

REVISED VM0009 METHODOLOGY ELEMENT - SECOND ASSESSMENT (VALIDATION) REPORT

VERSION 01



Document Prepared By: Environmental Services, Inc. (Project Number VO12033.00)

Methodology Element Title	Methodology for Avoided Deforestation	
Version	Version 2.154	
Methodology Element Category	Methodology	
	Methodology Revision	X
	Module	
	Tool	
Sectoral Scope(s)	Sectoral Scope 14; REDD	

Report Title	Revised VM0009 Methodology Element - Second Assessment (Validation) Report	
Report Version	01	
Assessment Criteria	VCS Methodology Approval Process (v3.3, 01 February 2012); VCS Program Guide (v3.2, 01 February 2012); VCS Standard (v3.2, 01 February 2012); VCS Program Definitions (v3.2, 01 February); VCS Agriculture, Forestry and Other Land Use (AFOLU) Requirements (v3.2, 01 February 2012)	
Client	Wildlife Works 242 Redwood Highway - Frontage Road, Mill Valley, CA 94941; www.wildlifeworks.com	
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Summary:

Environmental Services, Inc (ESI) was selected on 4 April 2012 by Wildlife Works and VCSA to perform the second methodology assessment of the revised VM0009 Methodology in accordance with the VCS Methodology Approval Process, VCS Standard, VCS Program Guide, and the VCS AFOLU Requirements.

The second revision of the VM0009 methodology element provides a means to quantify Net GHG Emission Reductions and Removals (NERs) from project activities that prevent conversion of forest to non-forest. The methodology accounts for emissions from all allowable pools specified by the VCS AFOLU Requirements for the REDD project category, with the exception of peat soils and litter. This methodology can be applied to account for avoided emissions from planned deforestation (APD) and degradation, and unplanned deforestation and degradation (AUDD) baseline scenarios.

This assessment (validation) was conducted as required by the Verified Carbon Standard’s double validation process when a methodology element is revised. ESI’s review included detailed analysis of the revised VM0009 methodology element, literature reviews, technical reviews, and use of previously approved methodologies, as needed. After completion of ESI’s internal conflict of interest procedures, an on-site validation meeting was conducted on 10-12 April 2012. During this time period, Version 2.106 of the VM0009 methodology element was validated. ESI’s first round Non-conformity Reports (NCR) and Clarifications (CL) were issued to Wildlife Works on 18 April 2012. The revised VM0009 methodology element was received from WWC on 7 May 2012. ESI closed all NCRs and CLs, and approved the revisions made by WWC (Version 2.154) on 27 July 2012. DNV’s assessment report was received by ESI on 23 August 2012.

The scope of the methodology element 2nd validation included applicability conditions, project boundary, procedure for demonstrating additionality, procedure for determining baseline scenario, baseline emissions, leakage, quantification of net GHG emission reduction and/or removals, monitoring, data and parameters, adherence to the project principles of the VCS program, and relationship to approved or pending methodologies. The scope encompassed only the validation of new/additional sections and concepts that have been added to VM0009 since its original approval.

One (1) non-conformity report (NCR) was issued and eight (8) clarifications (CL) were requested. All were addressed satisfactorily by Wildlife Works during the methodology assessment process. These NCRs and CLs provided needed clarity to ensure that the methodology was in compliance with VCS standards and requirements. No restrictions or uncertainties were identified during this assessment.

All findings were satisfactorily addressed by Wildlife Works. ESI confirms that all validation activities within the scope of this assessment for the revised VM0009 methodology element, adhere to the criteria established for this assessment as documented in this report, are complete and concludes without any qualifications or limiting conditions that the methodology element documentation (Methodology for Avoided Deforestation, Version 2.154) meets the requirements of VCS Program Guide, VCS Standard, VCS AFLOU Requirements, and the VCS Methodology Approval Process. Therefore, ESI recommends that VCSA approves the revised methodology element (Methodology for Avoided Deforestation, Version 2.154) as prepared by Wildlife Works.

