RUBY CANYON ENVIRONMENTAL

&

FIRST CORP

Validation and Verification Report

ACR698 Anew - Katahdin Forestry Project

June 8, 2023

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TABLE OF CONTENTS

1 INTRODUCTION

Anew Climate, LLC (Anew), formerly Bluesource LLC, contracted with Ruby Canyon Environmental, Inc. (RCE) to perform the validation and verification of the ACR698 Anew – Katahdin Forestry Project (Project) for the reporting period of November 19, 2019 – December 31, 2021 and a crediting period of November 19, 2019 – November 18, 2039 under the American Carbon Registry (ACR) program. Anew acts as the project developer for the landowner and project proponent, Acadian Timber Corp./Katahdin Forest Management, LLC (Katahdin Forest Management). 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 "Anew – Katahdin Forestry Project" dated May 31, 2023. For the verification, RCE ensured that the GHG assertion was materially correct, that the data provided to RCE was well documented, and that if Anew 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 approximately 175,974.67 acres of northern hardwood and spruce-fir forestland in Piscataquis and Penobscot Counties, Maine. The area encompasses habitat for White-tailed Deer and the federally threatened Canada Lynx. Maine's northern woods are also known habitat for Moose and American Martin. This property is owned by Katahdin Forest Management, the Maine operations of Acadian Timber Corp. The Project ensures long-term sustainable management of the forests.

1.3 RESPONSIBLE PARTY

Project Proponent

Katahdin Forest Management, LLC
365 Canada Road Edmundston,
NB E3V 1W2
Kevin Topolniski, Chief Forester
506-737-2345 ext. 2545

Project Developer

Anew Climate, 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
Forestry Analyst: Tim Facemire, FRST
Forestry Analyst: Andrew Russo, FRST
Internal Reviewer: Phillip Cunningham

1.5 VALIDATION AND VERIFICATION CRITERIA

1.5.1 Validation and Verification Standards, Guidelines, and Tools

- Anew – Katahdin Forestry Project Plan (May 31, 2023)
- Anew - Katahdin Forestry Project Monitoring Report (June 8, 2023)
- 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 April 26, 2022 to identify any potential conflict of interest with the Project or Project Developer. The COI form was approved by ACR on April 26, 2022.
- RCE and Anew held a validation/verification kick-off meeting on May 5, 2022. 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 June 8-10, 2022. 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:
            - Christian Eggleton
            - Andrew Russo
    - During the site visit, the Verification team met with the following individuals:
        - Anew
            - Jason Heffner
            - Ian Hash
        - Red Start
            - Dana Hazen
            - Althea Dacey
- RCE performed a risk-based desktop review of the submitted validation/verification documents. The desktop review included an assessment of the GHG calculation methods and inputs, source data completeness, data management system and monitoring systems and eligibility documentation.
- RCE conducted interviews and had conversations with Project personnel during the verification. Personnel interviewed include:
    - Ian Hash – Anew

    - Ben Parkhurst – Anew
    - Liz Lott – Anew
    - Josh Clark - Anew
- RCE submitted requests for corrective actions, non-material findings, additional documentation, and clarifications as necessary to Anew 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 Anew.

