# Verification Report

# ACR422 – Wabassus Improved Forest Management Project

Reporting Period: 01/01/2023 – 12/31/2023

July 16, 2025

TÜV SÜD America, Inc.

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# 1 INTRODUCTION

The Climate Trust (TCT) contracted with TÜV SÜD America, Inc. (TÜV SÜD) to perform the verification of the ACR422 – Wabassus Improved Forest Management Project (Project) for the reporting period of January 1, 2023 – December 31, 2023 under the American Carbon Registry (ACR) program. TCT acts as the technical consultant for the landowner and project proponent, Downeast Lakes Land Trust (DLLT). This report is documentation of verification activities TÜV SÜD performed for the Project. TÜV SÜD ensured that the GHG statement was materially correct, that the data provided to TÜV SÜD were well documented, and that if TCT made any material errors, that these errors were corrected.

## 1.1 OBJECTIVES

The objectives of the verification are to evaluate:

- The emissions reductions and to ensure that the statement is materially correct;
- The data provided to TÜV SÜD can be documented and if errors or omissions are detected, they be corrected

TÜV SÜD 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 area is composed of 6,144 acres of coniferous and hardwood forest, located within Washington County, Maine. The project area contains many valuable ecological, educational, open space, and scenic resource conservation values, including an extensive network of lakes and streams of important value to the local economy.

After being purchased by DLLT, the land was put under a conservation easement held by the state of Maine, restricting development and subdivision of the property, but still allowing for commercial forest management. The Project will provide critical finance for the oversight and management of the property, which will focus on improved forest management, wildlife-centered practices, higher carbon storage, and conservation value over the higher return, more aggressive timber management practiced on other ownerships of the region.

## 1.3 RESPONSIBLE PARTY

Project Proponent
Downeast Lakes Land Trust (DLLT)
4 Water Street,
Grand Lake Stream, ME 04668
David Montague
(207)796-2100

Project Consultant
The Climate Trust
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Portland, Oregon 97214
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434-326-1144

## 1.4 Verification Team

Lead Verifier: Christian Eggleton
Team Members: Tim Facemire, Thomas Christopher, Vitor Aguiar, Ben Miller
Independent Reviewer: Zach Eyler

## 1.5 Verification Criteria

### 1.5.1 Verification Standards, Guidelines, and Tools

- ACR Standard, Version 8.0, July 2023
- 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, January 1, 2024
- ACR Tool for Risk Analysis and Buffer Determination, v1.0
- Wabassus Improved Forest Management Project GHG Plan, March 2018
- ISO 14064-3: 2019 “Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas statements”

### 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 VERIFICATION PROCESS

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

- TÜV SÜD completed a COI form on April 4, 2024 to identify any potential conflict of interest with the Project, Project Developer or other parties. The COI form was approved by ACR on April 5, 2024.
- TÜV SÜD and TCT held a verification kick-off meeting on April 5, 2024. During the kick-off meeting TÜV SÜD reviewed the verification objectives and process, reviewed the schedule, and submitted an initial document request.
- TÜV SÜD 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.
- TÜV SÜD developed a risk-based sampling plan based upon the strategic review and risk assessment. The verification plan and sampling plan were used throughout the process and were revised as needed based upon additional risk assessments.
- The Verification Team conducted the site visit to the Project to verify the inventory quality and forest management practices during the week of May 20, 2024. During the site visit the Verification Team performed key personnel interviews, conducted t-test 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 personnel:
        - Ben Miller – TÜV SÜD
    - During the site visit, the verification team met with the following individuals:
        - Madeline Montague – TCT
        - Jeremy Koslowski – TCT
- TÜV SÜD performed a detailed risk-based desktop review of the submitted 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.
- TÜV SÜD conducted interviews and had conversations with Project personnel during the verification. Personnel interviewed include:
    - Madeline Montague – TCT
    - Jeremy Koslowski – TCT
    - Ben Rifkin – TerraCarbon
- TÜV SÜD submitted requests for corrective actions, non-material findings, additional documentation, and clarifications as necessary to TCT throughout the verification.
- TÜV SÜD's independent reviewer conducted a review of the verification sampling, report, and statement..
- TÜV SÜD issued a final verification report, verification opinion, and List of Findings.

- TÜV SÜD held an exit meeting with TCT.