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1 INTRODUCTION

1.1 Objective

The validation (second assessment) objective was to assess the likelihood that implementation of the revised VM0009 methodology element would result in the accurate calculations and appropriate eligibility criteria of the GHG emission removal methodology as stated by the methodology developer (ISO 14064-3:2006).

1.2 Scope and Criteria

The scope of the revised VM0009 methodology element 2nd assessment included applicability conditions, project boundary, procedure for demonstrating additionality, procedure for determining baseline scenario, baseline emissions, leakage, quantification of net GHG emission reduction and/or removals, monitoring, data and parameters, adherence to the project principles of the VCS Program, and relationship to approved or pending methodologies. The scope encompassed only the validation of new/additional sections and concepts that were added to VM0009 since its original approval.

The criteria followed the methodology element validation and VCS Program guidance documents provided by VCS located at <http://www.v-c-s.org/program-documents/find-program-document>. These documents include:

- VCS Methodology Approval Process (v3.3, 01 February 2012)
- VCS Program Guide (v3.2, 01 February 2012)
- VCS Standard (v3.2, 01 February 2012)
- VCS Program Definitions (v3.2, 01 February)
- VCS Agriculture, Forestry and Other Land Use (AFOLU) Requirements (v3.2, 01 February 2012)
- Wildlife Works Carbon LLC: Methodology for Avoided Mosaic Deforestation of Tropical Forests, Version 1.1, 10 November 2011

1.3 Summary Description of the Methodology Element

Revised VM0009 now provides a means to quantify *Net GHG Emission Reductions and Removals (NERS)* from project activities that prevent conversion of *forest* to non-forest. The methodology accounts for *emissions* from all allowable pools specified by the VCS AFOLU Requirements for the REDD project category, with the exception of peat soils and litter. This methodology can be applied to account for avoided *emissions* from planned deforestation and degradation (APD) and unplanned deforestation and degradation (AUDD) baseline scenarios.

This methodology differentiates between five *baseline types* based on the proximate *agent of deforestation*, the *drivers of deforestation*, whether the *specific agent of deforestation* can be identified and the progression of deforestation. The *agent of deforestation* can include a *primary agent* and *secondary agents* which contribute to a *cascade of degradation* ultimately leading to a non-forest state. Under this *methodology*, project proponents implement project activities in the project area and surrounding region that address the agents and *drivers of deforestation*. When the agents and *drivers of deforestation* are not known, they can be identified using expert knowledge or a participatory rural appraisal, which is a type of community survey. In some cases related to planned *deforestation*, the *specific agent of deforestation* may be known. Identifying the agents and *drivers of deforestation* is essential to designing effective project activities to mitigate *deforestation*.

The baseline scenario for a project is defined by at least one baseline type. Once the agents and *drivers of deforestation* are known, this information can be used to identify baseline types. Each baseline type is characterized by *baseline emissions models* that are applied to a project accounting area. Parameters to

these models are partially determined using a reference area. Descriptions of parameterization methods are described in section 2.1.1 and vary by baseline type. The intent of these models is to provide simplified and unified accounting with clear and user-friendly implementation. This approach dramatically reduces the number of parameters and equations in the *methodology* relative to prior versions.

Leakage is quantified using an *activity-shifting leakage area(s)* and a *market-effects leakage area*, which may or may not overlap with the *reference area*. Like the *reference area*, the *activity-shifting leakage area* is defined by the agents and *drivers of deforestation* for each identified baseline type in the baseline scenario. However unlike the *reference area*, the *activity-shifting leakage area(s)* is also defined by proximity to the project area and anticipated directional shifts in *deforestation* activities. The *activity-shifting leakage area* is more purposeful than a belt or an arbitrary buffer around the project area. The *market-effects leakage area* is defined when *long-lived wood products* exist in the *baseline scenario* to estimate *leakage* resulting from a change in supply of domestic *long-lived wood products* as a result of illegal or legal-sanctioned logging.

