please clarify or correct.	These values have been updated to be weighted correctly. They are not used anywhere else except as a check for outputs in the "Financials" tab and the "HarvestRevenue" tab, and the previous method of averaging was an oversight that is now corrected.	As this just functions as a check, this item may be closed.						Closed
CR 14	Figure A-1 in the GHG Plan identifies Lat/Long. What point in the project area is this referring to?	The Lat/Long coordinates for the project area refer to the centroid of the project boundary polygon.	Thank you for this clarification. This item may be closed.						Closed
CR 15	Please clarify what is meant by the legend entry "No Private Roads" in Figure A-5 of the GHG Plan. The symbology looks identical to Public Roads.	The legend entry is meant to show that there are no private roads within the project boundary.	Thank you for this clarification. This item may be closed.						Closed
CR 16	There are harvesting limitations modeled into the Baseline for the northern long-eared bat. A review of the USFWS ESA website reveals the potential occurrence of other listed species. How are these accounted for in the Baseline?	The threatened and endangered species on the USFWS ESA website was cross-referenced against two biological inventories done on the Sharp Bigham Property - a survey of birds and small mammals, and an inventory of the cave and karst systems on the property. The northern long-eared bat was the only listed species found within the project area. These areas have been buffered appropriately. No harvesting has been modeled into these areas in the baseline.	Thank you for this information. This item may be closed.						Closed
CR 17	It appears that in the 'SharpBingham_GHG_Plan_11_16_20_v2' Table E1-e prescription for the SHW70 is just a copy and paste of the SHW80 prescription. The .fvs out file would suggest the residual basal area left for SHW70 is 70, not 80?	Yes, that is correct, SHW70 residual basal area is 70, not 80. The GHG plan has been updated with values that align with FVS keyfile inputs.	Thank you for making this correction. This item may be closed.						Closed
CR 18	The GHG Plan Monitoring Plan defect calculation appears to differ from that described in the Inventory Methodology (defect from stump to 4" top vs entire bole length). Please clarify or update.	The GHG plan included an incomplete description of the defect calculation, and has been updated to align with the inventory methodology.	Thank you for making this correction. This item may be closed.						Closed
CR 19	Please provide justification for the assumption that "Fixed cost estimates for the property were estimated to be \$10/acre."	To understand common practices in the region, and associated costs (i.e. fixed costs per acre), an interview was conducted with TNC Alabama's Director of Forest Management, Thomas Reddick. He estimated fixed costs to be \$5/acre, but we decided to use \$10/acre in our model to be conservative.	Thank you for this clarification. This item may be closed.						Closed

CR 20	<p>Regarding the financial barriers test, what is the basis for the \$3.20 carbon price per ton? Additionally, it is reasonable that the project satisfies the Implementation Barriers Test according to the IFM methodology because "carbon funding is reasonably expected to incentivize the project's implementation" – though this may be due to the PP's mission as an organization. The GHG plan states that not harvesting is an opportunity cost and that carbon funding overcomes the financial barrier of project implementation. The project documents outlining the financial barriers test show that the project carbon revenues can pay for the costs of project development and maintenance, but because the project scenario involves no harvesting, please clarify how the carbon funding exceeds the "Project Proponent's established and documentable minimum acceptable rate" (ACR Standard 7.0 4.A.3). Are there costs associated with maintaining a no harvest scenario that the project overcomes?</p>	<p>The carbon price per ton came from the "State of the Voluntary Carbon Markets 2020" Report's average price for forestry and land used credits in 2019 (Table 1). This document has been added to the shared folder. Costs on the property associated with the no harvest scenario include maintaining and improving access roads for recreation (such as hunting), educational tours and outreach, and staff payroll. The Nature Conservancy of Alabama, as well as other TNC chapters across the nation are experiencing financial stresses, leading to consequences including layoffs, furloughs and budget cuts. Timber harvesting is one revenue option that would be considered, if the carbon project were not in place, to fill voids in their budget, especially in light of the impacts of COVID, such as reduced economic outlooks for grant funding. However, the carbon project provides this much needed funding without the loss of carbon stocks and sequestration of their forests.</p>	<p>Thank you for this clarification and additional information. This item may be closed.</p>				Closed
CR 21	<p>In Table E-1k, Baseline Carbon Stocks on the OHG Plan, Tables tab of 'SharpBingham_RP_ERT_HWP_08_09_2021' the total t CO2e value in D5 is not multiplying the average by the total acreage of the project, but only by a strata. Please clarify.</p>	<p>This has been corrected to multiply the value by the total project acres.</p>	<p>This change needs to be made again please.</p>	<p>Changed.</p>	<p>This has been corrected again.</p>		Closed
CR 22	<p>In the 'Project Summary tab of 'SharpBingham_100yr_calcs_08_09_2021' the columns Q and S for Average AG CO2e per acre (toms/acre)and 100-yr Average CO2e per acre, are pulling the incorrect columns from the 'FVSPivot_projinv' tab. At the moment the columns are F, L, Q, R, etc, and G, J, M, P, S, respectively. Unfortunately those value are: CO2_AG_2019, VOLCFIND_2019, CO2_DEAD_2024, instead of just the averaged value of CO2_AG every 5 years.</p>	<p>These columns have been corrected to pull from the correct columns in the 'FVSPivot_projinv' tab every 5 years.</p>	<p>Issue is back in the 11/8 version, although the quantification does not use this particular cell in the IFM ERT sheet.</p>	<p>Changed.</p>	<p>This has been corrected again.</p>		Closed
CR 23	<p>There is a lack of concurrence between 'SharpBingham_100yr_calcs_08_09_2021' Baseline_Project_40YR_CO2e tab and the 'SharpBingham_RP_ERT_HWP_08_09_2021' Baseline_Project_40YR_CO2e tab, as well as with the verifier, particularly in regard to 2021 stocks. The ERT calcs have a pasted in value of 173.04 for project live CO2e per acre, whereas the 100Yr calcs use a calculated value of 170.96 based off of the initial carbon stocking plus two years of modeled increment, where the verifier is using the RP1 project live stocking for 2020 as calculated from the actual treelist, and adding one year of the modeled increment. Please choose and apply a consistent method for this quantification.</p>	<p>The 100-year calculations have been updated to be consistent with the CO2 calculations for the years in which these have been updated.</p>	<p>Thank you for making this change. This item may be closed.</p>				Closed
CR 24	<p>In 'SharpBingham_RP2_ERT_HWP_08_11_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.</p> <p>Also starting in 2020 (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.</p>	<p>The uncertainty formulas in rows 25 and 26 have been updated to match the ACR IFM ERT calculator Methodology. These formula changes are in the "ACR_IFM_ERT_Calcs" tab (ERT_HWP workbook).</p>	<p>Thank you for making these changes. This item may be closed.</p>				Closed
CR 25	<p>In 'SharpBingham_RP_ERT_HWP_11_08_2021' on the ACR_IFM_ERT_Calcs tab the uncertainty values used in cells D2 and D3 do not match any quantification, initial, RP1, or RP2.</p>	<p>Changed,</p>	<p>This has been confirmed. Thank you.</p>				Closed