# 3 VERIFICATION FINDINGS

## 3.1 PROJECT BOUNDARY AND ACTIVITIES

The project area is composed of 6,144 acres of coniferous and hardwood forest in Washington 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 January 1, 2018 - December 31, 2037.

## 3.2 GHG SOURCES SINKS, AND RESERVOIRS

Table 1 shows the GHG emission sources included in the project boundary based on the Methodology. TÜV SÜD 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 when applicable |
| 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

TÜV SÜD confirmed the following ACR eligibility criteria listed in the ACR Standard, Version 8.0 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 January 1, 2018.
- Minimum Project Term: The minimum project term is 40 years.
- Crediting Period: The crediting period is 20 years as specified by the Methodology, January 1, 2018 - December 31, 2037.

- Real: TÜV SÜD confirmed that the GHG reductions follow the ACR methodology and are verifiable.
- Emission or Removal Origin: TÜV SÜD confirmed that DLLT owns and has control over, or document effective control over the GHG sources/sinks from which the emissions reductions or removals originate.
- Offset Title: TÜV SÜD confirmed that all Project lands are owned directly by the Project Proponent (DLLT), which holds full legal title.
- Additional: TÜV SÜD confirmed that the project is additional as described in Section 3.4.
- Regulatory Compliance: TÜV SÜD confirmed that the Project is in compliance with all applicable regulations.
- Permanent: TÜV SÜD 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: TÜV SÜD confirmed that the Project correctly accounted for leakage per the Methodology.
- Independently Validated and Verified: TÜV SÜD is a third-party verification body that the project proponent has contracted to verify the Project.
- Environmental and Community Assessments: TÜV SÜD reviewed project impacts as described in section 3.6 of this report.

### 3.3.2 Methodology Eligibility

TÜV SÜD 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.
- DLLT owns the land and the timber rights on the forestland and can legally harvest.
- FSC, SFI, or ATFS certification is not needed as harvesting is not planned in the with-project
- scenario.
- The Project is not on tribal lands.
- The Project is not on public non-federal lands.
- The Project does not use non-native species where adequately stocked native stands were converted for forestry or other land uses after 1997.
- The Project has not drained or flooded wetlands on or after the project start date.
- The 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

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

### 3.4.2 Common Practice Test

The geographic region for the Project includes northern Maine. At the time of the Project start date most forest managers in the project region practiced an aggressive, predominately even-aged management regime focused on harvesting as much timber as possible with very little investment. DLLT, however, is focused on long-term forest management and conservation. Weighted average common practice stocking in the project region, which have been assessed by ARB, is well below the projected stocking outcome in the with-project scenario. Thus, management in the with-project case can be characterized as producing outcomes not achieved by typical common practice.

### 3.4.3 Implementation Barriers Test

The Project chose to assess the financial barriers test per the ACR Standard and Methodology. TÜV SÜD confirmed that carbon funding is reasonably expected to incentivize the Project's implementation. Due to the Project being implemented, DLLT loses the ability to monetize timber harvests during the life of the Project. TCT 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

TÜV SÜD 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.

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

## 3.6 LEAKAGE

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

## 3.7 ENVIRONMENTAL AND COMMUNITY IMPACTS

The Project Plan includes a summary of the Project activity's net positive environmental and community impacts. The Project will provide habitat protection for wildlife, plant species, and trees, water quality protection and protection from soil erosion and degradation among other benefits (see Wabassus_ACR-SDG-Cont-Report-AFOLU-Project-v2.0_20250715 ). The Project is not expected to cause any negative environmental impacts.

## 3.8 LOCAL STAKEHOLDER CONSULTATION

Residents of Grand Lake Stream, Maine are very engaged as members of the DLLT board, which has directly authorized the Wabassus Improved Forest Management Project. Per the January 1, 2018

resolution “the Board of Directors of the Downeast Lakes Land Trust commits to manage the Wabassus Tract for the generation and maintenance of carbon offset credits on the American Carbon Registry and to comply with the reasonable terms of the ACR for any offsets issued.”

Additionally, DLLT’s engagement with the New England Forestry Foundation and the Woodie Wheaton Land Trust through the Downeast Lakes Forestry Partnership has protected more than 300,000 acres of interior Washington County, Maine, including the Wabassus property, from development through the purchase of land and conservation easements.

