SECOND ASSESSMENT REPORT FOR THE REVISION AND EXTENSION TO VM0007: REDD+ METHODOLOGY FRAMEWORK

Document Prepared By Zane Haxtema

Methodology Title	Revision and Extension of VCS Methodology VM0007
Version	REDD+ MF: VM0007 REDD+MF_v1.6_SCS RD2_19MAR2019
	BL-UP: VMD0007 BL-UP_v3.3_RD2 SCS_15FEB2019
	LK-ASP: VMD0009 LK-ASP v1.2_RD2 SCS_19MAR2019
	LK-ASU: VMD0010 LK-ASU v1.1_RD2 SCS_17APR2019
	E-BPB: VMD0013 E-BPB v1.1 18APR2019
	M-REDD: VMD0015 M-REDD, v2.1_RD2 SCS_15FEB2019
	X-STR: VMD0016 X-STR_v1.2_SCS RD2_19MAR2019
	X-UNC: VMD0017 X-UNC_v2.2_ESI RD2_27SEP2017 RD1_15DEC2017
	BL-ARR: VMD0041 BL-ARR_v1.1_SCS RD2_15FEB2019
	BL-PEAT: VMD0042 BL-PEAT v1.0_SCS RD2_15JAN2019
	LK-ECO: VMD0044 LK-ECO v1.0 RD2 26JUL2018
	M-ARR: VMD0045 M-ARR_v1.1_SCS RD2_15FEB2019
	M-PEAT: VMD0046 M-PEAT v1.0_SCS RD2_15JAN2019
	ADD-AM: ADD-AM_v1.0_ESI RD1_27SEP2017_SCS RD1_15DEC2017

Methodology Category	BL-TW: BL-TW_v1.0_SCS RD2_19MAR2019 M-TW: M-TW_v1.0_SCS RD2_17APR2019	
	Methodology	
	Methodology Revision	X
	Module	
	Tool	
Sectoral Scope(s)	Agriculture, Forestry and Land Use	

Report Title	Second Assessment Report For the Revision and Extension to VM0007: REDD+ Methodology Framework
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Approved By	Christie Pollet-Young
Work Carried Out By	Lead Assessor: Zane Haxtema Assessor: Dr. Letty Brown Technical Expert: Dr. Jason Keller Technical Reviewer: Francis Eaton

Summary:

SCS Global Services was commissioned by VCS to perform the second assessment of the revision to the REDD+ Methodology Framework and associated modules and tools (“the methodology”) in accordance with the VCS Methodology Approval Process, VCS Standard, VCS Program Guide and the VCS AFOLU requirements.

The methodology consists of a series of modules and tools which form the basic framework for a REDD baseline and monitoring methodology. As revised, this framework now includes and integrates modules for Restoring Wetland Ecosystems (RWE) projects and Conservation of Intact Wetlands (CIW) in coastal areas.

The purpose of the assessment was to assess the conformance of the methodology revision to the VCS rules and current best practices for quantification of GHG emission reductions and removals. The assessment was performed through a desk review of the revised methodology and other relevant documents. The criteria for the assessment was the VCS Version 3. A total of 129 findings were issued during the course of the assessment.

The assessment services documented in this report were discontinued, upon request of the client, on 26 June 2019. As of that date, the assessment team was unable to conclude that all aspects of Version 1.6 of the methodology which fall within the assessment scope are in full conformance with the assessment criteria, for specific reasons that are detailed within this report.

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1 INTRODUCTION

1.1 Objective

The purpose of the assessment was to conduct a second assessment of the revision to the REDD+ Methodology Framework and associated modules and tools (collectively termed "the methodology") within this report. Restore America's Estuaries and Silvestrum, referred to as the methodology developer, has commissioned SCS Global Services (SCS) to perform the assessment. The assessment was performed in accordance with the guidance documents listed in Section 2.1 of the report.

The report presents the findings of the assessment team, including a description of the process and rationale for arriving at the conclusion. The assessment team is comprised of a qualified group of auditors and subject area experts, with experience in assessing methodologies and modules and tools for compliance with the applicable rules of the VCS.

1.2 Summary Description of the Methodology

The methodology utilizes a modular approach and contains procedures for three of the six AFOLU project categories under the VCS Program (ARR, REDD and WRC) and encompass a very broad array of project activities—everything from peatland rewetting to forest conservation to reforestation. The revision primarily entailed an expansion of scope to encompass project activities on tidal wetlands, but numerous other modifications to the methodology were also included in the scope of the revision.

2 ASSESSMENT APPROACH

2.1 Method and Criteria

In accordance with the Methodology Approval Process, the scope of the assessment included the following:

- Applicability conditions: Assessment of whether the proposed methodology's applicability conditions are appropriate, adequate and in compliance with the VCS rules.
- Project boundary: Assessment of whether an appropriate and adequate approach is provided for the definition of the project's physical boundary and sources and types of GHGs included.
- Procedure for determining the baseline scenario: Assessment of whether the approach for determining the baseline scenario is appropriate, adequate and in compliance with the VCS rules.
- Procedure for demonstrating additionality: Assessment of whether the approach/tools for determining whether the project is additional are appropriate, adequate and in compliance with the VCS rules.
- Baseline emissions: Assessment of whether the approach for calculating baseline emissions is appropriate, adequate and in compliance with the VCS rules.

- Project emissions: Assessment of whether the approach for calculating project emissions is appropriate, adequate and in compliance with the VCS rules.
- Leakage: Assessment of whether the approach for calculating leakage is appropriate, adequate and in compliance with the VCS rules.
- Quantification of net GHG emission reductions and/or removals: Assessment of whether the approach for calculating the net GHG benefit of the project is appropriate, adequate and in compliance with the VCS rules.
- Monitoring: Assessment of whether the monitoring approach is appropriate, adequate and in compliance with the VCS rules.
- Data and parameters: Assessment of whether the specification for monitored and not monitored data and parameters is appropriate, adequate and in compliance with the VCS rules.
- Adherence to the project principles of the VCS Program: Assessment of whether the methodology adheres to the VCS Program principles set out in the VCS Standard.

The proposed revision was assessed for conformance against the VCS Version 3, including the following documents:

- VCS Standard, Version 3.7
- Agriculture, Forestry and Other Land Use Projects (AFOLU) Requirements, Version 3.6
- Methodology Approval Process, Version 3.7
- Program Definitions, Version 3.7
- Validation and Verification Manual, Version 3.0
- VCS Methodology Template, Version 3.3
- VCS Module/Tool Template, Version 3.3

The above notwithstanding, the scope of the assessment was limited to review of language within the methodology that were either updated in the revision or that were potentially affected by such updates. This assessment scope is implied by Section 7.3 of the Methodology Approval Process, which states that “A revision to a VCS methodology is handled as an update to the prevailing version of the methodology”. Unless otherwise noted, the following holds true within this report:

- All references to “the methodology” are limited to that portion of the methodology falling within the scope of the assessment.
- All references to individual tools or modules (e.g., BL-UP), or the methodology framework (REDD+ MF) are limited to that portion of the referenced tools, modules or methodology framework falling within the scope of the assessment.

The primary method used for this assessment was document review, as described in Section 2.2 of this report. In addition, the assessor took into consideration the comments received during the public comment period from 21 February 2017 until 23 March 2017.

2.2 Document Review

The assessment activity included a detailed review of the methodology and associated modules and tools against the criteria of the guidance documents listed in Section 1.2 of this report. The

proposed methodology revision was assessed for logical coherence, internal consistency, completeness, and consistency with current best practices for quantification of emission reduction and removals. The first assessment report was also reviewed.

2.2.1 Documents Received From Methodology Assessment Team

Documents received 27 September 2017:

- VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017.docx
- ADD-AM_v1.0_ESI RD1_27SEP2017.docx
- BL-TW_v1.0_ESI RD1_27SEP2017.docx
- M-TW_v1.0_ESI RD1_27SEP2017.docx
- VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.docx
- VMD0007 BL-UP_v3.3_27SEP2017.docx
- VMD0017 X-UNC_v2.2_ESI RD2_27SEP2017.docx
- VMD0041 BL-ARR_v1.1_ESI RD1_27SEP2017.docx
- VMD0016 X-STR_v1.2_ESI RD2_27SEP2017.docx
- VM0007_v1.6_First_Assessment_Report.pdf

Documents received 15 December 2017:

- VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017 RD1_15DEC2017.docx
- ADD-AM_v1.0_ESI RD1_27SEP2017 RD1_15DEC2017.docx
- BL-TW_v1.0_ESI RD1_27SEP2017 RD1_15DEC2017.docx
- M-TW_v1.0_ESI RD1_27SEP2017 RD1_15DEC2017.docx
- VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017 RD1_15DEC2017.docx
- VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017.docx
- VMD0017 X-UNC_v2.2_ESI RD2_27SEP2017 RD1_15DEC2017.docx
- VMD0041 BL-ARR_v1.1_ESI RD1_27SEP2017 RD1_15DEC2017.docx
- VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017.docx

Documents received 12 January 2018:

- VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018.docx

Documents received 25 January 2018:

- BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018.docx
- M-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018.docx
- VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018v2.docx

Documents received 29 March 2018:

- VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 27MAR2018.docx
- VMD0041 BL-ARR_v1.1_ESI RD2_20170609 SCS 27MAR2018.docx
- VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017 RD1_15DEC2017 27MAR2018.docx

Documents received 4 June 2018:

- BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 03JUN2018.docx
- M-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 03JUN2018.docx
- VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018.docx
- VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 03JUN2018.docx
- VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 03JUN2018.docx
- VMD0041 BL-ARR_v1.1_ESI RD2_20170609 SCS 03JUN2018.docx
- VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017 RD1_15DEC2017 03JUN2018.docx

Document received 12 June 2018:

- VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 12JUN2018.docx

Documents received 30 July 2018:

- BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 28JUL2018.docx
- M-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 2JUL2018.docx
- VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018.docx
- VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 25JUL2018.docx
- VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018.docx
- VMD0041 BL-ARR_v1.1_ESI RD2_20170609 SCS 28JUL2018.docx
- VMD0044 LK-ECO v1.0 RD2 26JUL2018.docx
- VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017 RD1_15DEC2017 03JUN2018.docx

Documents received 2 December 2018:

- BL-TW_v1.0_SCS RD2_02DEC2018.docx
- VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018.docx
- VMD0007 BL-UP_v3.3_RD2 SCS_02DEC2018.docx
- VMD0009 LK-ASP v1.2_RD2 SCS_02DEC2018.docx
- VMD0010 LK-ASU v1.1_RD2 SCS_02DEC2018.docx
- VMD0016 X-STR_v1.2_SCS RD2_02DEC2018.docx
- VMD0041 BL-ARR_v1.1_SCS RD2_02DEC2018.docx
- VMD0042 BL-PEAT v1.0_SCS RD2_02DEC2018.docx
- VMD0045 M-ARR_v1.1_SCS RD2_02DEC2018.docx

Document received 4 January 2019:

- BL-TW_v1.0_SCS RD2_02DEC2018 v2.docx

Documents received 10 January 2019:

- BL-TW_v1.0_SCS RD2_02DEC2018 v2 commented.docx
- M-TW_v1.0_SCS RD2_03OCT2018 commented.docx

Documents received 15 January 2019:

- VMD0042 BL-PEAT v1.0_SCS RD2_15JAN2019.docx
- VMD0046 M-PEAT v1.0_SCS RD2_15JAN2019.docx

Documents received 7 February 2019:

- BL-TW_v1.0_SCS RD2_06FEB2019.docx

- M-TW_v1.0_SCS RD2_06FEB2019.docx

Documents received 11 February 2019:

- BL-TW_v1.0_SCS RD2_10FEB2019.docx
- M-TW_v1.0_SCS RD2_10FEB2019.docx
- VM0007 REDD+MF_v1.6_SCS RD2_10FEB2019.docx
- VMD0007 BL-UP_v3.3_RD2 SCS_08FEB2019.docx
- VMD0016 X-STR_v1.2_SCS RD2_10FEB2019.docx
- VMD0041 BL-ARR_v1.1_SCS RD2_10FEB2019.docx
- VMD0045 M-ARR_v1.1_SCS RD2_10FEB2019.docx

Documents received 15 February 2019:

- BL-TW_v1.0_SCS RD2_15FEB2019.docx
- M-TW_v1.0_SCS RD2_15FEB2019.docx
- VM0007 REDD+MF_v1.6_SCS RD2_15FEB2019.docx
- VMD0007 BL-UP_v3.3_RD2 SCS_15FEB2019.docx
- VMD0009 LK-ASP v1.2_RD2 SCS_15FEB2019.docx
- VMD0010 LK-ASU v1.1_RD2 SCS_15FEB2019.docx
- VMD0015 M-REDD, v2.1_RD2 SCS_15FEB2019.docx
- VMD0016 X-STR_v1.2_SCS RD2_15FEB2019.docx
- VMD0041 BL-ARR_v1.1_SCS RD2_15FEB2019.docx
- VMD0045 M-ARR_v1.1_SCS RD2_15FEB2019.docx
- VMD0013 E-BPB v1.1 25JAN2019.docx

Documents received 15 April 2019:

- BL-TW_v1.0_SCS RD2_19MAR2019.docx
- M-TW_v1.0_SCS RD2_19MAR2019.docx*
- VM0007 REDD+MF_v1.6_SCS RD2_19MAR2019.docx*
- VMD0009 LK-ASP v1.2_RD2 SCS_19MAR2019.docx***
- VMD0010 LK-ASU v1.1_RD2 SCS_19MAR2019.docx***
- VMD0016 X-STR_v1.2_SCS RD2_19MAR2019.docx**
- VMD0016 X-STR_v1.2_SCS RD2_19MAR2019.pdf**
- VMD0013 E-BPB v1.1 19MAR2019.docx
- Responses to NIR NCRs 119 to 122.docx

*Note: The assessment team was able to only partially review the updates made to this version of REDD+ MF prior to the discontinuation of assessment services.
**Note: The assessment team was able to only partially review the updates made to this version of X-STR prior to the discontinuation of assessment services.
*** Note: These documents were received by the assessment team but not formally reviewed.

Documents received 17 April 2019:

- M-TW_v1.0_SCS RD2_17APR2019.docx
- VMD0009 LK-ASP v1.2_RD2 SCS_17APR2019.docx*
- VMD0010 LK-ASU v1.1_RD2 SCS_17APR2019.docx**

*Note: The assessment team was able to only partially review the updates made to this version of LK-ASP prior to the discontinuation of assessment services.
**Note: The assessment team was able to only partially review the updates made to this version of LK-ASU prior to the discontinuation of assessment services.

Documents received 18 April 2019:

- VMD0013 E-BPB v1.1 18APR2019.docx

Packages of documents were also received by the assessment team on 13 May 2019 and 23 May 2019, but these documents were not reviewed under the scope of the assessment services described in this report.

2.2.2 Public Comments

Public Comment Documents (Two sets of comments received), posted on website: http://database.v-c-s.org/methodologies/redd-methodology-framework-reddmf-v16

2.3 Interviews

Interviews were held during the course of the assessment, as follows.

Individual	Affiliation	Role	Date(s) Interviewed
Steve Emmett-Mattox	Restore American's Estuaries	Methodology Developer	1 November 2017
Igino Emmer	Silvestrum	Methodology Developer	1 November 2017; 19 March 2019

Dr. Jason Keller, the technical expert for the assessment team, was in attendance during all interviews listed in the above table.

2.4 Assessment Team

Zane Haxtema led the assessment and performed or directly supervised all aspects of the work, including assessment, issuance and resolution of findings and report writing. Mr. Haxtema holds a M.S. in Forest Resources from Oregon State University (Corvallis, Oregon, USA) and a B.S. from The Evergreen State College (Olympia, Washington, USA). A well-rounded forestry professional, Mr. Haxtema held a wide variety of positions in forest research and management before coming to SCS, ranging from work on logging and tree planting crews to experience as a wildland firefighter and research assistant. A specialist in natural resource inventory, Mr. Haxtema holds significant expertise in sampling design, inventory management and growth modeling. Mr. Haxtema is well versed in a wide variety of methodological approaches for carbon accounting, having served as a lead auditor on a wide variety of projects under the Climate Action Reserve, the Verified Carbon Standard and the Climate, Community and Biodiversity Standards. Mr. Haxtema is a Registered Professional Forester in the state of California, USA.

Letty B. Brown assisted with many aspects of the assessment, including assessment, issuance and resolution of findings. Dr. Brown holds a Ph.D. in Forest Science from the University of California, Berkeley, where she also completed her Master's in Range Ecology. Prior to joining

SCS, Dr. Brown worked as a Forest Scientist at URS, where she led forest carbon offset project development and management of forest inventory for various clients. In this role she also worked on methodology development with the Verified Carbon Standard, developing methods for crediting wetland conservation projects in their Technical Working Group. Upon receiving her Ph.D. in 2007, Dr. Brown was a Fulbright Scholar and Postdoctoral Researcher in Brazil, designing and implementing remote-sensing and ground-based research to map and designate conservation targets for a portion of the Brazilian Atlantic Forest. Her background also includes forest restoration and ecological analysis, having created habitat conservation plans in California and managed teams of field researchers throughout her career.

Francis Eaton served as the "appropriately qualified, independent technical reviewer" as requested by Section 5.1.2 of the Validation and Verification Manual." Mr. Eaton holds a Masters of Forest Science from the Yale School of Forestry and Environmental Studies and received his B.S. in Forestry from Northern Arizona University. The focus throughout his studies was forest management with emphases on sampling design and statistical analysis. He spent three years working collecting field data and completing data analysis on forest restoration projects with the Ecological Restoration Institute. His work experience also includes complete biophysical inventories and estimation of timber volume for two 3000 acre properties, as a forest consultant in northern New Mexico. Mr. Eaton is well versed in sampling designs and auditing field campaigns as a teaching fellow for masters-level management plan courses. Mr. Eaton currently works as a Verification Forester for SCS and has completed forest carbon projects under the Verified Carbon Standard (VCS), the Climate Action Reserve (CAR), and the Climate, Community, and Biodiversity Alliance (CCBA). Moreover, Mr. Eaton is accredited by the California Air Resources Board as Lead Offset Verifier and is also certified by the Board in the US Forest Project and Urban Forest Protocols. He is also certified as Lead Verifier under the Climate Action Reserve.

A VCS-approved expert was not used in the course of this assessment. However, it should be noted that Dr. Jason Keller, Assistant Professor at Chapman University (Orange, California, USA) and an expert in wetlands science and carbon cycling (credentials can be reviewed online at https://www.chapman.edu/our-faculty/jason-keller), was utilized in the assessment as a Technical Expert. Dr. Keller was asked to review the following key sections of the methodology as well as of the associated modules and tools:

- REDD+ MF, Sections 3 and 8.3
- BL-TW, Sections 3 and 5
- M-TW, Sections 3 and 5
- ADD-AM, Appendix A
- X-STR, Section 5
- M-ARR, Sections 3 and 5
- LK-ECO (entire module)

Dr. Keller was asked to answer a series of questions regarding the above sections, and the feedback provided by Dr. Keller informed the list of topics discussed during the meetings described in Section 2.3 above. Finally, Dr. Keller participated in a section of the meetings described in Section 2.3 above.

2.5 Resolution of Findings

Potential material 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 Reports (NCRs) were issued in response to material discrepancies in the proposed revision. A material discrepancy could be defined as one of the following:

- An instance of non-conformance to the guidance documents listed in Section 1.2 of this report;
- An instance where the language of the methodology required clarification in order to avoid ambiguity;
- An instance where the proposed methodology lacked internal consistency; or
- An instance where formulae in the proposed revision were not consistent with mathematical convention.

An adequate response for each issued NCR, including evidence of corrective action, was required before a positive assessment opinion could be reached. A total of 106 NCRs were issued during the assessment.

New Information Requests (NIRs) were issued to the client when more information was needed to determine whether a material discrepancy existed. Issuance of an NIR did not necessarily signify the presence of a material discrepancy. However, an adequate response to all issued NIRs was required before an assessment opinion could be reached. A total of 23 NIRs were issued during the assessment.

All issued findings are described in Appendix A below.

3 ASSESSMENT FINDINGS

In general, the assessment team was unable to conclude that all aspects of Version 1.6 of the methodology which fall within the assessment scope are in full conformance with the assessment criteria. Reasons that preclude the assessment team reaching such a conclusion fall into one of three categories:

- Portions of the methodology which fall within the assessment scope have not been reviewed by the assessment team.
- Portions of the methodology which fall within the assessment scope have been reviewed by the assessment team and found, as documented in the findings log sent to the methodology development team on 3 May 2019, to contain material discrepancies that would preclude a positive assessment opinion.
- Revisions to the methodology in response to findings that were open as of 3 May 2019 (either because it was not possible to review the findings responses prior to 3 May 2019 or because the findings were issued in early May 2019 and findings responses were not reviewed from that point until the point of discontinuation of assessment services). Such subsequent revisions to the methodology have not been reviewed by the assessment team.

Circumstances that preclude the conclusion that all aspects of Version 1.6 of the methodology which fall within the assessment scope are in full conformance with the assessment criteria are referred to as "gaps" within this assessment report. Description of such gaps are denoted with bold-face font. It is recommended that the reader conduct a word search for the term "gap" in order to comprehensively identify all such gaps.

In general, the methodology was found to be in compliance with the many of the principles set out in the VCS Standard and other VCS rules and requirements. The new modules and revisions enlarge the eligible environments and activities to be more broadly applicable for a variety of project types including restoring and conserving wetland ecosystems in coastal and inland wetlands. New baseline, leakage, stratification, uncertainty and monitoring modules are consistent with best practice and scientific consensus by following previously validated methods for determining emissions.

Gap: A significant exception to the statement immediately above exists with respect to the revision to M-REDD; see Section 3.9.2.3 below for more details.

Because the methodology covers multiple project categories and sub-categories, the assessment team ensured that the methodology complies in full to Section 4.1.3 of the AFOLU Requirements. The assessment team can confirm that, in all instances where it is not possible to provide specific guidance for each category or sub-category, as applicable, the methodology universally applies the most restrictive requirement(s) (e.g., those requirements which would require the greatest amount of documentation or the lowest quantification of GHG emission reductions and/or removals). Applicable VCS approved tools are appropriately invoked for determining project significance, baseline, additionality and risk.

3.1 Relationship to Approved or Pending Methodologies

This section is not applicable to methodology revisions, per Section 7.2 of the Methodology Approval Process.

3.2 Stakeholder Comments

A prior version of the methodology was posted for comment from 21 February 2017 to 23 March 2017. Two sets of comments were received, one from South Pole Group Colombia and one from WILDCOAST Mexico.

The assessment team reviewed the comments as well as the response to comments prepared by the developer of the methodology and the module/tool revisions. The assessment looked at whether and how the developer has taken due account of all comments received during the public stakeholder consultation, per VCS requirements Section 4.4.3(1) of the Methodology Approval Process.

In summary, the assessment team found the Developer Responses to be reasonable and to sometimes result in a direct revision(s) to the document(s) in question, or to otherwise demonstrate that the comment is insignificance or irrelevance of the comment, as per Methodology Approval Process Section 4.4.2.

Public Comments and Methodology Developer Responses:

South Pole Comment	Developer Response	SCS Remarks
If there is a REDD combined with another activity, is it necessary to do the additionality for each activity (REDD and also the other activities)?	All WRC projects, whether or not combined with other categories, are deemed additional. We will clarify this in the MF and the ADD module.	The developer response isn't entirely accurate (though perhaps it was accurate in respect of an earlier version of the methodology); Section 7 of REDD+ MF clarifies that the "all tidal wetlands conservation and restoration project activities" (which would, by definition, include any REDD project activities on tidal wetlands) can use the activity method, but all other project activities (including, e.g., REDD project activities on peatland) must use the project method. Irrespective of the confusion in the provided response, this point is clearly laid out in the methodology.
If a wetland is not a peatland or tidal wetland (for instance inland wetlands), an inland wetland can be included to this methodology?	The methodology only covers peatlands and tidal wetlands. For other types of wetland (e.g. island wetland) the procedures would have to be screened with the necessary expertise. Our expertise is limited to peatland and tidal wetland.	The description provided by the developer is sufficient. The methodology is sufficiently descriptive in its geographic limitations. Inland wetlands are not permitted. Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.

South Pole Comment	Developer Response	SCS Remarks
What is an intact wetland?	There is no strict definition of intact wetland but the AFOLU requirements refer to such wetland as intact or partially altered while still maintaining their natural functions. (Addition from VCS: 'Degradation' is defined in the Program Definitions. Although 'degraded forest' is not specifically defined, it would be a forest that has undergone degradation per the definition in the Program Definitions (i.e. forest land with a reduction in canopy cover and/or carbon stocks due to human activities such as animal grazing, fuelwood extraction, timber or removal or other such activities, but that has not been converted to non-forest land).)	While a definition of "intact wetland" is not provided, a definition of "degraded wetland" is provided in Section 3 of REDD+ MF, and Table 3 of REDD+ MF presents a binary choice whereby a user is required to select between a pre-project condition of "Drained peatland or degraded tidal wetland", on the one hand, or "Undrained or partially drained peatland or intact or partially altered tidal wetland", on the other hand. Thus, the determination of what constitutes an "intact" wetland is not so important, for purposes of the methodology, as the determination of what constitutes a "degraded wetland"—and the methodology provides clear and scientifically sound criteria for what constitutes a degraded wetland. Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.

South Pole Comment	Developer Response	SCS Remarks
Which criteria are used to prove that a forest is degraded or not?	The methodology does not provide a definition of degraded forest. It uses the term as per the AFOLU requirements and assumes that a degraded forest has lost in part or completely its natural functions.	In terms of the pre-project condition, the only location in the methodology we are aware of in which it is important whether or not a forest is "degraded" or not is in respect of the following applicability condition for ARR project activities, as set out in Section 4.4 of REDD+ MF: "The project area is non-forest land or land with degraded forest". We are comfortable with determination of "degraded" status being made on a project-specific basis, with no criteria in the methodology being required. In practice, the methodology contains accounting procedures to address reforestation on a wide variety of pre-existing forest conditions. Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.
According to the methodology, enrichment activities in a degraded wetland is an ARR activity?	As long as enrichment is not IFM (ie when forest management is in place in the baseline) this is indeed ARR.	Footnote 15 in REDD+ MF clarifies which types of project activities fall under the scope of IFM and are therefore ineligible under the methodology. Is highlighted in the underlining in the footnote, the important distinction is whether management would occur in the baseline. Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.

South Pole Comment	Developer Response	SCS Remarks
In Table 3, column 3, line 4 from REDD+MF, "Avoiding deforestation/forest degradation" is only referring to peatlands or to all wetlands? Why wetland degradation is separated from forest degradation?	The table should be read as follows: if the pre-project conditions is a drained peatland or a degraded tidal wetland with a land cover that is forest with deforestation or with forest degradation, the project activity may be peatland rewetting or tidal wetland restoration in combination with avoiding deforestation or forest degradation. This implies a combination of a restoration activity (wetland) with a conservation activity (forest).	In the judgment of the assessment team, this comment was significant but has been addressed through an update to Table 3 of REDD+ MF, which clarifies that avoiding deforestation/ forest degradation may be a project activity, in a RWE+REDD framework, in respect of both peatlands and tidal wetlands.
If it is possible to use enrichment as ARR, how this can be monitored? How is the carbon stock monitored? Is there a module or SOP to monitor it?	GHG accounting in ARR, whether replanting, enrichment or other, is a matter of comparing forest growth in the baseline and the project scenario. The baseline is not monitored and must be quantified ex ante.	We believe that this comment is insignificant. Standardized procedures exist to monitor carbon stock changes in planted stands, and these procedures are provided in BL-ARR.
Table 11 from REDD+MF: Refers to AUDD, APD and REDD as three different categories. However, AUDD and APD are included to REDD projects. This is not clear. Can you please specify it or provide some clarification?	This table is just a translation of language in the BL-PL and BL-UP modules when they are used for CIW activities. The table does not intend to propose a classification.	We agree that providing a hierarchical classification of project types is not the intent of Table 11. The stated purpose of Table 11 is to provide "Translation between REDD and WRC Terminology". Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.
Conservation of intact wetlands are included in the methodology, but this is not mentioned in the modules of the methodology. Therefore, how can we include Conservation of Intact Wetland in this methodology?	This is determined in Table 4 of REDD-MF. CIW is represented in the top row as AUWD and APWD.	We agree that Table 4 clarifies that AUWD and APWD project activities are included; these acronyms are defined in Section 2 and Section 4.5.3 of the methodology contains applicability conditions so that it is clear what project activities qualify as CIW project activities under the methodology. Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.

South Pole Comment	Developer Response	SCS Remarks
Table 3 from REDD+MF is not consistent/clear: (i) the methodology has a baseline for carbon estimation for restoration activities, but does not include baseline for REDD; (ii) the suggestion is to separate the drained peatland to the degraded tidal wetland and the undrained peatland to the intact tidal wetland to avoid confusion to the user.	i) The baseline for REDD is covered in modules BL-UP and BL-PL; ii) Table 3 distinguishes various AFOLU project activities, not whether terrain is drained, undrained, degraded or intact. Each project activity has a set of mandatory and optional modules. We do not see any inconsistency here.	This comment seems to refer to the table now known as Table 4. Regarding (i), this comment was likely significant at the time it was posted but, given the extent of the changes to Table 4 of REDD+ MF during the course of the assessment, it seems likely that any confusion that previously existed has been cleared up (i.e., that the methodology has effectively been updated to take the comment into account). Regarding (ii), while this is an interesting idea, we agree that a separation on the basis of project activity is reasonable and appropriate, and that the methodology does not need to be updated to take this particular sub-comment into account.
There is no baseline for degraded wetlands in the module for REDD to avoid unplanned deforestation and degradation.	In the case of avoiding wetland degradation in combination with REDD, Table 3 points to the mandatory use of certain baseline modules. The user must select AUDD, APD or AD as REDD subcategories, as well as AUWD or APWD as CIW sub-categories, and the table then tells which modules are relevant. E.g. for AUDD combined with AUWD in tidal wetlands, baseline modules BL-UP and BL-TW are mandatory.	Table 3 of REDD+ MF specifies that the applicable combined project category in the situation named would be “RWE+REDD”. Section 8.1.4 of REDD+ MF states that “Baseline net emissions from the soil carbon pool in combined projects must be estimated using Module BL-PEAT or BL-TW, whichever is relevant (see Table 3).” Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.