3 VALIDATION AND VERIFICATION FINDINGS

3.1 PROJECT BOUNDARY AND ACTIVITIES

The Project entails improved forest management on approximately 175,974.67 acres of northern hardwood and spruce-fir forestland in Piscataquis County and Penobscot County, Maine. 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 November 19, 2019 – November 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 November 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, November 19, 2019 – November 18, 2039.
- Real: RCE confirmed that the GHG reductions follow the ACR methodology and are verifiable.
- Emission or Removal Origin: RCE confirmed that Katahdin Forest Management owns and has control over or documented effective control over the GHG sources/sinks from which the emissions reductions or removals originate.
- Offset Title: RCE confirmed that all Project lands are owned directly by the Project Proponent (Katahdin Forest Management), 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, with the exception of:
    - A violation of Maine's Chapter 27 rule (harvesting more than 40% of the volume of trees 6 inches and larger at 4.5 feet above ground within a ten-year period) was discovered for one harvest in T6 R13 WELS during this reporting period. This occurred on approximately 1.44 acres in a P-G subdistrict.
    - To account for this violation, RCE confirmed the following changes were made to the calculations:
        - A zero-carbon strata was added which covered the violation area and contained no living or dead CO_2e.
        - All HWPs obtained from the violation area were excluded from the HWP volumes for this reporting period.
- 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 16% 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.
- Katahdin Forest Management controls the timber rights on the forestland and can legally harvest.
- The Project will have harvesting, but the Katahdin Forest Management is certified by the Sustainable Forestry Initiative for the Project 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.
- Katahdin Forest Management 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 area is similar to industrial forestland based on its size and as a private landholding and has a history of history of timber harvesting and contracting to logging companies.

The project's geographic region for timber production extends to the Southeast, Northeast and Southwest of the project area, as well as into Canada. Throughout this region industrial forestlands are heavily cut often through clear-cutting and high-grading, and managed for maximizing NPV of the forestland investment. Wood products including hardwood sawtimber and softwood pulpwood are distributed to mills throughout this region and demand is strong and steady.

Without the Project the property would have likely continue to have been managed for timber production and NPV maximizing harvesting. 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, Katahdin Forest Management loses the ability to monetize timber harvests at rate similar to business as usual practices during the life of the Project. Anew provided a financial assessment comparison of NPV between the baseline scenario with harvesting and the project

scenario with a lower amount of harvesting but including revenue from carbon credits. The baseline scenario NPV was significantly greater demonstrating that carbon funding is integral to the project activity.

3.5 PERMANENCE

RCE confirmed that the Project correctly applied the ACR Tool for Risk Analysis and Buffer Determination to account for permanence. A total risk score of 16% was confirmed.

3.6 PROGRAMMATIC DEVELOPMENT APPROACH

RCE confirmed that the Project is utilizing a Programmatic Development Approach (PDA). The Project currently only has one "site" but expects to potentially add additional area to the Project in the future. RCE confirmed that the Project has completed the required PDA Project Design Document and included it as an addendum to the GHG Plan.

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 Anew 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. Anew and Katahdin Forest Management implemented the monitoring plan as stated in the Project Plan during Project activities.

3.10 BASELINE SCENARIO

The Project's baseline scenario represents an aggressive harvest regime, 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, clearcut, single tree selection, commercial thinning, and shelterwood removal, with restrictions on rotation ages and minimum harvest volumes.

Anew utilized the USDA's Forest Vegetation Simulator (FVS) Northeastern variant to model harvests and yields. Growth models were calibrated using site index values calculated from plot gathered tree cores and their averages. RCE reviewed the Site Index calculations and confirmed that a reasonable species and site index for the region was assigned on an individual plot basis to appropriately calibrate growth. The process was confirmed to be consistently and systematically applied to each plot.

RCE reviewed the resulting baseline outputs to ensure that they reflected the modeling objectives and the legal additionality requirements, such as harvest size restrictions and riparian harvesting restrictions including the Chapter 27 Rule, Standards for Timber Harvesting and Timber Harvesting Related Activities within Unorganized and Deorganized Areas of the State. The model grows trees and volumes at a reasonable rate compared to regional averages.

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 eight 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. All eight strata were sampled during the site visit – HW (Hardwood), HWY (Hardwood-Young), MIX (Hardwood Softwood Mix), MIXY (Mixed Young), SF (Spruce Fir), SFY (Spruce Fir Young), SW (Softwood), and SWY (Softwood Young. FRST chose plots from these strata per a random sampling method.

The current inventory contains 339 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 11 successful plots within the project to successfully verify inventory stocking levels. The Verification Team successfully verified site data after measuring a total of 17 site plots. The Project passed the t-test during the site visit.