## 3.9 Monitoring Plan

The Project Plan includes a Monitoring Plan that identifies all monitored data and parameters. TÜV SÜD 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 TCT and reviews of project documents, TÜV SÜD 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. TCT and DLLT implemented the monitoring plan as stated in the Project Plan during Project activities.

## 3.10 Baseline Scenario

The baseline modeling was not reviewed in this verification. The baseline values remained unchanged from RP1 and the initial verification.

## 3.11 On-site Inventory Verification Check

In preparation for and during the site visit, the Verification Team reviewed evidence necessary to verify inventory estimates using the 90% t-test methodology described in the Protocol. The Verification Team confirmed that stocking and vegetation were consistent with descriptions in inventory data. The current inventory contains 136 permanent, variable-radius plots. At each plot location, a fixed-radius plot was established to measure all trees greater than or equal to 5.0” in diameter at breast height (DBH).

Given this sample design, strata quantity and project size, the Verification Team was required to sample 8 plots to successfully verify inventory stocking levels. The Verification Team successfully verified site data after measuring a total of 8 site plots. Through this process, TÜV SÜD confirmed the Project’s current on-site tree carbon stocks estimated by TCT.

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 TCT 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. The Verification Team confirmed that the Project area boundary was appropriate and accurate.

## 3.12 PROJECT DATA AND GHG EMISSIONS REDUCTION STATEMENT

TÜV SÜD 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

The baseline modeling was not reviewed in this verification. The baseline values remained unchanged from RP1 and the initial verification.

### 3.12.2 Project Emissions

TÜV SÜD confirmed that the project emissions were correctly calculated.

### 3.12.3 Emissions Reductions

TÜV SÜD verified that TCT calculated emissions reductions according to relevant Methodology equations and that the methods are included in the Project Plan.

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

TÜV SÜD recalculated emissions reductions for the fifth reporting period according to the equations defined in the Methodology and the Project Plan and found the Project statement to be free of material misstatement.

# 4 VERIFICATION RESULTS

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

# 5 VERIFICATION CONCLUSION

TÜV SÜD America, Inc. conducted the verification of ACR422 Wabassus DLLT IFM project according to the requirements found in ISO 14064-3:2019. The objective of the verification activities was to conduct an independent assessment of the project reporting period and ex-post GHG emission reductions resulting from the Project. Preparation and fair presentation of the GHG statement in accordance with the criteria is the responsibility of Anew.

- GHG-related activity: Improved Forest Management
- GHG statement reporting period: January 1, 2023 – December 31, 2023
- Criteria:

- ACR Standard, Version 8.0 (July 2023)
- 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, January 1, 2024
- ACR Tool for Risk Analysis and Buffer Determination, v1.0
- Wabassus Improved Forest Management Project GHG Plan, March 2018

The data and information supporting the GHG statement were historical in nature.

TÜV SÜD has ensured DLLT's effective use of controls related to the GHG statement. TÜV SÜD concludes that there is sufficient and appropriate evidence to support DLLT's GHG statement and issues an Unmodified Opinion.

TÜV SÜD confirms that the GHG statement has been prepared:

- Without material discrepancy,
- In accordance with all applicable criteria, and
- Verified to a reasonable level of assurance.

Table 2 provides a summary of the emissions reductions as stated in the GHG statement.

**Table 2. Total ERTs**

| Vintage | Total Emission Reductions / Removals ($mtCO_2e$) | Buffer Pool / Reserve Account Contribution ($mtCO_2e$) | Net Emission Reductions / Removals ($mtCO_2e$) | Removals Subset (if applicable) ($mtCO_2e$) | Emission Reductions Subset (if applicable) ($mtCO_2e$) |
|---|---|---|---|---|---|
| 2023 | 91,333 | 14,614 | 76,719 | 87,656 | 3,677 |
| **Total** | **91,333** | **14,614** | **76,719** | **87,656** | **3,677** |

Note: Totals might not sum due to rounding.