South Pole Comment	Developer Response	SCS Remarks
The module BL-UP mentioned degradation for tidal wetlands in the title. However, it is not clear how the baseline and monitoring is performed for degradation.	The principles applied in BL-UP for determining deforestation and forest degradation baselines are used mutatis mutandis for wetland degradation. This is explained in Section 8.1.3 while the difference in language is outlined in Table 11.	We agree that BL-UP, in combination with the guidance provided in Section 8.1.4 (not 8.1.3; the section reference has shifted over time) of REDD+ MF provides adequate guidance regarding avoided degradation of tidal wetlands. Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.
Modules BL-TW and M-TW include restoration, but not conservation.	This is not the way it works. BL-TW and M-TW provide procedures for quantification of emissions and removals that cover both degradation, restoration and avoided degradation scenarios. While BL-UP and BL-PL help determine the baseline scenarios, BL-TW and M-TW help quantify emissions and removals in those scenarios.	Both BL-TW and M-TW clearly indicate applicability to conservation project activities, as set out in Section 4 of each module. We agree that modules BL-UP and BL-PL are appropriately referenced for determining baseline scenarios. Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.
BL-TW: When you mention degradation, are you only referring to soil degradation?	We refer to degradation of tidal wetland and this is not limited to soil degradation. It can also pertain to e.g. changes in hydrology.	It is not clear to what this comment refers. The word “degradation” is only used in two locations in BL-TW, and neither instance seems to correspond to the comment. Therefore, we agree that this comment (a) is irrelevant or (b) was previously relevant, but has since been addressed through an update to the methodology.

South Pole Comment	Developer Response	SCS Remarks
M-TW: There is no module for the risk of degradation in the soil and this is one of the main sources of emission. Therefore, the project cannot claim for the avoided emission from soil degradation. How can I get carbon credits for conserving an intact wetland? If the conservation of intact wetland is not included in the methodology, this need to be excluded. In addition, in the module M-TW the activities for intact wetlands (e.g. improving water management on drained wetlands, maintaining or improving water quality for seagrass meadows, protecting at risk wetlands) is not included.	This is not covered in the monitoring module for the project scenario. In baseline module BL-TW you will find procedure for quantifying emissions related to soil degradation. Please note that your wording (quote) activities for intact wetlands (e.g. improving water management on drained wetlands, maintaining or improving water quality for seagrass meadows, protecting at-risk wetlands) (unquote) is in part incorrect. Activities for intact wetlands can only be conservation, not improving conditions.	We agree that BL-TW contains procedures for quantifying baseline emissions attributable to wetland degradation, so it appears that the commenter was simply looking at the wrong module (understandable, given the number of modules involved). In addition, we agree that, per Table 3, the only project category applicable to intact wetlands is CIW; RWE activities cannot be performed on such wetlands. Therefore, we agree that this comment is irrelevant.
M-TW: Page 8, Equation 6: there is a parenthesis missing in the equation.	Thanks for spotting this. We will remove the parenthesis.	This comment appears to have been addressed, through an update to the methodology, as parentheses are appropriately used in Equation 6.
M-TW: Number and location of plots for monitoring purposes? This is not clear in the module. Also, the frequency of measurement is missing.	Sample size is not provided by the monitoring module but is governed by procedures in module X-UNC. Frequency is provided in the parameter tables in Section 6.2.	We agree that procedures to account for uncertainty are provided in Section 5.4.2 of X-UNC, and that criteria and procedures for determining the number and location of plots are not necessary. We agree that the frequency of measurement is provided in Section 6.2 of M-TW. Therefore, we agree that this comment is irrelevant

South Pole Comment	Developer Response	SCS Remarks
M-TW: According to the methodology, it is possible to monitor the first time and then wait 10 years until the next one. Is this possible? Please, provide clarification on it. Specially on monitoring frequency vs. verification	The methodology needs to comply with methodology requirements. The monitoring interval and its relation to verification is governed by project requirements. Please see there.	The stated response to the comment is confusing, but Section 5.2.3 of REDD+ MF does state that "The minimum duration of a monitoring period is one year and the maximum duration is 10 years." This allows for the possibility of a 10-year monitoring period. We agree that to provide specific guidance regarding the length of verification periods, and the relationship between monitoring period and verification period, is outside the scope of the methodology and is handled, at a programmatic level, by the VCS rules. Therefore, we agree that this comment is insignificant.
X-STR: Chapter 5.2. Third paragraph, line 3 mentioned to refer to "4(a) below", but 4(a) does not appear in the text.	Thanks for spotting this. We will remove this reference.	This comment appears to have been addressed, through an update to the methodology, as the text "4(a)" is no longer included in X-STR.
X-STR: Page 11: Equation 8. VC is missing in the explanation of the parameters.	Will be added.	This comment appears to have been addressed, through an update to the methodology, as an explanation of parameter VC is included below Equation 8.
BL-ARR: Equation 1: how should the project owner need to monitor the baseline? Is it necessary to measure plots in 2 different times? Or why do you use delta in the formula as a change? Please, have in mind that some projects are retroactive and this is not that easy to monitor when the project activities started already.	There is no monitoring of the baseline. The baseline is quantified ex ante. Carbon stock change is a proxy to CO2 emissions and hence the delta is used. In the baseline, a CO2 emission can be quantified by taking the difference in the forecast of C stock of two points in time.	We agree that the baseline is not monitored (though it is updated over time; perhaps that is what the commenter is intending to refer to). The convention of quantifying emissions from carbon stock changes (as signified by the delta symbol) is common in GHG accounting and is a pre-existing feature of this methodology. Therefore, we agree that this comment is insignificant.

South Pole Comment	Developer Response	SCS Remarks
BL-ARR: Which land cover should have the baseline? Because it says that can include degraded land. How can we define the degraded land?	A suited area can support a higher tree/shrub C stock than in the baseline achieved through ARR activities. Degraded land is a well-established term in forestry and land use and expert judgement should be sufficient to make the claim.	The meaning of this comment is not fully clear but, insofar as the question around "degraded land" is considered, please see our comments above on this topic.
BL-ARR: Why do the peatland need to be drained to be eligible? And why is it not possible to include an undrained peatland without forest cover?	The applicability conditions require the peatland area to be degraded, either seen from its forest condition or from its state of drainage, which seems logical for a project activity that intends to improve the situation. Nonforested peatland thus must be drained. This avoids undrained natural non-forested peatland to be afforested.	The condition that "Where the ARR project activity is implemented on peatland, the peatland must be degraded in the baseline scenario…" in Section 4 of BL-ARR is a pre-existing condition (i.e., it exists in V1.0 of BL-ARR), and so the scope of applicability of the methodology has not been narrowed in this revision. It is otherwise the prerogative of the methodology developer to introduce applicability conditions as deemed fit, so long as they are clearly set out. Therefore, we agree that this comment is insignificant.

South Pole Comment	Developer Response	SCS Remarks
M-ARR: Why is necessary to use LTA for conservation projects? We believe this only needs to be used when harvest take place.	This module is not for conservation but for ARR. The LTA pertains to harvesting, as pointed out in the heading "Long-term average in case of harvesting".	We agree that, in Section 5 of M-ARR, the necessary clarification is provided in the following language: "Where reforestation or revegetation activities in the project scenario include harvesting, the maximum number of GHG credits generated by these activities over the crediting period must not exceed the long-term average GHG benefit. The long-term average is calculated per the requirements set out in the VCS Program Document, AFOLU Requirements, with the following modifications…" It is not stated, but seems implicitly clear, that the LTA need not be calculated for project activities that do not include harvesting. Therefore, we agree that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology.
M-ARR: Why soil is not included anymore?	Thanks for spotting this. This also points to a problem with Table 5 in REDD+ MF. Both BL-ARR and MARR are focused on biomass compartments, since modules CP-S, PEAT and TW cover soil. We will clarify how litter, deadwood and soil are accounted for in both terrestrial and wetland situations.	This comment appears to have been addressed, through an update to the methodology, as procedures for soil carbon accounting are now clearly provided.
X-UNC: The title does not mention WRC. The content of the modules should be consistent with the title.	The "REDD+" is intended to cover all activities and situations, as in the title of the framework document "REDD+ MF".	While we understand that the title could be clearer, there are no VCS rules regarding the titles applied to methodology documents. Therefore, we agree that this comment is insignificant.

South Pole Comment	Developer Response	SCS Remarks
BL-UP: The title is not very clear. Deforestation can be included to wetland? For instance, page12 point b., mentioned “deforestation agents”. According to the title, deforestation cannot be included to wetland. Please, clarify.	For both forested terrestrial sites and wetlands, the module provided procedures for accounting the loss of forest cover in the baseline. The module, however, also provides procedures for wetland degradation. For example, a salt marsh (i.e. Without forest cover) may degrade or get lost in the baseline, and this can be quantified using this module and taking account of translation table 1.	We agree that procedures are provided in BL-UP to adequately address avoided deforestation project activities on wetlands, when used in concert with the guidance in Table 11 of REDD+ MF. We understand that it was previously not clear that Table 11 applied to REDD+WRC project activities, but the guidance in Section 8.1.4 of REDD+ MF has been updated clarify that. Therefore, this comment has been addressed through an update to the methodology.
If deforestation is allowed in wetlands, there is not enough detailed guidelines for the baseline.	See above	It’s not clear exactly what this comment refers to, but if it refers to a paucity of guidance for determination of the baseline scenario for REDD+WRC projects, we agree that the methodology does contain adequate procedures for this purpose.

Wildcoast Comment	Developer’s Response	SCS Response

Wildcoast Comment	Developer's Response	SCS Response
In general, I think that the methodology could include clearer and easy to use decision trees, both for the reader and for potential project designers. This will expedite the decision process of whether to start a carbon credit project or not. Also it would be useful if the methodology uses a simpler language whenever possible and includes a quiz to evaluate the viability of potential projects. The methodology seems to be applicable to a mangrove conservation project in Mexico. However, after reading it, there is still some uncertainty to assess the probability of project success (i.e. knowing if carbon credit for sale are going to be produced). It seems that it is necessary to actually apply and invest on the methodology to make sure if an specific project will meet all conditions required by VCS. Maybe a quiz to evaluate project feasibility can be included to help project proponents.	As we strive to satisfy the user's need for an understandable and – easy-to use document, we must find a middle ground between, on one end, simple language and more extensive narratives, and bullet-pointed instruction combined with equations, on the other. We argue that a methodology is not a complete tool for assessing project viability and that a methodology – in essence – needs to meet VCS methodology requirements. We suggest VCS to communicate with Wildcoast about what can be expected form a methodology.	Without taking issue with the commenter's assessment that a procedure for assessing potential project viability may be a helpful aide to the users of the methodology, such a procedure is not required by the VCS rules. In addition, while simplicity and clarity are desirable, in many cases the complexities of the VCS rules, when applied to a methodology that encompasses a very wide array of potential project activities, inherently result in a methodology that will require a substantial time investment in order to understand and implement correctly. Therefore, this comment is insignificant.
For the reader, especially for those new on the carbon credits world, it is not easy to follow the first decision tree to define the type of project to be developed. We suggest using more mainstream language and whenever possible provide clear examples of projects and/or activities.	See response above.	As with the above comment, the request for "more mainstream language" and "clear examples" is outside the scope of what the VCS rules require. Therefore, this comment is insignificant.
Also, it seems that a CIW project must be always combined with a REDD project, but there is uncertainty if a CIW project can stand by itself. Those, is it difficult to determine which models and tools to use or when to use them. The methodology and decision tree should be clearer about this.	This is helpful feedback. CIW can be a stand-alone project activity. In fact, REDD and ARR can be too. We will make this explicit in the language of section "Identification of the Most Plausible VCS-eligible Activity (ies)" in chapter 2. Note that Table 3 indicates that RWE and CIW can be done not combined with another category.	It appears that this was a significant comment when it was provided, but since then the methodology has been extensively revised and we believe it is now clear that CIW can be applied as a stand-alone project category. Therefore, this comment has been addressed through an update to the methodology

Wildcoast Comment	Developer's Response	SCS Response
A clear definition/description with examples should be provided for UPWD and APWD.	Definitions of these categories are provided in the VCS AFOLU Requirements. The methodology assumes knowledge and understanding of VCS Standard, AFOLU Requirements and Program Definitions.	It is unclear exactly what is meant by "UPWD" (this acronym is not used in the methodology), but we assume that the commenter intended to refer to AUWD. While the request for "examples" is outside the scope of the VCS rules, it is true that prior versions of the methodology used acronyms drawn from the VCS rules without clearly referring the reader back to the relevant VCS Program documents, which allowed for the possibility of confusion. The current version of REDD+ MF provides a defined list of acronyms and states that "For definitions of VCS AFOLU project categories refer to the VCS AFOLU requirements." Therefore, while this comment was significant, it has been addressed through an update to the methodology
With the information provided, it is difficult to decide if a leakage area and leakage avoidance activities are needed for a specific WRC project.	This comment re leakage is not specific enough for an appropriate response. We will be happy to communicate directly with Wildcoast.	We agree that the comment is not detailed enough to elicit a specific response, and so we deem the comment insignificant.
Page 15-16 and other parts of the ms, the following paragraph is confusing "Baseline agents of deforestation must: (i) clear the land for tree harvesting, settlements, crop production (agriculturalist) or ranching or aquaculture, where such clearing for crop production or ranching or aquaculture does not amount to large scale industrial agriculture or aquaculture activities*; (ii) have no documented and uncontested legal right to deforest the land for these purposes; and (iii) be either residents in the reference region for deforestation or immigrants. Under any other condition this methodology must not be used". We suggest to use a simpler language and/or provide examples.	See response above	It appears that the commenter's concern is primarily with the structure of the applicability condition (in what is now Section 4.3.2 of REDD+ MF). While some minor amendments have been made to the applicability condition (and, thus, fall within the scope of the assessment), the basic structure of the applicability condition predated the revision under assessment, and review of it is outside the scope of the assessment. Therefore, the comment is insignificant.

Wildcoast Comment	Developer's Response	SCS Response
On page 16, the conditions contained in Modules BL-TW and M-TW that also apply to avoiding unplanned wetland degradation, should be described in this document to expedite the review and decision making for project designers (potential new partners for VCS).	In REDD+ MF we include conditions that apply across the board for each eligible project category. In modules, we include applicability conditions that apply to that specific module. To us this seems the best way to structure applicability conditions and to avoid overwhelming the user when reading the framework document.	The assessment team agrees that it is appropriate to specify module-specific applicability conditions within the modules themselves, and this is consistent with other modules within the methodology. Therefore, we deem this comment to be insignificant.
On page 20, number 5.1.4: The acronyms for avoiding planned and unplanned wetland degradation are mixed up.	Thanks for spotting this.	This comment was significant at the time it was issued, but it has apparently since been addressed through an update to the methodology, as the described error does not appear to be present within REDD+ MF.
On page 22, the table for carbon pools of REDD project activities is missing (Table 4).	Section 5.3.2 REDD points out: "The carbon pools (and corresponding methodology modules) included in or excluded from the boundary of REDD project activities are shown in Table 4." This is a left-over of the first version of VM0007. In subsequent versions of the methodology it was decided to not duplicate the required information on carbon pools for REDD.	It's not clear now exactly what the commenter's concern was. It's possible that the comment refers to an expectation that Table 4 appear within the same section (currently Section 5.3.2) of the cited language. In any case, we agree that Table 4 provides appropriate guidance regarding the carbon pools to include within the project boundary (and corresponding modules to be used), and so this comment is insignificant.
On page 18, it would be useful to know if data, statistics and geographic information, can be taken from official governmental reports or published peer reviewed science for the project area, and if so, what are the conditions to be able to use published technical information.	Point appreciated. We will consider if such information can be taken from official governmental reports or published peer-reviewed science for the project area.	It appears that this comment has been addressed through an update to the methodology, although the lack of specificity in the comment itself makes it difficult to confirm this.
On page 24 the Table numbers seems to be defaced/wrong.	We do not see this problem in our document version (the one for public review obtained from VCS)	It appears that this comment (a) is insignificant or (b) was previously significant, but has since been addressed through an update to the methodology, as we have not identified any such error in our review of the methodology.

Wildcoast Comment	Developer's Response	SCS Response
On sections 6-8 a decision tree should be provided to help the reader understand and decide what modules to use. It would be very useful.	See response above.	Without taking issue with the assessment that a decision tree would be a useful guide, such a decision tree is not required by the VCS rules. We believe that what is now Table 4 within REDD+ MF provides reasonably clear guidance regarding which modules apply to a given project activity. Therefore, we deem this comment to be insignificant.

3.3 Structure and Clarity of Methodology

The VM0007 REDD Methodology Framework revisions and associated tools and modules were reviewed by the assessment team for clarity and logical consistency in accordance with VCS rules for methodology assessments, as set out in the Methodology Approval Process. In many instances, the methodology is written in a clear, logical, concise and precise manner, with procedures logically presented and easily understood. Furthermore, this report generally affirms that:

- **The developer has followed the instructions in the methodology template and ensured that the methodology's various criteria and procedures are documented in the appropriate sections of the template.** In general, the methodology developers have followed the VCS templates and have included the specific criteria and procedures in the appropriate sections.
    - **Gap:** In a few instances where the requirements of the current template were not followed, the assessment team issued findings, and the methodology developers provided guidance received from the VCS, stating that because certain elements of the VM0007 and its modules will be revised subsequent to this assessment, the methodology developers are exempt from the requirement to use the newest template at this time.
- **The terminology used in the methodology is consistent with that used in the VCS Program, and GHG accounting generally**. All definitions are consistent with those in the VCS program definitions, or other VCS guidance documents (e.g., the AFOLU Requirements).
- **The key words must, should and may have been used appropriately and consistently to denote firm requirements, (non-mandatory) recommendations and permissible or allowable options, respectively.** This convention is intentionally followed throughout the methodology. In the modules that have been revised as part of the methodology revision, "shall" has been replaced with "must" in a systematic fashion, in accordance with the following requirement of the VCS Methodology Template: "The term shall is reserved for VCS program documents and is generally not appropriate for methodologies."
- **The criteria and procedures are written in a manner that can be understood and applied readily and consistently by project proponents**. While there is some confusion

inherent in using a modular methodology, the criteria and procedures are generally clearly presented, and should be readily accessible to users with the necessary competencies.

- **The criteria and procedures are written in a manner that allows projects to be unambiguously audited against them.** The criteria and procedures are not, in many cases, highly prescriptive; however, they are sufficiently prescriptive as to allow unambiguous assessment of projects, particularly in combination with other VCS requirements.

Gap: However, in the judgment of the assessment team, the structural integrity issues that have been an issue throughout the assessment have not been substantively resolved. In general, such issues are caused by mismatches in one or more of the following:

- Variable name, function and/or unit of measure
- Procedures (e.g., two different modules which both contain procedures for fossil fuel combustion, or a gap in coverage in which procedures do not exist to quantify certain emissions relating to certain categories of project activities).

Additional details regarding the unresolved structural integrity issues that have been identified by the assessment team may be found in Appendix A below. However, it should be noted that the list of unresolved structural integrity issues identified by the assessment to date is not a comprehensive list of all such issues. Inherent to the methodology assessment work described in this report has been the reality that, given the complexities involved, a comprehensive identification of all outstanding issues at any one point in time has proven elusive. In addition, when revising a methodology of this complexity to address a specific discrepancy or nonconformity to the assessment criteria, it is very easy to inadvertently cause other discrepancies or nonconformities to the assessment criteria elsewhere in the methodology in the process, potentially leading to a circular or near-circular loop that is difficult to escape. It is the professional judgment of the assessment team that significant work remains in order to produce a methodology that is free of material errors (i.e., errors that would rise to the level of significantly hindering use of the methodology). The information in this paragraph is being provided in order to satisfy the requirement of the VCS Methodology Assessment Report Template that the assessment team “Assess whether the methodology is written in a clear, logical, concise and precise manner” and “Provide an overall conclusion regarding the structure and clarity of the methodology”. We recommend that serious care and attention be taken in assessment of the resolution of the gaps identified in this report. It is also important to note that this report contains a list of gaps or discrepancies that have been identified but it is possible that others may arise during the revision process. The methodology is complex and contains many interdependencies which must be closely evaluated and monitoried to ensure the structure integrity of the entirety.

3.4 Definitions

The key terms defined in the methodology element modules are presented clearly and appropriately in a definition section, which is located at the beginning of each document. The comprehensive list of terms relevant to the methodology is ordered alphabetically and definitions for acronyms are provided. Definitions of key terms are presented concisely and assist the reader in comprehension for effective implementation of the methodology. Definitions of terms relating to wetland science were reviewed by the Technical Expert (see Section 3.9 below) and found to be scientifically sound.

3.5 Applicability Conditions

Conditions regarding activities or circumstances that are excluded from the scope of the methodology are termed “non-applicability conditions” within this Section 3.5.

The assessment team concludes, overall, that the applicability conditions are generally appropriate and in conformance with the VCS rules; exceptions to this statement are noted as gaps below.

The following table summarizes applicability conditions as written and the final evaluation of those changes during the assessment. In addition to the conditions as set out within the methodology framework (REDD+ MF), where modules or tools have additional applicability conditions, these are specified along with the name of the module or tool:

Applicability Conditions	**Assessment Team Findings**
REDD+ MF	
All project activities	
All land areas registered under the CDM or under any other GHG program (both voluntary and compliance-oriented) must be transparently reported and excluded from the project area. The exclusion of land in the project area from any other GHG program must be monitored over time and reported in the monitoring reports.	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
REDD activity types	
Land in the project area has qualified as forest (following the definition used by VCS; in addition, see Section 5.1.2) for at least the 10 years prior to the project start date. Mangrove forests are excluded from any tree height requirement in a forest definition, as they consist of (close to) 100% mangrove species, which often do not reach the same height as other tree species, and occupy contiguous areas and their functioning as a forest is independent of tree height.	This condition is written in a clear and precise manner to ensure that projects are under forest cover (per the VCS definition) and have been under forest cover for a period prior to start date, thus enforcing the requirement of Section 4.2.5 of the AFOLU Requirements that “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 assessment team agrees that mangrove forests should be excused from any height threshold set out in an internationally excepted definition of what constitutes a forest, although hopefully such a definition would make explicit allowance for mangrove forests.
If land within the project area is peatland or tidal wetlands and emissions from the soil carbon pool are deemed significant, the relevant WRC	The added reference to “tidal wetlands” appropriately reflects the expansion of the scope of the methodology.

modules (see Table 3) must be applied alongside other relevant modules.	
Baseline deforestation and forest degradation in the project area fall within one or more of the following categories…	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
Leakage avoidance activities must not include…	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
Avoiding Unplanned Deforestation activities are applicable under the following conditions: Baseline agents of deforestation shall: (i) clear the land for tree harvesting, settlements, crop production (agriculturalist) or ranching or aquaculture, where such clearing for crop production or ranching or aquaculture does not amount to large scale industrial agriculture activities (ii) have no documented and uncontested legal right to deforest the land for these purposes; and (iii) are either residents in the reference region for deforestation or immigrants. Under any other condition this methodology shall not be used.	The added reference to “aquaculture”, both in the main text and in footnote 13, appropriately reflects the reality that aquaculture may be the baseline scenario applicable to RWE project activities.
Avoiding Unplanned Deforestation activities are applicable under the following conditions: If, in the baseline scenario of avoiding unplanned deforestation project activities, post-deforestation land use constitutes reforestation, this methodology may not be used	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
Avoiding Planned Deforestation/Degradation: Avoiding planned deforestation/degradation activities are applicable under the following condition: Where conversion of forest lands to a deforested condition must be legally permitted	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
Avoiding Forest Degradation (Fuelwood/Charcoal) Avoiding forest degradation activities are applicable under the following conditions…	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
ARR activity types	
ARR activities are applicable under the following	The first applicability condition is written in a

conditions: • The project area is non-forest land or land with degraded forest. Note that restoring carbon stocks in degraded and managed forest (e.g., enrichment planting) is not an eligible activity as it falls in the category of Improved Forest Management (IFM). Restoring carbon stocks in a degraded but unmanaged forest is an ARR activity. • In strata with drained organic soil, ARR activities must be combined with rewetting. ARR activities are not eligible under the following condition: • The project scenario involves the application of nitrogen fertilizers. • If ARR activities enhance peat oxidation. Therefore, on peatland, this activity requires at least some degree of rewetting. In a tidal system where the tidal regime is restored or continues to be in place, ARR activities are considered not to enhance peat oxidation.	sufficiently precise manner to direct projects to use of the appropriate modules for estimating carbon stock changes in ARR project activities. The guidance provided is consistent with the explanatory note under Section 4.2.1 of the AFOLU Requirements. The assessment team has no comments regarding the second applicability condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above). The first non-applicability condition is written in a clear and precise manner to enforce "Note" below Section 4.2.20(1) of the AFOLU Requirements, which specifies that ARR activities involving nitrogen fertilization are not eligible project activities. The second non-applicability condition is written in a clear and precise manner to enforce the requirement of Section 4.2.20(1) of the AFOLU Requirements. Note that the prohibition against harvesting of trees in the project scenario, which exists in the currently prevailing version of REDD+ MF, has been removed. This is appropriate, given that M-ARR now generally includes appropriate procedures to account for any emissions attributable to such harvesting (see Section 3.9.2 below).
Where project activities on wetlands are excluded by the applicability conditions of applied modules or tools, such applicability conditions can be disregarded for the purpose of their use within this methodology, as quantification procedures for peat and tidal wetland soils are provided in Modules BL-PEAT, M-PEAT, BL-TW and M-TW. Therefore, ARR activities on wetlands are regarded as combined ARR-RWE activities.	It is appropriate to disregard any exclusion of project activities on wetlands, as the only reason for such exclusion would be an absence of appropriate accounting procedures specific to wetland soils, and that the methodology now supplies the appropriate criteria in the named modules.
All WRC activity types	
WRC activities are not eligible under the following conditions: • Project activities lower the water table, unless the project converts open water to tidal wetlands, or improves the hydrological connection to impounded waters. • Changes in hydrology do not result in the accumulation or maintenance of soil carbon stock, noting a) this pertains to projects that	The conditions are consistent with the AFOLU Requirements Sections 4.2.16 - 4.2.19. Per AFOLU Requirement Section 4.6.20 there can be no significant hydrological effect on adjacent lands, either by using a large enough buffer or physical barriers. The water table depths in adjacent lands will be monitored to detect ecological leakage. The second condition is consistent with Section 4.2.19(1) of the AFOLU Requirements and effectively requires that,

intend to sequester carbon through sedimentation and/or vegetation development and b) this does not pertain to projects that increase salinity to reduce CH4 emissions. Projects that aim to decrease CH4 emissions through increased salinity must account for any changes in SOC stocks. • Hydrological connectivity of the project area with adjacent areas leads to a significant increase in GHG emissions outside the project area. • Project activities include the burning of organic soil. • Nitrogen fertilizer(s), such as chemical fertilizer or manure, are applied in the project area during the project crediting period.	where project activities are intended to sequester carbon, they must be designed to achieve this end. Procedures are contained in module LK-ECO to conduct monitoring in order to ensure that emissions outside the project area are precluded (see Section 3.9.3 below). .
RWE activity types	
For RWE project activities, prior to the project start date, the project area must meet the following conditions: a) The area is free of any land use that could be displaced outside the project area, as demonstrated by at least one of the following, where relevant: • The project area has been abandoned for two or more years prior to the project start date; or • Use of the project area for commercial purposes (i.e., trade) is not profitable as a result of salinity intrusion, market forces, or other factors. In addition, timber harvesting in the baseline scenario within the project area does not occur; or • Degradation of additional wetlands for new agricultural/aquacultural sites within the country will not occur or is prohibited and by enforced law. OR b) The area is under a land use that could be displaced outside the project area, although in such case, baseline emissions from this land use must not be accounted for. OR c) The area is under a land use that will continue at a similar or greater level of service or production during the project crediting period	The conditions are written in a sufficiently clear and precise manner, such that it can be determined whether a project activity meets with the conditions. Regarding the condition which states that "The area is under a land use that could be displaced outside the project area" with the caveat that "baseline emissions from this land use must not be accounted for", the assessment team expressed concern that this condition violated Section 3.6.1 of the AFOLU Requirements, which states the following: "Methodologies shall establish procedures to quantify all significant sources of leakage. Leakage is defined as any increase in GHG emissions that occurs outside the project boundary (but within the same country), and is measurable and attributable to the project activities. All leakage shall be accounted for, in accordance with this Section 4.6." However, the assessment team received guidance from Amy Schmid, of Verra (via email received 21 February 2019), in which it was confirmed that "we will not require [the applicability condition] to fully meet the requirements of Section 4.6.1 of the AFOLU Requirements, per the above..." in respect of the specific applicability condition in question. Therefore, we judge that the condition in question complies with the assessment criteria, as interpreted by Verra, in spite of an apparent contradiction to the letter of Section

(e.g., reed or hay harvesting, collection of fuelwood, subsistence harvesting, and commercial fishing). The project proponent must demonstrate (a), (b) or (c) above, based on verifiable information such as laws and bylaws, management plans, annual reports, annual accounts, market studies, government studies or land use planning reports and documents.	3.6.1 of the AFOLU Requirements.
Peatland Rewetting activity types	
This methodology is applicable to rewetting drained peatland (RDP) activities on project areas that meet the VCS definition for peatland (see VCS Program Definitions).	The applicability conditions are written in a sufficiently clear and precise manner, such that it can be determined whether a project activity meets with the conditions. The list of conditions in the currently prevailing version of REDD+ MF has been removed and replaced with a general reference to the AFOLU Requirements for the definition of peatland and of rewetting of drained peatland activities. This is appropriate, given that the contents of the AFOLU Requirements may change somewhat over time and that referencing this document provides more flexibility in that case. **Gap**: The BL-PEAT and M-PEAT modules state, in Section 4, that "This module is limited to domed peatlands in the tropical climate zone." While it is not necessarily an issue to have applicability conditions that are additive, it seems problematic, when use of the BL-PEAT and M-PEAT modules are mandatory for projects on peatland (which they are, per Table 4 of REDD+ MF), that significant applicability conditions for use of those modules (which are, de facto, applicability conditions for use of the methodology as a whole) are not expressed within REDD+ MF. The assessment team notes that the following text exists within Section 4.4 of the currently prevailing version of REDD+ MF: "The scope of this methodology is limited to domed peatlands in the tropical climate zone."
Tidal Wetland Restoration activity types	
Project activities restoring tidal wetlands may include any of the following, or combinations of the following: • Creating, restoring and/or managing hydrological conditions (e.g., removing tidal barriers, improving hydrological connectivity, restoring tidal flow to wetlands or lowering water	The conditions are written in a sufficiently clear and precise manner, such that it can be determined whether a project activity meets with the conditions. The conditions ensure that project activities are limited to those activities included as eligible project activities under Section 4.2.19(1) of the AFOLU Requirements.