Project Area

During the site visit, the Verification Team conducted boundary-line reconnaissance by visiting Project boundary edge lines and points, plotting edge points with GPS receivers, and determining whether there were discrepancies with the digital Project boundary files provided by Anew 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 Anew calculated emission reductions according to relevant Methodology equations and that the methods are included in the Project Plan.

RCE recalculated emission 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.

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

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). Anew 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 Anew – Katahdin Forestry 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 November 19, 2019 – December 31, 2021 can be considered in conformance with the:

- ACR Standard, Version 7.0 (December 2020)
- ACR Validation and Verification Standard Version 1.1 (December 19018)
- 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. Total ERTs

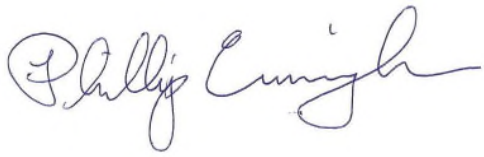
Vintage	Removal ERTs ($mtCO_2e$)	Other ERTs ($mtCO_2e$)	Total GHG Reductions and Removals ($mtCO_2e$)		Risk Buffer ($mtCO_2e$)	Final ERTs ($mtCO_2e$)
2019	40,945	896	41,841		6,695	35,146
2020	356,806	7,807	364,613		58,338	306,275
2021	355,831	7,786	363,617		58,179	305,438
Total	**753,582**	**16,489**	**770,071**		**123,212**	**646,859**

Note: Totals might not sum due to rounding.

Lead Validator and Verifier

Zach Eyler

Internal Reviewer



Phillip Cunningham

APPENDIX A—DOCUMENTS REVIEWED

1. 2019 -2021 KFM Acadian Timber Sample Tickets Series
2. 2019 Stumpage Price Report
3. 2020 Stumpage Price Report
4. Amend_Katahdin_Conservation_Easement_FINAL
5. Best Management Practices for Forestry_ Protecting Maine_s Water
6. chap_20_rules
7. DRAFT_Katahdin_RP1_MonitoringReport_series
8. DRAFT_Katahdin_RP1_MonitoringReport_6_2_23
9. Katahdin_RP1_MonitoringReport_6_8_23
10. Katahdin_100Yr_calcs_series
11. Katahdin_Boundary_series
12. Katahdin_CarbonPlot_Methodology_10_6_2021
13. Katahdin_CC_Series
14. Katahdin_CCOS_Series
15. KATAHDIN_FOREST_MGT_ PLAN_2013_V3 8 FINAL April 15 2014
16. Katahdin_GHG_Plan_series
17. Katahdin_GHG_Plan_05_31_23
18. Katahdin_GROW
19. Katahdin_IndTreeGrowne
20. Katahdin_Inventory_Master_4_4_22
21. Katahdin_PlotData_3_24_22
22. Katahdin_Plots_5_03_22
23. Katahdin_Project_RP_HWP series
24. Katahdin_Project_RP1_HWP series
25. Katahdin_RMZ_series
26. Katahdin_RP_ERT_HWP_series
27. Katahdin_SHW_Series
28. Katahdin_SHWTHIN_Series
29. Katahdin_SiteIndex_Calcs series
30. Katahdin_Start_RP_CO2_series
31. Katahdin_Strata_series
32. Katahdin_STSH_Series
33. Katahdin_SV_CO2_series
34. KatahdinACR_PDA_PDD_10_14_22
35. KTL_to_Brascan_PenobCo_Book_9215_Page_126
36. KTL_to_Brascan_PiscCo_Book_1536_Page_126
37. KTL_to_KFM_PenobCo_Book_9215_Page_177
38. KTL_to_KFM_PiscCo_Book_1536_Page_177
39. QAQCReport_Katahdin
40. RP1_Katahdin_HB_Harvest_Merge_9_27_22
41. sws_town_status_map
42. TC_Follow-up-1a

