

# AFOGNAK FOREST CARBON PROJECT 2014 VERIFICATION REPORT



Document Prepared By Zane Haxtema

Project Title	Afognak Forest Carbon Project
Version	1-1
Report ID	1-1

Report Title	Afognak Forest Carbon Project 2014 Verification Report		
Client	Camco International Group, Inc.		
Pages	40		
Date of Issue	17 April 2015		
Prepared By	SCS Global Services (SCS)		
Contact	2000 Powell Street, Suite 600, Emeryville, CA 94608, USA		
	http://www.scsglobalservices.com		
	Email: cpollet-young@scsglobalservices.com		
	Telephone: +1 (510) 452-8000		
Approved By	Christie Pollet-Young		
Work Carried	ed Lead auditor: Zane Haxtema		
Out By	Technical reviewer: Francis Eaton		



#### Summary:

This report describes the verification audit of the Afognak Forest Carbon Project ("the project"), a Logged to Protected Forest (LtPF) project located in Alaska, USA, that was conducted by SCS. The purpose of the verification audit was to conduct, in accordance with the VCS rules, an ex-post independent assessment of the GHG emission reductions and removals that have occurred as a result of the project during the monitoring period. The verification audit was performed through a combination of document review, interviews with relevant personnel and on-site inspections. A total of one finding was issued during the verification process. The project complies with all of the verification criteria, and the assessment team has no restrictions or uncertainties with respect to the compliance of the project with the verification criteria.



# Table of Contents

1	Intro	duction	5
	1.1	Objective	5
	1.2	Scope and Criteria	5
	1.3	Level of Assurance	5
	1.4	Summary Description of the Project	5
2	Verif	ication Process	6
	2.1	Method and Criteria	6
	2.2	Document Review	6
	2.3	Interviews	7
	2.3.1	Interviews of Project Personnel	7
	2.3.2	2 Interviews of Other Individuals	7
	2.4	Site Inspections	8
	2.5	Resolution of Findings	8
	2.5.1	Forward Action Requests	8
	2.6	Eligibility for Validation Activities	8
3	Valic	lation Findings	9
	3.1	Participation under Other GHG Programs	9
	3.2	Methodology Deviations	9
	3.3	Project Description Deviations	9
	3.4	Grouped Project	9
4	Verif	ication Findings	9
	4.1	Project Implementation Status	9
	4.2	Accuracy of GHG Emission Reduction and Removal Calculations	13
	4.2.1	Data and Parameters Available at Validation	13
	4.2.2	2 Data and Parameters Monitored	20
	4.3	Quality of Evidence to Determine GHG Emission Reductions and Removals	23
	4.4	Non-Permanence Risk Analysis	25
	4.4.1	Internal Risk - Project Management	25
	4.4.2	2 Internal Risk – Financial Viability	27
	4.4.3	Internal Risk – Opportunity Cost	29
	4.4.4	Internal Risk – Project Longevity	30
	4.4.5	External Risk – Land Tenure and Resource Access/Impacts	31



	4.4.6	External Risk – Community Engagement	33
	4.4.7	External Risk – Political Risk	33
	4.4.8	Natural Risk	35
5	Verifica	ation conclusion	38
App	oendix A	x: List of Findings	40



#### 1 INTRODUCTION

#### 1.1 Objective

In accordance with Section 5.1.1, SCS carried out an ex-post independent assessment of the GHG emission reductions and removals that have occurred as a result of the project during the monitoring period, conducted in accordance with the VCS rules. In accordance with Section 2.1.2 of the VCS Validation & Verification Manual, V3.1, the objectives of the verification engagement were to evaluate the monitoring report and assess the following:

- The extent to which methods and procedures, including monitoring procedures, have been implemented in accordance with the validated project description. This includes ensuring conformance with the monitoring plan.
- The extent to which GHG emission reductions and removals reported in the monitoring report are materially accurate.

The other objective of the verification engagement was to assess the non-permanence risk analysis.

#### 1.2 Scope and Criteria

In accordance with Section 4.3.4 of ISO 14064-3:2006, the scope was defined as follows:

- The project;
- The physical infrastructure, activities, technologies and processes of the project;
- The GHG sources, sinks and/or reservoirs that are applicable to the project;
- The types of GHGs that are applicable to the project; and
- The monitoring period, as discussed in Section 5 of this report.

In accordance with Section 5.3.1 of the VCS Standard, the criteria for verification was the VCS Version 3, including the following documents:

- VCS Program Guide
- VCS Standard
- VCS AFOLU Requirements
- VCS Non-Permanence Risk Tool
- The VCS-approved methodology VM0012, Version 1.1, as applied by the project

Unless otherwise indicated, the assessment was performed against the most recent version of the relevant VCS guidance document.

In addition, the assessment was performed against the requirements of the validated project description.

#### 1.3 Level of Assurance

In accordance with Section 5.3.1 of the VCS Standard, the level of assurance of this report is reasonable.

#### 1.4 Summary Description of the Project

The project is located on Afognak Island, Alaska, USA and is aimed at avoiding emissions due to logging in the baseline scenario.

# 2 VERIFICATION PROCESS

#### 2.1 Method and Criteria

The verification was performed through a combination of document review and interviews with relevant personnel, as discussed in Sections 2.2 through 2.4 of this report. At all times, the monitoring report and non-permanence risk analysis were assessed for conformance to the criteria described in Section 1.2 of this report. As discussed in Section 2.5, findings were issued to ensure conformance to all requirements.

The audit team created a sampling plan following a proprietary sampling plan workbook developed by SCS. Per Section 4.4.3 of ISO 14064-3:2006, the audit team identified possible risks of errors, omissions and misrepresentations with respect to the verification criteria. For each identified risk, the audit team assessed the likelihood of the material discrepancy occurring, the likelihood of the material discrepancy not being prevented or detected by the controls of the project the material discrepancy and the likelihood of the material discrepancy not being detected by the audit team. Sampling and data testing activities were planned to address any risk where the likelihood of a material discrepancy not being detected by the audit team then created a verification plan that took the sampling plan into account.