levels on impounded wetlands) • Altering sediment supply (e.g., beneficial use of dredge material or diverting river sediments to sediment-starved areas) • Changing salinity characteristics (e.g., restoring tidal flow to tidally-restricted areas) • Improving water quality (e.g., reducing nutrient loads leading to improved water clarity to expand seagrass meadows, recovering tidal and other hydrologic flushing and exchange or reducing nutrient residence time) • (Re-)introducing native plant communities (e.g., reseeding or replanting) • Improving management practice(s) (e.g., removing invasive species, reduced grazing) • The prescribed burning of herbaceous and shrub aboveground biomass (cover burns) as a project activity may occur	
Conservation of Intact Wetland activity types	
This methodology is applicable to conservation of undrained and partially drained peatland (CUPP) activities on project areas that meet the VCS definition for peatland (see VCS Program Definitions). CUPP activities are not eligible if in combination with REDD project activities on peatland that increase drainage.	The applicability conditions are written in a sufficiently clear and precise manner, such that it can be determined whether a project activity meets with the conditions. The list of conditions in the currently prevailing version of REDD+ MF has been removed and replaced with a general reference to the AFOLU Requirements for the definition of peatland and of rewetting of drained peatland activities. This is appropriate, given that the contents of the AFOLU Requirements may change somewhat over time and that referencing this document provides more flexibility in that case. Note that the limitation in the currently prevailing version of REDD+ MF, which states that "The scope of this methodology is limited to domed peatlands in the tropical climate zone", has been removed. Procedures in X-STR have been revised to support this scope expansion (see Section 3.6.5 below).
Project activities conserving tidal wetlands may include: • Protecting at-risk wetlands (e.g., establishing conservation easements, establishing community supported management agreements, establishing protective government regulations, and preventing disruption of water and/ or sediment supply to wetland areas) • Improving water management on drained	The conditions are written in a sufficiently clear and precise manner, such that it can be determined whether a project activity meets with the conditions. The conditions ensure that project activities are limited to those activities included as eligible project activities under Section 4.2.19(2) of the AFOLU Requirements.

wetlands • Maintaining or improving water quality for seagrass meadows • Recharging sediment to avoid drowning of coastal wetlands • Creating accommodation space for wetlands migrating with sea-level rise	
Avoiding Unplanned Wetland Degradation activity types	
Avoiding unplanned wetland degradation activities are eligible under the following condition: • Baseline agents of wetland degradation (i) cause an alteration in the hydrology of the project area (involving drainage, interrupted sediment supply, or both) and/or a loss of soil organic carbon; (ii) have no documented and uncontested legal right to degrade the wetland; and (iii) are either residents in the reference region for wetland degradation (see Section 5.1.4 below) or immigrants. Under any other condition, this methodology must not be used.	The applicability conditions are written in a sufficiently clear and precise manner, such that it can be determined whether a project activity meets with the conditions.
Avoiding Planned Wetland Degradation activity types	
Avoiding planned wetland degradation activities (that is, not combined with REDD project activities. In combined activities, the applicability conditions for REDD apply, and those outlined in Modules BL-TW and M-TW) are eligible under the following condition: • Conversion of intact or partially altered wetlands to a degraded condition must be legally permitted. Note that where the project activity involves the avoidance of future degradation under conversion concessions, which are without legal authorization and documentation at the project start date, the project qualifies as AUWD.	The applicability condition is written in a sufficiently clear and precise manner, such that it can be determined whether a project activity meets with the condition. **Gap**: In the judgment of the assessment team, the statement that "Note that where the project activity involves the avoidance of future degradation under conversion concessions, which are without legal authorization and documentation at the project start date, the project qualifies as AUWD" stands in non-conformance to Section 4.2.7 of the AFOLU Requirements and introduces a number of other consistency issues with respect to other aspects of the methodology. This presence of this language was noted by the assessment team in Section 4.3.3 of REDD+ MF and NCR 119 was issued; see Appendix A for the finding, which details, in full, the various issues introduced by this language. In response to the finding, the questionable text was removed from Section 4.3.3 of REDD+ MF, but the assessment team did not notice that it was also present in Section 4.5.3 of REDD+ MF.
VMD0006 BL-PL Module	
Gap: If any revision to the applicability conditions of this module has been made, those revisions	

will not have been reviewed by the assessment team.	
VMD0007 BL-UP Module	
The module is applicable for estimating baseline emissions from unplanned deforestation (conversion of forest land to non-forest land in the baseline case). The following conditions must be met to apply this module. The forest landscape configuration can be mosaic, transition or frontier. • The module shall be applied to all project activities where the baseline agents of deforestation: (i) clear the land for settlements, crop production (agriculturalist), ranching or aquaculture, where such clearing for crop production, ranching or aquaculture does not amount to large scale industrial agri/aquaculture activities;[1] (ii) have no documented and uncontested legal right to deforest the land for these purposes; and (iii) are either resident in the region (reference region—cf. Section 1 below) or immigrants. • Where pre-project, unsustainable fuelwood collection is occurring within the project boundaries, Modules BL-DFW and LK-DFW shall be used to determine potential leakage	The added reference to "aquaculture", both in the main text and in footnote 2, appropriately reflects the reality that aquaculture may be the baseline scenario applicable to RWE project activities.
VMD0009 LK-ASP Module	
The module is applicable for estimating the leakage emissions due to activity shifting from forest lands that are legally authorized and documented to be converted to non-forest land, including activity shifting to forested wetland that is drained or degraded as a consequence of project implementation. The module is also applicable for estimating the leakage emissions due to activity shifting from non-forested wetlands that are legally authorized and documented to be converted and degraded. Under these situations, displacement of baseline activities can be controlled and measured directly by monitoring	Addition of reference to wetland degradation appropriately reflects the expansion of the methodology to encompass project activities that prevent degradation of tidal wetlands. Addition of statement that "The module is also applicable for estimating the leakage emissions due to activity shifting from non-forested wetlands that are legally authorized and documented to be converted and degraded" is appropriate for the same reason.

the baseline deforestation or wetland degradation agents or class of agents. This tool must be used for projects in areas where planned deforestation happens on forested wetlands, regardless of the absence of wetland within the project boundaries. The module is mandatory if Module BL-PL has been used to define the baseline, and the applicability conditions in Module BL-PL must be complied with in full.	
VMD0010 LK-ASU Module	
This module is applicable for estimating carbon stock changes and greenhouse gas emissions related to the displacement of activities that cause deforestation of lands or wetland degradation outside the project area due to avoiding unplanned deforestation or avoiding unplanned wetland degradation in the project area. Activities subject to potential displacement are conversion of forest land to grazing lands, crop lands, and other land uses, or conversion of intact or partially degraded wetlands to drained or degraded wetlands. The module is mandatory if module BL-UP has been used to define the baseline and the applicability conditions in module BL-UP must be complied with in full.	Addition of reference to wetland degradation appropriately reflects the expansion of the methodology to encompass project activities that prevent degradation of tidal wetlands.
VMD0013 E-BPB Module	
This module is applicable to REDD and REDD-WRC project activities.	The scope has been broadened in an appropriate manner, given that the module is now being used by all REDD and REDD-WRC project activities (including those situated on tidal wetland).
VMD0015 M-REDD	
The module is mandatory for REDD and CIW project activities.	Broadens the scope to include all CIW project activities. **Gap**: The assessment team is not convinced that M-REDD, as currently written, contains appropriate criteria and procedures for monitoring GHG emissions and removals attributable to CIW project activities. See Section 3.9.2.3 below for more details on this.
Where selective logging is taking place in the project case…	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section

	2.1 above).
VMD0016 X-STR Module	
Any module referencing strata i must be used in combination with this module. In case of REDD, aboveground biomass stratification is only used for pre-deforestation forest classes, and strata are the same in the baseline and the project scenario. Post-deforestation land uses are not stratified. Instead, average post-deforestation stock values (e.g., simple or historical area-weighted approaches are used, as per Module BL-UP). For peatland rewetting and conservation project activities this module must be used to delineate non-peat versus peat and to stratify the peat according to peat depth and soil emission characteristics, unless it can be demonstrated that the expected emissions from the soil organic carbon pool or change in the soil organic carbon pool in the project scenario is de minimis. In the case of WRC project activities, the project boundary must be designed such that the negative effect of drainage activities that occur outside the project area on the project GHG benefits are minimized.	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
VMD0017 X-UNC Module	
This module is mandatory when using methodology REDD+ MF. It is applicable for estimating the uncertainty of estimates of emissions and removals of CO_2-e generated from REDD and WRC project activities. The module focuses on the following sources of uncertainty: • Determination of rates of deforestation and degradation • Uncertainty associated with estimation of stocks in carbon pools and changes in carbon stocks • Uncertainty associated with estimation of peat emissions • Uncertainty in assessment of project emissions Where an uncertainty value is not known or cannot be simply calculated, a project must justify that it is using an indisputably conservative	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).

number and an uncertainty of 0% may be used for this component. Guidance on uncertainty – a precision target of a 95% confidence interval half-width equal to or less than 15% of the recorded value must be targeted. This is especially important in terms of project planning for measurement of carbon stocks; sufficient measurement plots should be included to achieve this precision level across the measured stocks.	
VMD0041 BL-ARR Module	
This module is applicable under the following conditions: • The applicability conditions set out in AR-ACM0003 Afforestation and reforestation of lands except wetlands must be met. [2] • Applicability conditions included in AR-ACM0003 Afforestation and reforestation of lands except wetlands and corresponding tools that exclude project activities on wetlands can be disregarded for the purpose of their use in this module, as accounting procedures for the peat soil are provided in Modules BL-PEAT and BL-TW. • Where the ARR project activity is implemented on peatland, the peatland must be degraded in the baseline scenario as identified by the presence of drainage infrastructure (ditches, canals) and associated lowered water tables below the surface. In the case of forested peatland, degradation may be identified by the removal or degradation of the tree cover before the project start date. • Where the ARR project activity is implemented on tidal wetlands, the wetland must be degraded, as defined in	The only conditions that have been substantively revised from the language in the currently prevailing version of the methodology and that, as such, fall within the scope of the assessment (see Section 2.1 above), are the following: • The condition "Where the ARR project activity is implemented on tidal wetlands, the wetland must be degraded, as defined in REDD+ MF" has been added. This appropriately references the definition of "degraded wetland" as set out in REDD+ MF, thus ensuring clarity. • The following previously existing condition has been removed: "This module is not applicable under the following condition… Project scenarios involving the harvesting of trees are excluded from this module. Therefore, procedures for the estimation of long-term average carbon stocks are not required. This is justified, as the revised version of M-ARR includes procedures for estimation of long-term average carbon stocks.

REDD+ MF.	
VMD0045 M-ARR Module	
This module is applicable under the following conditions: • The applicability conditions provided in AR-ACM0003.[3] • Applicability conditions included in AR-ACM0003 and corresponding tools that exclude project activities on wetlands can be neglected for the purpose of their use in this module, as accounting procedures for the peat soil are provided in Modules M-PEAT and M-TW.	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
VMD0044 LK-ECO Module	
This module is applicable under the following condition: • Leakage caused by hydrological connectivity is avoided by project design and site selection, as set out in Section 5 below.	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
VMD0045 M-ARR Module	
This module is applicable under the following conditions: • The applicability conditions provided in AR-ACM0003.1 • Applicability conditions included in AR-ACM0003 and corresponding tools that exclude project activities on wetlands can be neglected for the purpose of their use in this module, as accounting procedures for the peat soil are provided in modules BL-PEAT and M-TW.	The only conditions that have been substantively revised from the language in the currently prevailing version of the methodology and that, as such, fall within the scope of the assessment (see Section 2.1 above), are the following: • The condition "Applicability conditions included in AR-ACM0003 and corresponding tools that exclude project activities on wetlands can be neglected for the purpose of their use in this module, as accounting procedures for the peat soil are provided in Modules M-PEAT and M-TW." In this text, the reference to BL-PEAT in the currently prevailing version of M-ARR has been revised to M-PEAT. In addition, a reference to M-TW has been added. The revision to M-PEAT appears to be a correction, as M-PEAT is the module used for monitoring emissions and removals from soil organic carbon attributable to project activities on peatland. **Gap**: The reference to M-

	TW may also be appropriate, as M-TW is the module used for monitoring emissions and removals from soil organic carbon attributable to project activities on tidal wetlands. However, the text states that "accounting procedures for the peat soil are provided in… M-TW". This is confusing, as M-TW does not pertain to project activities on peat soil.
VMD0046 M-PEAT Module	
This module is applicable to RDP and CUPP activities as defined in VCS AFOLU Requirements. The project area must meet the VCS definition for peatland. This module is limited to domed peatlands in the tropical climate zone. Furthermore, the following applicability conditions apply: • It must be demonstrated using tool T-SIG that N2O emissions in the project scenario are not significant, or it must be demonstrated that N2O emissions will not increase in the project scenario compared to the baseline scenario, and therefore N2O emissions need not be accounted for. • In the baseline scenario the peatland must be drained or partially drained. • At project start the peatland may still be undrained. • It must be demonstrated using Module LK-ECO that ecological leakage must not occur.	The assessment team has no comments regarding this condition, as this condition has not been substantively revised from the language in the currently prevailing version of the methodology and, as such, it falls outside the scope of the assessment (see Section 2.1 above).
ADD-AM Demonstration of Additionality of Tidal Wetland Restoration and Conservation Project Activities	
This module is applicable to tidal wetland restoration and conservation projects meeting the applicability conditions set out in Section 4.5 of VCS methodology VM0007 REDD+ Methodology Framework.	The reference to the applicability conditions in Section 4.5 of REDD+ MF is appropriate. As discussed in Section 3.8 below, the applicability conditions appropriately define the positive list for additionality demonstration purposes.
BL-TW Module	
This module applies to tidal wetland restoration and conservation project activities, as defined in REDD+ MF. This module is applicable under the same applicability conditions outlined in REDD+ MF for WRC project activities.	Appropriately references REDD+ MF for applicability conditions pertaining to tidal wetland restoration and conservation project activities. The assessment team agrees that BL-TW is appropriate for any such activities deemed applicable under REDD+ MF.
M-TW Module	
This module applies to tidal wetland restoration and conservation project activities, as defined in REDD+ MF. This module is applicable under the	Appropriately references REDD+ MF for applicability conditions pertaining to tidal wetland restoration and conservation project

same applicability conditions outlined in REDD+ MF for WRC project activities.	activities. The assessment team agrees that BL-TW is appropriate for any such activities deemed applicable under REDD+ MF.

3.6 Project Boundary

3.6.1 Overview

The approach for identifying the project boundaries- temporal, geographic and applicable GHG sources and sinks- is appropriate for the project activities covered by the methodology. The assessment team concludes, overall, that the specification of the project boundary in the methodology is generally of adequate clarity and in conformance with the VCS rules.

The VCS Standard requires that the methodology elements establish criteria and procedures for describing the project boundary and identifying and selecting optional carbon pools, i.e. sources, sinks, and reservoirs relevant to the baseline and project scenarios. Procedures to quantify emissions are appropriately included in all methodology elements for all relevant pools and sources.

The methodology allows for flexibility in selecting carbon pools depending on project category and associated scenario or otherwise demonstrable conservative exclusion. The assessment team evaluated the appropriateness of mandatory or optional carbon pools and sources of GHG for project scenarios under the methodology and determined the methodology developers' choices were justified.

Further identification and discussion of the procedures for identifying the project boundaries is provided below.

3.6.2 Procedures in REDD+ MF

REDD+ MF appropriately addresses the establishment of spatial, temporal and gaseous boundaries to meet VCS AFOLU Requirements for REDD, ARR, and WRC project categories and applicable to AUDD, APD, and Degradation project scenarios. The guidance for identification of mandatory and optional pools is confirmed to be suitable based on the choosing of appropriate modules for a project specific methodology. A specific discussion of all substantive changes made to the procedures in REDD+ MF for identifying the project boundaries is provided below.

Section(s)	Change	Assessment Team Findings
2	[Extensive changes to Table 4]	Table 4 has been revised to better accommodate the various possible combinations of project activities supported by the methodology. As pointed out in the guidance above Table 4: "Where REDD or ARR any of these project activities take place in combination with WRC, the project must adhere to both the respective project category modules and the relevant WRC modules. For example, an AUDD

Section(s)	Change	Assessment Team Findings
		project combined with AUWD on tidal wetland, must follow the instructions provided in both respective columns." This provides clear instruction regarding how Table 4 is to be used and, with the exceptions identified below, Table 4 provides clear instruction regarding the combination of modules to be applied to a given project activity. In addition, the guidance provided by Table 4 is consistent with that provided in Section 4.3.1 of the AFOLU Requirements. **Gap**: Table 4 indicates that M-REDD is not used for CIW project activities; this is inconsistent with Section 8.2 of REDD+ MF, which references use of M-REDD for "stand-alone CIW project activities and CIW-REDD project activities" in two locations. This discrepancy has been identified as item 2 in NCR 104, which remained open as of the issuance of this report (see Appendix A below). **Gap**: Table 4 indicates that M-REDD is not applicable to ARR project activities, but E-BPB (which relies upon M-REDD) indicates in Section 4 that it is applicable to "...REDD-WRC project activities". This discrepancy has been identified as item 4 in NCR 112, which remained open as of the issuance of this report (see Appendix A below). **Gap**: Parameters from the "CP modules" (e.g., CP-AB and CP-D) are referenced throughout M-REDD. However, such modules are not required (per Table 4) for use with stand-alone WRC project activities; therefore, there is a disconnect in the methodology guidance, as the M-REDD states in Section 4 that "The module is mandatory for REDD and CIW project activities". This discrepancy has been

Section(s)	Change	Assessment Team Findings
		identified as item 4 in NCR 128, which remained open as of the issuance of this report (see Appendix A below).
5.1.2	"Mangrove forests are excluded from any tree height requirement in a forest definition, as nearly 100% or all of their vegetation consists of mangrove species, which often do not reach the same height as other tree species, and they occupy contiguous areas. Ecologically, their functioning as a forest is independent of tree height."	The assessment team agrees that mangrove forests should be excused from any height threshold set out in an internationally excepted definition of what constitutes a forest, although hopefully such a definition would make explicit allowance for mangrove forests.
5.1.2	"These procedures also apply to combined REDD+CIW project activities."	The assessment team agrees that the previously established procedures are also applicable to combined REDD+CIW project activities.
5.1.4	The WRC project area must meet the definition as provided in Section 4.2.16 of the VCS AFOLU Requirements…	The guidance in the AFOLU Requirements has been appropriately referenced. The assessment team understands that the VCS Validation and Verification Manual contains guidance that appears to preclude such a direct reference, stating on page 46 that "Methodologies must not restate VCS requirements". However, it is the judgment of the assessment team that the methodology developer cannot be reasonably expected to precisely reference the exact guidance on wetlands from the AFOLU Requirements without reprinting the text verbatim. Technically speaking, the VCS Validation and Verification Manual is a guidance document as opposed to a normative reference and, therefore, a non-conformance to this document does not necessarily constitute a material discrepancy. The assessment team received guidance from Verra, in an email from Amy Schmid dated 12 January 2018, that ""all WRC projects are required to meet the definition of wetland set out in the AFOLU Requirements, meaning that no project that only meets the definition of wetland in the Program Definitions would be eligible under the VCS Program."

Section(s)	Change	Assessment Team Findings
		Therefore, the language is deemed appropriate by the assessment team.
5.1.4	From "The project area must not have been not drained or converted to create GHG emissions reductions/removals" to "For RWE project activities, the project area must not have been drained or converted to create GHG emissions reductions/removals."	The change made is a correction to the grammar as well as a clarification that this requirement specifically applies to RWE project activities; both changes are appropriate (this requirement could not apply to CIW project activities since such lands cannot have been drained or converted prior to the project).
5.1.4	"The maximum eligible quantity of GHG emission reductions in WRC project activities is limited to the difference between the remaining SOC stock in the project and baseline scenarios after 100 years. If a significant difference at the 100-years mark cannot be demonstrated, the project area is not eligible for carbon crediting. The assessment must be executed ex ante using conservative parameters. Procedures are provided in Module X-STR."	The change made is the removal of specific references to peat and peatland. This is appropriate, given that the requirement of Section 4.5.29 applies to all WRC project activities, not just activities on peatland.
5.1.4	"WRC project activities in tidal zones must take account of effects of sea-level rise on project boundaries. Procedures are provided in Module X-STR."	Appropriately enforces the requirement of Section 4.3.25 of the AFOLU Requirements (see below regarding X-STR for more details).
5.1.4	"In CIW project activities that are not combined with REDD activities, various types of boundaries must be distinguished, depending on the CIW category (i.e., planned or unplanned wetland degradation)…"	Appropriately references BL-UP and BL-PL for further specification regarding the project boundary and other types of boundaries (e.g., the RRD in BL-UP).
5.2.1	From "…for which procedures are provided in module BL-PEAT" to "…for which procedures are provided in Modules BL-PEAT and BL-TW".	Correctly reflects the expansion to include project activities on tidal wetlands.
5.2.2	From "The project crediting period for REDD+ projects must be between 20 and 100 years" to "The project crediting period for AFOLU projects must be between 20 and 100 years"	Appropriately reflects that REDD+ MF now applies to project types other than REDD+ projects; the requirements are no inconsistent with those in Section 3.8.1 of the VCS Standard.
5.2.2	Change to text under "Peat Depletion Time (PDT) and Soil organic carbon Depletion Time (SDT)".	Appropriately broadens pre-existing references to PDT to also include SDT, given expansion of scope to encompass tidal wetlands.
5.3.1	Change from "peatland" to "wetlands".	Appropriately reflects expansion of

Section(s)	Change	Assessment Team Findings
		scope to encompass tidal wetlands.
5.3.3	Changes to "Justification / Explanation" in Table 5: • Changes to explanation of why carbon pools are included, excluded or optional • Removal of reference to preclusion of harvest in the project scenario • Revised references to specific modules used for quantifying carbon stock in litter, dead wood and soil	All changes were reviewed and found to be appropriate. Note that there have been no changes to the procedures for determining whether carbon pools are included in, or excluded from, the project boundary. The references to the specific modules used were reviewed and found to be appropriate.
5.3.3	Change from "Terrestrial" to "On mineral soil, and from "On peatland" to "Wetlands" under "Carbon pool" in Table 5.	Changes appropriately reflect the expanded scope of the methodology to include project activities on wetlands other than peatland.
5.3.4	Inclusion of herbaceous vegetation ("Included only for combined ARR-WRC projects explicitly in tidal wetlands")	Inclusion of herbaceous vegetation is permitted for both ARR and WRC project activities, per Section 4.3.1 of the AFOLU Requirements, and BL-ARR and M-ARR contain appropriate quantification procedures for herbaceous vegetation (see below for more details).
5.3.4	Revised references to specific modules used for quantifying carbon stock in litter, dead wood and soil	The references to the specific modules used were reviewed and found to be appropriate.
5.4.2, 5.4.3, 5.4.4	Differentiation of table between sources included in baseline and project quantification	Change is appropriate and consistent with the table presented in the VCS Methodology Template.
5.4.2, 5.4.3	Change to state that CO2 emissions from biomass burning are "included"	This is a purely semantic change that has no impact on quantification procedures, but the assessment team agrees that it is less confusing to state that this is source is include and that "Carbon stock decreases due to burning are accounted as a carbon stock change", as stated.
5.4.4	Addition of "Emissions from tidal wetlands mineral soil"	Appropriately expands the scope of the methodology to encompass project activities on tidal wetlands; inclusion of all three greenhouse gases ensures conformance to Sections 4.3.23-24 of the AFOLU Requirements.
5.4.4	Change from "Peat combustion" to "Peat or biomass combustion"	Required in order to introduce procedures to account for biomass

Section(s)	Change	Assessment Team Findings
		combustion, given that Section 4.5.2 of REDD+ MF explicitly states that "In RWE-ARR project activities, the prescribed burning of herbaceous and shrub aboveground biomass (cover burns) may occur".
5.4.4	Additional guidance regarding inclusion of fossil fuels	Guidance that "Mandatory where RWE project activities on tidal wetlands include fossil fuel combustion; In CIW project activities, potential emissions are negligible" is consistent with Section 4.3.3(3) of the AFOLU Requirements, which states that "…where machinery use for earth moving activities may be significant in WRC project activities as compared to the baseline, emissions shall be accounted for if above de minimis…" and that "Fossil fuel combustion from transport and machinery use in rewetting of drained peatland and conservation of peatland project activities need not be accounted for". (While the AFOLU Requirements indicates that fossil fuel emissions attributable to rewetting of drained peatland project activities "need not be accounted for", it does not present a nonconformity for the methodology to voluntarily include procedures to account for such emissions).

Note that the only GHG source required by the methodology to be included in the project boundary for ARR project activities is "Burning of woody biomass". Per the applicability condition in Section 4.4 of REDD+ MF, application of nitrogen fertilizers cannot be carried out under the project activity, so the exclusion of emissions from nitrogen fertilizers is justified. The assessment team also noted that, with the proposed revision, timber harvest is allowed for in ARR project activities. While timber harvest may entail substantive fossil fuel emissions, the assessment team noted that "Fossil fuel combustion from transport and machinery use in project activities" is specifically noted as a GHG source that "need not be accounted for" for ARR project activities, per Section 4.3.3 of the AFOLU Requirements.

3.6.3 Procedures in BL-PL

Gap: If any revision to the applicability conditions of this module has been made, those revisions will not have been reviewed by the assessment team (see Section 3.9.12 below for further details).

3.6.4 Procedures in BL-UP

A number of minor revisions have been made to the guidance for establishing the boundaries of the reference region for projecting the rate of deforestation (RRD), reference region for projecting location of deforestation (RRL) and leakage belt. These changes are cosmetic in nature and have no substantive impact on the guidance of the module except to provide increased clarity. All such changes have been reviewed and approved by the assessment team.

The only substantive change made has been the introduction of the following, as a possible exception to the requirements for establishing the RRD in Step 1.1.1.1 Alternate of Section 5: "Subnational policy regulations. Where the consolidated area of population census units surrounding the project area crosses subnational jurisdictional borders and it can be proven that varying land-use regulations in specific census units affect the baseline scenario differently in these census units compared to the project area, these census units can be excluded from the RRD. Levels of enforcement must be taken into account when assessing these differences"

In justifying this change, the methodology developer argued that the regulatory context and levels of enforcement can vary widely across jurisdictions in a manner that would have a significant effect on the baseline scenario, and provided an example of where this has occurred on the ground. The assessment team reviewed the justification provided and confirmed that it was appropriate.

3.6.5 Procedures in X-STR

A specific discussion of all substantive changes made to the procedures in X-STR for identifying the project boundaries is provided below.