43. The Forestry Rules of Maine 2017_ A Practical Guide for Foresters
44. NDA - Blue Source Canada - Acadian Timber_Fully Executed_REDACTED
45. Project_Start_date_Memo
46. LetterOfViolation_20_4130_001
47. OBF Agreement September 14 2020
48. SIRS_Incident_Report_20230330_083204316
49. Katahdin_RP1_HarvestViolationArea_4_6_23.shp
50. State of the Voluntary Carbon Markets 2021
51. Signed_ACR AFOLU Carbon Project Reversal Risk Mitigation Agreement_2021-07-31

APPENDIX B—LIST OF FINDINGS

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

Corrective Action Request (CAR), Non-Material Finding (NMF), Additional Documentation Request (ADR), or Clarification Request (CR) #	Finding and Date	Section of Protocol/ Methodology/ Program Document	Project Developer Response and Date	RCE response and Date	Additional Project Developer Response and Date	Additional RCE Response and Date	Open or Closed
CAR 1	There appear to be 3 missing plots based on the apparent grid used (see screenshots tab for their locations). Why is this?	C3	An updated Project Area Boundary has been uploaded to the shared folder. The previous boundary was outdated.	Thank you for providing this updated boundary file, this has been confirmed. This item may be closed.			Closed
NMF 1	In the TreeData tab of the Katahdin_SV_CO2_05_24_2022 and Katahdin_Start_RP_CO2_05_24_2022 work books tree 303 is listed as having no defect despite having a height of 20ft and a phantom height of 37 ft.	D3	This was a transcription error between the original delivered data and the modeled tree list. The tree should have a total height of 37 and 4-inch height of 20. This has been corrected and is reflected in the updated CO2 calcs workbook in the shared folder.	Thank you for making this change. This item may be closed.			Closed
NMF 2	In the TreeData tab of the Katahdin_SV_CO2_05_24_2022 and Katahdin_Start_RP_CO2_05_24_2022 work books tree 617 is listed as having a TPA of 15, however its DBH is 2.5, which should place it in the inner plot with a TPA of 100.	D3	This was a transcription error between the original delivered data and the modeled tree list. The tree should have TPA of 100 instead of 15. This has been corrected and is reflected in the updated CO2 calcs workbook in the shared folder.	While this correction was made in the updated Katahdin_Start_SV_CO2_06_01_2022 workbook, it remains in the Katahdin_Start_RP_CO2_08_04_2022 workbook.	This correction has been made. Tree 617 was updated to TPA = 100. TPA of 15 is incorrect. CO2 calcs workbooks have now been properly updated.	Thank you for making this change. This item may be closed.	Closed
NMF 3	In 'Katahdin_SiteIndex_Calcs_03_28_2022' on the 'SI_coefficients' tab, there appears to be a transcription error in the Tamarack row.	D3	This transcription error has been updated. Plots 152 and 325 are affected. Site index for these plots is now slightly lower for both plots following the update.	Confirmed. This item may be closed.			Closed
NMF 4	In 'Katahdin_SiteIndex_Calcs_03_28_2022' on the 'SI_coefficients' tab, there appears to be a transcription error in the Red Pine row. The value in column T should be 70, rather than zero based on the formula from 'Site Index Curves for Forest Tree Species in the Eastern United States'.	D3	This transcription error has been updated. Plots 94 and 193 are affected. Site index for these plots is now slightly higher for both plots following the update.	Confirmed. This item may be closed.			Closed
ADR 1	The State of Maine lists the entire project area as being under a Conservation/Wildlife Easement. Please provide the text of this easement. Shapefile listing this downloaded from https://www.maine.gov/geolib/catalog.html#planning	B2	The conservation easement document has been added to the shared verification folder.	Thank you for providing this document. This item may be closed.			Closed
ADR 2	Please provide copies of the deeds of the properties themselves which describe the specific measurements of the property boundary. The provided quitclaim with covenant deeds list which lots have been transferred, but generally not the actual dimensions or locations of the owned lots themselves, which is not enough detail to confirm that ownership matches the provided shapefiles.	B2	The Deeds have been provided through the following online resources: https://penobscotdeeds.com/ https://www.maineregistryofdeeds.com/	Thank you for providing these websites. Details of the deeds have been reviewed. This item may be closed.			Closed
ADR 3	Please provide evidence of the 10% check cruise as described in the GHG Plan.	8.C	The check cruise documentation has been added to the shared folder.	Thank you for making this change. This item may be closed.			Closed