Residual biomass in the *baseline scenario* is quantified for each baseline type using a *proxy area*. The *proxy area* is distinct from the *leakage areas*, and may or may not overlap the *reference area*. The *proxy area(s)* characterizes the carbon stocks associated with the end land uses in the *baseline scenario*. The project proponent measures biomass for selected *carbon pools* in the *proxy area*. The *proxy area* should have the same landscape configuration as the project area and be large enough to accommodate an adequate (per Appendix B and D) sample of measurement plots, but the *proxy area* need not be as large as the project area. The *proxy area* allows project proponents to include baseline types with end land uses that have significant biomass, such as swidden agriculture, the accounting is complex.

Compared to approaches taken by other REDD methodologies, the approaches used in this *methodology* deviate significantly in three regards: First, the *baseline emissions models* predict cumulative *emissions* over time rather than an aerial rate of *deforestation* in hectares per year. Second, important parameters to the *baseline emissions models* are fit using simple point observations of *deforestation* over a historic *reference period* rather than requiring a series of complex Land Use Land Cover (LULC) classifications of full-coverage satellite imagery. Third, accounting for the various sources of *emissions* from biomass is dramatically simplified by rolling all sources of potential *emissions* into a single model and parameterizing the model based on easily understood *baseline types*.

2 ASSESSMENT APPROACH

2.1 Method and Criteria

As defined by ISO 14064-3:2006 (E), “validation is the systematic, independent and documented process for the evaluation of a greenhouse gas assertion in a GHG project plan against agreed validation criteria”. In the case of a new methodology validation, the validation is the systematic, independent documented process for the evaluation of methodology element documentation against the VCS Program criteria. ESI’s analysis technique had three parts: 1) ESI review and assessment; 2) utilization of independent technical experts; and 3) review of methodology developer’s explanations/clarifications and insight. ESI’s review included detailed analysis of the revised VM0009 methodology element, literature reviews, technical reviews, and use of previously approved methodologies, as needed. A summary of all findings were provided to Wildlife Works.

The level of assurance is used to determine the depth of detail that the validator places in the validation plan to determine if there are any errors, omissions, or misrepresentations (ISO 14064-3:2006). ESI assessed the revised methodology (proposed data, sampling descriptions, documentation, calculations, etc.) to provide reasonable assurance to meet the requirements set out in the VCS Standard (and its ancillary documents).

Materiality is a concept that errors, omissions and misrepresentations could affect the GHG reduction assertion and influence the intended users (ISO 14064-3:2006). The materiality of a methodology element is based on an evaluation of whether or not the methodology is following VCS Program requirements. If the methodology does not adhere to the VCS program requirements, the methodology developer is given the opportunity to correct the non-conformity and amend the methodology within a reasonable timeframe. If the non-conformity is corrected and the level of assurance has been met, then the methodology is recommended for approval.

The criteria followed the methodology element validation and VCS Program guidance documents provided by VCS located at <http://www.v-c-s.org/program-documents/find-program-document>. These documents include:

- VCS Methodology Approval Process (v3.3, 01 February 2012)
- VCS Program Guide (v3.2, 01 February 2012)
- VCS Standard (v3.2, 01 February 2012)
- VCS Program Definitions (v3.2, 01 February)
- VCS Agriculture, Forestry and Other Land Use (AFOLU) Requirements (v3.2, 01 February 2012)

2.2 Document Review

A detailed review of the revised methodology element documentation was conducted to ensure consistency with, and identify any deviations from, VCS program requirements. The methodology was reviewed focusing on the methodology's adherence to VCS program guide, the VCS Standard, VCS AFOLU Requirements and other guidance documents. Additionally, the review focused on technical aspects of the methodology and its adherence to currently accepted principles and methods associated with REDD. The following is the final list of documents received and reviewed by ESI:

- VM0009 Methodology for Avoided Deforestation V2.106
- VM0009 Methodology for Avoided Deforestation V2.154 (final version)
- Changes to VM0009 for Auditor – July 2012
- VM0009 Compare – V2.145 – V2.153
- METHODOLOGY REVISIONS FOR VM0009 V1.1: AVOIDED DEFORESTATION OF TROPICAL FORESTS REPORT N°2011-9347 REVISION NO. 2