Section(s)	Change	Assessment Team Findings
4	From "In the case of peatland rewetting and conservation project activities…" to "In the case of WRC project activities…"	Appropriately reflects expansion of scope to encompass tidal wetlands.
5.1	"for example using the UTM system" struck from first sentence below "Stratification of Above-ground Biomass Using Remote Sensing"	While not necessary, the change is acceptable in that the example provided was superfluous (the meaning of "a common geodetic system" should be clear enough without the UTM example).
5.1	Deletion of "Semi-automated image classification approaches may be applied."	It's not clear why this change made, but it doesn't seem particularly problematic. It doesn't specifically state that such classification may not be applied.
5.1	"Ancillary GIS data may be used to assist the delineation of biomass classes (e.g., elevation, vegetation maps)"	This is essentially a restatement of the previously included statement that "Thus, it is acceptable practice to base strata on ancillary data that can serve as a proxy for potential biomass classes

Section(s)	Change	Assessment Team Findings
		(eg, vegetation class maps, interpretation of aerial photographs or high resolution satellite imagery; see module BL-UP)." It's not clear why this language was added, but the addition is not problematic.
5.3.1	From "the peat thickness map must distinguish with a resolution of 50 cm strata where peat will be depleted within the project crediting period" to "the peat thickness map must distinguish those strata where peat will be depleted within the Crediting Period… The project proponent must demonstrate that the resolution used in mapping results in a conservative assessment (i.e., it tends to overestimate strata that will be depleted), for example, by assessing variation in peat depth near the critical depth through multiple corings at close distance or by assuming a default conservative error (e.g., of 10 cm in moss or sedge peat or 50 cm in (tropical) wood peat with coarse woody remnants)."	The change made is appropriate, in that it substitutes more nuanced guidance on selection of a conservative mapping approach for the previously existing guidance, which simply applied a blanket resolution requirement.
5.3.1	"Areas at the project start date with a peat layer shallower than required by the adopted definition of peatland may be included if those areas are connected with others that meet the definition. Isolated pockets that do not meet the definition may not be included."	This text is not inconsistent with the AFOLU Requirements, which does not impose a specific universal depth requirement for areas considered to be peatland.
5.3.1	Addition of procedures for creating a peat depth map for project activities not on tropical peat domes, beginning with "To create a peat depth map, depth measurements must be conducted in a systematic way along transects that cover the peatland…"	Procedures have been added for creating a peat depth in respect of peatlands not located on domed peatland. The procedures were reviewed by the Technical Expert (see Section 3.9 below) and found to be consistent with best available wetlands science. **Gap**: Given that the scope of applicability of the methodology is effectively limited, in respect of peatlands, to domed peatlands (as discussed in Section 3.5 above), it

Section(s)	Change	Assessment Team Findings
		seems inappropriate to include the guidance in Section 3.5.1, since the inclusion of such guidance implies that peatlands other than domed peatlands are eligible under the methodology (why would the methodology contain procedures for a land class that is precluded per applicability condition?). As such, the inclusion of this guidance would likely be a source of considerable confusion.
5.3.2	• Addition of the following text: "The project proponent must calculate an expected minimum number of plots per peat depth class based on required map accuracies. The choice of number of, distance between, and location of inventory transects and peat corings lies with the project proponent based on available resources, time, accessibility and required accuracies of the final peat strata map. They must be justified in the PD. Options include peat coring locations using representative random sampling or systematic sampling. In areas with limited accessibility, transects may need to be delineated according to access points and navigable routes. • Addition of the following text: "Interpolation of depth assessments between transects can follow isohypses of the height model. It must be demonstrated that the delineation of the area of the required peat depth is conservative."	These revisions were reviewed by the Technical Expert (see Section 3.9 below) and found to be consistent with best available wetlands science.
5.3.2	Removal of the following text: "A cross-	Removal of this text is acceptable, as

Section(s)	Change	Assessment Team Findings
	section of the dome can be established using corings along the same transect but starting from the opposite margin and following the same rules. A spatially explicit peat depth map can be attained from the peat depth data using spatial interpolation, such as Kriging."	the text in question simply indicated one possible acceptable way to fulfil the requirements, and removal of said text has no substantive effect on the underlying requirements themselves.
5.4	References to "peatland" and "peat" modified.	Appropriately reflects expansion of scope to encompass tidal wetlands.
5.4	References to adjustment for leakage added	Adjustment for leakage is mandated by Section 4.5.29 of the AFOLU Requirements, which states "To determine this long-term net GHG benefit, methodologies shall establish criteria and procedures to estimate the remaining soil carbon stock adjusted for any project emissions and leakage emissions in both the baseline and project scenarios for 100 years, taking into account uncertainties in modeling and using verifiable assumptions." The sentence beginning with "The adjustment for leakage is based on an approximation…" is simply a summary of the procedures that are set out in more detail elsewhere in X-STR.
5.4.1	Addifion of differentiation between organic soil and mineral soil.	Appropriately reflects expansion of scope to encompass tidal wetlands, since different procedures are appropriate to different types of soils.
5.4.1, 5.4.2	References to "peat" changed to "soil organic".	Appropriately reflects expansion of scope to encompass tidal wetlands (since, with this expansion, not all organic soils are necessarily peat soils.
5.4.1, 5.4.2	Significant revision to procedures to determine areas of wetland eligible for crediting	Significant revision has been made to these procedures. At a high level, the revisions are methodologically sound. Such revisions were reviewed by the Technical Expert (see Section 3.9 below) and found to be consistent with best available wetlands science. **Gap**: However, at a finer level of detail, significant issues with the procedures have been identified. These issues

Section(s)	Change	Assessment Team Findings
		currently known to the assessment team have been detailed in NCR 111, which remained open as of the issuance of this report (see Appendix A below).
5.5	Minor revisions to procedures for stratification according to peat depletion time	These revisions were reviewed by the Technical Expert (see Section 3.9 below) and found to be consistent with best available wetlands science.
5.5	"If tPDT-BSL,i falls within the Crediting Period, subsequent organic carbon loss from remaining mineral soil may be estimated as well using the procedure for SDT in Section 5.6."	This addition has been justified by the methodology developer under the rationale that, if the peat layer within a given stratum has been completely oxidized prior to the end of the crediting period (i.e., if "tPDT-BSL,i falls within the Crediting Period"), the stratum in question is, effectively, no longer peatland and, as such, it is no longer bound to the requirements for the peat depletion time as set out in Section 4.5.25(1)(a) of the AFOLU Requirements. The assessment team agrees with this rationale.
5.6	Insertion of procedures to stratify project area according to soil depletion time (SDT).	The procedures are set up to mirror those in Section 5.5 for stratifying according to the peat depletion time. The guidance provided is scientifically sound and accounts for complicating factors such as a non-linear loss rate and alternating mineral and soil horizons. The procedures conservatively assume that the soil depletion time is five years for strata with eroded soils, and BL-TW is appropriately referenced for further guidance on selection of default factors. The procedures comply with the requirements of Section 4.5.25(1)(b) of the AFOLU Requirements. These revisions were reviewed by the Technical Expert (see Section 3.9 below) and found to be consistent with best available wetlands science.
5.8-5.13	Insertion of stratification procedures for tidal wetlands	These procedures were included to ensure conformance with Section 4.3.25 of the AFOLU Requirements. The

Section(s)	Change	Assessment Team Findings
		procedures were reviewed by the Technical Expert (see Section 3.9 below) and found to be consistent with best available wetlands science.

3.7 Baseline Scenario

Not applicable, as the criteria and procedures for identifying the baseline scenario have not been revised from the currently prevailing version of the methodology and, as such, their review falls outside the scope of the assessment (see Section 2.1 above)..

3.8 Additionality

The criteria and procedures for determining additionality are appropriate for the project activities covered by the methodology. The assessment team concludes, overall, that the criteria and procedures for determining additionality are in conformance with the VCS rules.

For projects not eligible to use the activity method, the project method set forth in the baseline/additionality tool, as described in Section 3.7 above, is used by the methodology for determining additionality. The baseline/additionality tool is an appropriate additionality tool that has been approved under the Clean Development Mechanism (an approved GHG program) and therefore complies with VCS requirements for determination of additionality (as set out in Section 4.6.2 of the VCS Standard).

Steps 1 through 3 of the baseline/additionality tool for are appropriate for the project activities covered by the methodology, and the guidance provided to augment use of these steps is appropriate, for the reasons described in Section 3.7 above. Step 4 of the baseline/additionality tool, which requires a common practice analysis, is likewise appropriate. Specific references to “forestation” and “A/R CDM” aside, the language of Step 4 is practically identical to the corresponding of the VCS “Tool for the Demonstration and Assessment of Additionality in Agriculture, Forestry and Other Land Use (AFOLU) Project Activities”, and can be considered appropriate for the project activities covered by the methodology to the extent that Step 4 of the VCS “Tool for the Demonstration and Assessment of Additionality in Agriculture, Forestry and Other Land Use (AFOLU) Project Activities” (which is appropriate for all AFOLU project activities) can be considered appropriate for the project activities covered by the methodology. As with Steps 1 through 3, the methodology contains guidance to augment Step 4 of the baseline/additionality tool and ensure that the baseline/additionality tool is used in a manner that is appropriate to the project activities covered by the methodology, as described in Section 3.7 above.

Tidal wetland conservation and restoration project activities use an activity method for demonstrating additionality set forth in ADD-AM, as described in Section 3.7 above. To demonstrate additionality, two steps are involved.

1. Demonstrate regulatory surplus, in accordance with the VCS Standard

2. Applicability conditions represent the positive list

The positive list was determined to be appropriate for tidal wetland and sea grass restoration activities in the VCS-approved module, VM0033 Methodology for Tidal Wetland and Seagrass Restoration, where the level of restoration was determined to be 2.74% or less in the U.S. The methodology developers determined that no global data sets exist to determine the level of tidal wetland restoration activities outside the US and used expert judgement to establish the activity penetration of tidal wetland restoration activities outside of the United States as lower than anywhere in the United States. Additional analysis, described in the module and reviewed by the assessment team, found the penetration of tidal wetland conservation activities to be about 3.6% in the world. Given the low penetration (less than 5%) of the activities throughout the world, the new module was deemed appropriate for determining additionality.

The assessment team reviewed the process used by the methodology developers to select the expert as well as reviewed the qualifications of the expert (e.g. curriculum vitae), and assessed whether good practice methods were used for eliciting expert judgment, per VCS Standard Section 4.5.6. The assessment team confirmed that requirements were met both in terms of documentation of steps taken to locate and solicit the judgment of the expert, and the expertise of the expert in terms of assessing the data sources for global tidal wetland restoration activities.

3.9 Quantification of GHG Emission Reductions and Removals

As mentioned in Section 2.4 above, a Technical Expert was retained for the assessment. The Technical Expert was asked to specifically review the portions of the methodology for which their expertise was particularly relevant, as indicated below:

Methodology Element Asked to Review	**Portion Asked To Review**
REDD+ MF	Section 3, Section 8.3 (as specifically pertaining to WRC project activities)
BL-TW	Section 5
M-TW	Section 5
ADD-AM	Appendix A
X-STR	Sections 5.2-5.6 and 5.8-5.13
X-UNC	Sections 5.2.2, 5.2.3, 5.4.2 and 5.4.3
M-ARR	Portion of Section 5 related to ARR on wetlands influenced by sea level rise; guidance for parameter $C_{BSL\text{-}herb,i,t}$ in Section 6.1
BL-ARR	Guidance for parameter $C_{BSL\text{-}herb,i,t}$ in Section 6.1

The Technical Expert was asked to review the above to ensure that all criteria and procedures were scientifically sound and consistent with good practice in monitoring and measurement as applied to wetlands. Any issues raised by the Technical Expert were raised to the methodology developer via the findings process, as documented in Appendix A below. Therefore, the assessment team concludes, categorically, that the quantification procedures in the methodology are scientifically sound and consistent with good practice in monitoring and measurement as applied to wetlands, with the exception of any gaps flagged within the text of this report. A further discussion regarding how criteria and procedures in the methodology are consistent with the assessment criteria is provided below.

3.9.1 Baseline Emissions

3.9.1.1 General Comments

The assessment team cannot conclude, at this time, that the procedures for calculating baseline emissions and removals are in conformance with the VCS rules and requirements. The areas in which the assessment team has found conformance, as well as the areas in which gaps remain, are detailed below.

An assessment of the criteria and procedures for calculating baseline emissions and removals, as a whole, follows.

Criterion	Assessment findings
Are procedures for calculating baseline emissions and removals appropriate for the project activities covered by the methodology?	**Sometimes**, though **gaps** remain (e.g., the methodology does not contain procedures to account for biomass and/or burning in respect of ARR-WRC and stand-alone WRC project activities, as documented in Sections 3.9.1.4 and 3.9.2.2 below).
Are all algorithms, equations and formulas used appropriate and without error?	**Sometimes**, though **gaps** remain (e.g., there are discrepancies in tracking of variables from one module to another, in units of measurement and in calculation processes, as detailed in NCRs 102, 104, 106, 111-112, 115, 118, 123-127, and 129—see Appendix A below).
Do procedures for calculating baseline emissions and removals cover all GHG sources, sinks and reservoirs (and carbon pools) included in the project boundary?	**Sometimes**, though **gaps** remain (e.g., there are discrepancies that lead to the potential for double-counting or non-counting of emissions, as detailed in NCRs 113 and 117—see Appendix A below).
Are all models or default factors used are appropriate and in conformance with VCS requirements on same?	No specific models are used by the methodology; default factors are generally in conformance with VCS requirements (see Section 3.10 below for more details)

The audit team's specific findings regarding the individual modules used to quantify baseline emissions are provided below.

3.9.1.2 BL-PL

Gap: A revision was made to BL-PL as part of the general methodology revision process. The original reason for such revision is not known to the assessment team. The earliest mention of BL-PL, in correspondence with the methodology developer, is in an email that was received by the assessment team on 2 December 2018. To the best knowledge of the assessment team, a revision to BL-PL was not strictly required in order to address any of the assessment findings. The revision to BL-PL has not been reviewed by the assessment team. This is the reason why

various versions of BL-PL have not been listed in Section 2.2.1 above, even though these documents were, technically speaking, transmitted to the assessment team via email.

3.9.1.3 BL-UP

This module has been minimally changed from the prevailing version. Many minor improvements to the clarity of the text have been made; all have been reviewed by the assessment team and found to be appropriate. In addition, a handful of more substantive changes have been made, as discussed below.

Change	Assessment Team Comments
The sentence "An exception can be made if the project proponent can demonstrate that abandoned aquaculture ponds remain unused for more than 10 years." added to Part 2 of Section 5.	In support of this change, the methodology developer indicated (via email received 12 June 2018) that "The point here is that just because land is idle in an aquaculture setting, doesn't mean that it can be used by other people in a population growth setting. Normally, pond use is dictated by investment capacity and land ownership." The assessment team agrees with this conclusion.
The requirement to "Perform a separate assessment for terrestrial and wetland strata, if applicable" added to Step 3.4.1 of Section 5.	This change is appropriate, given the expansion of BL-UP to encompass project activities on wetlands and given that patterns of deforestation can generally be predicted to vary between wetland and terrestrial areas.
Changes regarding carbon accounting procedures referenced: • "When applying Module BL-UP for AUWD-REDD, stand-alone AUWD or RWE-REDD project activities, disregard the above reference to Module CP-S and use Module BL-TW or BL-PEAT (whichever is relevant) instead for soil GHG accounting" (Step 4.2.1, Section 5) • "For AUWD-REDD, stand-alone AUWD and RWE-REDD project activities, GHG emissions from the soil organic carbon pool are not quantified using Equation 21, see Step 4.3." • "Use Modules CP-AB, CP-W, CP-D, CP-LI and CP-S. for REDD project activities not implemented on wetlands. • "For AUWD-REDD or RWE-	**Gap**: These changes likely need additional review. Various discrepancies introduced by these changes are identified NCR 102, which remained open as of the issuance of this report (see Appendix A below). The outstanding issues with BL-UP that are currently known to the assessment team are as follows: • Equations 23 and 24 reference the parameter $C_{WP,i,i}$ but no such parameter exists. It appears likely that the intent was to reference the parameter $C_{WP,i}$ from CP-W. In this case, it should also be noted that parameter $C_{WP,i}$ is not listed below Equations 23 and 24, nor is it included in the parameter tables in Section 6. • Strides have been made in the effort to introduce clarity to the procedures, but additional effort is needed to resolve the issues. At least some of the remaining issues are: o The BL-UP states that "For AUWD-REDD or RWE-REDD project

REDD project activities, Equation 23 and Module CP-S must not be used. Instead, use Equation 24 for carbon stock change in all pools except soil, and Equations 25 or 26 for the quantification of GHG emissions from the SOC pool. For AUWD-REDD, stand-alone AUWD or RWE-REDD project activities, use Module BL-TW or BL-PEAT (whichever is relevant) to estimate soil GHG emissions following wetland degradation and apply Equation 25 or 26, respectively.”	activities, Equation 23 and Module CP-S must not be used. Instead, use Equation 24 for carbon stock change in all pools except soil, and Equations 25 or 26 for the quantification of GHG emissions from the SOC pool. For AUWD-REDD, stand-alone AUWD or RWE-REDD project activities, use Module BL-TW or BL-PEAT (whichever is relevant) to estimate soil GHG emissions following wetland degradation and apply Equation 25 or 26, respectively." It appears that the intent is to substitute the written word (which is prone to misinterpretation and confusion) for mathematical equations (which are, when correctly composed, completely clear) in respect of the quantification procedures. This opens a number of avenues for confusion. For example, one could infer, for stand-alone AUWD project activities, that the result of either Equation 25 or 26 should be made equal to C_{TOT} in Equation 22. However, this is not clearly stated. For AUWD-REDD project activities, one could presume that the result of either Equation 25 or 26 should be added to the result of Equation 24. However, this would cause an incorrect result, as Equations 25 and 26 perform quantification on a "cumulative basis" (summing across years from the project start date) while Equation 24 performs quantification on an "annual basis" (being quantified uniquely for each stratum-year combination). o Equations 25 and 26 in BL-UP are duplicative of Equation 1 in modules BL-PEAT and BL-TW,

	respectively. o Equations 34-37 do not seem to connect with any of the equations in REDD+ MF. For example, Equation 34 quantifies the parameter $GHG_{BSL\text{-}PEAT,PA,unplanned}$, which seems similar, but identical, to the parameter $GHG_{BSL\text{-}PEAT,unplanned}$ in Equation 8 of REDD+ MF.
Revision to Equation 22 (in the numbering scheme used in the module)	The upper limit of the index of summation has been revised from "t" to "t*". This change is appropriate and introduces consistency with the remainder of the methodology.
Revisions to Equations 23-26 and 28-37	**Gap**: A handful of technical issues with these revisions were identified by the assessment team in NCR 102, which remained open as of the issuance of this report (see two cells above for a detailed description of said issues).

Gap: BL-TW references E-FFC and E-BPB for quantification of emissions from fossil fuels and peat/biomass burning, respectively. However, it is notable that BL-PL and BL-UP, which are paired with BL-TW under certain circumstances, also contain procedures for quantification of emissions from fossil fuels and peat/biomass burning. This results in double-count of such emissions within the quantification framework and, thus, inappropriate use of the various modules within the methodology. This issue was identified in NCR 117, which remained open as of the date of issuance of this report (see Appendix A below).

3.9.1.4 E-BPB

A revision has been made to E-BPB in order to extend the scope to REDD-WRC project activities. A minor amendment has been made to the text in Section 5.1 (which contains procedures for quantifying emissions attributable to biomass burning) and a more significant amendment has been made to Section 5.2. To the best knowledge of the assessment team, the amendments made are structurally sound, with the exception of the gap described below.

Gap: While there does not seem to be anything incorrect with the procedures in E-BPB as written, a significant gap in coverage exists in respect of procedures for quantification of emissions attributable to biomass and peat burning for ARR-WRC and stand-alone WRC project activities. As stated in Section 4 of E-BPB, its applicability is limited to "REDD and REDD-WRC project activities". However, the methodology suggests, in the locations cited below, that E-BPB is to be used for ARR-WRC and stand-alone WRC project activities. This introduces an inconsistency and also creates a "coverage gap" whereby procedures to account for burning of biomass and peat effectively do not exist for such activities.

- Table 8 of REDD+ MF indicates that procedures for quantification of emissions attributable to peat combustion are "provided in module E-BPB" for WRC project activities
- Section 9.3.2 of REDD+ MF states that "Where emissions are included in the baseline, they must be monitored in the project case, following the methodological procedures described in the emission modules (E-BPB, E-FFC, and E-NA)."
- Sections 5.5 and 5.5 of BL-PEAT and M-PEAT, respectively, reference E-BPB for quantification of emissions attributable to peat combustion.
- Sections 8.1.4 and 8.4.4 of REDD+ MF reference BL-ARR and M-ARR, respectively, for "the accounting of biomass and biomass burning (if relevant)" in respect of "RWE-ARR project activities". However, BL-ARR and M-ARR still do not contain any procedures to account for emissions from burning of peat.

These issues were raised by the assessment team, in part, in NCRs 105, 112 and 113, which remained open as of the date of issuance of this report (see Appendix A below for the full text of these findings).

3.9.1.5 BL-ARR

The procedures for quantifying baseline emissions in Section 5 have been revised to allow for ARR project activities on tidal wetlands. The CDM methodology AR-ACM0003 (Afforestation and reforestation of lands except wetlands) and associated tools are still referenced for quantification of carbon stock change in relevant biomass pools. Additional procedures have been added to account for herbaceous biomass. The modules BL-PEAT and BL-TW have been referenced to provide quantification procedures in respect of the soil organic carbon pool for project activities on peatland and tidal wetlands, respectively. All of the changes have been reviewed and found to be appropriate. The AR-ACM0003 methodology is appropriately referenced and utilized, and the quantification procedures are free from error. The procedures for quantification of carbon stock in herbaceous biomass were reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science.

The other significant change has been the introduction of procedures to quantify and account for the long-term average GHG benefit, following Section 4.5.5 of the AFOLU Requirements. M-ARR is referenced for accounting procedures.

In summary, all revisions to BL-ARR have been reviewed and found to be appropriate.

3.9.1.6 BL-PEAT

A number of minor changes (changes to variable names and units of measure) were made to this module.

Gap: A number of minor technical issues have arisen due to the changes made. These issues are documented in NCR 125, in Appendix A below, which remained open as of the date of issuance of this report, and the reader is referred to those findings for a detailed description of the issues identified.

3.9.1.7 BL-TW

The procedures for quantification of baseline emissions in Section 5 of BL-TW were reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science. The procedures for calculating baseline emissions comply with the relevant requirements within the AFOLU Requirements, as described below.

AFOLU Requirements reference	**Assessment findings**
Section 4.4.10(1)	• Criteria and procedures for taking into account the current and historic hydrological characteristics of the watershed or coastal plain, and the drainage system in which the project occurs, are provided under "Infrastructure impediments to tidal hydrology" in Section 5.1.1 of BL-TW.
Section 4.4.10(2)	• Criteria and procedures for taking into account the long-term average climate variables influencing water table depths and the timing and quantity of water flow, as determined using data from climate stations that are representative of the project area and shall include at least 20 years of data, are provided under the heading "Climate Variables" in Section 5.1.1 of BL-TW.
Section 4.4.10(3)	• Criteria and procedures for taking into the impact of any planned water management activities are provided in the final sentence under "Infrastructure impediments to tidal hydrology" in Section 5.1.1 of BL-TW.
Section 4.4.11	• Criteria and procedures for establishing the baseline scenario require consideration of: o collapsing dikes or ditches that would have naturally failed over time without their continued maintenance and progressive subsidence of deltas or peatlands leading to a rise in relative water table depths in the final sentence under "Land use and development patterns" in Section 5.1.1 of BL-TW. o non-human induced elevation of non-vegetated wetlands to build vegetated wetlands in the final two sentences under "Climate variables" in Section 5.1.2 of BL-TW.
Section 4.4.12(1)	• Section 5.2.1 of REDD+ MF requires that "While developing WRC baselines, the project must reference a period of at least 10 years in order to model a spatial trend in drainage, and it must take into account long-term (20-year) average climate variables, for which procedures are provided in Modules BL-PEAT and BL-TW." • Section 8.1 of REDD+ MF additionally requires that BL-UP is used for AUWD activities. • Criteria regarding use of data from climate stations are provided under "Climate variables" in Section 5.1.2 of BL-TW. • BL-UP contains extensive criteria and procedures for referencing "a

AFOLU Requirements reference	Assessment findings
	period of at least 10 years for modeling a spatial trend in conversion, taking into account… the observed conversion practices", while BL-TW contains criteria and procedures for taking account the "drainage including canal width, depth, length and maintenance".
Section 4.4.12(2)	• Section 5.2.1 of REDD+ MF requires that "While developing WRC baselines, the project must reference a period of at least 10 years in order to model a spatial trend in drainage, and it must take into account long-term (20-year) average climate variables, for which procedures are provided in Modules BL-PEAT and BL-TW." • Section 8.1 of REDD+ MF additionally requires that BL-PL is used for APWD activities. • BL-PL contains extensive criteria and procedures for documentation that the project area was intended to be drained or otherwise converted, following these requirements, while BL-TW contains criteria and procedures for taking into account the depth of drainage.
Section 4.4.13	• Not applicable; the criteria and procedures for identifying fire in the baseline scenario do not fall under the scope of this assessment, for the reasons provided in Section 2.1 above.
Section 4.4.14	• This requirement is addressed in Section 5.3.1 of BL-TW, and the required criteria and procedures are provided in Section 5.3.2 of same.
Section 4.4.15	• This requirement is addressed in Section 5.3.1 of BL-TW, and the required criteria and procedures are provided in Section 5.3.2 of same.
Section 4.4.16	• Criteria and procedures for taking account of processes within the project area that reduce sediment supply associated with changes in the landscape are provided in Section 5.1.2 of BL-TW under "Land use and development patterns" and "Infrastructure impediments to tidal hydrology".
Section 4.4.17	• Criteria and procedures for identifying wetland erosion and/or migration resulting from sea level rise in the baseline scenario are provided in Section 5.8 of X-STR and Section 5.2 of BL-TW.
Section 4.5.1	• Procedures for quantifying baseline emissions are generally consistent with IPCC 2006 Guidelines for National GHG Inventories and IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry.
Section 4.5.2	• Not applicable; guidance from the IPCC 2006 Guidelines for National GHG Inventories does not neatly apply to this soil organic carbon accounting task sense.
Section 4.5.3	• In terms of the belowground biomass and dead wood carbon pools,

AFOLU Requirements reference	Assessment findings
	Section 5.2 of BL-TW states "…this methodology does not provide procedures for accounting of biomass loss due to sea level rise or erosion in the baseline scenario, which is conservative." The assessment team agrees that it is conservative (and inherently in conformance with Section 4.5.3) not to assume biomass loss due to sea level rise or erosion in the baseline scenario. • In terms of the soil organic carbon pool, Section 5.2 of BL-TW states, "For areas that submerge without erosion, the loss of SOC may be assumed to be insignificant. It is assumed that, upon submergence without erosion, soil carbon is not returned to the atmosphere unless site-specific scientific justification is provided. In areas with wave action, there may be a net loss of soil material in cases where erosion exceeds deposition, which would lead to carbon removal. In the baseline scenario, assuming that all carbon is re-sedimented and stored (and not oxidized) is conservative. However, in most cases a portion of this carbon will return to the atmosphere. Procedures are provided in Section 5.3.3 to estimate this quantity"; this approach is appropriate and does not assume immediate emission of the soil stock upon submersion or erosion.
Section 4.5.25	• Procedures for addressing the peat depletion time and soil depletion time requirements are provided in Sections 5.5 and 5.6 of X-STR, respectively (see Section 3.6.5 above).
Section 4.5.26	• See above comments regarding Section 4.4.11.
Section 4.5.27	• Procedures for using proxies are provided in Sections 5.3.2.1, 5.3.3.1, 5.3.4.1, 5.3.5.1 and 5.3.6.1, with further guidance provided in Section 5.3.1; corresponding requirements are provided in M-TW to ensure consistency between baseline and project quantification. • The methodology developer argued that the requirement that "Where relevant, the micro-topography of the project area (e.g., the proportion of hummocks and hollows and vegetation patterns in peatlands) shall be considered" does not apply to project activities on tidal wetlands. The assessment team agrees that it is unlikely that Section 4.5.27 was intended to be applied to project activities on tidal wetlands.
Section 4.5.28	• Regarding (1), while BL-TW does contain procedures to account for the loss of sediment from the project area in the baseline scenario in Section 5.3.3, these procedures are appropriate and conservative. • Regarding (2), M-TW does not contain any procedures to account for increased sedimentation in the project area, and so can automatically be considered conservative.
Section 4.5.29	• Procedures to address this requirement are provided in Section 5.4 of X-STR (see Section 3.6.5 above).

AFOLU Requirements reference	Assessment findings
Section 4.5.30	• BL-TW states, in Section 5.3.5, that "CH4 emissions in the baseline scenario may be conservatively excluded."
Section 4.5.31	• Not applicable; not relevant to baseline quantification.
Section 4.5.32	• Except as noted elsewhere in this report, the methodology ensures that combined project activities adhere to both the WRC requirements and the AFOLU requirements for other project activities.
Section 4.5.33	• Not applicable; procedures intended to satisfy this requirement are found in X-STR, though assessment of said procedures is outside the scope of the assessment (see Section 2.1 above).
Section 4.5.34	• Not applicable; procedures intended to satisfy this requirement are found in X-STR, though assessment of said procedures is outside the scope of the assessment (see Section 2.1 above).
Section 4.5.35	• These requirements are addressed through procedures to account for sea level rise in Section 5 of M-ARR (under "ARR on wetlands influenced by sea level rise") and Section 5.8 of X-STR.

Gap: BL-TW references E-FFC and E-BPB for quantification of emissions from fossil fuels and peat/biomass burning, respectively. However, it is notable that BL-PL and BL-UP, which are paired with BL-TW and M-TW under certain circumstances, also contain procedures for quantification of emissions from fossil fuels and peat/biomass burning. This results in double-count of such emissions within the quantification framework and, thus, inappropriate use of the various modules within the methodology. This issue was identified in NCR 117, which remained open as of the date of issuance of this report (see Appendix A below).

3.9.2 Project Emissions

3.9.2.1 General Comments

The assessment team cannot conclude, at this time, that the procedures for calculating project emissions and removals are in conformance with the VCS rules and requirements. The areas in which the assessment team has found conformance, as well as the areas in which gaps remain, are detailed below.

An assessment of the criteria and procedures for calculating project emissions and removals, as a whole, follows.

Criterion	Assessment findings
Are procedures for calculating project emissions and removals appropriate for the project activities covered by the methodology?	**Sometimes**, though **gaps** remain (e.g., there are discrepancies in the guidance for which modules are to be used to quantify project emissions from fossil fuel use, as detailed in NCR 104—see

Criterion	Assessment findings
	Appendix A below).
Are all algorithms, equations and formulas used appropriate and without error?	**Sometimes**, though **gaps** remain (e.g., there are discrepancies in tracking of variables from one module to another, in units of measurement and in calculation processes, as detailed in NCRs 102, 104, 106, 111-112, 115, 118, 123-127, and 129—see Appendix A below).
Do procedures for calculating project emissions and removals cover all GHG sources, sinks and reservoirs (and carbon pools) included in the project boundary?	**Sometimes**, though **gaps** remain (e.g., there are discrepancies that lead to the potential for double-counting or non-counting of emissions, as detailed in NCRs 113 and 117—see Appendix A below).
Are all models or default factors used are appropriate and in conformance with VCS requirements on same?	No specific models are used by the methodology; default factors are generally in conformance with VCS requirements (see Section 3.10 below for more details)

The audit team's specific findings regarding the individual modules used to quantify project emissions are provided below.

3.9.2.2 E-BPB

Gap: The same comments made under Section 3.9.1.4 above also apply here. An additional concern is that Section 4 of REDD+ MF explicitly states that, for RWE-ARR project activities, "The prescribed burning of herbaceous and shrub aboveground biomass (cover burns) as a project activity may occur". Thus, for RWE-ARR project activities, the methodology explicitly permits an activity that will result in GHG emissions, and the methodology does not contain any procedures to account for the emissions caused by said activity. This raises concerns regarding the principles of conservativeness and completeness, as set out in Section 2.4.1 of the VCS Standard, in addition to overall concerns regarding the integrity of the methodology.

3.9.2.3 M-REDD

M-REDD was revised to include procedures to monitor project emissions attributable to REDD-WRC and stand-alone WRC project activities.

Gap: The assessment team has significant misgivings regarding the manner in which M-REDD has been revised. The approach appears to have been, essentially, to include a small number of references to "CIW", make a number of other limited modifications and assume that all of the existing procedures within M-REDD can be applied, with limited modification, to WRC project activities. The concerns of the assessment team are detailed in NCR 128, which remained open as of the date of issuance of this report, and the reader is referred to Appendix A below for the full text of this finding, noting that the specific examples listed in NCR 128 are not a comprehensive listing of all discrepancies introduced by the revisions made. The assessment team has particular reservations regarding the adoption of procedures using remote sensing technology, which were

developed for monitoring carbon stock change in forests, to monitoring carbon stock change in nonforested wetlands. However, it is acknowledged that the procedures in question have not been referred to the Technical Expert for review. Had the assessment engagement not been discontinued, it is likely that the Technical Expert would have been brought in to provide expert review of these procedures.