#### 2.2 Document Review

The monitoring report (version 1.0 dated 1 December 2014) and non-permanence risk report (version 1.0 dated 1 December 2014) were carefully reviewed for conformance to the verification criteria. The following additional documentation, provided by project personnel in support of the aforementioned documents, was also reviewed by the audit team:

Document	File Name	Ref.
Project description, as accessed from VCS Project Database (http://www.vcsprojectdatabase.org/) on 1 May 2014	PROJ_DESC_872_17_MAY_201 2.pdf	/1/
Monitoring report for monitoring period from 01 January 2012 to 31 December 2013, as accessed from VCS Project Database (http://www.vcsprojectdatabase.org/) on 23 January 2015	MONIT_REP_872_01Jan2012_T O_31Dec2013	/2/
Validation report, as accessed from VCS Project Database (http://www.vcsprojectdatabase.org/) on 1 May 2014	VALID_REP_872_13_JUN_2012. pdf	/3/
Verification report for monitoring period from 01 January 2012 to 31 December 2013, as accessed from VCS Project Database (http://www.vcsprojectdatabase.org/) on 23 January 2015	VERIF_REP_872_01Jan2012_T O_31Dec2013	/4/
KML file showing delineation of project area, as accessedfromVCSProjectDatabase(http://www.vcsprojectdatabase.org/) on 1 May 2014	KML_872.kml	/5/
Satellite imagery for the project area, dated July 2013, and map images derived from said imagery	[various files]	/6/
Project geodatabase	Afognak Nov 29.mdb	/7/



Document	File Name	Ref.
Email attestation from ALC regarding absence of harvest activities	FW Updated request from our Afognak verifier.msg	/8/
Email attestation from RMEF regarding absence of harvest activities	RE Updated email stating no timber harvesting.msg	/9/
LST model output, as approved at validation	Afognak LST April 20, 2012.xlsx	/10/
LST model output, as submitted for verification	Afognak LST Aug14, 2014.xlsx	/11/
Carbon model	Afognak Carbon Model v3.4- Monitoring 2014.xlsx	/12/
Inventory workbook	Afognak plot data & UF Oct 2014.xlsx	/13/
Screenshots showing output from queries of Alaska Department of Natural Resources Recorder's Office database	2014Afognak_DNRRecordersDB. docx	/14/

#### 2.3 Interviews

#### 2.3.1 Interviews of Project Personnel

No interviews were conducted with project personnel as part of the verification engagement described in this report. However, the verification engagement relied heavily upon the verification engagement conducted with respect to the previous monitoring period (the period 1 January 2012-31 December 2013). Details regarding interviews carried out as part of the previous engagement may be found within Section 2.3 of the applicable monitoring report.

#### 2.3.2 Interviews of Other Individuals

Information was gathered via email correspondence with the following individuals during the month of January 2015.

Individual	Affiliation	Role
Samantha Carroll	Alaska Department of Natural Resources	Large Project Coordinator
Russ Blome	Branch of Lands & Realty, Alaska State Office, Bureau of Land Management	Realty Specialist
Preston Kroes	Division of Parks & Outdoor Recreation, Alaska Department of Natural Resources	Kodiak District Ranger II



#### 2.4 Site Inspections

A site inspection of the project area was carried out on 8 September 2014, and the details of that inspection are documented within Section 2.4 of the verification report from the previous verification engagement. In addition, as described in Section 4.1 below, the audit team was able to assess the status of the project area, remotely, through observation of remotely sensed imagery.

Even though a site inspection did not take place after the end of the monitoring period (and, therefore, a single site visit was undertaken for both the current verification engagement and the previous verification engagement), the approach carried out by the audit team is justifiable due to the following:

- The project area is on a very remote island, and the only access is by boat or helicopter; therefore, there is minimal potential for anthropogenic disturbance, as confirmed during the site inspection.
- While timber harvesting has taken place elsewhere on the island (including an area adjacent to a
  portion of the project boundary), it was confirmed during the site inspection that no incursion
  across the project boundary had been made at the time of the site inspection, as described in
  Section 4.1 of the previous verification report; this was also confirmed through observation of
  remotely sensed imagery as described in Section 4.1 below.
- As documented in Sections 4.1 and 4.4.8 of the previous verification report and Section 4.4.8 below, the project area experiences a low risk of significant natural disturbance, and the likelihood that a disturbance event could have (a) occurred after the site inspection and before the end of the monitoring period and (b) not been reported to the audit team or detected by the audit team using the methods documented in this report is judged to be extremely low.

#### 2.5 Resolution of Findings

Any potential or actual discrepancies identified during the assessment process were resolved through the issuance of findings. The types of findings issued by SCS were characterized as follows:

**Non-Conformity Report (NCR)**: An NCR signified a discrepancy with respect to a specific requirement. This type of finding could only be closed upon receipt by SCS of evidence indicating that the identified discrepancy had been corrected. Resolution of all open NCRs was a prerequisite for issuance of a verification statement.

As part of the verification process, one NCR was issued. All findings issued by the audit team during the verification process have been closed. In accordance with Section 5.3.6 of the VCS Standard, all findings issued during the verification process, and the inputs for their closure, are described in Appendix A of this report.

#### 2.5.1 Forward Action Requests

This section is not applicable, as no forward action requests have been issued.

#### 2.6 Eligibility for Validation Activities

This section is not applicable, as SCS holds accreditation for validation for the relevant sectoral scope (scope 14; AFOLU).



#### 3 VALIDATION FINDINGS

#### 3.1 Participation under Other GHG Programs

This section is not applicable, as the project is not, at this time, seeking registration under an approved GHG program.

#### 3.2 Methodology Deviations

This section is not applicable, as no methodology deviations have been validated at the time of the verification engagement described in this report. Per Section 3.5.2 of the VCS Standard, the previously validated methodology deviations, and their consequences, have been reported on in Section 4.1 below.

#### 3.3 **Project Description Deviations**

This section is not applicable, as the no project description deviations have been validated at the time of the verification engagement described in this report. Per Section 3.6.2 of the VCS Standard, the previously validated project description deviation has been reported on in Section 4.1 below.

#### 3.4 Grouped Project

This section is not applicable, as the project is not a grouped project.

#### 4 VERIFICATION FINDINGS

#### 4.1 **Project Implementation Status**

The audit team confirmed that the implementation of the project is faithfully described in the monitoring report. The project activity is summarized as follows in Section 1.7 of the project description: "In contrast to the baseline scenario, the Afognak Forest Carbon Project will conserve the project area forests for the duration of the project and in perpetuity." The audit team was able to confirm that, as stated in Section 2.1 of the monitoring report, "Other than conservation of the project area, no material planned or unplanned activities were undertaken on any project parcel since the project start date."

The audit team confirmed the above assertion through email correspondence with the personnel described in Section 2.3.2 above, which affirmed no knowledge of any change in the status of the project area during the monitoring period.

One small change in project implementation, which is not considered by the audit team to be a material discrepancy between project implementation and the project description, is a change in the identity of the entity identified in the project description as Camco Global. As this change occurred during the prior monitoring period, justification that this change is not a material discrepancy can be found in the monitoring report applicable to the previous verification engagement.