ADR 4	Several of the provided scaling tickets are missing or are not complete enough to confirm the accuracy of provided harvest information (see Harvest Tickets Followup tab for details). Please provide additional details for the tickets in question.	8.C	Updated copies of the missing/incomplete scaling tickets have been provided in the shared folder. Please see our response comments in the "Harvest Tickets Followup Tab". When scaling tickets were insufficient to show volumes, vendor statements are provided showing matching volumes.	Thank you for providing these. Vendor Statements have been review and there are no more outstanding questions. This Item May be closed.			Closed
CR 1	There seem to be several roads visible on current satellite imagery that have not been cut out of the project boundary like the other roads. Some may be unusually bright skid paths, but others are clearly maintained roads. Which of these are actually maintained roads, and why haven't they also been cut out of the project? (shapefile of questionable locations named "FRST_Katahdin_Roads_Questions" is included with LOF 2.0 and the screenshots tab contains several examples). Please provide a description of the process and data sources for removing roads from the project area.	D3	Additional roads as described in CR1 and the associated shapefile have been removed from the project areas. Historical imagery in Google Earth was used to verify the permanence of each additional road removal. 10 of the potential roads identified in the shapefile were not removed from the project area due to be considered skid trails and displaying signs of reforestation after reviewing historical imagery. These roads appear to be 10+ years old based on historical imagery. Roads in the project area were retrieved from the USDA Geospatial Data Gateway. After review or the shapefile, many of the roads visible in the property area were either not accurate or were not delineated in the shapefile. Roads were realigned or delineated using imagery and with the support of a remote sensing analysis. To differentiate a road from a skid trail, the following characteristics were evaluated. - Is there evidence of ditching, grubing or gravelling? - Is the road associate with a main artery of the road network? - How long has the road been on the landbase? - Are there evident landings for a turnaround or log piles? After the roads were delineated, updated aerial imagery became available (ESRI basemap and Google Earth). The roads have been updated and removed from the project boundary using the most up to date and available imagery.	Thank you for updating the project area. This item may be closed.			Closed
CR 2	Please describe the additional steps and source data to identify the project area. The Screenshots tab shows the GPS location of two blazes identified on the SV that also align with cutlines and were 75-150 feet off of the project boundary shapefile's border.	D3	The Federal, State, tribal etc Protected areas land ownership shapefile from the USDA Geospatial Data Gateway, as well as the NCED shapefile, were consulted against the property boundary. Separate property files from the adjacent ownerships were also consulted where available against the property boundary. Adjustments have been made to the boundary based on the blazed property line and the aerial imagery that indicates a change in management and harvest treatment on the property. The remainder of external boundaries were reviewed and conservatively moved inwards in areas where the most up to date imagery revealed clear cutlines existing on both sides of the boundary, indicating clear ownership boundaries. Areas where cutlines where partially ambiguous were not adjusted. The boundary was not expanded in areas where the boundary line was more conservative (inside of) than the cut lines.	Thank you for providing additional details. This item may be closed.			Closed
CR 3	Pages 7-20 of the Katahdin_GHG_Plan_08_12_22 document contain a duplication of pages 31-42 inserted into Table A3.1 Project Eligibility Requirements. Why is this?	3.B	This is an error, and is corrected in the most updated version of the GHG plan.	Thank you for making this change. This item may be closed.			Closed
CR 4	Katahdin_GHG_Plan_08_12_22 the VT FVS prescription states "Harvest Trees 40 years". What is meant by this?	3.B	This FVS prescription should not have been included in the prescriptions, and has been removed from the FVS prescriptions, and is no longer referenced in the GHG Plan.	Thank you for making this change. This item may be closed.			Closed
CR 5	In the GHG_Plan_Tables tab of the Katahdin_RP_ERT_HWP_08_05_2022 document cell J3 lists the period as being from 2019-2039, while cells L3 & M3 sum columns E:X, which includes the data for 2040. Why is this?	3.B	The Project crediting period includes 2019-2039. The 20 year average should not include 2040 in the ARC_IFM_ERT_Calcs tab (cell H3 calculation). This calculation has been updated, so that the 20 year average baseline does not include 2040.	Thank you for making this change. This item may be closed.			Closed