Gap: A number of minor technical issues have arisen as a result of the revisions to M-REDD; these issues are detailed in NCRs 123, and 129-129, which remained open as of the date of issuance of this report, and the reader is referred to Appendix A below for the full text of these findings.

3.9.2.4 M-ARR

The procedures for quantifying baseline emissions in Section 5 have been revised to allow for ARR project activities on tidal wetlands. The CDM methodology AR-ACM0003 (Afforestation and reforestation of lands except wetlands) and associated tools are still referenced for quantification of carbon stock change in relevant biomass pools. Additional procedures have been added to account for herbaceous biomass. The modules M-PEAT and M-TW have been referenced to provide quantification procedures in respect of the soil organic carbon pool for project activities on peatland and tidal wetlands, respectively. All of the changes have been reviewed and found to be appropriate. The AR-ACM0003 methodology is appropriately referenced and utilized, and the quantification procedures are free from error. The procedures for quantification of carbon stock in herbaceous biomass, as well as the procedures for ARR project activities on wetlands influenced by sea level rise, were reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science.

The other significant change has been the introduction of procedures to quantify and account for the long-term average GHG benefit, following Section 4.5.5 of the AFOLU Requirements. The procedures appropriately reference the prescriptive requirements in Section 4.5.5, but provide interpretive guidance. The procedures have been reviewed and found to be internally consistent, free from error and also consistent with the requirements of Section 4.5.5 of the AFOLU Requirements.

In summary, all revisions to M-ARR have been reviewed and found to be appropriate.

3.9.2.5 M-PEAT

A number of minor changes (changes to variable names and units of measure) were made to this module.

Gap: A number of minor technical issues have arisen due to the changes made. These issues are documented in NCR 126, in Appendix A below, which remained open as of the date of issuance of this report, and the reader is referred to those findings for a detailed description of the issues identified.

3.9.2.6 M-TW

The procedures for quantification of project emissions in Section 5 of M-TW were reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science. The procedures for calculating baseline emissions comply with the relevant requirements within the AFOLU Requirements, as described below.

AFOLU Requirements reference	**Assessment findings**
Section 4.5.1	• Procedures for quantifying baseline emissions are generally consistent with IPCC 2006 Guidelines for National GHG Inventories and IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry.
Section 4.5.2	• IPCC 2006 Guidelines for National GHG Inventories has implicitly been referenced to establish procedures for quantifying GHG emissions/removals associated with the belowground biomass pool.
Section 4.5.25	• Procedures for addressing the peat depletion time and soil depletion time requirements are provided in Sections 5.5 and 5.6 of X-STR, respectively (see Section 3.6.5 above).
Section 4.5.27	• Procedures for using proxies are provided in, in BL-TW (as referenced by M-TW), in Sections 5.3.2.1, 5.3.3.1, 5.3.4.1, 5.3.5.1 and 5.3.6.1 with further guidance provided in Section 5.3.1. • The methodology developer argued that the requirement that "Where relevant, the micro-topography of the project area (e.g., the proportion of hummocks and hollows and vegetation patterns in peatlands) shall be considered" does not apply to project activities on tidal wetlands. The assessment team agrees that it is unlikely that Section 4.5.27 was intended to be applied to project activities on tidal wetlands.
Section 4.5.28	• Regarding (1), while BL-TW does contain procedures to account for the loss of sediment from the project area in the baseline scenario in Section 5.3.3, these procedures are appropriate and conservative. • Regarding (2), M-TW does not contain any procedures to account for increased sedimentation in the project area, and so can automatically be considered conservative.
Section 4.5.30	• BL-TW states, in Section 5.3.5, that "CH4 emissions in the baseline scenario may be conservatively excluded."
Section 4.5.31	• M-TW contains procedures to account for methane emissions in Sections 5.3.5 and 5.4.2. • The methodology developer argued that the requirement that "Where relevant, the micro-topography of the project area (e.g., the proportion of hummocks and hollows and vegetation patterns in peatlands) shall be considered" does not apply to project activities on tidal wetlands. The assessment team agrees that it is unlikely that Section 4.5.27 was intended to be applied to project activities on tidal wetlands.

AFOLU Requirements reference	Assessment findings
Section 4.5.32	• Except as noted elsewhere in this report, the methodology ensures that combined project activities adhere to both the WRC requirements and the AFOLU requirements for other project activities.
Section 4.5.33	• Not applicable; procedures intended to satisfy this requirement are found in X-STR, though assessment of said procedures is outside the scope of the assessment (see Section 2.1 above).
Section 4.5.34	• Not applicable; procedures intended to satisfy this requirement are found in X-STR, though assessment of said procedures is outside the scope of the assessment (see Section 2.1 above).
Section 4.5.35	• These requirements are addressed through procedures to account for sea level rise in Section 5 of M-ARR (under "ARR on wetlands influenced by sea level rise") and Section 5.8 of X-STR.

Gap: M-TW references E-FFC and E-BPB for quantification of emissions from fossil fuels and peat/biomass burning, respectively. The M-TW module also references M-REDD explicitly. However, it is notable that M-REDD, which is paired with M-TW under certain circumstances, also contains procedures for quantification of emissions from fossil fuels and peat/biomass burning. This results in double-count of such emissions within the quantification framework and, thus, inappropriate use of the various modules within the methodology. This issue was identified in NCR 117, which remained open as of the date of issuance of this report (see Appendix A below).

3.9.3 Leakage

The conclusions of the assessment team vary according to the type of leakage accounting, as mentioned below.

3.9.3.1 Ecological Leakage

The assessment team concludes, overall, that the procedures for calculating ecological leakage are appropriate for the project activities covered by the methodology, and are in conformance with the VCS rules.

In order to support the expansion of the scope of the methodology to account for project activities tidal wetlands, LK-ECO was modified to the required accounting procedures. The revised procedures in Section 5 of LK-ECO were were reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science. These revised procedures are also full consistent with Section 4.6.20 of the AFOLU Requirements.

3.9.3.2 Activity Shifting Leakage

The assessment team cannot conclude, at this time, that the procedures for calculating project emissions and removals are in conformance with the VCS rules and requirements.

The modules LK-ASP and LK-ASU, which serve to account for leakage attributable to avoided planned deforestation projects and avoided unplanned deforestation projects, respectively, were revised.

Gap: Significant accounting issues were identified by the assessment team in respect of the revisions made, as identified in NCRs 106, 114 and 115, all of which remained open as of the date of issuance of this report. The remaining issues are summarized below, though the reader is referred to Appendix A below for the complete details.

- Quantification procedures that were designed solely for REDD project activities have been adapted to other project activities without due care being taken to make the necessary revisions (NCR 106).
- A number of minor issues remain with the calculations (NCR 106).
- An erroneous reference to a “leakage belt” has been noted in LK-ASP (NCR 115).
- A number of discrepancies were identified in relation to X-STR (NCR 116).

3.9.3.3 Market Leakage

Procedures for accounting of market leakage are provided in LK-ME, which was not included within the scope of the methodology revision. To the best knowledge of the assessment team, nothing in the revisions made has triggered a need to revise LK-ME, and LK-ME the procedures in LK-ME remain fully consistent with the methodology.

3.9.4 Net GHG Emission Reductions and Removals

A number of minor changes were made to Section 5 of X-UNC, and a section specific to tidal wetlands (Section 5.4.2) were added. These changes were reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science. They were also generally reviewed by the assessment team in order to confirm that the pre-existing conformance to the principles set out in the IPCC 2006 Guidelines for National GHG Inventories (as referenced by Section 4.5.1 of the AFOLU Requirements in terms of uncertainty analysis) have not been altered, and the methodology continues to address uncertainty as required under Section 4.1.4 of the VCS Standard. The revisions to X-UNC are appropriate and in conformance with the VCS rules.

The assessment team cannot conclude, overall, that the procedures for calculating net GHG emission reductions and removals, in REDD+ MF, are in conformance with the VCS rules.

Gap: A number of accounting errors have been introduced through the revision. These errors are identified in NCR 104, which remained open as of the date of issuance of this report, and the reader is referred to Appendix A for a detailed description of the issues.

3.10 Monitoring

The assessment team concludes, overall, that the procedures for monitoring in the methodology are generally in conformance with the VCS rules, with exceptions as noted below (and see also the gaps identified in Section 3.9.2.3 above). The procedures for monitoring are generally appropriate for the project activities covered by the methodology (again, excepting the gaps identified in Section 3.9.2.3 above), as further described for each applicable parameter below.

The overall procedures for monitoring are set out in Section 9.3 of REDD+ MF, and are minimally changed with the revision, which is appropriate given that the procedures are relatively generic. Guidance for use of expert judgment (which appropriately references the IPCC 2006 Guidelines for National GHG Inventories, as per Section 4.5.1 of the AFOLU Requirements) and requirements for monitoring of continued conformance with the applicability conditions for WRC project activities have been added.

The assessment team has the following general findings regarding the data units used in the methodology:

Data unit	Abbreviation in methodology	Findings
Meter	m	As defined under the Le Système international d'unités ("SI system"), the meter is an internationally recognized unit of distance that is commonly used in GHG accounting
Centimeter	cm	As defined under the Le Système international d'unités ("SI system"), the centimeter is an internationally recognized unit of distance that is commonly used in GHG accounting
Cubic meter	m^{-3}	See above comment regarding the meter; the cubic meter is thus an internationally recognized unit of volume that is commonly used in GHG accounting
Year	yr	The year is a universal unit of time that is commonly defined with sufficient specificity for purposes of the methodology
Tonne	t	As defined under the Le Système international d'unités ("SI system"), the tonne is an internationally recognized unit of weight that is commonly used in GHG accounting
Hectare	ha	As a unit adopted for use with the Le Système international d'unités ("SI system"), the hectare is an internationally recognized unit of distance that is commonly used in GHG accounting

3.10.1 Assessment of Data and Parameters Available at Validation

An identification of each parameter available at validation for which guidance was newly added or substantially changed in the methodology, and an assessment (as requested) of how each piece

of newly added or substantially changed information provided in the parameter table is appropriate, is provided below. For parameters that have not been newly added to the methodology (i.e., that existed in prior versions of the methodology), "N/A" denotes information that was not substantially changed in the methodology and is therefore excluded from the scope of the assessment, as discussed in Section 2.1 above.

3.10.1.1 Parameters in REDD+ MF

Data / Parameter	$E_{FC,i,t}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	Reference to E-FFC is appropriate.
Value applied	N/A
Justification of choice of data	Reference to E-FFC is appropriate.
Purpose of Data	Purpose is correctly stated.

3.10.1.2 Parameters in BL-PL

Gap: If any revision to the data and parameters available at validation has been made, those revisions will not have been reviewed by the assessment team (see Section 3.9.12 above for further details).

3.10.1.3 Parameters in BL-UP

See Section 3.10.2.2 below.

3.10.1.4 Parameters in LK-ASP

Gap: If any revision to the data and parameters available at validation has been made, those revisions have not been review or approved by the assessment team, given the substantive accounting issues that remain in respect of this module (see Section 3.9.3.2 above for further details).

3.10.1.5 Parameters in LK-ASU

Gap: If any revision to the data and parameters available at validation has been made, those revisions have not been review or approved by the assessment team, given the substantive accounting issues that remain in respect of this module (see Section 3.9.3.2 above for further details).

3.10.1.6 Parameters in E-BPB

See Section 3.10.2.6 below.

3.10.1.7 Parameters in M-REDD

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed in the methodology.

3.10.1.8 Parameters in X-STR

Data / Parameter	$A_{BSL,i}$ *or* A_i
Data unit	N/A
Source of data	N/A
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	The specification of measurement methods is substantively improved over the guidance in the previous version of the methodology. The guidance provided is consistent with commonly accepted good practice.
Purpose of Data	N/A
Assessment team overall conclusion:	N/A

Data / Parameter	$Depth_{peat\text{-}BSL,i,t0}$ *and* $Depth_{peat\text{-}WPS,i,t0}$
Data unit	N/A
Source of data	N/A
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	Additional guidance added to the “comments” field is appropriate to help ensure that data utilized are of consistent quality.
Purpose of Data	N/A
Assessment team overall conclusion:	N/A

Data / Parameter	$Depth_{soil,i,t0}$
Data unit	Appropriate for measurement of depth

Source of data	Source of data is appropriate to help ensure that data are applicable to the project area
Value applied	No value specified
Justification of choice of data or description of measurement methods and procedures applied	Guidance is appropriate to help ensure that data are applicable to the project area
Purpose of Data	Purpose of data is correctly specified

Data / Parameter	$Rate_{Closs\text{-}BSL,i,t}$, $Rate_{Closs\text{-}BSL,i}$
Data unit	Appropriate unit for calculation of carbon stock loss per year
Source of data	Guidance for parameter $C\%_{BSL\text{-}emitted,i,t}$ is appropriately referenced
Value applied	No value specified
Justification of choice of data or description of measurement methods and procedures applied	Procedures are appropriately referenced.
Purpose of Data	N/A

Data / Parameter	$Rate_{Closs\text{-}WPS,i,t}$
Data unit	Appropriate unit for calculation of carbon stock loss per year
Source of data	N/A
Value applied	No value specified
Justification of choice of data or description of measurement methods and procedures applied	Assessment team agrees it is conservative to set this value to zero.
Purpose of Data	Purpose of data is correctly specified

Data / Parameter	*VC*
Data unit	Appropriate unit for calculation of volumetric carbon content

Source of data	Appropriate for measuring this parameter
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	Procedures are appropriately referenced.
Purpose of Data	Purpose of data is correctly specified

3.10.1.9 Parameters in BL-ARR

Data / Parameter	Parameters relating to calculation of biomass in trees (e.g., $C_{TREE\_BSL,t}$)
Data unit	Data unit is appropriate to the required tasks.
Source of data	Either AR-ACM0003 or AR-TOOL14 are correctly referenced.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	Either AR-ACM0003 or AR-TOOL14 are correctly referenced.
Purpose of Data	Purpose of data is correctly specified

Data / Parameter	$C_{BSL\text{-}herb,i,t}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	Appropriately specified.
Value applied	Suggested default factor was reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science.
Justification of choice of data or description of measurement methods and procedures applied	Derivation of default factor was reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science.
Purpose of Data	Purpose of data is correctly specified

3.10.1.10 Parameters in BL-PEAT

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed (other than a change in variable names) in the methodology.

3.10.1.11 Parameters in LK-ECO

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed (other than a change in variable names) in the methodology.

3.10.1.12 Parameters in M-ARR

Data / Parameter	Parameters relating to calculation of biomass in trees (e.g., $C_{TREE\_BSL,t}$)
Data unit	Data unit is appropriate to the required tasks.
Source of data	Either AR-ACM0003 or AR-TOOL14 are correctly referenced.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	Either AR-ACM0003 or AR-TOOL14 are correctly referenced.
Purpose of Data	Purpose of data is correctly specified

Data / Parameter	$C_{BSL\text{-}herb,i,t}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	Appropriately specified.
Value applied	Suggested default factor was reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science.
Justification of choice of data or description of measurement methods and procedures applied	Derivation of default factor was reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science.
Purpose of Data	Purpose of data is correctly specified

3.10.1.13 Parameters in M-PEAT

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed (other than a change in variable names) in the methodology.

3.10.1.14 Parameters in BL-TW

Note that only parameters that originate in BL-TW are addressed below.

Data / Parameter	$GHG_{BSL\text{-}insitu\text{-}CO2,i,t}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	This data/parameter was included because it pertains to the CO2 emissions from the SOC pool of in-situ soils in the baseline scenario in stratum i in year t. This value is derived conservatively from approved estimated using methods described in Sections 5.3.2.1, 5.3.2.2, 5.3.2.3 and 5.3.2.4 of BL-TW Module and is compliant with VCS rules for default values. The data unit, source of data, value applied, justification of choice of data or description of measurement methods and procedures applied, and purpose of data are appropriate to the parameter being monitored.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$Deduction_{alloch}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	This data/parameter was included because it pertains to the deductions from CO2 emissions from the SOC pool to account for the percentage of the carbon stock that is derived from allochthonous soil organic carbon. This value is derived conservatively from methods described in Section 5.3.2.6 of Module BL-TW and is compliant with VCS rules for default values. The data unit, source of data, value applied, justification of choice of data or description of measurement methods and procedures applied, and purpose of data are appropriate to the parameter being monitored.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$C\%_{BSL\text{-}soil,i,t}$
Data unit	Data unit is appropriate for relative quantitative data.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	*BD*
Data unit	Data unit is the typical unit of measure for bulk density data in the SI system.
Source of data	This data/parameter was included because it measures dry bulk density. This value is derived conservatively from methods described above (Source of Data) and is compliant with VCS rules for default values. The data unit, source of data, value applied, justification of choice of data or description of measurement methods and procedures applied, and purpose of data are appropriate to the parameter being monitored.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.
Comments	N/A

Data / Parameter	$Depth\_i_{i,t}$
Data unit	Data unit is appropriate for a measure of depth under the SI system.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$GHG_{BSL\text{-}soil\text{-}CH4,i,t}$ $GHG_{BSL\text{-}soil\text{-}N2O,i,t}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	These parameters were included because they pertain to methane and nitrous oxide emissions, respectively, from the soil organic carbon pool in the baseline scenario in stratum i in year t. The values are derived conservatively from methods described in Sections 5.3.5.1 and 5.3.5.4 of Module BL-TW and are compliant with VCS rules for default values. The data unit, source of data, value applied, justification of choice of data or description of measurement methods and procedures applied, and purpose of data are appropriate to the parameter being monitored.
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$C_{BSL\text{-}soil,i,t}$
Data unit	Data unit is a commonly accepted standard for quantification of carbon stock on a per-area basis.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$C\%_{BSL\text{-}soil,i,20}$
Data unit	Data unit is appropriate for relative quantitative data.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$\%C_{alloch}$ $\%C_{soil}$ $\%OM_{depsed}$ $\%OM_{soil}$ $\%C_{depsed}$
Data unit	Data unit is appropriate for relative quantitative data.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	*SA*
Data unit	Data unit is appropriate for calculation of surface area on a per-mass basis
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$GHG_{BSL\text{-}eroded\text{-}CO2,i,t}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$C\%_{BSL\text{-}emitted,i,t}$
Data unit	Data unit is appropriate for relative quantitative data.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	The justification for the appropriateness of the default values is clearly provided.
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$C_{BSL\text{-}eroded,i,t}$
Data unit	Data unit is a commonly accepted standard for quantification of carbon stock on a per-area and per-year basis.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$C\%_{BSL\text{-}eroded,i,t}$
Data unit	Data unit is appropriate for relative quantitative data.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$Depth\_e_{i,t}$
Data unit	Data unit is appropriate for a measure of depth under the SI system.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of	N/A

data or description of measurement methods and procedures applied	
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$GHG_{BSL\text{-}excav\text{-}CO2,i,t}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$C_{BSL\text{-}excav,i,t}$
Data unit	Data unit is a commonly accepted standard for quantification of carbon stock on a per-area and per-year basis.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	$C\%_{BSL\text{-}excav,i,t}$
Data unit	Data unit is appropriate for relative quantitative data.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	*Depth_ex* $_{i,t}$
Data unit	Data unit is appropriate for a measure of depth under the SI system.
Source of data	Reference to estimation methods is clearly provided.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

Data / Parameter	*CH4-GWP* *N2O-GWP*
Data unit	Data unit is appropriately specified as dimensionless.
Source of data	Source of data is clearly specified to be IPCC.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A
Purpose of Data	Purpose is correctly stated.

3.10.1.15 Parameters in M-TW

Note that only parameters that originate in M-TW, and that are monitored or measured (as opposed to calculated from monitored or measured data) are addressed below.

Data / Parameter	*CH4-GWP* *N2O-GWP*
Data unit	Data unit is appropriately specified as dimensionless.
Source of data	Source of data is clearly specified to be IPCC Fourth Assessment Report, as required by Section 3.15.3 of the VCS Standard.
Value applied	N/A
Justification of choice of data or description of measurement methods and procedures applied	N/A

Purpose of Data	Purpose is correctly stated.

3.10.2 Assessment of Data and Parameters Monitored

An identification of each parameter monitored for which guidance was newly added or substantially changed in the methodology, and an assessment (as requested) of how each piece of newly added or substantially changed information provided in the parameter table is appropriate, is provided below. For parameters that have not been newly added to the methodology (i.e., that existed in prior versions of the methodology), "N/A" denotes information that was not substantially changed in the methodology and is therefore excluded from the scope of the assessment, as discussed in Section 2.1 above.

3.10.2.1 Parameters in REDD+ MF

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed in the methodology.

3.10.2.2 Parameters in BL-PL

Gap: If any revision to the data and parameters monitored has been made, those revisions will not have been reviewed by the assessment team (see Section 3.9.12 above for further details).

3.10.2.3 Parameters in BL-UP

Data / Parameter	*LB*
Data unit	N/A
Source of data	N/A
Description of measurement methods and procedures to be applied:	N/A
Frequency of monitoring/recording:	N/A
QA/QC procedures to be applied:	Pre-existing procedures have been replaced with "Any imagery or GIS datasets used must be geo-registered referencing corner points, clear landmarks or other intersection points." This is appropriate, and allows for the flexibility not to ground-truth boundaries if other high-quality are available for reference purposes.
Purpose of data	N/A
Calculation method	N/A

Data / Parameter	$GHG_{BSL\text{-}PEAT,i,t}$ $GHG_{BSL\text{-}TW,i,t}$ $C_{WP100,i}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	Originating modules are correctly identified
Description of measurement methods and procedures to be applied:	N/A
Frequency of monitoring/recording:	N/A
QA/QC procedures to be applied:	N/A
Purpose of data	N/A
Calculation method	N/A

3.10.2.4 Parameters in LK-ASP

Gap: If any revision to the data and parameters monitored has been made, those revisions have not been review or approved by the assessment team, given the substantive accounting issues that remain in respect of this module (see Section 3.9.3.2 above for further details).

3.10.2.5 Parameters in LK-ASU

Gap: If any revision to the data and parameters monitored has been made, those revisions have not been review or approved by the assessment team, given the substantive accounting issues that remain in respect of this module (see Section 3.9.3.2 above for further details).

3.10.2.6 Parameters in E-BPB

Data / Parameter	$D_{peatburn,i,t}$
Data unit	Data unit is appropriate for measuring length
Source of data	**Gap**: M-PEAT is correctly identified as an originating module, but the reference to BL-PEAT is incorrect.
Description of measurement methods and procedures to be applied:	**Gap**: M-PEAT is correctly identified as an originating module, but the reference to BL-PEAT is incorrect.
Frequency of	**Gap**: M-PEAT is correctly identified as an originating module, but the

monitoring/recording:	reference to BL-PEAT is incorrect.
QA/QC procedures to be applied:	The monitoring requirements of REDD+ MF are appropriately referenced.
Purpose of data	This is correctly stated.
Calculation method	This is correctly stated.

3.10.2.7 Parameters in M-REDD

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed in the methodology.

3.10.2.8 Parameters in X-STR

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed in the methodology.

3.10.2.9 Parameters in BL-ARR

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed in the methodology.

3.10.2.10 Parameters in BL-PEAT

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed in the methodology.

3.10.2.11 Parameters in LK-ECO

Data / Parameter	Ecological leakage process as described in Table 5.1
Data unit	N/A
Source of data	N/A
Description of measurement methods and procedures to be applied:	N/A
Frequency of monitoring/recording:	It is appropriate that monitoring be conducted at each monitoring event.
QA/QC procedures to be applied:	The monitoring requirements of REDD+ MF are appropriately referenced.
Purpose of data	This is correctly stated.
Calculation method	This is correctly stated.

3.10.2.12 Parameters in M-ARR

Data / Parameter	Parameters relating to calculation of biomass in trees (e.g., $C_{TREE\_BSL,t}$)
Data unit	Data unit is appropriate to the required tasks.
Source of data	Either AR-ACM0003 or AR-TOOL14 are correctly referenced.
Description of measurement methods and procedures to be applied:	Either AR-ACM0003 or AR-TOOL14 are correctly referenced.
Frequency of monitoring/recording:	Either AR-ACM0003 or AR-TOOL14 are correctly referenced.
QA/QC procedures to be applied:	Either AR-ACM0003 or AR-TOOL14 are correctly referenced.
Purpose of data	This is correctly stated.
Calculation method	This is correctly stated.

Data / Parameter	$C_{BSL\text{-}herb,i,t}$
Data unit	This unit of measure is the generally accepted standard for GHG accounting, as set out in Section 3.15.3 of the VCS Standard.
Source of data	Appropriately specified.
Description of measurement methods and procedures to be applied:	Suggested default factor was reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science.
Frequency of monitoring/recording:	Derivation of default factor was reviewed by the Technical Expert (see Section 3.9 above) and found to be consistent with best available wetlands science.
QA/QC procedures to be applied:	The monitoring procedures of REDD+ MF are appropriately referenced.
Purpose of data	This is correctly stated.
Calculation method	This is correctly stated.

3.10.2.13 Parameters in M-PEAT

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed (other than a change in variable names) in the methodology.

3.10.2.14 Parameters in BL-TW

This sub-section is not applicable, as there are no parameters for which guidance was newly added or substantially changed in the methodology.

3.10.2.15 Parameters in M-TW

Note that only parameters that originate in M-TW are addressed below.

Data / Parameter	$C_{WPS\text{-}soil,i,t}$
Data unit	Data unit is a standard for calculating carbon stock on a per-area basis.
Source of data	Source of data is appropriately stated.
Description of measurement methods and procedures to be applied:	Measurement procedures are appropriately referenced.
Frequency of monitoring/recording:	It is appropriate that monitoring be conducted at each monitoring period.
QA/QC procedures to be applied:	The monitoring requirements of REDD+ MF are appropriately referenced.
Purpose of data	This is correctly stated.
Calculation method	This is correctly stated.

Data / Parameter	*BD*
Data unit	Data unit is the typical unit of measure for bulk density data in the SI system.
Source of data	Reference to source of data is correctly provided.
Description of measurement methods and procedures to be applied:	Measurement procedures are appropriately referenced.
Frequency of monitoring/recording:	It is appropriate that monitoring be conducted at each monitoring period.
QA/QC procedures to be applied:	The monitoring requirements of REDD+ MF are appropriately referenced.
Purpose of data	This is correctly stated.
Calculation method	This is correctly stated.

Data / Parameter	$Depth\_i_{i,t}$
Data unit	Data unit is appropriate for a measure of depth under the SI system.
Source of data	Reference to source of data is correctly provided.

Description of measurement methods and procedures to be applied:	Measurement procedures are appropriately referenced.
Frequency of monitoring/recording:	It is appropriate that monitoring be conducted at each monitoring period.
QA/QC procedures to be applied:	The monitoring requirements of REDD+ MF are appropriately referenced.
Purpose of data	This is correctly stated.
Calculation method	This is correctly stated.

4 ASSESSMENT CONCLUSION

The assessment services documented in this report were discontinued, upon request of the client, on 26 June 2019. As of that date, the assessment team was unable to conclude that all aspects of the methodology which fall within the assessment scope are in full conformance with the assessment criteria, for specific reasons that are detailed throughout this report.

The documents that, together, constitute the methodology, as referred to in this Section 4, are the portions of the following documents that fall within the scope of the assessment documented in this report (see Section 2.1 above):

Document	**Filename (Includes Version Number and Issue Date)**
REDD+ MF	VM0007 REDD+MF_v1.6_SCS RD2_19MAR2019
BL-UP	VMD0007 BL-UP_v3.3_RD2 SCS_15FEB2019
LK-ASP	VMD0009 LK-ASP v1.2_RD2 SCS_19MAR2019
LK-ASU	VMD0010 LK-ASU v1.1_RD2 SCS_17APR2019
E-BPB	VMD0013 E-BPB v1.1 18APR2019
M-REDD	VMD0015 M-REDD, v2.1_RD2 SCS_15FEB2019
X-STR	VMD0016 X-STR_v1.2_SCS RD2_19MAR2019
X-UNC	VMD0017 X-UNC_v2.2_ESI RD2_27SEP2017 RD1_15DEC2017
BL-ARR	VMD0041 BL-ARR_v1.1_SCS RD2_15FEB2019
BL-PEAT	VMD0042 BL-PEAT v1.0_SCS RD2_15JAN2019
LK-ECO	VMD0044 LK-ECO v1.0 RD2 26JUL2018
M-ARR	VMD0045 M-ARR_v1.1_SCS RD2_15FEB2019
M-PEAT	VMD0046 M-PEAT v1.0_SCS RD2_15JAN2019
ADD-AM	ADD-AM_v1.0_ESI RD1_27SEP2017_SCS RD1_15DEC2017
BL-TW	BL-TW_v1.0_SCS RD2_19MAR2019
M-TW	M-TW_v1.0_SCS RD2_17APR2019

5 REPORT RECONCILIATION

Not applicable.

6 EVIDENCE OF FULFILMENT OF VVB ELIGIBILITY REQUIREMENTS

The following evidence of fulfilment of SCS' eligibility requirements is presented in accordance with Section 4.2 of the Methodology Approval Process.

SCS has completed at least ten project validations under sectoral scope 14 (AFOLU). A summary of the first ten project validations performed by SCS is as follows:

Project and Project ID	**Date validation report issued**	**Date project registered**	**Name of GHG program under which project registered**
INFAPRO Rehabilitation of logged-over dipterocarp forest in Sabah, Malaysia (672)	31-Aug-2011	2-Sep-2011	Verified Carbon Standard
Natural High Forest Rehabilitation Project on degraded land of Kibale National Park (673)	6-Sep-2011	6-Sep-2011	Verified Carbon Standard
Protection of a Tasmanian Native Forest (Project 3: Peter Downie) (587)	18-Mar-2011	7-Apr-2011	Verified Carbon Standard
Redd Forests Grouped Project: Protection of Tasmanian Native Forest (641)	13-May-2011	1-Jul-2011	Verified Carbon Standard
Protection of a Tasmanian native forest – Project 1 – REDD Forests Pilot (605)	18-Mar-2011	3-May-2011	Verified Carbon Standard
Boden Creek Ecological Preserve Forest Carbon Project (647)	24-Jun-2011	18-Jul-2011	Verified Carbon Standard
Peri-urban bamboo planting around South African townships (Project ID confidential)	8-Aug-2011	8-Dec-2011	Verified Carbon Standard
Tree planting in South African townships (Project ID confidential)	2-Sep-2011	8-Dec-2011	Verified Carbon Standard
Rimba Raya Biodiversity Reserve Project (674)	31-Aug-2011	7-Sep-2011	Verified Carbon Standard
Reforestation Across the Lower Mississippi Valley (774)	20-Apr-2011	14-Feb-2012	Verified Carbon Standard

Note that the above is not necessarily an exhaustive list of all validations performed by SCS.