**Lead Verifier**

Christian Eggleton

Christian Eggleton

**Independent Reviewer**

Zach Eyler

# APPENDIX A—DOCUMENTS REVIEWED

1. Wabassus_RP 5_ACR Calcs MonReport_R1 series
2. FVS_Translation_TerraCarbon_ACRInventoryDataTool_v02_20220218
3. FVSTreeListEast_20230906
4. Wabassus_2023_SF_20230906
5. 08312023 Wabassuss Data QC 2023 V2
6. Wabassus_Adjust_20230901
7. WabassusInventoryCalcsAndStats_Dec-31-2023 series
8. WabassusInventoryCalcsAndStats_SF_Dec-31-2017 series
9. Wabassus_ProjectArea_updatedbuffers_8_1_2018 shapefile
10. WabassusInventory_2017.09.05 shapefile
11. WabassusInventory_2023.02.08 shapefile
12. WabassusInventory_NewPlots_20230208 shapefile
13. Wabassus_SOPs_2023-08-07
14. Wabassuss Data 2023 V1
15. Wabassus SOPs revFeb2018
16. Wabassus_SOPs_2024-11-04
17. Wabassus_RP 5_Monitoring Report APPENDIX_R5_20241210
18. Wabassus_RP5_MonitoringReport_20250418 signed KBA
19. Wabassus Monitoring Report 2018 4-17-19
20. Wabassus Monitoring Report APPENDIX4-8-19
21. Wabassus Monitoring Report 2020 APPENDIX 7-21-2021
22. Wabassus Monitoring Report RP 2 3 v2
23. Wabassus_RP 4_Monitoring Report APPENDIX_R1_04.05.2023
24. Wabassus_RP 4_Monitoring Report_20230918
25. 2023 Maine Federal Forest Health Highlights_Revised Submission Copy 15Feb2024
26. Wabassus Project GHG Plan Final_20181003
27. Wabassus_ACR AFOLU Project SDG Contribution Report
28. Wabassus_ACR-SDG-Cont-Report-AFOLU-Project-v2.0_20250715

# APPENDIX B—LIST OF FINDINGS

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

| | |
|---|---|
| **Project ID & Name:** | **ACR 422 - Wabassus Improved Forest Management Project** |
| **Project Developer:** | **The Climate Trust** |
| **Reporting Period:** | **5** |
| **List of Findings version:** | **4.0** |