CR 6	Which species are being recorded for the items in Columns A-M of the Actual_RP1_HWP_Step_1 tab of the Katahdin_RP_ERT_HWP_08_05_2022 workbook. Individual species FIA codes are typically numbers not the two letter abbreviations provided.	3.B	Species are not recorded in the recorded harvest, but species groups are. Column headers have been adjusted to reflect this. Also, we have received additional RP1 harvest information, and have included all RP1 harvest in the ERT workbook.	Thank you for confirming this and updating the provided data. This item may be closed.			Closed
CR 7	The FVS outfiles for the SHW prescription show that the initial and subsequent cut can reoccur every 50 years if the conditions are met, while the SHWHIN prescription can reoccur every 35 years and the SHW50 prescription can reoccur every 40 years. However these potential reoccurrences are not mentioned in the prescriptions descriptions in the Katahdin_GHG_Plan_08_12_22 document. Why is this?	3.B	More clarity has been added to the GHG plan, including time for return entries. Also, it was noted that SHW50 was inadvertently harvesting in constrained area, SHW50 has been dropped by the prescription list, and now only SHW and SHWTHIN are included. SHW and SHWTHIN are very similar, except SHWTHIN has a commercial thin (CT) entry before shelterwood entries, and SHW does not have a CT before shelterwood entries. The constrained area is now correctly limited to the STSH and STSS prescriptions.	Thank you for updating this. This item may be closed.			Closed
CR 8	Per ACR IFM 1.3, "The baseline management scenario shall be based on silvicultural prescriptions recommended by published state or federal agencies". Was the baseline informed by state or federal guidance, and if so, please provide the supporting documentation.	3.B	The baseline scenario was informed by state and federal guidance through consulting with a Maine Licensed Forester, John Steward, and other members of KFM staff. All silviculture prescribed in the baseline scenario was considered common practice for NPV-maximizing management in the region, and fall within the legal harvesting limits for the area as defined in the "Maine Forest Service Chapter 20 Forest Regeneration & Clearcutting Standards" (https://www.maine.gov/dacf/mfs/publications/rules_and_regs/chap_20_rules_05012014.pdf) and the "Maine Forest Practices Act" (http://www.maine.gov/tools/whatsnew/attach.php?id=394086&an=1).	Thank you for providing additional details. This item may be closed.			Closed
CR 9	The 'Katahdin_CarbonPlot_Methodology_10_6_2021' document states that, "If a plot falls in an area that is unsafe to measure where it falls, note the reason for the safety issue. If the safety issue is temporary and can be addressed by the addition of specific safety equipment or returning at a later time, then revisit the plot once these issues can be addressed. If a plot is deemed permanently unsafe and in such a way that safety equipment or revisiting at a later time cannot address, do not measure the plot. Please contact Bluesource for guidance on how to address any plots deemed permanently 'unsafe'." Did this occur during measurement?	8.C	No permanently unsafe plots were found during the inventory.	Thank you for confirming this. The item may be closed.			Closed
CR 10	Is this project enrolled in other environmental asset programs for non-carbon benefits?	6.I	The project is not enrolled in any other environmental asset programs for non-carbon benefits.	Thank you for confirming this. The item may be closed.			Closed
CR 11	Are any forest pests or diseases known to be present in large quantities within the project area? The GHG Plan is slightly ambiguous about the presence of diseases and pests in the project area and we suggest clarifying.	3.B	No pests or diseases are present in large quantities within the project area. Section A6: Forest Pests and Diseases has been revised to add more clarity on Pest and Disease within and around the project area. Please see the updated GHG plan.	Thank you for confirming this. The item may be closed.			Closed