The identity and role of the VCS expert utilized in the course of the assessment are described in Section 2.4 of this report.

7 SIGNATURE

Signed for and on behalf of:

Name of entity: SCS Global Services

Signature: 

Name of signatory: Christie Pollet-Young

Date: 31 July 2019

APPENDIX A: ASSESSMENT FINDINGS

The following tables include all issues raised during the assessment services described in this report. It should be noted that all language under "Methodology Developer Response" is a verbatim transcription of responses to issues provided by the methodology developer. The findings are differentiated between those that were closed, and that that were not closed, at the time of discontinuation of assessment services.

Findings That Were Closed Prior to Assessment Service Discontinuation

NCR 1 Dated 28 Nov 2017
Standard Reference: AFOLU Requirements v.3.6
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: Section 4.3.1 of the AFOLU Requirements states "The relevant carbon pools for AFOLU project categories are aboveground tree biomass (or aboveground woody biomass, including shrubs, in ARR, ALM and ACoGS projects), aboveground non-tree biomass (aboveground non-woody biomass in ARR and ALM projects), belowground biomass, litter, dead wood, soil (including peat) and wood products. Methodologies shall include the relevant carbon pools set out in Table 2 below." Table 2 categorizes WRC projects codes belowground biomass as optional, with note: "Carbon pool is optional and may be excluded from the project boundary. Where the pool is included in the methodology, the methodology shall establish criteria and procedures to set out when a project proponent shall or may include the pool."

Section 5.2 of the BL-TW Module states "The consequences of submergence and/or erosion of a given stratum due to sea level rise or other factors (e.g., wave action due to boats) are: 1) Carbon stocks from aboveground biomass are lost to oxidation, and 2) Depending upon the geomorphic setting, soil carbon stocks may be submerged and held intact or be eroded and transported beyond the project area." With regard to belowground biomass, the section does not establish "criteria and procedures to set out when a project proponent shall or may include the pool" and therefore should be revised.

Methodology Developer Response: We revised the procedure for biomass to include belowground biomass as well. Sections 5.2 and 6.1 have been amended.
Assessment Team Response: Sections 5.2 and 6.1 of BL-TW_v.1.0_ESI RD1_27Sept2017 RD1_15Dec2017 have been revised appropriately to include criteria and procedures for inclusion of belowground biomass. The finding is closed.

NCR 2 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v.3.7
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

Section 5 of the VCS Module Template states, ““Follow the instructions provided in any relevant sections of the VCS Methodology Template (eg, project boundary, baseline scenario, additionality and quantification of GHG emission reductions and removals).” Section 8.1 of the Methodology template states “Use the example format below (copy and paste) for specifying equations and defining the associated parameters and variables, including the unit of measure.”

Section 5.3.3 of the BL-TW Module, Equation 24, calculates C mass present in eroded soil material environment in the baseline scenario using the percentage of carbon of soil material eroded as a term in the equation. However, the term for percentage of carbon of soil material eroded is not divided by 100. The same applies to Equation 32, where the percent carbon of soil material excavated is not expressed as a percentage.

Methodology Developer Response: We believe equation 24 is correct. The percentage is devided by 100 in equation 23. In equation 24 it is a value between 0 and 100 and this way at both sides of the equation the unit equates t C/ha/yr. Note the x10 is used to balance both sides.
Assessment Team Response: The assesment team reviewed the equations referred to in the document "BL-TW_v.1.0_ESI RD1_27Sept2017 RD1_15Dec2017." The project team's response is correct for Equations 24 and 32. The finding is closed.

NCR 3 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v.3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The introductory text of the VCS Module Template states ““The module must be written in a clear, logical, concise and precise manner, to aid readability and ensure consistent application by intended users.”

The first sentences of Section 5.1.1. of the M-TW Module state that emissions in the project scenario “are attributed to carbon stock changes in biomass carbon pools, soil processes, or a combination of these. In addition, where relevant, emissions from fossil fuels use may be quantified.” The same first sentences (except for applying to the baseline scenario) are used in Section 5.1.1 of the accompanying baseline module, BL-TW. Equation 1 of the M-TW module is also the same as Equation 1 of the BL-TW module. However, the M-TW Equation 1 is expanded to include net CO2e emissions from prescribed burning in the project scenario.

In the M-TW module, the sentences preceding Equation 1 do not provide clarity that prescribed burning is included in Equation 1.

Methodology Developer Response: "and prescribed burning" has been added to the text.
Assessment Team Response: The described text has been added to Section 5.1.1 as stated, in the revised module "M-TW_v1.0_ESI RD1_27SEP2017.doc"

NCR 4 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v.3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

Section 5 of the VCS Module Template states, ““Follow the instructions provided in any relevant sections of the VCS Methodology Template (eg, project boundary, baseline scenario, additionality and quantification of GHG emission reductions and removals).”

Section 8.1 of the Methodology template states “Use the example format below (copy and paste) for specifying equations and defining the associated parameters and variables, including the unit of measure.”

Section 5.4.1 of the M-TW Module, Equation 14, expresses C fraction of the sample as determined in the laboratory, as a percentage. However, the term is currently expressed as a proportion and should be revised accordingly.

Methodology Developer Response: The unit (%) has been removed from the definition of the C fraction.
Assessment Team Response: The project team has removed the unit (%) from Equation 14 as stated, in the revised module "M-TW_v1.0_ESI RD1_27SEP2017.doc". The finding is closed.

NCR 5 Dated 28 Nov 2017
Standard Reference: VCS Standard v.3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

Section 5 of the VCS Module Template states, ““Follow the instructions provided in any relevant sections of the VCS Methodology Template (eg, project boundary, baseline scenario, additionality and quantification of GHG emission reductions and removals).”

Section 8.1 of the Methodology template states “Use the example format below (copy and paste) for specifying equations and defining the associated parameters and variables, including the unit of measure.”

In Section 5.4.1 of the M-TW Module, Equation 14, the assessment team was not able to solve for tons of C per hectare. The units in the equation should be revised accordingly

Methodology Developer Response: The unit for BD has been corrected to read g/m3. The conversion factor is now correct at 100.
Assessment Team Response: In the revised module "M-TW_v1.0_ESI RD1_27SEP2017.doc", Equation 14, the unit for BD has been changed as stated. The finding is closed.

NCR 6 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v.3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

Section 5 of the VCS Module Template states, ““Follow the instructions provided in any relevant sections of the VCS Methodology Template (eg, project boundary, baseline scenario, additionality and quantification of GHG emission reductions and removals).”

Section 8.1 of the Methodology template states “Use the example format below (copy and paste) for specifying equations and defining the associated parameters and variables, including the unit of measure.”

Similar to NCR.5, for Section 5.4.2 of the M-TW Module Equation 15 and 16, the assessment team could not follow the units to solve for tons of C02 equivalents per hectare per year.

Methodology Developer Response: Conversion factor of 100 has been added to equations 15 and 16
Assessment Team Response: In the revised module "M-TW_v1.0_ESI RD1_27SEP2017.doc", Equation 15 and Equation 16 have been revised appropriately as stated. The finding is closed.

NCR 7 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v.3.7
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

Section 5 of the VCS Module Template states, ““Follow the instructions provided in any relevant sections of the VCS Methodology Template (eg, project boundary, baseline scenario, additionality and quantification of GHG emission reductions and removals).”

Section 8.1 of the Methodology template states “Use the example format below (copy and paste) for specifying equations and defining the associated parameters and variables, including the unit of measure.”

Section 5.4.2 of the X-STR Module, Equations 15 and 16 use the term VC. While the term is defined for earlier equations in the module, it is not defined beneath Equations 15 or 16.

Methodology Developer Response: The term VC has been added to the list under equations 15 and 16.
Assessment Team Response: The term has been added and defined below Equations 15 and 16 as stated, in the revised module "VMD0016 X-STR_v1.2_ESI RD2_27SEP2017.doc"

NIR 8 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v.3.7
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

Section 5 of the VCS Module Template states, ““Follow the instructions provided in any relevant sections of the VCS Methodology Template (eg, project boundary, baseline scenario, additionality and quantification of GHG emission reductions and removals).”

Section 8.1 of the Methodology template states “Use the example format below (copy and paste) for specifying equations and defining the associated parameters and variables, including the unit of measure.”

Section 5.6 of the X-STR Module, Equation 20, the term tSDT-BSL,I defines the soil organic carbon depletion time in stratum i (in years elapsed since the project start date) in years. The term is set to 5 years as a constant. However, no citation or source is contained to justify it as such.

Methodology Developer Response: Footnote 13 in BL-TW states: "To ensure a conservative outome, emissions must be estimated for a 5-year time period following the initial year of erosion." The 5 years mentioned in equation 20 of X-STR follows the same logic.
Assessment Team Response: The response justifies the finding and the finding is closed.

NIR 9 Dated 28 Nov 2017
Standard Reference: VCS Standard v.3.7
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017.doc
Finding: Section 4.1.4 of the VCS Standard requires that "Methodology elements shall be guided by the principles set out in Section 2.4.1". The principle of "accuracy", as set out in Section 2.4.1, is defined as "Reduce bias and uncertainties as far as is practical".

Section 5.8 of the X-STR Module sets out methods for setting project boundaries and accounting for effects of sea level rise. However, the methods seems to conflict in terms of whether IPCC global numbers can be used or not. In paragraph 2 it states: “For both the baseline and project scenarios, the project proponent must provide a projection of relative sea-level rise within the project area based on IPCC regional forecasts or peer-reviewed literature applicable to the region. In addition, the project proponent may also utilize expert judgment. Global average sea-level rise scenarios are not suitable for determining the changes in wetland boundaries. Therefore, if used, IPCC most-likely global sea-level rise scenarios must be appropriately downscaled to regional conditions that include vertical land movements, such as subsidence.”

In paragraph 4 it states “The potential for tidal wetlands to rise vertically with sea-level rise is sensitive to suspended sediment loads in the system. A sediment load of >300 mg per liter has been found to balance high-end IPCC scenarios for sea-level rise.”

Please provide justification that the two statements are not conflictual in terms of how IPCC global scenario estimates can and cannot be employed for the purpose of the module.

Methodology Developer Response: The validator is picking up on two related but not conflicting statements. In section 5.8 we are discussing the need to set an appropriate rate and amount of sea level rise during life of the project. Various SLR analyses can be applied but there is a need to select the most appropriate for the region and not just pick a global average. This data will be used to assess the lateral distribution of the wetlands in the future as well as inform the vertical response.

Paragraph 4 speaks to the capacity of the wetland to build vertically with sea level rise. At high sediment availability (over 300 mg/l) tidal wetlands have the capacity to keep pace with the high end estimates of sea level rise. These wetlands may still migrate laterally, but will continue to build. We cited Morris et al., 2012 on the topic of sensitivity to sediment supply previously.
Assessment Team Response: The assessment team agrees with the response provided by the methodology developer team. The findings is closed.

NCR 10 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v.3.7
Document Reference: VMD0017 X-UNC_v2.2_ESI RD2_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

Section 5 of the VCS Module Template states, ““Follow the instructions provided in any relevant sections of the VCS Methodology Template (eg, project boundary, baseline scenario, additionality and quantification of GHG emission reductions and removals).”

Section 8.1 of the Methodology template states “Use the example format below (copy and paste) for specifying equations and defining the associated parameters and variables, including the unit of measure.”

Section 5.1.1 of the X-UNC Module, Equation 3, uses the term i but does not define it.

Methodology Developer Response: The term j was added to the list under equation 3.
Assessment Team Response: The term j was added to the list under Equation 3, in the revised module "VMD0017 X-UNC_v2.2_ESI RD2_27SEP2017 RD1_15DEC2017". The finding is closed.

NIR 11 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states: "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed. The methodology documentation shall state clearly the date on which it was issued and its version number."

Section 4 of the VCS Methodology Template v 3.3 (Issued 8 October 2013) states "Applicability conditions must be specified clearly, and in a manner that allows easy determination of whether an activity being undertaken by a potential project proponent is eligible."

In the VM0007 REDD+MF methodology, Section 3, the current definition of tidal wetland is "A subset of wetlands under the influence of the wetting and drying cycles of the tides (e.g., marshes, seagrass meadows, tidal forested wetlands and mangroves). Sub-tidal seagrass meadows are not subject to drying cycles, but are still included in this definition."

The assessment team had several questions related to the clarity of the definition. In particular, the definition contains no guidance relating to salinity which implies, because of the existence of freshwater tidal systems, that brackish as well as freshwater systems are eligible. In addition, the definition as written contains no guidance regarding the frequency of tidal disturbance. Please provide justification that, as currently written, the definition is sufficient to allow for clear and specific application of the methodology. Otherwise, the definition should be revised accordingly.

Methodology Developer Response: The definition is intended to be encompassing and flexible. All wetlands across the salinity gradient are applicable - therefore, salinity has not been specified. Also, tidal frequency is not relevant as long as there is tidal influence of some sort.
Assessment Team Response: The assessment team agrees with the response provided by the methodology developer team. The findings is closed.

NIR 12 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states: "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed. The methodology documentation shall state clearly the date on which it was issued and its version number."

Section 4 of the VCS Methodology Template v 3.3 (Issued 8 October 2013) states "Applicability conditions must be specified clearly, and in a manner that allows easy determination of whether an activity being undertaken by a potential project proponent is eligible."

In the VM0007 REDD+MF methodology, Section 3, the current definition of tidal wetland restoration is: "Restoration of degraded tidal wetlands in which establishment of prior ecological conditions is not expected to occur in the absence of the project activity. For the purpose of this methodology, this definition also includes activities that create wetland ecological conditions on mudflats or within open or impounded water."

The words 'prior ecological condition' may introduce confusion regarding the period to which a project must restore in order to be eligible as a project. In particular, 'prior' could be interpreted to mean pre-invasion (relating to a prior time when indigenous people were the principal land stewards), or, instead, pre-disturbance (relating to more recent disturbance). Please provide justification that, as currently written, the definition is sufficient to allow for clear and specific application of the methodology. Otherwise, the definition should be revised accordingly.

Methodology Developer Response: The word 'prior' is indeed confusing. Also, the definition is merely a description of the baseline. We have amended the definition as follows:
"Reestablishing or improving the hydrology, salinity, water quality, sediment supply and/or vegetation in degraded or converted tidal wetlands. For the purpose of this methodology, this definition also includes activities that create wetland ecological conditions on uplands under the influence of sea level rise or activities that convert one wetland type to another or activities that convert open water to wetland."

This mimics the project activities given as examples in 4.5.2: "creating, restoring, and/or managing hydrological conditions, sediment supply, salinity characteristics, water quality and/or native plant communities".

Also amended in modules BL-TW and M-TW.
Assessment Team Response: The assessment team confirms that the changes were made as stated, and that such changes appropriately address the finding. The finding is closed.

NCR 13 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v. 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states: "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed. The methodology documentation shall state clearly the date on which it was issued and its version number."

The VCS Methodology Template v 3.3 (Issued 8 October 2013) Section 3 states "Using the format in the example below, provide, in alphabetical order, definitions of key terms and acronyms that are used in the methodology. Ensure all defined terms are used in the methodology. Do not include terms already defined under the VCS."

The VCS Program Definitions define wetlands as "Land that is inundated or saturated by water for all or part of the year (e.g., peatland), at such frequency and duration that under natural conditions they support organisms adapted to poorly aerated and/or saturated soil. Wetlands (including peatlands) cut across the different AFOLU categories. Project activities may be specific to wetlands or may be combined with other AFOLU activities."

The VM0007 REDD+MF methodology, Section 3, defines wetland as "An area that meets an internationally accepted definition of wetland, such as from the IPCC, Ramsar Convention on Wetlands, those established by law or national policy, or those with broad agreement in the peer-reviewed scientific literature for specific countries or types of wetlands. Common wetland types include peatland, salt marsh, tidal freshwater marsh, mangroves, wet floodplain forests, prairie potholes and seagrass meadows."

The definition of wetland is already defined in the VCS Program Definitions and cannot be defined by the methodology; the methodology should be revised accordingly.

Methodology Developer Response: The definition provided in the Program Definitions is not in line with the one provided in the AFOLU requirements. For the purpose of this methodology we deem the latter definition to be more appropriate and we have therefore provided in the methodology a definition accordingly. Functionally speaking this is a better outcome. We suggest to consult the VCS on this matter.
Assessment Team Response: The assessment team provided the following response as follows to the methodology team:

"As outlined in the finding, the VCS rules state the requirement that terms already defined under the VCS not be included in the methodology. As such, please see the response above related to the methodology team seeking VCS guidance. As of now, the non-conformity has not been resolved."

Methodology Developer Response 2:
Assessment Team Response 2: The methodology developer team sought guidance from the VCS and provided the following response to the assessment team in an email dated Friday January 12,

2018:

"This was the response from VCS regarding bullet point 3.

Amy Schmid: "For the issue at hand – all WRC projects are required to meet the definition of wetland set out in the AFOLU Requirements, meaning that no project that only meets the definition of wetland in the Program Definitions would be eligible under the VCS Program. As such, and to meet the requirements of the methodology template, it is not necessary to include the definition of wetland in the definitions section of VM7. If you think it is necessary, you may add in text to reference the section of the AFOLU Requirements where the more-robust definition of wetland is set out, in a different section of the methodology. If you do decide to add this reference in, we'd suggest putting it in the section of the methodology or module that describes the delineation of the project area (e.g., section 5.1.4 of REDD+MF)."

We responded that we will follow their suggestion re adding a reference to the AFOLU requirements in section 5.1.4. We added: "The WRC project area must meet the definition as provided in Chapter 4.2 of the VCS AFOLU Requirements."

The new REDD+MF document is attached."

Based on the response, the assessment team reviewed the revised REDD+MF document entitiled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018" and confirmed that the text was added to Section 5.1.4 and that the defintion of wetlands was removed from Section 3. As such, the finding can be closed.

NCR 14 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v. 3.7
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states: "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed. The methodology documentation shall state clearly the date on which it was issued and its version number."

Section 4 of the VCS Methodology Template v 3.3 (Issued 8 October 2013) states "Applicability conditions must be specified clearly, and in a manner that allows easy determination of whether an activity being undertaken by a potential project proponent is eligible."

In Section 3 of the BL-TW Module, Deltaic Fluidized Mud is defined as "A Carbon Preservation Depositional Environment (CPDE) type. This subaquatic depositional environment is characterized by sediment accumulation rates generally greater than 0.4 g per cm2 per year in deltaic settings, consisting primarily of fluidized (unconsolidated) fine-grain materials. Surface sediments may be re-suspended by waves and tides, but deposited organic matter will be buried. Examples of these can be found in the Amazon and Mississippi deltas." Small Mountainous River is defined as "A Carbon Preservation Depositional Environment (CPDE) type. This is a depositional environment from which the sediment is supplied from small mountainous rivers, most commonly found in tectonically active margins and small steep gradients. Sediment accumulation rates are generally greater than 0.27 g per cm2 per year. Examples of these systems can be found in the rivers flowing from the island of Taiwan and the Eel river of California." Extreme Accumulation Rates is defined as "A Carbon Preservation Depositional Environment (CPDE) type. This subaquatic depositional environment is characterized by accumulation rates generally greater than 1 g per cm2 per year resulting in rapid and long-term burial of deposited sediments. Examples of these systems can be found in the Ganges-Brahmaputra and Rhone river deltas."

The definitions define specific accumulations rates in grams per area but do not specify what the grams are of (i.e. sediment, organic matter, carbon). The definitions could therefore result in a lack of clarity and specificity with regard to the module's applicability conditions. Please revise the definitions accordingly.

Methodology Developer Response: The unit is grams of sediment per area. The module has been revised to reflect this.
Assessment Team Response: The applicable Section 3 definitions in the revised module "BL-TW_v.1.0_ESI RD1_27Sept2017 RD1_15Dec2017" have been revised to specify the measurements are in grams of sediment per area. The finding is closed.

NCR 15 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed."

The introductory text of the VCS Module Template states ""The module must be written in a clear, logical, concise and precise manner, to aid readability and ensure consistent application by intended users."

In Section 5.3.1 of the BL-TW Module, Equation 6 contains a deduction factor (Deduction (alloch)) which is applied to allochthonous carbon and is defined as the "Deduction from CO2 emissions from the SOC pool to account for the percentage of the carbon stock that is derived from allochthonous soil organic carbon; t CO2e ha-1 yr-1". Section 5.3.2, states "In certain cases, allochthonous soil organic carbon may accumulate in the project area. Procedures for the estimation of a compensation factor for allochthonous soil organic carbon are specified in Section 5.3.2.6." In Section 5.3.2.6, the term 'deduction' and how it is applied is defined but the word compensation is not used in the referenced section or any subsequent portions of the document.

If compensation factor and deduction factor have different meanings in the context of the module, please define each and clarify accordingly. If the two are synonymous, please revise accordingly.

Methodology Developer Response: Compensation' has been replaced with 'deduction'.
Assessment Team Response: The assessment team confirms that 'compensation' has been replaced with 'deduction' appropriately in the revised module "BL-TW_v.1.0_ESI RD1_27Sept2017 RD1_15Dec2017". The finding is closed.

NCR 16 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: ADD-AM_v1.0_ESI RD1_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

Section 5 of the VCS Module Template states, ““Follow the instructions provided in any relevant sections of the VCS Methodology Template (eg, project boundary, baseline scenario, additionality and quantification of GHG emission reductions and removals).”

Section 8.1 of the Methodology template states “Use the example format below (copy and paste) for specifying equations and defining the associated parameters and variables, including the unit of measure.”

In Appendix A of the ADD-AM Tool, Section B, Analysis contains the definition for activity penetration. The activity penetration (APy) term is defined as “Activity penetration of the project activity in year y (percentage)”. However, the equation as currently written calculates a proportion and not a percentage as stated.

Methodology Developer Response: The formula has been corrected using track changes in the module ADD-AM, which has been saved with a new file name "ADD-AM_v1.0_ESI RD1_27SEP2017_SCS RD1_30NOV2017.doc"
Assessment Team Response: The assessment team reviewed the revised document provided and confirms that the change made is sufficient to close the finding.

NCR 17 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Methodology Template v 3.3 requires the use of a box (provided in the template document) on the title page with the following instructions “All items in the box at the bottom of the first page must be completed using Arial 10pt, black, regular (non-italic) font. The box must appear on the first page of this document until the methodology or methodology revision is approved. Following approval, the document will be reformatted by the VCSA as an approved VCS methodology.”

The referenced title page format was not used in preparation of the methodology.

Methodology Developer Response: This seems redundant as it is clear that this is a revision of VM0007, it has already been given a version number (1.6) by the VCS (SH - Sam Hoffer) and the VCS has been editing the document during the course of the validation (prior to public comments, and between first and second validation).
Assessment Team Response: The following assessment team response was intially provided outside the cover of the Findings Workbook, as follows:

"The assessment team believes the VCS requirements are clear, as stated in the initial finding. If the methodology team is requesting an exception, the VCS should be communicated with directly to seek an exception. As of now, the non-conformity has not been resolved. "
Methodology Developer Response 2: Please see Assessment Team Response 2
Assessment Team Response 2: The methodology developer team sought guidance from the VCS and provided the following response to the assessment team in an email dated Friday January 10, 2018:

"Regarding the second bullet point (use of templates) we received the following response from the VCS:

Amy Schmid: "If you recall, we proposed updating much of the language of VM7 and its modules after the completion of the second assessment, and before the revised version of the methodology is officially approved and posted to our website (see attached email). During this process, we’ll also ensure that the methodology and modules are in the most recent templates, and meet all template/formatting requirements during our updates to the text. With respect to SCS’ finding, please feel free to forward the attached message to them and let them know that VCS will be re-doing some of the language and ensuring that the format of the methodology documentation meets our requirements after the completion of the second assessment. So, it is not necessary for the methodology and modules to be put into the new templates at this time.""

Based on the guidance provided by Amy Schmid at the VCS, the assessment team agrees that the methodology team is not required to comply with the stated template requirements at this time.

Therefore, the finding is closed.

NCR 18 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed."

The VCS Methodology Template v 3.3 (Issued 8 October 2013) Section 1 Sources states "Indicate key methodologies, documents and/or projects upon which the proposed methodology is based. For methodology revisions, identify the methodology, and the associated GHG program, upon which the revision is based."

The referenced information on the methodology and associated GHG program upon which the revision is based was not included in Section 1.

Methodology Developer Response: Please see response to NCR 17. A similar response would apply here.
Assessment Team Response: Please see the Assessment Team Response 2 provided for NCR.17. The VCS guidance applies to this finding as well. Therefore the finding is closed.

NCR 19 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Methodology Template v 3.3 (Issued 8 October 2013) Section 3 states “Using the format in the example below, provide, in alphabetical order, definitions of key terms and acronyms that are used in the methodology.”

The acronyms are currently not listed in alphabetical order.

Methodology Developer Response: Acronyms have been placed in alphabetical order
Assessment Team Response: The requested edits have been made to the revised module "VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017 RD1_15DEC2017". The finding is closed.

NCR 20 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Methodology Template v 3.3 (Issued 8 October 2013) Section 3 states “The methodology must use key words must, should and may appropriately. Consistent with best practice, must is to be used to indicate a firm requirement, should is to be used to indicate a (non-mandatory) recommendation and may is to be used to indicate a permissible or allowable option. The term shall is reserved for VCS program documents and is generally not appropriate for methodologies.”

The submitted REDD+MF methodology document include the word shall in two places. In Section 4.4 it states “The project activity shall not involve manipulation of hydrology (or otherwise affect hydrology)” and in Section 4.5.2 states “The area is under a land use that could be displaced outside the project area, although in such case, baseline emissions from this land use shall not be accounted for.”

Please revise the sections accordingly.

Methodology Developer Response: Both instances have been replaced with 'must'.
Assessment Team Response: The requested edits have been made to the revised module "VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017 RD1_15DEC2017". The finding is closed.

NCR 21 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Methodology Template v 3.3 (Issued 8 October 2013) Section 6 states “For AFOLU methodologies, describe the procedures for establishing rates of land-use and land-cover change, identifying historical management practices, establishing common practice, and/or identifying current and/or historical ecological characteristics, as applicable.“

These referenced procedures are currently missing from Section 6. Please revise accordingly.

Methodology Developer Response: Section 6.1 does not contain procedures as specified in the template itself but it refers to a VCS-approved tool that is designed to help complete the required analysis. The tool does not use the exact same terms as specified but has the same scope and it covers what is specified in the 2nd para of the instruction in Section 6 of the template.
Assessment Team Response: The assessment team reviewed the relevant sections of the revised module "VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017 RD1_15DEC2017" and agrees that the referenced tool is sufficient to close the finding.

NCR 22 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Methodology Template v 3.3 (Issued 8 October 2013) Section 7 Additionality states “For methodologies applying a project method for demonstrating additionality, describe the criteria and procedures for the demonstration and assessment of additionality. This may be done within the methodology, or through reference to an additionality tool approved under the VCS or an approved GHG program. Where an additionality tool is referenced, it must be stated that the latest version of the tool must be used.”

Section 7 of the submitted REDD+MF methodology does not state that the latest version of the tools listed must be used. Please revise accordingly.

Methodology Developer Response: This sentence has now been added to the text. Also in footnote 2 on p5 a similar statement has been added.
Assessment Team Response: The assessment team reviewed the relevant sections of the revised module "VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017 RD1_15DEC2017" and agrees that the revised text in Section 7.1 is appropriate. The finding is closed.

NCR 23 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed."

The VCS Methodology Template v 3.3 (Issued 8 October 2013) instructions for completing the methodology template (first page) state "The methodology must be written in a clear, logical, concise and precise manner, to aid readability and ensure consistent application by intended users."

Section 8.1 Baseline Emissions of the submitted REDD+MF methodology contains a list of modules to be used for baseline emission quantification for the different categories of project types contained in the Methodology. Under WRC project activities, it does not list the BL-DFW Module though the module is used for WRC projects, and is included as such in subsequent portions of the section including Section 8.1.2, and should be revised accordingly.

Methodology Developer Response: Module DFW has been added to the list relevant for REDD project activities in the chapeau of section 8.1 - first bullet. It is only relevant for wetlands if in a combination of AUWD and AD. Therefore it does not need to be added to the third bullet.
Assessment Team Response: Module DFW has been added to the bulleted list in Section 8.1. The finding is closed.

NCR 24 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed."

The VCS Methodology Template v 3.3 (Issued 8 October 2013) Section 9.2 states "Complete the table below for all data and parameters that will be monitored during the project crediting period (copy the table as necessary for each data/parameter)."

The box used in Section 9.2 of the submitted REDD+MF methodology is missing the "Calculation method" row in some boxes and should be revised accordingly.

Methodology Developer Response: These rows have been added
Assessment Team Response: The requested edits have been made to Section 9.1 of the revised module "VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017 RD1_15DEC2017". The finding is closed.

NCR 25 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions for Section 1 state “Indicate key modules, tools, methodologies, documents and/or projects upon which the proposed module is based. Identify any modules or tools used by this module. Include information on the author of the module, if desired.” The template also presents information regarding how such information should be presented.

Section 1 of the submitted M-TW module presents information regarding tools or modules used by the module but is missing the referenced information regarding key modules, tools, methodologies, documents and/or projects upon which the proposed module is based.

Methodology Developer Response: The sentence "This module uses the latest version of the the following methodology" has been changed to "This module is based on the following methodology".
Assessment Team Response: The sentence has been added accordingly to the revised module "M-TW_v1.0_ESI RD1_27SEP2017.doc"- the finding is closed.

NCR 26 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions for Section 3 state: “Using the format in the sample below, provide, in alphabetical order, definitions of key terms and acronyms that are used in the module.”

The M-TW document, Section 3, contains acronyms that are not in alphabetical order.

Methodology Developer Response: Acronyms have been placed in alphabetical order
Assessment Team Response: The revision has occurred in the module "M-TW_v1.0_ESI RD1_27SEP2017.doc"- the finding is closed.