Item	Verification Findings
Material discrepancies between project implementation and the project description	No material discrepancies were noted



ltem	Verification Findings
Implementation status of monitoring plan and completeness of monitoring	<ul> <li>Audit team confirmed monitoring activities documented in Section 3.3.1 of monitoring report were correctly carried out, through the following:</li> <li>Email correspondence with State of Alaska staff, as described in Section 2.3.2 above, to cross-check attestation that "No new areas of timber blowdown (&gt;4ha), incidents of fire, or visible areas of pests or disease were noted on the property by State of Alaska staff" and that "there have been no other activities material to carbon stocks in the project area during the monitoring period" (no such instances of natural disturbance or human activities were reported to audit team by State of Alaska staff)</li> <li>Review of work products produced using satellite imagery for the project area /6/ to confirm that : <ul> <li>al instances of land, in excess of 4 hectares, that are not mature forest have been faithfully represented in project's GIS system /7/ (area summaries of which are reported in Table 5 of the monitoring report)</li> <li>No instances of "illegal or unintentional incursion of adjacent management activities" are evident (i.e., regeneration harvest units on southern boundary of Uganik parcel appear not to have crossed into project boundary)</li> </ul> </li> <li>Risk-based replication of monitoring assessment carried by project personnel using independently acquired satellite imagery (Landsat 7 ETM imagery accessed 9 January 2015 from http://landsatlook.usgs.gov/) against boundaries as shown in work products provided by project personnel /7/ and downloaded from VCS website /5/</li> </ul>



Item	Verification Findings
Existence of material discrepancies between monitoring system and monitoring plan (as described in 3.3 of project description) and applied methodology	<ul> <li>All tasks described under heading "Annual Inventory Change Monitoring" within monitoring plan have been faithfully implemented, as described in monitoring report and commented on above</li> <li>Monitoring of activity shifting leakage, required under "Other Monitoring Requirements of the Project", has been carried out correctly (project personnel have provided evidence that no harvest has occurred on any properties owned or controlled by either American Land Conservancy /8/ or Rocky Mountain Elk Foundation /9/)</li> <li>No monitoring tasks described under heading "Field plot monitoring period (as allowed by applied methodology, which only requires re-measurement "at intervals of ≤ 5 years" (Section 9.3.8)</li> <li>Aside from methodology deviations described below in this Section 4.1 (which are not considered material), no discrepancies exist between monitoring plan and applied methodology</li> </ul>
Whether GHG emission reductions or removals generated by the project have become included in emissions trading program or other mechanism that includes GHG allowance trading	<ul> <li>Audit team confirmed that improved forest management projects are not within scope of Clean Development Mechanism</li> <li>Audit team confirmed, through personal knowledge of all projects currently approved under California's Air Resources Board Cap-and-Trade Program, that GHG emission reductions or removals generated by project have not become included in that program</li> <li>Audit team applied professional judgment to determine there is very low risk of GHG emission reductions or removals having been included in any other program</li> </ul>



Item	Verification Findings
Whether project has received or sought any other form of environmental credit, or has become eligible to do so since validation or previous verification	<ul> <li>Audit team is unaware of any other environmental crediting program that project would be eligible to participate in</li> </ul>
Whether project has participated or been rejected under any other GHG programs since validation or previous verification	<ul> <li>Audit team applied intimate knowledge of all other GHG programs prevalent in North America (American Carbon Registry, Climate Action Reserve and Air Resources Board) to confirm that project has not participated in or been rejected from any other GHG programs (any instance of rejection under these programs would be highly unlikely to escape attention of audit team)</li> </ul>

As determined through review of the previous monitoring report /2/, three methodology deviations have been applied to the project. The consequences of these deviations (listed in the order described in the monitoring report) are as follows:

- A deviation from guidance in Sections 8.2.4, 8.5.3 and 9.3.5 of the methodology, relating to installation of additional monitoring plots within the project area, was applied. The consequence of this deviation is that monitoring plots have not been installed in the analysis unit (AU201) that contains very young stands of timber. The consequences of this for the overall quantification of GHG emissions reductions/removals are minimal.
- 2. A deviation from guidance in Section 8.3.1 of the methodology, relating to monitoring of activity-shifting leakage, has been applied. The consequence of this deviation is that, rather than providing a list of all properties owned or controlled by the project proponents, project personnel have provided a list of all such properties upon which any commercial harvesting has occurred during the monitoring period. In the context of the project, this essentially results in a more direct reporting of potential for activity-shifting leakage, which does not have any impact upon the quantification of activity-shifting leakage.
- 3. A deviation from the approach set out in Equation 60b of methodology has been applied. The consequence of this deviation is that uncertainty is propagated consistent with statistical best practices.

As reported in the monitoring report, a single project description has been applied to the project. The deviation pertains to the quantification of GHG emission deductions/removals using output from the LST model on a yearly time-step, rather than a five-year time-step, as reported in the project description.

In conclusion, the audit team can affirm that the project has been implemented as described in the project description.



#### 4.2 Accuracy of GHG Emission Reduction and Removal Calculations

The GHG emission reductions and removals have been quantified correctly in accordance with the project description and (with the exception of the methodology deviations discussed in Section 3.2 above) with the applied methodology.

For all instances in which values were transcribed between datasets (e.g., transcription from the project description to reporting workbooks, or between reporting workbooks), the audit team carefully traced values to ensure the absence of manual transposition errors.

An identification of the data and parameters used to calculate the GHG emission reductions and removals, description of the steps taken to assess each of them, follows.