CR 12	"The Forestry Rules of Maine 2017," available: https://www.maine.gov/dacf/mfs/publications/handbooks_guides/rule_book.pdf, identify that "In many cases, a permit is required to harvest timber in P-RR subdistricts" and "Operating in a P-FW requires consultation with IF&W and may require a permit from MFS. Refer to the complete Chapter 27 rules for more information" (Page 31). How are these incorporated into the baseline considerations? Is there potential that the silvicultural prescriptions identified for these areas would not be permitted?	3.B	All P-RR and P-FW subdistricts are included in the RMZ/Constrained layer. All acres within the RMZ/Constraints layer are limited to the STSH and STSS prescriptions, which is compliant with chapter 27 rules for all constrained subdistricts within the PAB including P-SL1, P-SL2, P-GP, P-FW, P-RR. The landowner has consulted with IF&W in the past in order to harvest in these areas utilizing uneven-aged silvicultural prescriptions similar to STSH and STSS. We think it is reasonable for the baseline scenario to assume we can harvest at the same levels in the future.	Thank you for providing additional details. This item may be closed.			Closed
CR 13	Are any threatened or endangered species known to be present in the project area?	3.B	There are no known occurrences of federally listed endangered, threatened, or special concern species within the project area. Atlantic Salmon are listed as endangered species by the USFW. Several watersheds on the property are designated as Atlantic Salmon critical habitat. Yellow Lampmussel and Tidewater Mucket are classified by the State as a threatened species. Although at the northern extent of their range, habitat for both mussels is identified on some lakes within the project boundary. The State of Maine recommends that forestry operations within 250 ft of water ways within the identified habitat follow the forestry BMPs to protect the integrity of the habitat. The RMZ/Constraints layer includes all state designated RMZ areas and appropriate buffers. Baseline harvesting within these areas is limited to the STSH and STSS prescriptions, and are compliant with state BMPs.	Thank you for confirming this. The item may be closed.			Closed
CR 14	How is the data in the attributes table of the HB_RP1_Harvest_Merge shapefile organized? It is unclear from the column headings what data is being recorded in what column. Additionally, 12 polygons do not have designations in the URLBLK column. Which harvest blocks were these polygons associated with? Once the harvest shapefile is better understood in relation to wood products, a subsample of scale tickets will be requested.		The data in the Attributes table has been simplified to include Harvest Block Code associated with harvest volumes in column "URLBLK", the year, and the harvest treatment. Harvest treatment codes are as follows: CC = Clearcut; OR = Overstory Removal; SH = Shelterwood; SC = Selection Cut; CT = Commercial Thin. Block Codes have been added where missing, please see the updated shapefile in the shared folder.	Thank you for updating the shapefile and confirming details. The item may be closed.			Closed
CR 15	In cell B28 and B3 of the Baseline_Project_40YR_CO2e tab of the Katahdin_ERT_HWP_09_28_2022 workbook the HWP green tons/acre from the Actual_RP1_HWP_Step_1 is added to the transcribed values. Why is this?		We added the HWP green t/ac to account for RP1 harvest that took place prior to the carbon inventory installation. This process was described to the verification team in an email on 9/29/2022, and is outlined below for record in this LoF. This adjustment was made to account for harvesting that occurred between the Start Date and the Inventory Date. The entire process is outline below, however, the fourth bullet point is most relevant to this question. * Estimate bole CO2e - Converted RP1 green ton harvest volumes to CO2e. * Convert bole CO2e to whole tree CO2e - The CO2 calcs (StartDate_Tree_CO2_StemRatio) tab filters all merch trees > 5", DBH, then columns AF-AH are used to estimate the whole tree/bole ratio for the project inventory (this ratio is entered in cell Q13 of "Actual_RP1_HWP_Step_1" tab of ERT calcs). * Estimate t/ac removed in RP1 harvest - In cell R13 of "Actual_RP1_HWP_Step_1" tab of ERT calcs we multiply the tree/bole ratio * project area * total HWP green tons. * Apply adjustment to ERT calcs - The value from the previous step is added to the Start Date stocks in cells B3 and B28 of the of the 'Baseline_Project_40YR_CO2e' tab of the 'Katahdin_RP_ERT_HWP_09_21_2022' workbook. * The result is a Start Date t/ac that increases the Start Date stocks by the estimated amount of HWP in RP1.	Thank you for providing this explanation. The explanation is sufficient to close this item.			Closed