| Corrective Action Request (CAR), Non-Material Finding (NMF), Additional Documentation Request (ADR), or Clarification | Finding and Date | Section of Protocol/ Methodology or Program Document | Project Developer Response and Date | RCE response and Date | Additional Project Developer Response and Date | Additional RCE Response and Date | Open or Closed |
|---|---|---|---|---|---|---|---|
| **CAR 1** | | | | | | | |
| | | | | | | | |
| **NMF 1** | | | | | | | |
| | | | | | | | |
| **ADR 1** | Please provide monitoring reports for previous reporting periods. | G | Previous monitoring reports are now provided in the project database. | Thank you for providing previous monitoring reports. This item may be closed. | | | Closed |
| **ADR 2** | Please provide raw data of the 2023 inventory audit. | F1 | The raw 2023 inventory audit data is now provided in *Wabassuss Data 2023 V1.xlsx*. | Thank you for providing the raw audit data. This item may be closed. | | | Closed |
| | | | | | | | |
| **CR 1** | Is this project enrolled in any other environmental asset program for non-carbon benefits? | B1 | The project area is not currently enrolled in any other programs. | Thank you for the clarification. This item may be closed. | | | Closed |
| **CR 2** | Have the property boundaries changed since the last verification? | B2 | Property boundaries have not changed since the last verification. | Thank you for the clarification. The project boundaries have been verified. This item may be closed. | | | Closed |
| **CR 3** | Has there been any harvesting during the reporting period? | C3 3.2 | No harvesting has taken place on the project area within the RP. | Thank you for the clarification. A review of aerial imagery has shown no indication of harvesting activities, confirming the developer's response. This item may be closed. | | | Closed |
| **CR 4** | Please describe the actions taken for monitoring any natural or anthropogenic disturbances that may have occurred during the RP. | D4 | A representative sample of established forest carbon inventory plots were remeasured which captured any natural or anthropogenic disturbances that occurred on the areas sampled. Further, as a requirement of FSC certification, annual monitoring events occur. See https://downeastlakes.org/wp-content/uploads/2024/08/DLCF-Monitoring-Public-Summary-2023.pdf. | Thank you for the clarification and for sharing the Downeast Lakes Community Forest Monitoring Report. This item may be closed. | | | Closed |
| **CR 5** | It appear that multiple roads have not been removed from the project area. Please clarify. | B2 | The project area was previously validated. There is no explicit requirement under ACR IFM v1.3 to remove roads from the project area. All areas within the project area had equal probability of selection for sampling, including the roads that fall within the project area, thus statistically accounting for roads in the project area. | Thank you for the clarification. This item may be closed. | | | Closed |
| **CR 6** | Upon review of the 08312023 'Wabassuss Data QC 2023 V2', it appears that not all plots classified as "Check Cruise" in the '2.2 TreeData' tab are also classified as "Checked" in the '2.1 PlotData' tab. Additionally, trees in plots not classified as "Check Cruise" have check notes. Does that mean these plots have actually been audited? Please clarify. | F1 | The difference between the two noted tabs are plots 9 and 177. The minimum overall QA/QC target of 5-10% of the sample points was check cruised, regardless if plots 9 and 177 were check cruised. Thus, if the two additional plots were check cruised, that would add more assurance; if the two additional plots were not check cruised, the minimum QA/QC targets were still exceeded. | Thank you for the clarification. The audit percentage has been verified. This item may be closed. | | | Closed |
| **CR 7** | Upon review of the R9 Insect & Disease Detection Survey (IDS) Data, it appears that there have occurrences of disease and pest damage within 30-mile radius of the project area during the RP. Please clarify why the risk assessment for the Diseases and Pests category should be maintained at 4%. See CR 7 tab for additional details. | B5 | The project development team was unable to reproduce the results shown in the "CR 7" tab by utilizing "CONUS_Region9_2023 — DAMAGE_AREAS_FLAT_CONUS_Rgn9_2023" accessed from https://www.fs.usda.gov/foresthealth/applied-sciences/mapping-reporting/detection-surveys.shtml. However, by referencing the results in "CR 7" tab, only two potential risks are considered mortal: fire, and root disease/beetle. Of those two, only root disease/beetles are diseases/infestations. The *ACR Tool for Risk Analysis and Buffer Determination* details that "epidemic" diseases/infestations be analyzed. So, the root disease/beetle risk noted in the "CR 7" tab needs to be considered an epidemic to qualify for the higher risk score of 8%. Upon reviewing the *Maine Forest Service Forest Health and Monitoring Forest Health Highlights Annual Report 2023* (*2023 Maine Federal Forest Health Highlights_Revised Submission Copy 15Feb2024.pdf* ), no epidemic-scale root disease or beetle infestation was noted. | Thank you for the clarification. This item may be closed. | | | Closed |
| **CR 8** | Upon review of the 'tree data' tab of 'WabassusInventoryCalcsAndStats_Dec-31-2023_20231117', it has been observed a few trees have the same measurements for Height_Total (column U) and Height to broken top (column V). Please clarify/confirm if these trees are in fact broken and if their aforementioned height measurements should be different. | C3 3.1.1 | Neither "Height_Total" nor "Height to a broken top" field are utilized in calculations. Per the inventory SOPs, if a tree had a broken top, that missing portion was recorded as missing biomass, which is how broken tops were accounted for in biomass quantification. | Thank you for the clarification. This item may be closed. | | | Closed |