2.3 Interviews

This second assessment of the revised VM0009 methodology Version 2.106 was conducted on-site at Wildlife Works' offices in Mill Valley, CA, 10-12 April 2012. Jeremy Freund, Vice President, Carbon Development for Wildlife Works, Kyle Holland, President of ecoPartners, and Ben Caldwell, Vice President of ecoPartners were present. Presentations of the changes included in this revision were presented by Kyle Holland. Day one of this assessment covered Sections 1 – 5 of the methodology. Day two of this assessment covered Section 6, and day three covered Section 7 – 10 of the methodology. Steve Ruddell from ESI interviewed the stated individuals on the sections of the methodology as they were presented. Findings were discussed as they were issued by ESI.

2.4 Use of VCS-Approved Expert

Steven Ruddell, President of CarbonVerde, LLC and VCS approved REDD expert conducted the on-site validation meeting and technical assessment for ESI.

2.5 Resolution of Any Material Discrepancy

No material discrepancies were issued during this assessment.

2.6 Internal Quality Control

The Regional Technical Manager is responsible for the overall performance of the methodology assessment process, and is the main authority for quality assurance and quality control of the validation/verification policy and procedures of the ESI Management System. The methodology element assessment was conducted according to ESI's policies and procedures, their accreditation under ISO 14065:2007, and VCS program requirements.

3 ASSESSMENT FINDINGS

3.1 Applicability Conditions

Two findings of non-conformance were issued during this assessment to Section 4.3 Applicability Conditions of the VCS Standard, Version 3.2. By addressing these two findings, as well as the requests for clarification findings this methodology element is in conformance with, and adequately addresses, all applicable requirements of Section 4.3 of the VCS Standard. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.2 Project Boundary

No findings of non-conformance were issued during this assessment to Section 4.4 Project Boundary of the VCS Standard, Version 3.2, and Section 4.3 of the VCS AFOLU Requirements. Methodology element Sections 5.1 – 5.4, including Table 2, Sections 6.3 – 6.7, Sections 8.2 – 8.3, and Section 8.4.5 adequately address the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.3 Procedure for Determining the Baseline Scenario

No findings of non-conformance were issued during this assessment to Section 4.5 Baseline Scenario of the VCS Standard, Version 3.2, and Section 4.4 of the VCS AFOLU Requirements. By addressing the requests for clarification, methodology element Sections 5, 7, and Appendices A, B, C, and D adequately address the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.4 Procedure for Demonstrating Additionality

No findings of non-conformance were issued during this assessment to Section 4.6 Additionality of the VCS Standard, Version 3.2. Methodology element Section 7 Procedure for Demonstrating Additionality adequately addresses the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.5 Baseline Emissions

No findings of non-conformance were issued during this assessment to Section 4 Baseline and Project Emissions/Removals of the VCS AFLOU Requirements. Methodology element Sections 6, including Tables 4 and 5, 6.15, 6.16, Sections 8.1 and 8.2, and Appendices B and C adequately address the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.6 Project Emissions

No findings of non-conformance were issued during this assessment to Section 4.5 Baseline and Project Emissions/Removals of the VCS AFLOU Requirements. Methodology element Sections 6, including Tables 4 and 5, 6.15, 6.16, Sections 8.1 and 8.2, and Appendices B and C adequately address the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.7 Leakage

No findings of non-conformance were issued during this assessment to Section 4.6 Leakage of the VCS AFLOU Requirements. By addressing the request for clarification, methodology element Sections 5.4, including Table 3, and Section 8.3 adequately address the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.8 Quantification of Net GHG Emission Reductions and/or Removals

No findings of non-conformance were issued during this assessment to Section 4.6 Quantification of Net GHG Emissions and/or Removals of the VCS Standard, Version 3.2, and Section 4.6 Quantification of Net GHG Emissions and/or Removals of the VCS AFLOU Requirements. Methodology element Sections 8 and 8.4 adequately address the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.9 Monitoring