NCR 27 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions state “The module must be written in a clear, logical, concise and precise manner, to aid readability and ensure consistent application by intended users.”

Section 6.1 Box 1 and Box 2 currently list Equations 14 and 15, respectively. However, the equations the parameters refer to are Equations 15 and 16.

Methodology Developer Response: These references have been corrected
Assessment Team Response: The Section 6.1 Equations have been changed accordingly, in the revised module "M-TW_v1.0_ESI RD1_27SEP2017.doc". The finding is closed.

NCR 28 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions for Section 6.1 state “Where the module establishes default factors which may become out of date (i.e., default factors that do not represent physical constants or otherwise would be expected to change significantly over time), make note of same in the Comments field.”

In Section 6.1 of the submitted module, the parameters for Box 1 and Box 2 are Global Warming Potentials for CH4 and N20, which are parameters that may change over time as new scientific data becomes available. Please indicate as such in the Comments field.

Methodology Developer Response: This note has been added to the comments box. We also added "The appropriate source is available from the latest version of the VCS Standard."In the current version the source is the 4th assessment report.
Assessment Team Response: The note has been added in the Comment section as stated, to Box 1 and 2 of Section 6.1, in the revised module "M-TW_v1.0_ESI RD1_27SEP2017.doc". The finding is closed.

NCR 29 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions for Section 6.1 state “Ensure that data sources are appropriate and comply with VCS rules and requirements.”

In Section 6.1, Box 1 and Box 2 list the Source of Data as the IPCC, however no specific IPCC document is listed.

Methodology Developer Response: A reference to the IPCC Fourth Assessment Report has been added.
Assessment Team Response: The refernce to the IPCC Fourth Assessment Report has been added as stated, to Box 1 and 2 of Section 6.1, in the revised module "M-TW_v1.0_ESI RD1_27SEP2017.doc". The finding is closed.

NCR 30 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process v 3.8
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions for Section 1 state “Indicate key modules, tools, methodologies, documents and/or projects upon which the proposed module is based. Identify any modules or tools used by this module. Include information on the author of the module, if desired.” The template also presents information regarding how such information is to be presented.

Section 1 of the submitted BL-TW module presents information regarding tools or modules used by the module but is missing the referenced information regarding documents upon which the proposed module is based.

Methodology Developer Response: The sentence "This module uses the latest version of the the following methodology" has been changed to "This module is based on the following methodology".
Assessment Team Response: The assessment team confirms that the appropriate changees have been made as stated in the Project Response to the revised module "BL-TW_v.1.0_ESI RD1_27Sept2017 RD1_15Dec2017". The finding is closed.

NCR 31 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: Sec. 6.1.4 of the Methodology Approval Process document states "Where the proposed methodology references tools or modules approved under the VCS or an approved GHG program, the validation/verification body shall determine whether the tool or module is used appropriately within the methodology. Reassessment of the actual tool or module is not required."

In the REDD+MF methodology, Section 1 Sources currently lists the "Methods to Project Future Conditions" as module VMD00XX indicating that it is under revision. VMD0019 is an existing module (VMD0019) that, to our knowledge, is not being changed as part of this revision to VM0007. Please justify the way it is currently listed and/or revise accordingly.

Methodology Developer Response: We think there was a misreading. The module is correctly referenced as VMD0019. The next one is listed as VMD00XX as it is the new module for additionality ADD-AM.
Assessment Team Response: The methodology team is correct. The finding is closed.

NCR 32 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0007 BL-UP_v3.3_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed."

The VCS Module Template v 3.3 requires the use of a box (provided in the template document) on the title page with the following instructions "All items in the box at the bottom of the first page must be completed using Arial 10pt, black, regular (non-italic) font. The box must appear on the first page of this document until the methodology or methodology revision is approved. Following approval, the document will be reformatted by the VCSA as an approved VCS methodology."

The referenced title page format was not used in preparation of the module.

Methodology Developer Response: Please note our response to NCR #17. A similar response would apply here.
Assessment Team Response: Please see the Assessment Team Response 2 provided for NCR.17. The VCS guidance applies to this finding as well. Therefore the finding is closed.

NCR 33 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0007 BL-UP_v3.3_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed."

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions for Section 1 state "Indicate key modules, tools, methodologies, documents and/or projects upon which the proposed module is based. Identify any modules or tools used by this module. Include information on the author of the module, if desired." The template also presents information regarding how such information is to be presented.

Section 1 of the submitted BL-UP module presents information regarding tools or modules used by the module but is missing the referenced information regarding documents upon which the proposed module is based.

Methodology Developer Response: Module BL-UP is not based on other modules or documents.
Assessment Team Response: Please see the Assessment Team Response 2 provided for NCR.17. The VCS guidance applies to this finding as well. Therefore the finding is closed.

NCR 34 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0017 X-UNC_v2.2_ESI RD2_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed."

The VCS Module Template v 3.3 requires the use of a box (provided in the template document) on the title page with the following instructions "All items in the box at the bottom of the first page must be completed using Arial 10pt, black, regular (non-italic) font. The box must appear on the first page of this document until the methodology or methodology revision is approved. Following approval, the document will be reformatted by the VCSA as an approved VCS methodology."

The referenced title page format was not used in preparation of the module.

Methodology Developer Response: Please note our response to NCR #17. A similar response would apply here.
Assessment Team Response: Please see the Assessment Team Response 2 provided for NCR.17. The VCS guidance applies to this finding as well. Therefore the finding is closed.

NCR 35 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0041 BL-ARR_v1.1_ESI RD1_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed."

The VCS Module Template v 3.3 requires the use of a box (provided in the template document) on the title page with the following instructions "All items in the box at the bottom of the first page must be completed using Arial 10pt, black, regular (non-italic) font. The box must appear on the first page of this document until the methodology or methodology revision is approved. Following approval, the document will be reformatted by the VCSA as an approved VCS methodology."

The referenced title page format was not used in preparation of the module.

Methodology Developer Response: Please note our response to NCR #17. A similar response would apply here.
Assessment Team Response: Please see the Assessment Team Response 2 provided for NCR.17. The VCS guidance applies to this finding as well. Therefore the finding is closed.

NCR 36 Dated 28 Nov 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states "Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed."

The VCS Module Template v 3.3 requires the use of a box (provided in the template document) on the title page with the following instructions "All items in the box at the bottom of the first page must be completed using Arial 10pt, black, regular (non-italic) font. The box must appear on the first page of this document until the methodology or methodology revision is approved. Following approval, the document will be reformatted by the VCSA as an approved VCS methodology."

The referenced title page format was not used in preparation of the module.

Methodology Developer Response: Please note our response to NCR #17. A similar response would apply here.
Assessment Team Response: Please see the Assessment Team Response 2 provided for NCR.17. The VCS guidance applies to this finding as well. Therefore the finding is closed.

NIR 37 Dated 1 Dec 2017
Standard Reference: VCS Standard
Document Reference: ADD-AM_v1.0_ESI RD1_27SEP2017
Finding: Section 4.1.20 of the VCS Standard states "The activity method shall set out, using the specification of the project activity under the applicability conditions, a positive list of project activities that are deemed as additional under the activity method (see Section 4.3 for further information on providing specification of project activities). All such project activities are deemed as additional under the activity method." Section 4 of the ADD-AM Tool states "this module is applicable to WRC project activities meeting the applicability conditions set out in Section 4.5 of VCS methodology VM0007 REDD+ Methodology Framework."

Section 4.5 of the VM0007 REDD+ Methodology Framework defines the WRC project activities meeting the applicability conditions. The activities fall within the categories of RWE (Restoration of Wetland Ecosystems) activities, including peat rewetting and tidal wetland restoration, and CIW (Conservation of Intact Wetland) activities including CUPP, or Conservation of Undrained and partially drained peatland activities.

Appendix A of the ADD-AM Tool presents the methods used to demonstrate the global activity penetration calculation. The calculations are based on three ecosystems, listed as Mangrove, Seagrass, and Salt Marsh, whose total global extent is shown in Table 1, total global extent of Protected/Conserved acreage is shown in Table 2, and a map of their global distribution is shown in Figure 1.

However, project activities within the three ecosystems used to justify the activity method do not encompass the complete scope of the positive list of project activities as set out in the eligibility criteria in Section 4.5 of the REDD-MF methodology framework.

Please demonstrate that the approach employed in the ADD-AM Tool meets the requirements of Section 4.1.20 of the VCS Standard.

Methodology Developer Response: Changes were made to REDD-MF: Sections 1 and 7.2 and ADD-AM: The title of the module, Sections 2 and 4. These changes clarify that the additionality module applies to tidal wetland restoration and conservation.
Assessment Team Response: The assessment team reviewed the revised sections of the REDD-MF and the T-ADD-AM and confirmed that the changes made to the referenced sections clarify the project activities that are eligible to employ the activity method. The changes are sufficient to close the finding.

NIR 38 Dated 1 Dec 2017
Standard Reference: VCS Standard
Document Reference: ADD-AM_v1.0_ESI RD1_27SEP2017
Finding: The VCS Standard, Section 4.6.9 sets forth the methods required for demonstrating that a project activity has achieved a low level of penetration relative to its maximum adoption potential as follows “Data used in determining the level of activity penetration shall meet the requirements for data set out for performance benchmarks in Section 4.5.6, mutatis mutandis.”

Section 4.5.6 states “Appropriate data sources for developing performance methods include economic and engineering analyses and models, peer-reviewed scientific literature, case studies, empirical data, and common practice data. The data and dataset derived from such data sources shall meet the requirements below. The CDM Guidelines for quality assurance and quality control of data used in the establishment of standardized baselines also provides useful related guidance.” It lists expert judgement as one of the appropriate data sources as follows “All reasonable efforts shall be undertaken to collect sufficient data and the use of expert judgment as a substitute for data shall only be permitted where it can be demonstrated that there is a paucity of data. Expert judgment may be applied in interpreting data. Where expert judgment is used, good practice methods for eliciting expert judgment shall be used (e.g., IPCC 2006 Guidelines for National GHG Inventories).”

For tidal wetland restoration activities in the United States, T-ADD-AM’s Appendix A references and employs the positive list for tidal wetland restoration activities that are set forth in the VM0033 Methodology for Tidal Wetland and Seagrass Restoration module. It states “the level of tidal wetland restoration in the U.S. was determined to be 2.74 percent of maximum potential (or lower) in VM0033, which is below the 5 percent threshold set by the VCS rules for positive lists justified via the activity penetration option.

For tidal wetland restoration activities outside the United States, the tool states: “No global data sets exist to determine the level of tidal wetland restoration activities outside of the U.S. However, as one of the most developed nations, with the most robust national and state level programs for tidal wetland restoration in the world, the U.S. has the highest activity level of tidal wetland restoration of any country in the world. Accordingly, the level of tidal wetland restoration for the rest of the world is conservatively assumed to be below the activity penetration of tidal wetland restoration in the U.S.; this conclusion relies on expert judgement (see below). The activity penetration level for tidal wetland restoration globally is therefore ≤ 2.74percent. All tidal wetland restoration outside of the U.S. meeting the applicability conditions in Section 4 above, and the regulatory surplus requirement, therefore qualifies for the positive list as well.”

As described to the assessment team during a web-based meeting held on 1rst November 2017, the methodology developers used expert judgement to establish the activity penetration of tidal wetland restoration activities outside of the United States as lower than anywhere in the United States. While expert judgement may be applied, documentation is needed of efforts that were undertaken to collect sufficient data and confirm that no global data sets exist. In addition, please provide documentation regarding how good practice methods for eliciting expert judgment, similar to those set out in the IPCC 2006 Guidelines for National GHG Inventories, were used to exercise expert judgement.

Methodology Developer Response: RAE relied on its network of international wetland restoration experts to identify potential data sources for global tidal wetland restoration activities. These included Conservation International, International Union for the Conservation of Nature - Global Marine and Polar Programme, The Nature Conservancy, Wetlands International, and the United Nations Environment Programme - World Conservation Monitoring Centre. In addition, RAE reviewed numerous articles on coastal wetland ecosystems and blue carbon, especially the reference section of each article, to identify appropriate data sources. RAE also performed Google searches on several keywords. All three avenues of searching confirmed a paucity of data at any significant scale. The expert later confirmed the paucity of data.

RAE took the following steps to identify, engage and incorporate expert judgment.

1. Identify an appropriate expert. As noted in the IPCC Guidelines for National GHG Inventories: Volume 1, “Experts with suitable backgrounds can be found in government, industrial trade associations, technical institutes, industry and universities.” Through email, RAE reached out to numerous organizations to identify experts familiar with tidal wetland restoration approaches, needs, challenges, programs, and accomplishments at national and global scales. These organizations included Conservation International, International Union for the Conservation of Nature - Global Marine and Polar Programme, The Nature Conservancy, Wetlands International, and the United Nations Environment Programme - World Conservation Monitoring Centre. Through Wetlands International, RAE identified one such expert.
2. Establish contact and rapport with expert. RAE made contact through email and Skype with the expert to explain the need and the questions upon which RAE sought expert judgment. RAE reviewed the curriculum vitae of the expert to confirm the identified person was in fact an expert.
3. Provide documents and resources to expert. RAE provided relevant documentation regarding the activity method, data, and VM0033 to the expert as well as specific questions upon which the expert judgment was sought.
4. Review of expert judgment. RAE reviewed the expert’s judgment and did not find the need for further clarification.

Assessment Team Response: Outside the cover of the Findings Worksheet, the assessment team requested additional information in the form of a CV for the expert mentioned in the Project Response, item number 2, who provided expert judgement for the purpose of T-ADD-AM. The methodology team provided the CV as well as the written testimonial of the expert in the document "ADD-AM - Demonstration of Additionality of WRC Projects 20170123". The assessment team reviewed the submitted materials against the VCS requirements for eliciting expert judgement, and confirmed that the requirements were met both in terms of documentation of steps taken to locate and solicit the judgement of the expert, and the expertise of the expert in terms of assessing the data sources for global tidal wetland restoration activities. The finding is closed.

NCR 39 Dated 1 Dec 2017
Standard Reference: VCS Standard
Document Reference: ADD-AM_v1.0_ESI RD1_27SEP2017
Finding: Section 4.3.9 of the VCS Standard states “The applicability conditions shall establish the scope of validity of the methodology, including the geographic scope. In establishing the scope of validity of the methodology, the methodology shall clearly demonstrate that there is similarity across the sub-areas of the geographic scope in factors such as socio-economic conditions, climatic conditions, energy prices, raw material availability and electricity grid emission factors, as such factors relate to the baseline scenario and additionality, It may be necessary to limit the applicability of the methodology to comply with this requirement.”

T-ADD-AM currently does not demonstrate such similarity across the sub-areas of the geographic scope for tidal wetland restoration activities outside of the United States, nor for tidal wetland conservation activities.

Methodology Developer Response: The global scope of the methodology is appropriate for the following reasons. For tidal wetland restoration, both within and outside of the U.S., all tidal wetlands face a common set of barriers to restoration: insufficient funding, willing landowners, competing land uses, community support, and physical and ecological limitations and changes, such as sea level rise. The primary limiting factor is funding. Moreover, all tidal wetland conservation activities face the same barriers: insufficient funding, willing landowners, competing land uses, community support, and physical and ecological limitations and changes, such as sea level rise. These barriers are the relevant factors for determining the appropriate geographic scope of the methodology. Moreover, ADD-AM refers to VM0033, where geographic scope and barriers to project implementation are also discussed. We have now added text to ADD-AM (remamed "ADD-AM_v1.0_ESI RD1_27SEP2017_SCS RD1_15DEC2017.doc") describing the geographic scope and justification as well.
Assessment Team Response: The assessment team reviewed the revised document, "ADD-AM - Demonstration of Additionality of WRC Projects 20170123.doc" and agree that the revised text in Appendix A Section B describes the geographic scope of the module and provides the justification as follows:
"The geographic scope of the module is global. Tidal wetland restoration and conservation activities face a common set of barriers in every country: insufficient funding, willing landowners, competing land uses, community support, and physical and ecological limitations and changes, such as sea level rise. These barriers are the relevant factors for determining the geographic scope of the methodology."
The assessment team finds the additions to be sufficient to close the finding.

NCR 40 Dated 1 Dec 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions state “All sections must be completed using Arial 10pt, black, regular (non-italic) font. Sample text is provided, in black, regular (non-italic) font, under a number of section headings. This sample language should be used where it is applicable and appropriate. Where a section is not applicable, same must be stated under the section (the section must not be deleted from the final document).” The Sections Titles are provided in Arial 11pt bold font.

In the M-ARR module, while sections 6.1 and 6.2 contain Arial 11pt bold font, the other section headers use Arial 10pt bold font and are therefore not in compliance with the referenced instructions.

Methodology Developer Response: All section headers are now in arial 11pt bold font.
Assessment Team Response: The revised module "VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017" has been revised such that the finding can be closed.

NCR 41 Dated 1 Dec 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions for Section 1 state “Indicate key modules, tools, methodologies, documents and/or projects upon which the proposed module is based. Identify any modules or tools used by this module. Include information on the author of the module, if desired.” The template also presents information regarding how such information is to be presented.

Section 1 of the submitted M-ARR module presents information regarding tools or modules used in the module but is missing the referenced information regarding documents upon which the proposed module is based.

Methodology Developer Response: Methodologies upon which M-ARR is based have been added.
Assessment Team Response: Section 1 of the revised module, VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017, has been revised as stated. The finding is closed.

NCR 42 Dated 1 Dec 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) Section 3 states “Using the format in the sample below, provide, in alphabetical order, definitions of key terms and acronyms that are used in the module. Ensure all defined terms are used, and consistently applied, in the module. Do not include terms already defined under the VCS.”

Section 5 of the M-ARR module states "Net GHG removals under the ARR project scenario on mineral soils are estimated using the procedures provided in CDM methodology AR-ACM0003 Afforestation and reforestation of lands except wetlands and associated tools." While the term “mineral soils” is used, it is not defined under the VCS and is not defined in the module, and is therefore not in compliance with the referenced section.

Methodology Developer Response: Definitions for mineral soil and organic soil have been added. Also in module BL-ARR.
Assessment Team Response: The assessment team reviewed the revised definitions sections of both modules referenced, and the definitions have been added as stated. The finding is closed.

NCR 43 Dated 1 Dec 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc
Finding: Sec. 6.1.4 of the Methodology Approval Process document states “Where the proposed methodology references tools or modules approved under the VCS or an approved GHG program, the validation/verification body shall determine whether the tool or module is used appropriately within the methodology. Reassessment of the actual tool or module is not required.”

The VMD0045 module’s title has been revised to be as follows: “Methods for monitoring greenhouse gas emissions and removals in ARR project activities on wetland and terrestrial soil (M-ARR)”

In Section 1 of the REDD+MF methodology, the VMD0045 module title is listed as “VMD0045 Methods for monitoring greenhouse gas emissions and removals in ARR project activities on peat and mineral soil (M-ARR)”, which is the old title of the VMD0045 module.

Methodology Developer Response: The titles of both VM0045 and VM0041 in these lists have been revised.
Assessment Team Response: The titles have been revised in the framework document "VM0007 REDD+MF_v1.6_ESI RD2_27SEP2017.doc" as stated. The finding is closed.

NCR 44 Dated 1 Dec 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0041 BL-ARR_v1.1_ESI RD1_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions for Section 1 state “Indicate key modules, tools, methodologies, documents and/or projects upon which the proposed module is based. Identify any modules or tools used by this module. Include information on the author of the module, if desired.” The template also presents information regarding how such information is to be presented.

Section 1 of the submitted BL-ARR module presents information regarding tools or modules used in the module but is missing the referenced information regarding documents upon which the proposed module is based.

Methodology Developer Response: Methodologies upon which BL-ARR is based have been added.
Assessment Team Response: Section 1 of the revised module, "VMD0041 BL-ARR_v1.1_ESI RD1_27SEP2017" has been revised appropriately. The finding is closed.

NCR 45 Dated 1 Dec 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0041 BL-ARR_v1.1_ESI RD1_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) instructions for Section 3 state: “Using the format in the sample below, provide, in alphabetical order, definitions of key terms and acronyms that are used in the module.”

The M-TW document, Section 3, contains acronyms that are not in alphabetical order.

Methodology Developer Response: Acronyms have been placed in alphabetical order
Assessment Team Response: Acronyms have been placed in alphabetical order in the VMD0041 BL-ARR_v1.1_ESI RD1_27SEP2017 module, as stated. The finding is closed.

NCR 46 Dated 1 Dec 2017
Standard Reference: VCS Methodology Approval Process 3.7
Document Reference: VMD0017 X-UNC_v2.2_ESI RD2_27SEP2017
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Module Template v 3.3 (Issued 8 October 2013) Section 3 states “The module must use key words must, should and may appropriately. Consistent with best practice, must is to be used to indicate a firm requirement, should is to be used to indicate a (non-mandatory) recommendation and may is to be used to indicate a permissible or allowable option. The term shall is reserved for VCS program documents and is generally not appropriate for modules.”

The submitted X-UNC module include the word shall in six places and is therefore not in compliance with the referenced text.

Methodology Developer Response: All instances have been replaced with 'must'.
Assessment Team Response: The instances have been replaced with must as stated, in the revised module "VMD0017 X-UNC_v2.2_ESI RD2_27SEP2017 RD1_15DEC2017". The finding is closed.

NIR 47 Dated 1 Dec 2017
Standard Reference: VCS Standard v. 3.7
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017.doc
Finding: Section 4.1.4 of the VCS Standard requires that "Methodology elements shall be guided by the principles set out in Section 2.4.1". The principle of "accuracy", as set out in Section 2.4.1, is defined as "Reduce bias and uncertainties as far as is practical".

Section 5.3.2.6 of the BL-TW Module states that “a deduction from the estimate of CO2 emissions from the SOC pool may be applied in the baseline scenario to account for the percentage of sequestration resulting from allochthonous soil organic carbon accumulation.” Equation 13 sets out the method for applying such a deduction. However, there is no mention of a way to apply such a deduction factor to methane or nitrous oxide emissions, though allochthonous soil organic carbon accumulation could contribute to these too.

Please provide a justification for why this is the case.

Methodology Developer Response: Although there are biogeochemical processes that relate allochthonous organic carbon inputs to methane and nitrous oxide emissions, the methodology does not explicitly require such processes to be directly measured due to the methods for estimating methane and nitrous oxide emissions. Direct measurement, default factors, and published data do not require these data. The only methods for estimating methane and nitrous oxide emissions that may require such input data are the proxy and modeling methods. The proxy method is dependent on the proxy or proxies selected; if allochthonous carbon inputs were one of these proxies than it would need to be accounted for. Similarly, if a model required allochthonous carbon input data, these would need to be estimated.
Assessment Team Response: The logic presented in the Project Response is acceptable to the assessment team. The finding is closed.

NCR 48 Dated 14 May 2018
Standard Reference: VCS Standard v. 3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: Section 4.4.1 of the VCS Standard states that "The methodology shall establish criteria and procedures for describing the project boundary and identifying and assessing GHG sources, sinks and reservoirs relevant to the project and baseline scenarios."

There are a number of areas in which clarity is lacking regarding the criteria and procedures in Section 5 of the VM0007 REDD+ Methodology Framework for identification of the project boundary. These are as follows:

1. In Section 5.3.3, it is suggested that, for ARR project activities in wetlands, "Emissions from soil organic carbon are estimated in Modules BL-PEAT and M-PEAT." This is inconsistent with the guidance in Table 4, which indicates that Modules BL-PEAT and M-PEAT are "not applicable" for ARR.
2. In Section 5.3.4, it is stated in Table 6 that herbaceous biomass is “included” and Modules BL-ARR and M-ARR are referenced (the implication being that these modules are used in all cases). However, these modules are designed for (as the name implies) ARR activities. While they can be used for RWE+ARR activities, they can’t be used for other combinations or for WRC (RWE, CIW) projects alone. Therefore, the implication that these modules should be used for (any) WRC projects is misleading.
3. In Section 5.3.4, in Table 6 the Modules BL-PEAT and M-PEAT are referenced (with the implication being that they can be used for all WRC project activities). These modules are only appropriate for project activities on peat soils--Modules BL-TW and M-TW would need to be used for tidal wetland areas. This is clarified elsewhere, but the over-arching reference to BL-PEAT and M-PEAT in Table 6 is misleading.
4. In Section 5.4.4, the "Justification/Explanation" under “oxidation of drained peat” in Table 9 has been merged into a single cell for the gases CH4 and N2O. This is likely to cause confusion and inconsistent application by intended users.

Methodology Developer Response: Re 1. If on wetland, an ARR activity is a combined ARR-RWE activity. To make this clearer, we added to 4.4 Applicability Conditions: "Therefore, ARR activities on wetlands are regarded as combined ARR-RWE activities." Hence, modules indicated in Table 3 under heading RWE apply. In the rows for M-PEAT and BL-PEAT the arrows indicate that these modules apply to the RWE component of the combined project. Both modules do not apply to the ARR component. We made an additional correction, i.e. to Table 3: The explanation for the 'arrow' now reads: "See instructions under REDD for CIW or REDD-CIW combined projects; see under ARR categories for RDP-ARR combined projects". In addition, in Table 3 for RWE+ARR we included vegetation establishment. So, on wetland the combination covers A/R, revegetation and vegetation establishment
2. Error corrected: This should be modules BL-TW and M-TW.
3. We added modules BL-TW and M-TW.
4. We split the cell to make appropriate linkages to GHGs and justifications.

Assessment Team Response: The assessment team reviewed the revised version of the VM0007 REDD+ Methodology Framework, entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018", to see whether the finding could be closed. The assessment team's feedback, following the same numbering in the original finding, is as follows:
1. The clarification added to Section 4.4 is helpful, as is the revised instructions for the arrow symbol.

However, the revisions are not sufficient to address the core issue, which seems to be that clear, over-arching guidance is not provided in regarding the application of Table 4 to combined project activities. Given the manner in which the Methodology Framework is currently written, it would be quite logical for a reader of the methodology to reach the conclusion that a binary choice is required regarding which column applies to their specific project activity (i.e., that the categories are mutually exclusive). A reader may then determine which column to reference in Table 4 based on which category they feel best fits their project activity. To use ARR+RWE as an example, a reader may determine that the ARR category should be referenced for an ARR project on peatland, especially if the primary project activity is the planting of trees, and any rewetting activity is a more minor component. Based on the response to the finding, it appears the intent is for Table 4 to be referenced uniquely for each component of a combined project (i.e., in the case of an ARR+RWE project activity, for the "ARR" column to be consulted to determine which modules apply to the ARR component and the corresponding action to be taken in respect of the "RWE" column). However, this is not clearly stated in the Methodology Framework. In addition, guidance is not provided regarding what action to take where the conflicting guidance appears to be provided by the different columns within Table 4 (e.g., for a combined APD+APWD project, it is indicated under the "APD" column that module CP-W is mandatory under certain circumstances, while it is indicated under the "APWD" column that said module is excluded). The discrepancy has not been fully resolved.

2. The stated response to this finding, that the reference to modules BL-ARR and M-ARR should be to modules BL-TW and M-TW, seems to be in error. While the sentence "Included for ARR on tidal wetlands" has been added to the specification for herbaceous biomass in Table 6, this modification is insufficient to entirely address the issue. While it is now clear that herbaceous biomass is included for ARR projects on tidal wetlands, it remains unclear whether herbaceous biomass is included for any other single or combined project category. The statement that this pool is "Included" in the "Included?" column may be seen as over-arching guidance unless clear additional explanation is provided in the "Justification / Explanation" column. The discrepancy has not been fully resolved.

3. With the added reference to modules BL-TW and M-TW, guidance is now provided for any and all WRC project activities, and the discrepancy has been resolved.

4. The "Justification/Explanation" under “oxidation of drained peat” in Table 9 still exists in a single cell for the gases CH4 and N2O, and so the discrepancy has not been resolved.

Due to the discrepancies that remain in respect of items 1, 2 and 4, the finding cannot be closed at this time.

Methodology Developer Response 2: Re 1: We agree that both the arrow and the X may cause confusion and we think the table may be simplified and more readable by using M, O and dash only. We amended the table by replacing the arrows with dashes in row M-REDD, replacing arrows with M's in rows BL-UP and BL-PL, by replacing arrows with dashes in row LK-DFW, by replacing all X's with dashes. The latter removes the apparent conflicting guidance as mentioned in validator's comment.

Re 2: Indeed the response was in error. The addition "Included only for ARR on tidal wetlands." was indeed intended to exclude other situations, such as single WRC projects. We amended the sentence to "Included only for combined ARR-WRC projects explicitly in tidal wetlands". This excludes single projects and ARR combined with other categories than WRC or WRC on peatland.

Re 4: The split has now been carried out.

Assessment Team Response 2: The assessment team reviewed the revised version of the VM0007 REDD+ Methodology Framework, entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018", to see whether the finding could be closed. The assessment team's feedback, following the same numbering in the original finding, is as follows:

1. The assessment team agrees that the action taken in response to the finding has removed some of the internal conflict within the methodology, but the issue has not been entirely resolved. The core issue is that, in the proposed revision, the table now known as Table 4 has gone from being a table that is referenced once, for a given project, to being a table that is potentially referenced multiple times for combined projects (i.e., is referenced and applied uniquely for each project category in a combined project). (Under Version 1.5 of the Methodology Framework document, the same table was still just a table that was referenced once--i.e., a single column was referenced for any given project activity.) Given the strong historical precedent behind the "referenced once" approach to Table 4, it is important, to avoid confusion, that language be inserted to make it abundantly clear that Table 4 must now be referenced uniquely for each category.
2. The action taken in Section 5.3.4 appropriately clarifies that the herbaceous biomass pool is "Included only for combined ARR-WRC projects explicitly in tidal wetlands" (the clear implication being that it is excluded for all other situations). The discrepancy has been resolved.
4. The "Justification/Explanation" under “oxidation of drained peat” in Table 9 has been separated into discrete cells for gases CH4 and N2O, and so the discrepancy has been resolved.
Due to the discrepancies that remain in respect of item 1, the finding cannot be closed at this time.
Methodology Developer Response 3: Re 1. An earlier deleted text hase been used and amended to read as follows: "Where REDD or ARR project activities take place in combination with WRC, the project must adhere to both the respective project category modules and the relevant WRC modules. For example, an AUDD project combined with AUWD on tidal wetland, must follow the instructions provided in both respective columns."
Assessment Team Response 3: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that the quoted language has been inserted. The language is sufficient to clarify that Table 4 is referenced uniquely for each project category. The addition of the example of an AUDD project combined with AUWD on tidal wetland is very helpful. The non-conformity has been resolved.