| **CR 9** | The total area of 'Wabassus_ProjectArea_updatedbuffers_8_1_2018' shapefile as well as the project area in the 'ACR IFM calc template' tab of 'Wabassus_RP 5_ACR Calcs MonReport_R1_20240105, which was applied in the calculation of baseline and project $CO_2$, is approximately 6,143.62 acres. However, the areas of each individual stratum in the 'PIVOT' tabs of the 'WabassusInventoryCalcsAndStats_Dec-31-2023_20231117', which were also used to calculate project mean $CO_2$, add up to approximately 6,146.31 acres. Please clarify. | C3 3.1.1 | The acreages in *WabassusInventoryCalcsAndStats_Dec-31-2023_20231117.xlsx* have been corrected to match those in *Wabassus_ProjectArea_updatedbuffers_8_1_2018.shp* and *Wabassus_RP 5_ACR Calcs MonReport_R1_20240105.xlsx* . Updated versions of those and all downstream documents have been provided in the project database. | Thank you for the clarification and updated documents. The acreage has been verified. This item may be closed. | | | Closed |
| **CR 10** | Upon review of 'Wabassus_RP 5_ACR Calcs MonReport_R1_20240924', it appears that the Spruce-Fir stratum trees were degrown to 2018 to a weighted 2018 stocking estimate which was deducted from the 2023 total stocking. For the purpose of this verification, the VVB is focused solely on end of RP5 calcs. Therefore, it is unclear why Spruce-Fir trees are being degrown to 2018 and subtracted from the total stocking at the end of the reporting period. If the inventory data (old and new) and the grown forward estimates are valid, please clarify why this correction is necessary. | C3 3.1.1 | From the validated GHG plan: "The < 20-year old spruce-fir stratum, much of it planted Black Spruce established by Champion International prior to DLLT ownership, was not inventoried as it is currently dominated by smaller dimension stems and is conservatively assumed to have zero stocks at project initiation."<br><br>Since the spruce-fir stratum was not fully inventoried in 2018, 10 new permanent plots were installed, as described in the current inventory SOPs document. From RP1 – RP4, the spruce-fir stratum was conservatively assigned no stocking. Since the 2023 inventory did measure carbon stocking within the spruce-fir stratum, an adjustment was applied to avoid an artificially inflated growth rate when compared to the baseline, which did not include stocks in the spruce-fir stratum. The 2023 spruce-fir inventory data was grown forward for 10 years in FVS-NE to establish an annual growth rate. Then, the spruce-fir stratum inventory was degrown to produce a 2018 stocking . That projected and weighted 2018 stocking was subtracted from the total 2023 stocking (all strata combined) to account for the lack of spruce-fir inventory data in 2018, thus eliminating an artificially inflated growth rate compared to the baseline in the spruce-fir stratum.<br><br>This adjustment makes no claim against the validity of the initial inventory (previously validated) or the current inventory. It is simply an attempt to capture growth in the spruce-fir stratum while also maintaining its contribution relative to the inventory data that informed the baseline model. | The EORP5 standing stocks have been verified during the site visit on 05/21/2024. To reduce field verified standing stocks for a correction due to a conservative initial stocking estimate would be inappropriate because the EORP5 stocks are solely a reflection of what is standing in the forest at the end of RP5.<br><br>The baseline and conservative assumptions associated with the Spruce-Fir stratum have been validated and verified and are not under RP5 review. Additionally, growth rate on a tree level is only influenced by trees that were inventoried in 2018 and 2023. Therefore, there is no artificially inflated growth rate which impacts EORP5 stocks, as suggested. Please remove a backdated stocking correction from the EORP5 crediting values. | The Spruce-Fir adjustment has been removed. All downstream files have been updated. | Thank you for adjusting calculations and providing updated files. The stockings of the Spruce-Fir stratum and project as a whole have been verified. This item may be closed. | Closed |
| **CR 11** | The 'tree data' tabs of 'Wabassus_Adjust_20230901' and 'WabassusInventoryCalcsAndStats_Dec-31-2023_20240924' show plots 9, 61, 69, 146, and 150 have double counted trees. However, they appear to be too far from any project boundary to be considered walkthrough plots. Please clarify. See CR 11 tab for additional information. | C3 3.1.1 | The originally validated SOPs state: "Plots involving overlap with discrete stratum or project area boundaries observable in the field will be corrected using the walk-through method" (provided in the project repository as *Wabassus SOPs revFeb2018.docx* ). The following statement in the current SOPs (*Wabassus_SOPs_2023-08-07.docx* ) is not consistent with the originally validated SOPs, nor is it reflective of what was performed in the 2023 field effort: "Plots near discrete project area boundaries observable in the field will be corrected using the walk-through method". The quoted language from the 2023 SOPs has been revised to match the originally validated SOPs in a new version: *Wabassus_SOPs_2024-11-04.docx* . | Thank you for the clarification. Upon review of the original inventory manual as well as the strata and project boundary layers, this item may be closed. | | | Closed |
| **CR 12** | Upon review of the 'Wabassus_RP5_MonitoringReport_20241210' it appears that Net ERRs in the Crediting Summary table (Section VI.7) do not match results from the calculation described in Section VI.6 of the Monitoring Report or Errata & Clarifications v1.3. Please clarify. See CR 12 tab for details. | C3 3.1.1 | Resolved via email. | Confirmed. | | | Closed |
| **Recommendations for Improvement** | | | | | | | |
| **1** | | | | | | | |