	Steps taken by audit team to assess		
Data/Parameter	accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description /1/ have been followed	appropriateness of default values
THLB	N/A (confirmed at validation)	Confirmed that value of 1968.4, was correctly sourced from Table 7 of project description /1/	N/A
ABSL,i	N/A (confirmed at validation)	Confirmed that all values were correctly sourced from Table 7 of project description /1/	N/A
CF	N/A (confirmed at validation)	Confirmed that value of 0.5 was correctly sourced from Table 4 of project description /1/	N/A (confirmed at validation)
ΔCBSL,P,t	Confirmed that summation in Equation 2 of methodology was correctly implemented in carbon model /12/ through review of calculations	Confirmed that calculation approach set out in Appendix 2 of project description is consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	N/A
ΔCBSL,LB,t	N/A (confirmed at validation)	Confirmed that annual outputs from LST model /10/ are consistent with 5- year outputs approved at validation /11/; independently calculated baseline carbon balance from LST model outputs; confirmed that calculation	N/A

#### 4.2.1 Data and Parameters Available at Validation



	Steps taken by audit		
	team to assess		
Data/Parameter	accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description /1/ have been followed	appropriateness of default values
		approach set out in Appendix 2 of project description is consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	
ΔCBSL,DOM,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
ΔCBSI,HWP,t	Confirmed that summation in Equation 18 of methodology was correctly implemented in carbon model /12/ through review of calculations	Confirmed that calculation approach set out in Appendix 2 of project description is consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	N/A
ΔCBSL,G,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
ΔCBSL,L,t	N/A (confirmed at validation)	Same as for $\Delta CBSL, LB, t$	N/A
ΔCBSL,LDW,t	N/A (confirmed at validation)	Same as for $\Delta CBSL, LB, t$	N/A
ΔCBSL,SNAG,t	N/A (confirmed at validation)	Same as for $\Delta CBSL,LB,t$	N/A
ΔCBSL,DBG,t	N/A (confirmed at validation)	Same as for ∆CBSL,LB,t	N/A
Ri	N/A (confirmed at validation)	Confirmed that applied root:shoot ratios, as applied in inventory workbook /13/ (0.20 for spruce, 0.23 for alder), are consistent with ranges set out in Section 3.1 of project description /1/	N/A (confirmed at validation)
fBSL,NATURAL,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
fBSL,HARVEST,i,t	N/A (confirmed at validation)	Same as for $\Delta CBSL, LB, t$	N/A



	Steps taken by audit team to assess		
Data/Parameter	accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description /1/ have been followed	appropriateness of default values
fBSL,DAMAGE,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
fBSL,BLOWDOWN,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
fBSL,BRANCH,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
fBSL,BUCKINGLOSS,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
fBSL,SNAGFALLDOWN,i, t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
fBSL,IwDECAY,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
fBSL,SWDECAY,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
fBSL,dgbDECAY,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
fBSL,PRODUCTk, fBSL,PROCESSk, fPRJ,PRODUCTk, and fPRJ,PROCESSk	N/A (confirmed at validation)	Confirmed that values have been correctly sourced from Table 1, Appendix 2 of project description /1/	N/A (confirmed at validation)
HLk	N/A (confirmed at validation)	Confirmed that values have been correctly sourced from Table 1, Appendix 2 of project description /1/	N/A (confirmed at validation)
fBSL,PERMHWPk, fPRJ,PERMHWPk	N/A (confirmed at validation)	Confirmed correct implementation of Equation 21 of methodology, as replicated in parameter table in Section 3.1 of project description /1/	N/A (confirmed at validation)
fBSL,BARK, fBSL,COARSE, and fBSL,FINE fPRJ,BARK, fPRJ,COARSE, and fPRJ,FINE	N/A (confirmed at validation)	Confirmed that all values were correctly sourced from parameter tables in Section 3.1 of project description /1/	N/A (confirmed at validation)
fBSL,BARKUSE, fBSL,COARSEUSE, and fBSL,FINEUSE fPRJ,BARKUSE, fPRJ,COARSEUSE, and fPRJ,FINEUSE	N/A (confirmed at validation)	Confirmed that all values were correctly sourced from parameter tables in Section 3.1 of project description /1/	N/A (confirmed at validation)
fBSL,PROCESSc and fBSL,PROCESSf	N/A (confirmed at validation)	Confirmed that value of 85% was correctly sourced from parameter	N/A (confirmed at validation)



	Steps taken by audit		
Data/Parameter	team to assess accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description /1/ have been followed	appropriateness of default values
fPRJ,PROCESSc and fPRJ,PROCESSf		tables in Section 3.1 of project description /1/	
BEF	N/A (parameter not used)	N/A (parameter not used)	N/A (parameter not used)
Allometric equation parameters	N/A (confirmed at validation)	Confirmed that implementation of allometric equations, as carried out in inventory workbook /13/, is consistent with parameters as set out in Standish, Manning, & Demaerschalk, 1985, as referenced in Section 3.2 of project description /1/	N/A (confirmed at validation)
fTRANSPORTk	N/A (confirmed at validation)	Confirmed that values, as used in carbon model /12/, have been correctly sourced from Table 2, Appendix 2 of project description /1/	N/A (confirmed at validation)
CHARVEST	N/A (confirmed at validation)	Confirmed that value of 0.016, as used in carbon model /12/, has been correctly sourced from Table 2, Appendix 2 of project description /1/	N/A (confirmed at validation)
cMANUFACTUREk	N/A (confirmed at validation)	Confirmed that values, as used in carbon model /12/, have been correctly sourced from Table 2, Appendix 2 of project description /1/	N/A (confirmed at validation)
cTRANSPORTk	N/A (confirmed at validation)	Confirmed that values for truck transport, as used in carbon model /12/, have been correctly sourced from Table 2, Appendix 2 of project description /1/; confirmed that values for ocean transport, as used in carbon model /12/, were similar to those in Table 2, Appendix 2 of project description /1/ (see notes for data/parameter	N/A (confirmed at validation)



	Steps taken by audit team to assess		
Data/Parameter	accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description /1/ have been followed ΔCEMITTRANSPORT,t	appropriateness of default values
dTRANSPORTk	N/A (confirmed at	for details) Same as for	N/A (confirmed at
ΔCEMITTRANSPORT,t	validation) Same as for ΔCEMITHARVEST,t, below	dTRANSPORTk Same as for ΔCEMITMANUFACTUR E,t, below, except as follows: For truck transport, audit team confirmed that same methods/formulae set out in Table 2, Appendix 2 of project description /1/ have been followed; for ocean transport, audit team replicated calculation using values from Table 2, Appendix 2 of project description /1/ and arrived at very slightly different results (i.e., a difference of approximately 13 metric tonnes CO2e in each year of monitoring period); this difference likely results from instances where values were rounded to the nearest integer in different measurements systems (e.g., miles vs. km) and is immaterial	validation) N/A (confirmed at validation)
GBSL,AG,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
GBSL,BG,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
LBLBSL,NATURALi,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
LBLBSL,FELLINGSi,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
LBSL,BLOTHERi,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
LBBSL,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A
DBGBSL,i,t	N/A (confirmed at validation)	Same as for ΔCBSL,LB,t	N/A