CR 16	The formulas in cells E26:E29 of the Actual_RP1_HWP_Step_4_5 tab of the Katahdin_RP_ERT_HWP_09_28_2022 workbook reference the values from the Actual_20YR_HWP_Step_1_2_3 tab reference the values from the Actual_20YR set of tabs, rather than the Actual_RP1 set of tabs. why is this?	3.B	These cells are reference only, and not used in subsequent calculations. They were set up so that Actual RP1 and Actual 20 year HWP could be compared in different tabs. The equations referenced in the finding were incorrectly referencing the 20 year HWP tab, and have been updated in the latest ERT workbook.	Confirmed. This item may be closed.			Closed
CR 17	In columns J:M on the Actual_RP1_HWP_Step_1 tab of the Katahdin_RP_ERT_HWP_09_28_2022 the conversion from total volume to biomass multiplies the total by the bark ratio as an unaltered multiplier. However per equation 7 in NRS 38, when applied to the total volume, the bark ratio should be modified using the formula "100 * (BV%wood / (100 + BV%wood)) ". Why is this not done?	3.B	The finding is correct, the bark ratio has been adjusted in the following two workbooks, updated workbooks are provided in the shared verification workbook. * Katahdin_Project_RP_HWP workbook: - Specific Gravity tab: Added columns G/H. Column H (Adjusted 1 - Bark Ratio) integrates the formula referenced in the finding. - Miles_Smith_MC_BR tab: Added column E "Adjusted 1 - Bark Ratio) integrates the formula referenced in the finding. - Summary tab - integrated the updated bark ratios into the ERT workbook. * ERT workbook: - Actual_RP1_HWP_Step_1: Updated column I (Bark Ratio) to include the appropriate formula. The net result is a lower estimate of HWP based, on slightly higher estimated Bark % from the adjustment to the formula.	Confirmed that these have been added and the calculation has been modified. This item may be closed.			Closed
CR 19	In cell c26 of the GHG_Plan_Tables tab of the Katahdin_RP_ERT_HWP_11_15_2022 workbook, the buffer credits are multiplied by 18%, instead of the 16% which is used elsewhere. Why is this?		Cell c26 of the GHG_Plan_Tables tab of the most recent version of Katahdin_RP_ERT_HWP workbook has been updated to apply the correct buffer percentage of 16%. This cell has been updated to sum buffer amounts directly from the ACR_IFM_ERT_Calcs tab, as the previous calculation did not incorporate year to year rounding up of buffer pool allocations.	Confirmed that this update has been made. This item may be closed.			Closed
CR 20	On page 29 of the Katahdin_GHG_Plan_11_18_22.pdf the project is listed as being 176,132 acres in size. However elsewhere it is recorded as 175,974.67 acres in size. Why is this?		Page 23 of the GHG plan, Section D1 Parameter Acres has been updated to 175,974.67. No acres value is reported on page 29.	Confirmed that this update has been made. This item may be closed.			Closed