No findings of non-conformance were issued during this assessment to Section 4.8 Monitoring of the VCS Standard, Version 3.2, and 4.8 Monitoring of the VCS AFLOU Requirements. Methodology element Sections 5.3, 5.4, 8.3, 9 and Appendix B adequately address the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.10 Data and Parameters

No findings of non-conformance were issued during this assessment to Section 4.8 Monitoring of the VCS Standard, Version 3.2, and 4.8 Monitoring of the VCS AFLOU Requirements. Methodology element Sections 9, 9.1, 9.2, and 9.3, and Appendices B, G, and H adequately address the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.11 Use of Tools/Modules

The only tool referenced by the methodology element is the VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities, v1.0. No findings of non-conformance were issued during this assessment to Section 4.6 Additionality of the VCS Standard, Version 3.2. Methodology element Section 7 Procedure for Demonstrating Additionality adequately addresses the VCS Standard's requirements for project boundary. Additionally, PD Requirements are identified at the end of each of these sections that provide direction to project proponents on specific documents and records, including procedures for how they must satisfy these sections of the methodology element.

3.12 Adherence to the Project Principles of the VCS Program

The assessed methodology element ensures that all principles, as identified in the VCS Program Guide, Version 3.2, are adhered to over the 30 year project and crediting period.

3.13 Relationship to Approved or Pending Methodologies

The methodology element provides this statement on the relationship to approved or pending methodologies; "This is a revision to VM0009 v1.1 to allow for baseline types which include logging and frontier-type deforestation. This revision also includes accounting and mensuration methodology to allow all permitted end land uses other than projects with peat soils in the baseline".

3.14 Stakeholder Comments

The revision to VM0009 was open for public comment from 6 March 2012 until 4 April 2012. No stakeholder comments were received.

4 RESOLUTION OF CORRECTIVE ACTION REQUESTS AND CLARIFICATION REQUESTS

Issued non-conformity report (NCR):

1. 4.1.6 A project method is a methodological approach that uses a project-specific approach for the determination of additionality and/or crediting baseline. This guidance document provides additional information to aid the interpretation of the VCS rules on standardized methods and should be read before developing or assessing such methods. Although the guidance document does not form part of the VCS rules, interpretation of the rules shall be consistent with the guidance document.

NCR #1 - No specific statement is made regarding the type of method used.

WWC response: We have modified the language of section 7, par 1 sentence 1 to read: "Project proponents shall demonstrate additionality using the latest version of the VCS "Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities" (VCS, 2012), a project method for demonstrating additionality" and we have added clarity in the first line of this section and in the first paragraph of the summary section, section 1.

Clarification (CL) requests:

1. 4.2.5 Eligible REDD activities are those that reduce net GHG emissions by reducing deforestation and/or degradation of forests. Deforestation is the direct, human-induced conversion of forest land to non-forest land. Degradation is the persistent reduction of canopy cover and/or carbon

stocks in a forest due to human activities such as animal grazing, fuelwood extraction, timber removal or other such activities, but which does not result in the conversion of forest to non-forest land (which would be classified as deforestation), and qualifies as forests remaining as forests, such as set out under the IPCC 2003 Good Practice Guidance. The project area shall meet an internationally accepted definition of forest, such as those based on UNFCCC host-country thresholds or FAO definitions, and shall qualify as forest for a minimum of 10 years before the project start date. The definition of forest may include mature forests, secondary forests, and degraded forests. Under the VCS, secondary forests are considered to be forests that have been cleared and have recovered naturally and that are at least 10 years old and meet the lower bound of the forest threshold parameters at the start of the project. Forested wetlands, such as floodplain forests, peatland forests and mangrove forests, are also eligible provided they meet the forest definition requirements mentioned above.

CL #1 - Consider requiring the PP to define the definition of Forests that it uses in a PDR in Section 4.

WWC response: We have added the requirement that the project proponent give the definition of forest used, the last PDR in section 4.