	Steps taken by audit		
	team to assess		
Data/Parameter	accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description /1/ have been followed	appropriateness of default values
ΔCPERMHWP1,t	Traced calculation of harvested carbon from harvest volumes; confirmed that parameter values were calculated in carbon model /12/ following steps of Section 8.1.7 of methodology	Confirmed that annual outputs from LST model /10/ are consistent with 5- year outputs approved at validation /11/; independently calculated baseline harvest volume from LST model outputs, traced calculation of harvested carbon from harvested volume in carbon model /12/; confirmed that calculation approach set out in Appendix 2 of project description is consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	N/A
ΔCPERMHWP2,t	Traced calculation of harvested carbon from harvest volumes; confirmed that parameter values were calculated in carbon model /12/ following steps of Section 8.1.7 of methodology	Same as for ΔCPERMHWP2,t	N/A
ΔCEMITFOSSIL,t	Confirmed that summation in Equation 25 of methodology was correctly implemented in carbon model /12/ through review of calculations	Confirmed that calculation approach set out in Appendix 2 of project description is consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	N/A
BRESIDUAI,t	Confirmed that calculation in Equation 22 of methodology was correctly implemented in	Confirmed that calculation approach set out in Appendix 2 of project description is	N/A



	Steps taken by audit		
	team to assess		
Data/Parameter	accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description /1/ have been followed	appropriateness of default values
	carbon model /12/ through review of calculations	consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	
BBARK,t, BCOARSE,t, BFINE,t	Confirmed that calculations in Equations 23a-c of methodology was correctly implemented in carbon model /12/ through review of calculations	Confirmed that calculation approach set out in Appendix 2 of project description is consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	N/A
ΔCEMITHARVEST,t	Traced calculation of harvested carbon from harvest volumes; confirmed that parameter values were calculated in carbon model /12/ following steps of Section 8.1.9 of methodology	Confirmed that annual outputs from LST model /10/ are consistent with 5- year outputs approved at validation /11/; independently calculated baseline harvest volume from LST model outputs, traced calculation of harvested carbon from harvested volume in carbon model /12/; confirmed that calculation approach set out in Appendix 2 of project description is consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	N/A
ΔCEMITMANUFACTURE, t	Same as for ΔCEMITHARVEST,t	Same as for ΔCEMITHARVEST,t	N/A
LEy	Same as for SEy below	Same as for SEy below	N/A
SEy	Confirmed that calculations set out in	Confirmed that market leakage option 2 (as set	N/A



Data/Parameter	Steps taken by audit team to assess accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description /1/ have been followed	appropriateness of default values
	Figure 1 of methodology were correctly implemented in carbon model /12/ through review of calculations	out in Section 8.3.4 of methodology) is documented as the selected approach in Section 4.3 of project description; confirmed that calculation approach set out in Appendix 2 of project description is consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	
MLFy	N/A (parameter not used)	N/A (parameter not used)	N/A (parameter not used)
BChv, n	Traced calculation of harvested carbon from harvest volumes	Same as for ΔCPERMHWP2,t	N/A

#### 4.2.2 Data and Parameters Monitored

	Steps taken by audit team to assess		
Data/Parameter	accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description have been followed	appropriateness of default values
APRJ,i	N/A (confirmed at validation)	Confirmed that all values were correctly sourced from Table 7 of project description	N/A
APSP,i	Confirmed that plot size was correctly calculated based on a plot radius of 14 m	N/A	N/A
Ap,i,t	Same as for APSP,i	N/A	N/A
DBH i,t	N/A (assessed during previous verification audit)	N/A (assessed during previous verification audit)	N/A
Height i,t	Same as for DBH i,t	Same as for DBH i,t	N/A
L,t	Same as for DBH i,t	Same as for DBH i,t	N/A



	Steps taken by audit		
	team to assess		
Data/Parameter	accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description have been followed	appropriateness of default values
dn,t	Same as for DBH i,t	Same as for DBH i,t	N/A
DLDW,c,i,t	N/A (confirmed at validation)	Confirmed that values were sourced from page 55 of project description	N/A (confirmed at validation)
BAGi,t	Recalculated values to confirm that implementation of allometric equations, as carried out in inventory workbook /13/, was correctly done (using parameters "Allometric equation parameters" that were available at validation)	Confirmed that implementation of allometric equations, as carried out in inventory workbook /13/, is consistent with parameters as set out in Standish, Manning, & Demaerschalk, 1985, as referenced in Section 3.2 of project description /1/	N/A (confirmed at validation)
BBGi,t	Traced calculation from BAGi,t using parameter Ri (confirmed at validation)	Confirmed that value of parameter was "Calculated from BAGi,t and Ri" as stated in Section 3.2 of project description	N/A
BTOTALi,t	Confirmed that summation in Equation 28b of methodology was correctly implemented in inventory workbook /13/ through review of calculations	Confirmed that Equation 28b of methodology is referenced in Section 3.2 of project description	N/A
CLB,i,t	Confirmed that summation in Equation 28c of methodology was correctly implemented in inventory workbook /13/ through review of calculations	Confirmed that Equation 28c of methodology is referenced in Section 3.2 of project description	N/A
CDOM,i,t	Confirmed that summation in Equation 28e of methodology was correctly implemented in inventory workbook /13/ through review of calculations	Confirmed that Equation 28e of methodology is referenced in Section 3.2 of project description	N/A
N ,t	Same as for DBH i,t	Same as for DBH i,t	N/A
Mean tree age	Same as for DBH i,t	Same as for DBH i,t	N/A
fPRJ,NATURAL,i,t	Same as for ΔCBSL,LB,t in Section 4.2.2 above	Same as for $\Delta CBSL,LB,t$ in Section 4.2.2 above	N/A