CL #2 - In Appendix A, consider adding Section A.4 that describes the relationship of the size of different areas listed in Table 1 of Section 2.1.2

WWC response: We have added a column to table 1 given the relative size of each of the areas.

2. 4.4.6 The baseline for REDD projects is comprised of a land-use and land-cover (LU/LC) change component and a carbon stock change component. These components may be addressed separately in a methodology as their scale of analysis may differ.

CL #3 - In Section 6.13 consider requiring q to be zero, or if not, that the PP must justify another value.

WWC response: The second PDR for section 6.7.13 now states "If the default of zero is not selected, for q, then a justification for the determination of q".

3. 4.4.6 1) APD: The criteria and procedures for identifying the baseline scenario shall require the project proponent to provide verifiable evidence to demonstrate, based on government plans (for publicly owned and managed land), community plans (for publicly owned and community-managed land), concessionary plans (for publicly owned and concession-holder managed) or landowner plans (for privately owned land), that the project area was intended to be cleared.

CL #4 - In Section 6.6, Table 4 consider requiring the PP to write procedures in a PDR for how it determines parameters m, tsa, tpa, and ADF.

WWC response: PDRs prescribing the methods for documenting and presenting procedures for determining these parameters are found in their respective sections, titled "Determining -parameter x-". These are currently 6.11, 6.8, 6.9, and 6.14.

CL #5 - For parameter m, clarify the explanation in Table 4. It currently is defined as volume degraded per day.

WWC response: The explanation of m has been modified to read "Commercial degradation per day (tCo2e/ha)".

4. 4.5.14 Procedures for quantifying GHG emissions/removals in all selected carbon pools may reference IPCC 2006 Guidelines for National GHG Inventories sections on conversion of forest to non-forest (for deforestation) and forests remaining as forest (for degradation).

CL #6 - Consider adding the IPCC reference to Section 1 Sources.

WWC response: This reference has not been added to section 1 - the language of the AFOLU requirements indicates it is optional, and that source was not used or cited in this document.

5. 4.6 b) Where the deforestation agent cannot be specifically identified, leakage shall be quantified based upon the difference between historic and with-project rates of deforestation by the identified most-likely-class of deforestation agent within the region. Alternatively, where such agents are driven by the demand for market commodities, the project may directly account for market leakage associated with the specific project activity. Where directly accounting for leakage, market leakage shall be accounted for at the country-scale, taking into account the supply and demand elasticity's for the commodity affected, and shall be based on methods for quantifying leakage from scientific peer-reviewed journal sources, as described above in Section 4.6.14.

CL #7 - In Section 8.3.3, consider adding a PDR requiring the PP to justify a value for market leakage that is zero.

WWC response: A PDR has been added to the end of section 8.3 which reads "If the market discount factor selected is zero (i.e. no market leakage), a justification of that choice."

6. Baseline re-evaluation

CL #8 - In Section 8.4.2.1, consider adding a graphic displaying the possible reversal at the time of baseline re-evaluation

WWC response: No graphic has been added as draft graphics we prepared seemed to add confusion to the section. We will consider adding more text and perhaps several graphics to a future revision.

7. Additional changes made by WWC and approved by ESI, that were not requested during the second assessment:

WWC response: We have made the following material changes to the methodology: 1. Section 6.14, the calculation of rU and associated equations and variables. This section was formerly Adf, and has been modified to position projects in which there was protection of the project area on the deforestation curve 2. B.2.8 The minimum plot size was reduced from 2 ha to 1 ha based on an experience in an area with many steep slopes in which it was unduly difficult to place 2 ha plots that fell entirely in the project accounting area.

5 ASSESSMENT CONCLUSION

ESI confirms that all validation activities within the scope of this assessment for the revised VM0009 methodology element, adhere to the criteria established for this assessment as documented in this report, are complete and concludes without any qualifications or limiting conditions that the methodology element documentation (*Methodology for Avoided Deforestation, Version 2.154*) meets the requirements of VCS Program Guide, VCS Standard, VCS AFLOU Requirements, and the VCS Methodology Approval Process v3.3. Therefore, ESI recommends that VCSA approves the revised methodology element (*Methodology for Avoided Deforestation, Version 2.154*) as prepared by Wildlife Works.