	Steps taken by audit		
	team to assess		
Data/Parameter	accuracy of GHG	whether	appropriateness of default values
	emission reductions and removals	methods/formulae set out in project	of default values
	and removals	description have been	
		followed	
fPRJ,HARVEST,i,t	Same as for $\Delta CBSL, LB, t$	Same as for ΔCBSL,LB,t	N/A
	in Section 4.2.2 above	in Section 4.2.2 above	
fPRJ,DAMAGE,i,t	Same as for $\Delta CBSL, LB, t$	Same as for $\Delta CBSL, LB, t$	N/A
	in Section 4.2.2 above	in Section 4.2.2 above	
fPRJ,BLOWDOWN,i,t	Same as for $\triangle CBSL, LB, t$	Same as for $\triangle CBSL, LB, t$	N/A
	in Section 4.2.2 above	in Section 4.2.2 above	N/A
fPRJ,SNAGFALLDOWN,i,t	Same as for $\Delta CBSL,LB,t$ in Section 4.2.2 above	Same as for $\Delta CBSL,LB,t$ in Section 4.2.2 above	N/A
fPRJ,lwDECAY,i,t	Same as for $\Delta CBSL, LB, t$	Same as for $\Delta CBSL, LB, t$	N/A
IF NJ, WDECAT, I, t	in Section 4.2.2 above	in Section 4.2.2 above	
DOMSNAG,i,t	Same as for BAGi,t	Same as for BAGi,t	N/A
	,		
DOMLDW,i,t	Confirmed that	Confirmed that	N/A
	summation in Equation 60c, Section 9.3.5 of	calculation approach set out in Appendix 2 of	
	methodology was	project description is	
	correctly implemented in	consistent with	
	inventory workbook /13/	methodology, and thus,	
	through review of	satisfaction of	
	calculations	requirements of	
		methodology inherently	
		results in compliance	
		with methods set out in	
		project description	
VLDW,c	Confirmed that	Confirmed that	N/A
	summation in Equation	calculation approach set	
	60a, Section 9.3.5 of	out in Appendix 2 of	
	methodology was	project description is	
	correctly implemented in	consistent with	
	inventory workbook /13/	methodology, and thus,	
	through review of	satisfaction of	
	calculations	requirements of	
		methodology inherently	
		results in compliance	
		with methods set out in project description	
L,i,t	Same as for DBH i,t	Same as for DBH i,t	N/A
dn,i,t	Same as for DBH i,t	Same as for DBH i,t	N/A
N i,t	Same as for DBH i,t	Same as for DBH i,t	N/A
EM	Assessed third	Confirmed that Equation	N/A
	methodology deviation	60a of methodology is	1 1// 1
	discussed in Section 3.2	referenced in Section 3.2	
	above; recalculation of	of project description;	
	results to confirm that	confirmation that	
	calculation followed	Equation 60a of	
	approach described in	methodology was	
	third methodology	followed except as	
		deviated from (as	



	Steps taken by audit team to assess		
Data/Parameter	accuracy of GHG emission reductions and removals	whether methods/formulae set out in project description have been followed	appropriateness of default values
	deviation described in monitoring report	described in third methodology deviation described in monitoring report)	
EI	Confirmed that calculation in Equation 60a, Section 8.5.3 of methodology was correctly implemented in inventory workbook /13/ through recalculation of results	Confirmed that Equation 60c of methodology is referenced in Section 3.2 of project description	N/A
EP	Confirmed that summation in Equation 60f, Section 8.5.3 of methodology was correctly implemented in inventory workbook /13/ through review of calculations	Confirmed that Equation 60f of methodology is referenced in Section 3.2 of project description	N/A
ERy,ERR,	Confirmed that system of calculations in Table 6 of methodology was correctly implemented in inventory workbook /13/ through recalculation of results	Confirmed that calculation approach set out in Section 4.5 of project description is consistent with methodology, and thus, satisfaction of requirements of methodology inherently results in compliance with methods set out in project description	N/A

#### 4.3 Quality of Evidence to Determine GHG Emission Reductions and Removals

The evidence used to determine the GHG reductions and removals was of sufficient quantity and appropriate quality. An identification of the categories of evidence used to determine the GHG emission reductions and removals, and a description of the steps taken to assess the sufficiency of quantity, and appropriateness of quality, of each category of evidence, follows.

	Steps taken by audit	Steps taken by audit team to assess		
Category	reliability, source, nature of evidence	information flow from data generation and aggregation, to recording, calculation and final	appropriateness of implemented calibration frequency	



		transposition into the monitoring report	of monitoring equipment
Reporting workbooks /10/ /11/ /12/ /13/	Workbooks originated from project personnel and were determined, after thorough testing, to be of high quality and highly reliable; quantity of workbooks provided to audit team was sufficient	In all cases, audit team traced data contained in workbooks back to their respective sources, which were:(1) other workbooks,(2) project description/1/; (3) workbooks claimed to be validated by project personnel; audit team reviewed and/or recalculated all relevant calculations and assessed final transcription of data into monitoring report	N/A
Project geodatabase /7/	Geodatabase originated from project personnel and was tested, via recalculation of area summaries in key shapefiles, to contain information consistent with project description /1/; it is well-organized and serves as adequate evidence regarding project area stratification	N/A (no values were traced directly into monitoring report or associated work products; geodatabase was assessed in order to assist with confirmation of lack of disturbance during helicopter overflight described in Section 2.4 above)	N/A
Email attestations regarding harvesting /8/ /9/	Attestations originated from personnel known to hold leadership roles with American Land Conservancy and Rocky Mountain Elk Foundation; chain of custody and transfer was evident in email documents; they are	Audit team confirmed that information regarding lack of harvesting was faithfully transferred to monitoring report	N/A



	adequate for intended purpose		
Satellite imagery and associated map documents /6/	Evidence is documentation provided by project personnel and sourced from Pleiades 1A satellite imagery; it is considered highly reliable by audit team	Audit team assessed maps to confirm that claims regarding lack of disturbance in report were consistent with imagery	N/A

# 4.4 Non-Permanence Risk Analysis

The determined value of the overall risk rating has not changed since the prior verification audit. The audit team did not perform a re-assessment of the risk analysis from first principles, but did assess the following:

- Whether any circumstances or conditions may have transpired since the prior verification audit such that the determination made by the previous verification body is no longer valid; and
- Whether items meant to address certain risks are in place and functioning as intended.

The determined value of the overall risk rating of 10% remains appropriate and in conformance to the AFOLU Non-Permanence Risk Tool, to the extent that said determined value was appropriate and in conformance to the AFOLU Non-Permanence Risk Tool at the time of the prior verification audit.

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
(a)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Audit team confirmed, through email correspondence with stakeholders (as described in Section 2.3.2 above), that no planting of trees within project area has occurred since project start date</li> </ul>	N/A	Risk rating is appropriate

#### 4.4.1 Internal Risk - Project Management



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
(b)	<ul> <li>Audit team reviewed prior non-permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Audit team confirmed, through email correspondence with stakeholders (as described in Section 2.3.2 above), that project area remains very remote and presence of activities that would threaten stocks on which GHG credits have been issued (e.g., illegal logging) are unlikely</li> <li>Audit team exercised professional judgment, gained from prior knowledge during previous verification engagement, to confirm that activities that would threaten stocks on which GHG credits have been issued threaten stocks on prior knowledge during previous verification engagement, to confirm that activities that would threaten stocks on which GHG credits have been issued are unlikely</li> </ul>	N/A	Risk rating is appropriate
(c)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Through correspondence with project personnel, audit team confirmed that no change occurred in management team that would impact the applied score</li> </ul>	N/A	Risk rating is appropriate



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
(d)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Audit team confirmed that it remains possible to access project area within a day's travel from the Colorado offices of Camco, given favorable weather conditions and assuming travel during the summer months (when daylight is longer)</li> </ul>	N/A	Risk rating is appropriate
(e)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Through correspondence with project personnel, audit team confirmed that no change occurred in management team that would impact the applied score</li> </ul>	N/A	Risk rating is appropriate

#### 4.4.2 Internal Risk – Financial Viability

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
(a)	-	-	N/A
(b)	-	-	N/A
(c)		-	N/A



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
(d)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> </ul>	N/A	Risk rating is appropriate
(e)	-	-	N/A
(f)	-	-	N/A
(g)	-	-	N/A
(h)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>As breakeven has already occurred, no cash out is required before project reaches breakeven; therefore, audit team agrees that project has inherently secured 100% of funding needed to cover total cash out before project reaches breakeven</li> </ul>	N/A	Risk rating is appropriate
(i)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>As breakeven has already occurred, no cash out is required before project reaches breakeven; therefore, audit team agrees that project inherently has as callable resources 100% of funding needed to cover total cash out before project reaches breakeven</li> </ul>	N/A	Risk rating is appropriate



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
(a)	-	-	N/A
(b)	-	-	N/A
(c)		-	N/A
(d)	Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis	NA	Risk rating is appropriate
(e)	-	-	N/A
(f)	-	-	N/A
(g)	-	-	N/A
(h)	See Section 4.4.4 below	N/A	Risk rating is appropriate

#### 4.4.3 Internal Risk – Opportunity Cost



4.4.4				
Risk	Assessment of rationale, assumptions	Assessment of quality of	Conclusion	
	and justification	documentation and data	regarding	
		provided	appropriaten	
			ess of the	
			risk rating	
			J	
	Audit team reviewed prior non-	N/A	Risk rating is	
	permanence risk report and		appropriate	
	confirmed that applied score is			
	unchanged from past risk analysis			
	Prior verification report states "The			
	proponent has indicated that a			
	federal conservation easement is			
	in place to protect the area for at			
	least 100 years. These easements			
	have been reviewed the audit team			
	and have been verified."			
	Audit team confirmed, through			
	interviews with Bureau of Land			
	Management personnel, that			
	conservation easements were still			
	valid and remained in full force and			
	effect as of 5 January 2015			
	Thus, conservation easements			
	continue to be in place, and they			
	were previously confirmed to			
	constitute "a legally binding			
	agreement that covers at least a			
	100 year period from the project			
	start date".			

### 4.4.4 Internal Risk – Project Longevity



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
(a)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> </ul>	N/A	N/A
(b)	<ul> <li>Audit team reviewed prior non-permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Audit team confirmed that agreements conferring ownership and resource access/use rights remain in force (see Section 4.4.4 above for details)</li> </ul>	N/A	Risk rating is appropriate
(c)	<ul> <li>Audit team reviewed prior non-permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Audit team confirmed that agreements conferring ownership and resource access/use rights remain in force (see Section 4.4.4 above for details)</li> <li>Audit team carried out correspondence with Bureau of Land Management and Alaska Department of Natural Resources personnel reported no disputes over land tenure or ownership within project area</li> </ul>	As evidence of due process undertaken to confirm absence of disputes over ownership and land/resource access/usage rights, audit team was provided with screenshots showing output from queries of Alaska Department of Natural Resources Recorder's Office database /14/; documentation appears high quality (as it derives from an official source) and reliable for confirmation of absence of disputes	Risk rating is appropriate

# 4.4.5 External Risk – Land Tenure and Resource Access/Impacts



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
(d)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Audit team confirmed that agreements conferring ownership and resource access/use rights remain in force (see Section 4.4.4 above for details)</li> <li>Audit team carried out correspondence with Bureau of Land Management and Alaska Department of Natural Resources personnel reported no disputes over access/use rights within project area</li> </ul>	As evidence of due process undertaken to confirm absence of disputes over ownership and land/resource access/usage rights, audit team was provided with screenshots showing output from queries of Alaska Department of Natural Resources Recorder's Office database /14/; documentation appears high quality (as it derives from an official source) and reliable for confirmation of absence of disputes	Risk rating is appropriate
(e)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> </ul>	N/A	Risk rating is appropriate



# 4.4.6 External Risk – Community Engagement

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Audit team inquired with Alaska Department of Natural Resources personnel regarding possible instances of households who are reliant on project area, and was informed of no such instances, and no instances of trespass during monitoring period</li> </ul>	N/A	Risk rating is appropriate

#### 4.4.7 External Risk – Political Risk

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating	
(a)	-	-	N/A	
(b)	-	-	N/A	
(c)	-	-	N/A	
(d)	-	-	N/A	
(e)	<ul> <li>Audit team downloaded dataset from World Bank Institute's Worldwide Governance Indicators (for the most recent five years, 2009-2013; accessed 9 January 2015) and replicated determination that governance score is 0.82 or higher.</li> </ul>	<ul> <li>The dataset used is required by the AFOLU Non-Permanence Risk Tool, and can be considered high quality.</li> </ul>	Risk rating is appropriate	



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
(f)	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that applied score is unchanged from past risk analysis</li> <li>Through review of FSC-US website (<u>https://us.fsc.org/;</u> accessed 23 January 2015), audit team confirmed that the United States continues to have an FSC standards body.</li> </ul>	N/A	Risk rating is appropriate



# 4.4.8 Natural Risk

Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
Fire	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that claims regarding likelihood, significance and mitigation are unchanged from claims approved as part past risk assessment.</li> <li>Audit team reviewed website (accessed 9 January 2015) http://afsmaps.blm.gov/imf_fireh istory/imf.jsp?site=firehistory and confirmed absence of recorded fires within project area since 1939 (and, therefore, absence of recorded fires within project area since previous risk analysis).</li> <li>Audit team inquired with Alaska Department of Natural Resources personnel regarding any natural disturbances in project area during reporting period and was told of no instances of such</li> <li>Audit team agrees that: a) there is no change in likelihood; b) assumed significance remains conservative; and c) it remains conservative to not apply mitigation score</li> </ul>	<ul> <li>The website provided for review by audit team is work product of a United States government agency (Bureau of Land Management) and can be expected to contain the best available information; documentation provided is high quality and specifically includes fires recorded in 2014.</li> </ul>	Risk rating is appropriate