6 REPORT RECONCILIATION

On 22 August 2012, ESI reviewed DNV’s assessment report, titled, “METHODOLOGY REVISIONS FOR VM0009 V1.1: AVOIDED DEFORESTATION OF TROPICAL FORESTS REPORT N°2011-9347 REVISION NO. 2”.

The only revision required was to ensure DNV reported the range and final version of the methodology that was validated during the validation process. VM0009 Methodology for Avoided Deforestation V2.106 was the version initially submitted to DNV and ESI at the beginning of the validation process. The final version approved was VM0009 Methodology for Avoided Deforestation V2.154. DNV provided a corrected report in 23 August, 2012.

7 EVIDENCE OF FULFILLMENT OF VVB ELIGIBILITY REQUIREMENTS

As set out in the VCS document Methodology Approval Process for Non-ARR AFOLU Methodology Elements:

- 1) Both validation/verification bodies shall be eligible under the VCS Program to perform validation for sectoral scope 14 (AFOLU); AND
- 2) At least one of the validation/verification bodies shall use an AFOLU expert (see Section 9) in the assessment; AND
- 3) At least one of the validation/verification bodies shall have completed at least ten project validations in any sectoral scope. Project validations can be under the VCS Program or an approved GHG program, with the projects having been registered under the applicable program. A validation of a single project under more than one program (eg, VCS and CDM) counts as one project validation. The validation/verification body that meets this eligibility requirement may be the same validation/verification body that uses an AFOLU expert


ESI fulfils the eligibility requirements in the following ways:

- 1) ESI is accredited by the American Standards Institute under ISO 14065:2007 for GHG Validation and Verification Bodies; including validation/verification of assertions related to GHG emission reductions and removals at the project level for Land Use and Forestry (Group 3). VCS accepts this accreditation.
- 2) ESI added Steve Ruddell to our team. Steve is a VCS AFOLU-REDD Expert and was considered a full team member who attended the meetings and completed the technical review.
- 3) To date ESI has completed 12 VCS project validations under AFOLU; however one has not been registered yet. Therefore ESI added three CCB project validations. Please see Appendix A for the required evidence.

8 SIGNATURE

Signed for and on behalf of:

Name of entity: Environmental Services, Inc.



Signature:

Name of signatory: Janice McMahon

Date: 24 August 2012

9 APPENDIX A

Project Validation Evidence for Environmental Services, Inc.

Name of Project	Validation Report – Date Issued	Date Project Registered	GHG Program Registered With
Restoration of degraded areas and reforestation in Cáceres and Cravo Norte, Colombia	24 February 2011	14 March 2011	VCS
TIST Program in Kenya VCS-001	2 March 2011	15 April 2011	VCS
TIST Program in Kenya VCS-002	2 March 2011	15 April 2011	VCS
TIST Program in Kenya VCS-003	2 March 2011	15 April 2011	VCS
TIST Program in Kenya VCS-004	2 March 2011	17 April 2011	VCS
TIST Program in Kenya VCS-005	16 December 2011	22 December 2011	VCS
Bull Run Overseas Forest Carbon Project: Phase 1	15 March 2012	13 April 2012	VCS
TIST Program in Uganda VCS-001	20 March 2012	25 May 2012	VCS
TIST Program in Uganda VCS-002	20 March 2012	25 May 2012	VCS
TIST Program in Uganda VCS-003	20 March 2012	25 May 2012	VCS
TIST Program in Uganda VCS-004	20 March 2012	25 May 2012	VCS
Protection of the Bolivian Amazon Forest	26 March 2012 26 March 2012	Not registered yet with VCS 26 March 2012	VCS CCB
Kariba REDD+ Project	8 February 2012	8 February 2012	CCB
Panama Canal Authority Sustainable Forest Cover Establishment Project	30 March 2012	30 March 2012	CCB