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
Pest and Disease Outbreaks	<ul> <li>Audit team reviewed prior non-permanence risk report and confirmed that claims regarding likelihood, significance and mitigation are unchanged from claims approved as part past risk assessment.</li> <li>In addition, audit team reviewed report "Forest Health Conditions in Alaska – 2010" (accessed 9 January 2015 from http://forestry.alaska.gov/pdfs/in sects/FHP20116_2010_FHProt Rpt.pdf) and confirmed that part or all of project area was flown over in this survey and that no significant pest activity was observed</li> <li>Audit team inquired with Alaska Department of Natural Resources personnel regarding any natural disturbances in project area in last five years and was told of no instances of such</li> <li>Audit team agrees that: a) there is no change in likelihood; b) assumed significance remains conservative; and c) it remains conservative to not apply mitigation score</li> </ul>	<ul> <li>The report "Forest Health Conditions in Alaska – 2010" is jointly published by two government agencies (United States Forest Service and State of Alaska, Department of Natural Resources) and can be considered of high quality.</li> </ul>	Risk rating is appropriate



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
Extreme Weather	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that claims regarding likelihood, significance and mitigation are unchanged from claims approved as part past risk assessment.</li> <li>Audit team inquired with Alaska Department of Natural Resources personnel regarding any natural disturbances in project area in last five years and was told of no instances of such</li> <li>Audit team agrees that: a) there is no change in likelihood; b) assumed significance remains conservative; and c) it remains conservative to not apply mitigation score</li> </ul>	N/A	Risk rating is appropriate



Risk	Assessment of rationale, assumptions and justification	Assessment of quality of documentation and data provided	Conclusion regarding appropriaten ess of the risk rating
Geological Risk	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that claims regarding likelihood, significance and mitigation are unchanged from claims approved as part past risk assessment.</li> <li>Audit team inquired with Alaska Department of Natural Resources personnel regarding any natural disturbances in project area in last five years and was told of no instances of such</li> <li>Audit team agrees that: a) there is no change in likelihood; b) assumed significance remains conservative; and c) it remains conservative to not apply mitigation score</li> </ul>	N/A	Risk rating is appropriate
Other natural risk	<ul> <li>Audit team reviewed prior non- permanence risk report and confirmed that claims regarding likelihood, significance and mitigation are unchanged from claims approved as part past risk assessment.</li> <li>Audit team inquired with Alaska Department of Natural Resources personnel regarding any natural disturbances in project area in last five years and was told of no instances of such</li> </ul>	N/A	Risk rating is appropriate

# 5 VERIFICATION CONCLUSION

The audit team asserts, with no qualifications or limitations, that:



- The project complies with the verification criteria for projects and their GHG emission reductions or removals set out in VCS Version 3
- The project complies with the validation criteria for projects set out in VCS Version 3

The audit team has been able to confirm that the project has been implemented in accordance with the project description and subsequently validated variations.

The audit team has been able to confirm, with a reasonable level of assurance, that the quantity of GHG emission reductions and removals set out below has been quantified in accordance with the VCS rules. As documented in Section 4.4 above, the audit team can also confirm that the non-permanence risk score of 10% has been quantified in accordance with the VCS rules.

Verification period: From 01-January-2014 to 31-December-2014

Verified GHG emission reductions and removals in the above verification period:

Year	Baseline emissions or removals (tCO2e)	Project emissions or removals (tCO2e)	Leakage emissions (tCO2e)	Net GHG emission reductions or removals (tCO2e)*	Uncertainty discount (tCO2e)	Buffer credits to be deposited into AFOLU pooled buffer account	Verified Carbon Units available for issuance and sale
2014	(124,329)	8,740	(13,987)	119,082	(1,786)	(12,678)	104,618
Total	(124,329)	8,740	(13,987)	119,082	(1,786)	(12,678)	104,618

\*Note: this has been calculated by following the explanatory text in Section 8.5.1 of the methodology indicating that "The annual net carbon emissions reductions is the actual net GHG removals by sinks from the project scenario minus the net GHG removals by sinks from the baseline scenario". This is the correct method of calculation because the baseline emissions/removals are negative (indicating emissions) and the project emissions/removals are positive (indicating removals). While this is correct, it conflicts with Equation 58 of the methodology (which requires calculation of the GHG removals from the baseline scenario minus those from the project scenario). This does not represent a methodology deviation because it is indicative of an internal inconsistency within the methodology (i.e., the methodology does not clearly indicate that either approach is preferred).



#### APPENDIX A: LIST OF FINDINGS

#### NCR 2014.1 dated 01-09-2015

**Standard Reference**: AFOLU Requirements V3.4, Section 3.7.3; VCS Non-Permanence Risk Report Template (Short Form) V3.0, Section 2

**Document Reference**: Afognak - VCS Non-Permanence Risk Report 2014 MR v1.0; Afognak - VCS Risk Report Calculation Tool, v3.0 2014 MR v1.0

**Finding**: The AFOLU Requirements states that "Projects shall prepare a non-permanence risk report in accordance with VCS document AFOLU Non-Permanence Risk Tool at both validation and verification... The non-permanence risk report shall be prepared using the VCS Non-Permanence Risk Report Template..." Section 2 of the VCS Non-Permanence Risk Report Template (Short Form) requires the user to "Document and substantiate the risk and/or mitigation for each risk factor."

Section 2.3 of the non-permanence risk report states that "Over the last five years of available data (2008-2012), the United States has an average WBI Governance Indicator of 1.25, therefore risk rating e) has been applied." This is not consistent with the following table, which indicates that the data used span the period 2009-2013 and that the average WBI Governance Indicator was 1.24. Thus, the risk factor in question has not been documented with complete clarity. In addition, there is a discrepancy between the value of 1.23, as stated in the non-permanence risk report, and the value of 1.25, as contained within the calculation tool (in the file entitled "Afognak - VCS Risk Report Calculation Tool, v3.0 2014 MR v1.0"). Client Response: The Non-Permanence Risk Report and Risk Tool documents have been corrected to reflect the calculated Political Risk value of 1.24. Both files have been updated to version 1.1. Auditor Response: Through review of the revised risk report entitled "Afognak - VCS Non-Permanence Risk Report 2014 MR v1.1", the audit team can confirm that information regarding the WBI Governance Indicator has been consistently presented. Through review of the revised risk report calculation tool entitled "Afognak - VCS Risk Report Calculation Tool, v3.0 2014 MR v1.1", the audit team can confirm that the information provided regarding the WBI Governance Indicator is consistent with that in the risk report. Therefore, the risk factor has been appropriately documented and substantiated, and the nonconformity has been resolved.

Closing Remarks: The Client's response adequately addresses the finding.