NCR 49 Dated 14 May 2018
Standard Reference: VCS Standard v3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: The VCS Standard requires in Section 4.7.1 that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs..."

The VM0007 REDD+ Methodology Framework states, in Section 5.3.4, that herbaceous biomass is included in the project boundary for WRC projects. For RWE+ARR project activities, the assessment team agrees that the methodology has established (in Modules BL-ARR and M-ARR) criteria and procedures for quantifying carbon stocks for this reservoir. However, for any other combined project activities (between WRC and project types), and for stand-alone WRC project activities, the methodology does not appear to have any criteria and procedures for quantifying carbon stocks for herbaceous biomass. The rationale for the assessment team's conclusions is as follows:

1. For WRC project activities on tidal wetlands combined with REDD project activities, there are no procedures for accounting of carbon stock change in herbaceous biomass. For such activities, Modules BL-TW and M-TW both reference (in Section 5.1.1) Module CP-AB for “REDD project activities on tidal wetlands”. Part 3 of Section 5 of Module CP-AB (V1.1) states that “Non-tree woody aboveground biomass pool includes trees smaller than the minimum tree size measured in the tree biomass pool, all shrubs, and all other non-herbaceous live vegetation”, with a footnote (footnote 2) indicating that “Pursuant to AR-WG 21 that the GHG emissions from removal of herbaceous vegetation are insignificant in A/R CDM project activities and therefore these emissions can be neglected in A/R baseline and monitoring methodologies”.
2. For WRC project activities on peatlands combined with REDD project activities, there is a similar lack of procedures for accounting of carbon stock change in herbaceous biomass, for the same reason stated above.
3. For WRC project activities on either tidal wetlands or peatlands not combined with any other project activities, there are no procedures for accounting of carbon stock change in herbaceous biomass. Modules BL-TW and M-TW provide no guidance for such accounting for stand-alone project activities. Such guidance is similarly lacking for project activities on peat soils.
4. The methodology indicates that herbaceous biomass is included in the project boundary but does not contain the required accounting procedures for any WRC project activities other than RWE+ARR project activities.
Methodology Developer Response: The justification for herbaceous vegetation refered to the wrong modules (TW) and now reads: "Included for ARR on tidal wetlands. Procedures in Modules BL-ARR and M-ARR account for emissions from this pool based on proxies and default factors". This also specifies that the inclusion of herbaceous vegetation only applies to tidal wetlands in combination with ARR. Single WRC projects do not account for vegetation as now specified in Table 3.

Note: In M-ARR we corrected the definition of ΔCWPS-herb under eq 1 by removing "ARR-RWE". The definitions under eq 7 and in table 6.1 were already correct. Under "Value applied"in section 6.2 we added "For tidal wetlands,".

We noticed another issue, i.e. with the BL-ARR module. In Sherlock Holmes fashion: On 27 June 2017 Steve sent several round 2-amended versions of modules to ESI. However, at the end of the 1st

validation ESI sent an older version of BL-ARR to the VCS (I think the mistake originates with us as we may have confused ESI by adding the older version to the batch of modules considered to be the final ones). This older version was then submitted to SCS for the 2nd validation: VMD0041 BL-ARR_v1.1_ESI RD1_20170515.docx. It should have been VMD0041 BL-ARR_v1.1_ESI RD2_20170609.docx, which was sent to ESI on 27 June and reviewed by them subsequently. Unfortunately, we did not notice the error in the assessment report, because in the list of submitted versions under the heading "Documents received 27 June 2017" this document was missing altogether. So, the older version was submitted to the VCS and pushed into the 2nd validation. Fortunately though, the changes are not complex and easily traceable. The amendments that were incorporated into the later version were similar to the ones in module M-ARR, i.e. reference to ACM0003 instead of CDM Tool 14 and less equations as most is covered by ACM0003. In fact, the amendment restored the original approach.

To resolve this, we went back to version VMD0041 BL-ARR_v1.1_ESI RD2_20170609.docx and added the amendments from the 2nd validation with SCS, based on the VMD0041 BL-ARR_v1.1_ESI RD1_27SEP2017 RD1_15DEC2017.docx version which SCS has reviewed and approved. This involves:

- The restructuring of section 1 Sources
- Adding definitions in section 3
- Simplifications to harvesting and sea level rise matters by referring to M-ARR

Assessment Team Response: The assessment team reviewed the revised version of the VM0007 REDD+ Methodology Framework, entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018", to see whether the finding could be closed. The assessment team appreciates the additional language that has been added to Table 6. However, the assessment does not agree that the addded language "specifies that the inclusion of herbaceous vegetation only applies to tidal wetlands in combination with ARR", because the added language does clarify that herbaceous vegetation is included for ARR project activities on tidal wetlands, but does not clarify that herbaceous biomass is excluded under all other circumstances (i.e., the word "only" is missing from the language added to Table 6).

Methodology Developer Response 2: The word "only" was added.

Assessment Team Response 2: Through review of the revised version of the VM0007 REDD+ Methodology Framework, entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018", the assessment team can confirm that the action taken in Section 5.3.4 appropriately clarifies that the herbaceous biomass pool is "Included only for combined ARR-WRC projects explicitly in tidal wetlands" (the clear implication being that it is excluded for all other situations). The discrepancy has been resolved.

NCR 50 Dated 14 May 2018
Standard Reference: VCS Validation and Verification Manual v3.1
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: Section 5.2 of the VCS Validation and Verification Manual requires that "VVBs must also ensure that methodologies are written in a manner that provides a prescriptive set of criteria and procedures that projects can apply and VVBs can audit against, thereby minimizing the scope for subjective interpretation, or gaming, by project proponents and VVBs using the methodology. This includes the use of precise language and the avoidance of vague terminology."

The methodology makes extensive use of acronyms that pertain to VCS project categories (e.g., CIW, RWE). The assumption the methodology seems to make is that the reader of the methodology will know exactly what these terms mean. While these terms are defined as acronyms in the appropriate locations (e.g., Section 3.1 of the REDD+ MF Methodology Framework), this still isn't adequate to ensure that the reader of the methodology will know what they mean. These terms are described in detail in Section 4 of the AFOLU Requirements, but Section 4 contains requirements for methodologies, not projects—so there's no reason that one would refer to that section when developing a project unless their attention was specifically drawn to that location. The definitions and context for the terms in Section 4 of the AFOLU Requirements isn't mentioned in the methodology, which may be a cause of confusion among users of the methodology.
Methodology Developer Response: In the acronyms sections of modules BL-TW, M-TW, REDD+MF, X-STR, BL-ARR and M-ARR we added "For definitions of VCS AFOLU project categories refer to the VCS AFOLU requirements". Moreover we added acronyms to modules BL-ARR and M-ARR as they were still lacking there.
Assessment Team Response: The assessment team can confirm that the language in question has been added to each of the referenced modules. The reference to the AFOLU Requirements is sufficient to address the issue.

NCR 51 Dated 14 May 2018
Standard Reference: AFOLU Requirements v.3.6
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: The AFOLU Requirements states the following in Section 4.2.20(1):

RWE may be implemented in combination with ARR, for example by planting a native or adapted tree or shrub species on peatland or in mangroves. While existing oxidation in drained conditions is accounted for in the baseline, ARR activities on peatland shall not enhance peat oxidation, therefore this activity requires at least some degree of rewetting."

The VM0007 REDD+ Methodology Framework states the following in Section 4.4: "For ARR project activities where at least a part of the project activity is implemented on organic soils or wetlands, and that wish not to account for soil emissions, intentional manipulation of the water table is not allowed. This implies that:
• The project activity must not involve manipulation of hydrology (or otherwise affect hydrology), and
• No more than 10% of their area may be disturbed as result of soil preparation for planting, and
• Species planted are restricted to those likely to have occurred under historic natural forest conditions in the project area, per best available knowledge (i.e., relevant literature and/or consultation with local experts)."

The assessment team has the following concerns regarding the above applicability conditions:

1. The applicability conditions conflict with requirement (also contained in Section 4.4 of the VM0007 REDD+ Methodology Framework) that "In strata with drained organic soil, ARR activities must be combined with rewetting", in that rewetting activities do necessarily involve manipulation of hydrology. They also, therefore, conflict with the guidance from the AFOLU Requirements, as quoted above.
2. While it is understood that the intent of the requirements quoted above was likely to ensure that negative impacts to hydrology (e.g., maintained or exacerbated drainage of peatland) do not occur, the specific reference to "project activities where at least a part of the project activity is implemented on organic soils or wetlands, and that wish not to account for soil emissions" suggests that the activities listed (such as drainage of peatland) is an acceptable component of ARR project activities, so long as projects are willing to "account for soil emissions". This suggestion runs counter to the requirement that "ARR activities on peatland shall not enhance peat oxidation".
3. While ARR+RWE is listed as an eligible combination of project categories in Section 4.2.20 of the AFOLU Requirements, ARR+CIW is not listed as an eligible combination. However, to the best knowledge of the assessment team, there are no applicability conditions given in the methodology that would project its use for ARR+CIW project activities.

Methodology Developer Response: This was an attempt to simplify certain cases based on CDM small-scale procedures. But indeed this raises conflicts with AFOLU requirements. We therefore removed this entire language.

Assessment Team Response: The assessment team can confirm, through review of the revised version of the VM0007 REDD+ Methodology Framework entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018", that all of the language quoted in the text of the finding has been removed. The removal of the text in question is sufficient to resolve the finding.

NCR 52 Dated 14 May 2018
Standard Reference: AFOLU Requirements v.3.6
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: The VM0007 REDD+ Methodology Framework states, in Section 4.5.1, that "WRC activities are not eligible under the following conditions... Changes in hydrology result in the accumulation or maintenance of soil carbon stock, noting a) this pertains to projects that sequester carbon through sedimentation and/or vegetation development and b) this does not pertain to projects that increase salinity to reduce CH4 emissions." This is inconsistent with the note under Section 4.2.19(1) of the AFOLU Requirements, which explicitly states that "Activities that increase net GHG removals through carbon sequestration by restoring soil carbon sequestration conditions (e.g., peat-forming conditions) are eligible under RWE." The condition is also written in a confusing manner that makes unclear exactly which project activities are in conformance with the stated applicability condition.
Methodology Developer Response: With this additional bullet point we responded to a comment by the 1st validator, with the following justification: Requirement 4.2.17 has a limited scope - i.e. RWE projects geared towards C sequestration - but there is another category of projects focussing on hydrology interventions increasing the salinity and therewith reduce CH4 emissions. A decrease in SOC stocks cannot a priori be excluded but it is a by-effect that needs to be accounted for, not part of the principle of the intervention.
In response to the comment of the 2nd validator: since this bullet point is for activities that are not eligible, the language should have included "DO NOT". Therefore, we amended it to read as follows: "• Changes in hydrology do not result in the accumulation or maintenance of soil carbon stock, noting a) this pertains to projects that are intended to sequester carbon through sedimentation and/or vegetation development and b) this does not pertain to projects that increase salinity to reduce CH4 emissions. Projects that aim to decrease CH4 emissions through increased salinity must account for any changes in SOC stocks."
Assessment Team Response: The assessment team can confirm, through review of the revised version of the VM0007 REDD+ Methodology Framework entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018", that the indicated revision has been made. The addition of the words "do not" are sufficient to resolve the conflict with Section 4.2.19(1) of the AFOLU Requirements, while the additional modifications enhance the clarity of the language, such that it should be clear which project activities fall within the scope of applicability of the requirement. Therefore, the discrepancy has been resolved.

NCR 53 Dated 14 May 2018
Standard Reference: AFOLU Requirements v.3.6
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: Section 4.6.20 of the AFOLU Requirements states the following: "Rewetting in the project area may lead to higher water table depths in some areas beyond the project boundary, and consequently leading to lower water table depths in downstream areas further beyond the project boundary (e.g., in the case of project activities that reverse subsidence), or cause transportation of organic matter to areas beyond the project boundary. In such cases, the project proponent shall be required to demonstrate that such changes in water table depths or export caused by the project do not lead to increases in GHG emissions outside the project area, or the affected areas shall be identified and the resulting leakage shall be quantified and accounted for."

The VM0007 REDD+ Methodology Framework states, in Section 4.5.1, that "WRC activities are not eligible under the following conditions... Hydrological connectivity of the project area with adjacent areas leads to a significant increase in GHG emissions outside the project area." The assessment team understands that the objective of this requirement is to ensure that ecological leakage, as described by the AFOLU Requirements, need not be accounted for in the methodology. However, the assessment team is concerned that, under the circumstance that project activities lead to higher water table depths outside the project area (or can reasonably be anticipated to do so), the methodology does not contain criteria and procedures to be followed to "demonstrate that such changes in water table depths or export caused by the project do not lead to increases in GHG emissions outside the project area". Note that the word "demonstrate" indicates active efforts to be undertaken by the project proponent (e.g., through monitoring, use of professional judgment to confirm there is no possibility that increases in GHG emissions could occur outside the project area, or some other means). In addition, while the applicability condition implies that some quantity of increase in GHG emissions outside the project area would be acceptable if this could be determined to be "insignificant", the quoted text of the AFOLU Requirements contains no such allowance. The assessment team understands that Section 4.6.2 of the AFOLU Requirements states that "Leakage that is determined, in accordance with Section 4.3.3, to be below de minimis (i.e., insignificant) does not need to be included in the GHG emissions accounting." However, the determination of "de minimis" status per Section 4.3.3 requires specific "criteria and procedures" to be established by the methodology by which ecological leakage may be determined to be de minimis.
Methodology Developer Response: Monitoring procedures were provided in 9.3.1 of REDD+ MF (Monitoring of project implementation) but we moved those to module LK-ECO.
Given the validator's comments, we have amended module LK-ECO to align better with the procedures of VM0033. These additional procedures provide the project proponent in tidal wetland projects with measurable criteria for avoiding ecological leakage.
Assessment Team Response: Thank you for clarifying that the procedures are found in LK-ECO. Through review of the revised module, entitled "VMD0044 LK-ECO v1.0 RD2 26JUL2018", it appears that the procedures are appropriate for the purpose at hand, although this will have to be double-checked with our Technical Expert, Dr. Jason Keller.

NCR 54 Dated 14 May 2018
Standard Reference: AFOLU Requirements v.3.6
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: Section 4.6.1 of the AFOLU Requirements states the following: “Methodologies shall establish procedures to quantify all significant sources of leakage. Leakage is defined as any increase in GHG emissions that occurs outside the project boundary (but within the same country), and is measurable and attributable to the project activities. All leakage shall be accounted for, in accordance with this Section 4.6."

In Section 4.5.2, the VM0007 REDD+ Methodology Framework provides three options for RWE projects that may be followed in order to avoid the need to account for leakage. One such option is the following: "The area is under a land use that could be displaced outside the project area, although in such case, baseline emissions from this land use must not be accounted for." This condition is not consistent with the requirement quoted above in that, if the displacement of a pre-project land use results in leakage (as defined above), applicability condition would permit the project proponent to not account for said leakage. Section 4.6.1 states that "all leakage shall be accounted for", regardless of whether baseline emissions relating to the pre-project land use are accounted for.
Methodology Developer Response: RDP and CUPP are explained in the AFOLU Requirements (4.2.18). We suggest to keep both in the list of acronyms in Ch3.
Assessment Team Response: It appears the response provided to this finding may have been inadvertently pasted from the response to NCR 54. In any case, no change has been made to Section 4.5.2 of the revised version of the VM0007 REDD+ Methodology Framework entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018", so it appears that the non-conformity has not been resolved.
Methodology Developer Response 2: Without any doubt: unfortunate paste work.
The option provided is not in line with the said requirement but there are good reasons for keeping it nonetheless. This has been discussed and clarified several times during the validation of this module, with validator and VCS staff, as well as during validation of VM0033 from which the option is copied. For sure the requirement has been put in place to preclude creating hot air credits by missing certain leakage emissions, but the option in the procedure has been designed to do exactly that (avoiding hot air credits), while at the same time allowing project types to exist that would in real life become unfeasible due to unfeasible tracking of activity shifting.
If activity shifting in reality does happen, the project does not benefit since the project was not allowed to account for the emissions associated with the activity. If activity shifting in reality does not happen, the approach is conservative because the project was not allowed to account for the emissions that were in fact a benefit of the project.
This option was included for projects restoring tidal wetlands that may gain significant GHG removals far exceeding any potential leakage loss. Projects just focussing on stop-loss and facing activity shifting would not result in any emission reduction. In discussions with validators of VM0033 and the VCS (Sam Hoffer) this was considered a valid approach.
Assessment Team Response 2: This item was discussed with the project developer. While the rationale provided by the project developer is logical, the fact is that the proposed approach appears to present a non-conformity regarding the plain text of the AFOLU Requirements and, thus, can only be permitted through written approval from Verra. While it seems this item was discussed with Verra in the past, the assessment team has not been provided with evidence of written approval from Verra. Therefore, the finding cannot be closed.

Methodology Developer Response 3: As discussed with VCS (see email by Amy Schmid dd 21 Fwbruary 2019), we added the following to point b. in section 4.5.2 "and where degradation of additional wetlands for new agricultural/aquacultural sites within the country will not occur or is prohibited by enforced law".
Assessment Team Response 3: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_19MAR2019", the audit team can confirm that the clarifying language in question has been added. In addition, the audit team can confirm receipt of an email by Amy Schmid, of Verra (received 21 February 2019) in which it was confirmed that "we will not require [the applicability condition] to fully meet the requirements of Section 4.6.1 of the AFOLU Requirements, per the above..." Therefore, the non-conformity has been resolved.

NCR 55 Dated 14 May 2018
Standard Reference: VCS Methodology Approval Process v 3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: The VCS Methodology Approval Process, Section 4.2 Step 1: Development of Methodology, states “Methodologies and methodology revisions shall be prepared using the VCS Methodology Template and modules and tools shall be prepared using the VCS Module Template. All instructions in the templates must be followed.”

The VCS Methodology Template v 3.2 instructions state the following in Section 3: “Provide definitions of key terms and acronyms that are used in the methodology/revision." The methodology uses the terms "rewetting drained peatland (RDP)" and "conservation of undrained and partially drained peatland (CUPP)". While these terms were previously used under the VCS Program, they have been superseded by other project categories. While it remains permissible for the methodology to use terms not defined under the VCS Program, these terms must then be defined by the methodology. No definition is provided for these terms in the VM0007 REDD+ Methodology Framework or (where applicable) other methodology documents.
Methodology Developer Response: RDP and CUPP are explained in the AFOLU Requirements (4.2.18). We suggest to keep both in the list of acronyms in Ch3.
Assessment Team Response: It is true that Section 4.2.18 of the AFOLU Requirements indicates that "Rewetting of drained peatland and the conservation of undrained or partially drained peatland are sub-categories of restoring wetland ecosystems and conservation of intact wetlands, respectively". In addition, the assessment team acknowledges that, in response to NCR 50, the "Definitions" suggests of the relevant methodology elements now state, "For definitions of VCS AFOLU project categories refer to the VCS AFOLU requirements." As Rewetting of Drained Peatland and Conservation of Undrained or Partially drained Peatland are VCS AFOLU project (sub-)categories, the reader of the methodology will be able to reference the AFOLU Requirements for the relevant clarification regarding these terms. Therefore, the discrepancy has been addressed.

NCR 56 Dated 14 May 2018
Standard Reference: VCS Standard v. 3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: The VCS Standard states in Section 4.3.1 that "The methodology shall use applicability conditions to specify the project activities to which it applies and shall establish criteria that describe the conditions under which the methodology can (and cannot, if appropriate) be applied."

Section 4.5.2 of the VM0007 REDD+ Methodology Framework contains the following applicability conditions:

"RDP activities are not eligible under the following conditions:
• If in combination with fire reduction on peatland that excludes rewetting as part of the project activity
• If in combination with ARR activities that enhance peat oxidation. Therefore, this activity requires at least some degree of rewetting unless ARR is carried out in a tidal system where the tidal regime is restored or continues to be in place
• Activities where drainage is continued or maintained"

The second and third conditions are confusing and likely to be misinterpreted by the intended users. In the case of the second condition, the first sentence indicates what activities are not allowed. Then, the second sentence indicates what activities (in this case, rewetting) are required. However, because the two sentence are proceeded by "RDP activities are not eligible under the following conditions", confusion as to whether rewetting is required or "not eligible" is likely to result. The third condition states that activities are not eligible where drainage is continued or maintained; however, additional context and clarification is needed regarding exactly how this condition should be understood by readers of the methodology in the context of their specific project activities. Thus the conditions quoted above do not clearly use applicability conditions to specify the project activities.
Methodology Developer Response: We agree that these are confusing conditions. In fact they are redundant under the heading of "Peatland Rewetting", which by definition involves some degree of rewetting and precludes the maintenance of the original drained state. Therefore, we removed all bullet points. The 2nd bullet point has been moved to the applicability conditions for ARR, where is does have relevance. We amended this 2nd bullet point as follows:
"• If ARR activities enhance peat oxidation. Therefore, on peatland, this activity requires at least some degree of rewetting. In a tidal system where the tidal regime is restored or continues to be in place, ARR activities are considered not to enhance peat oxidation."
The reference to CUPP in 4.5.3 is also redundant because CUPP by definition precludes the increasing of drainage. We removed the condition related to CUPP (2nd sentence).
Assessment Team Response: The assessment team can confirm, through review of the revised version of the VM0007 REDD+ Methodology Framework entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018", that the language in question has been removed. The assessment team agrees, for the reasons stated, that the language in question was not critical to the soundness of the methodology, and that its removal has not caused any issues. Therefore, the removal of the language has been sufficient to resolve the discrepancy.

NCR 57 Dated 14 May 2018
Standard Reference: VCS Standard v. 3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: Section 4.5.1 of the VCS Standard requires the following:

"Methodologies using a project method shall establish criteria and procedures for identifying alternative baseline scenarios and determining the most plausible scenario, taking into account the following:
1) The identified GHG sources, sinks and reservoirs.
2) Existing and alternative project types, activities and technologies providing equivalent type and level of activity of products or services to the project.
3) Data availability, reliability and limitations.
4) Other relevant information concerning present or future conditions, such as legislative, technical, economic, socio-cultural, environmental, geographic, site-specific and temporal assumptions or projections."

The VM0007 REDD+ Methodology Framework states the following: "For projects not eligible to apply the activity method for demonstrating additionality (see Section 7), the most plausible baseline scenario must be determined using T-ADD, listed in Section 2 above. The tool has been designed for A/R CDM project activities, but is used for this methodology by applying the notes provided for Table 10, below." The assessment team agrees that the tool T-ADD does contain criteria and procedures for identifying alternative baseline scenarios and determining the most plausible scenario, in line with the requirements of the VCS Standard. However, for projects that are eligible to apply the activity method for demonstrating additionality, the methodology is lacking criteria and procedures for identifying alternative baseline scenarios and determining the most plausible scenario, as Module ADD-AM is geared toward the demonstration of additionality and does not contain the required criteria and procedures pertaining to the baseline scenario.
Methodology Developer Response: Indeed, and therefore we reverted back to the original language at the top of section 6.1
Assessment Team Response: The assessment team can confirm, through review of the revised version of the VM0007 REDD+ Methodology Framework entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018", that the language within the currently prevailing version of that document (Version 1.5) has been reinstated. Therefore, the criteria and procedures for identifying the baseline scenario fall outside the scope of the assessment task, and the finding is withdrawn.

NCR 58 Dated 14 May 2018
Standard Reference: VCS Standard v. 3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2
Finding: Section 4.3.1 of the VCS Standard requires the following: "The methodology shall use applicability conditions to specify the project activities to which it applies and shall establish criteria that describe the conditions under which the methodology can (and cannot, if appropriate) be applied".

The VM0007 REDD+ Methodology Framework contains language that suggests that CIW activities can only be carried out within "intact wetlands". For example, CIW activities are referenced in Table 3 where "Undrained peatland or intact tidal wetland" is the pre-project land use. Additionally, in Section 4.5.3, it is stated that "Avoiding planned wetland degradation activities are eligible under the following condition... Conversion of intact wetlands to a degraded condition must be legally permitted", making it unclear whether project activities on partially degraded wetlands are eligible. Other instances of language that suggest that CIW activities can only be carried out within "intact wetlands" may be found through a word search for "intact". However, it is stated in Section 4.5.3 that "Project activities conserving tidal wetlands may include... Improving water management on drained wetlands", which conflicts with the above. Moreover, no specific applicability condition is provided in Section 4 to limit the use of the methodology, for CIW project activities, to intact wetlands. Note that Section 4.2.19(2) of the AFOLU Requirements indicates that "This category includes activities that reduce GHG emissions by avoiding degradation and/or the conversion of wetlands that are intact or partially altered while still maintaining their natural functions". Thus, wetlands that are "partially altered while still maintaining their natural functions" are eligible for CIW project activities under the AFOLU Requirements. While it is within the purview of the methodology to exclude such activities, such exclusion must take place per an activity condition.
Methodology Developer Response: We amended the pre-project description in table 3 and added a footnote describing CIW as in the AFOLU Requirements. This is to make sure that drained and partially drained and intact and partially altered conditions are eligible for CIW activities. In 4.5.3 last bullet we added "partially altered".
Assessment Team Response: The assessment team can confirm, through review of the revised version of the VM0007 REDD+ Methodology Framework entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018", that the language within the following sections has been amended to no longer suggest the preclusion of project activities on non-intact tidal wetlands:
- Table 3 (language now refers to "Undrained or partially drained peatland or intact or partially altered tidal wetland")
- Section 4.5.3 (language now states that "Conversion of intact or partially altered wetlands to a degraded condition must be legally permitted"

However, the "or partially altered" reference has not been added to the relevant language in Table 11, which results in a conflict with the corrections identified above. The same situation exists in Table 1 of the BL-UP module ("VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 12JUN2018"). Therefore, the discrepancy has not been fully resolved.
Methodology Developer Response 2: Language in the mentioned tables 11 and 1 has been amended.
Assessment Team Response 2: Through review of the revised version of the VM0007 REDD+ Methodology Framework, entitled "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018", as well as the revised version of BL-UP, entitled "VMD0007 BL-UP_v3.3_27SEP2017

RD1_15DEC2017 25JUL2018", the assessment team can confirm that the "or partially altered" reference has been appropriately added to Table 11 and Table 1, respectively, of the two documents. Therefore, the discrepancy has been fully addressed.

NCR 59 Dated 20 Jul 2018
Standard Reference: VCS Standard v. 3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018
Finding: Section 4.3.1 of the VCS Standard requires the following: "The methodology shall use applicability conditions to specify the project activities to which it applies and shall establish criteria that describe the conditions under which the methodology can (and cannot, if appropriate) be applied".

The VM0007 REDD+ Methodology Framework contains the following condition: "Avoiding unplanned deforestation activities are applicable under the following conditions... Where the project activity involves the avoidance of future deforestation under deforestation or conversion concessions, which are without legal authorization and documentation at the project start date". This condition is likely to cause significant confusion in the following areas:

1. Unless otherwise stated, it is understood that project activities must meet all applicability conditions following the words "...activities are applicable under the following conditions..." However, the above condition seems to only be relevant "Where the project activity involves the avoidance of future deforestation under deforestation or conversion concessions". Therefore, it is unclear how the condition is intended to be interpreted in other circumstances.
2. The circumstances under which the condition applies are very much unclear. Does the condition refer to a situation in which it can be projected that, at some future date, a concession will become legally authorized, and for which the project activity is stopping the planned deforestation that would occur upon authorization of the concession? In such case, it would seem that the project activity would fall under the Avoiding Planned Deforestation and/or Degradation category. Or, does the condition refer to a situation in which illegal deforestation is being avoided on lands that will be subject to a concession at a later date? In either case, a more targeted explanation is required, and it must be ensured that the situation described fully meets the requirements for Avoiding Unplanned Deforestation and/or Degradation project activities.
Methodology Developer Response: 1. The language has been changed to read: "Avoiding unplanned deforestation activities are applicable .... if future deforestation is expected to occur under future deforestation or conversion concessions, i.e. is without legal authorization and documentation at the project start date". Thus, if deforestation under deforestation concessions is expected but such concessions do not exist at the project start date, the eligible project activity is avoiding unplanned deforestation (rather than avoiding planned deforestation).
2. The edited text clarifies that avoiding unplanned deforestation applies when deforestation under a concession is expected in the future but such concession does not yet exist at project start date. Such projects do not comply with the definition of avoiding planned deforestation in requirement 4.2.9.1. because legal authorization and documentation are lacking. The desciption for avoiding unplanned deforestation in 4.2.9.2 does not preclude the project activity.
Assessment Team Response: The assessment team has revised the revisions made in "VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018". Unfortunately, the finding cannot be closed.

1. The way Section 4.4 is set up is to provide conditions that are additive, such that all conditions must be met in order for a project to be applicable. It seems the intent for the condition in question is to identify a possible circumstance under which project activities are applicable, but this conflicts with the conventions surrounding the statement of applicability conditions. As written, Section 4.4 could lead a reader to infer that the methodology is only applicable to the situation where "Future deforestation is

expected to occur under future deforestation or conversion concessions".
2. It's unclear why this condition is necessary. If the deforestation and/or degradation activities being avoided are "unplanned" as of the project start date, then the project activity is, of course, eligible as an AUDD activity, and the fact that the land on which the project activities are being carried may, in the absence of the project, have been included in a future concession seems irrelevant. On the other hand, if there is no "unplanned" deforestation and/or degradation pressure on the project area as of the project start date, it does not seem that the project activity is eligible as an AUDD activity.
Methodology Developer Response 2: 1. The bullet point has been reverted to the original language and moved to the one existing under 4.3.3. The way it works now is as an identification of a special case. A similar not has been aded to APWD in 4.5.3.
2. This was explained in the previous response. The definitions of AUDD and APD may cause confusion if a project is dealing with a possibility of future deforestation under a legal concession. Strictly, the project is not ADP because the authorised deforestation plan do as of yet not exist. Procedures for determining baseline and leakage may therefore not apply. Those for AUDD are quite suited on the other hand.
Assessment Team Response 2: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that the language in question has been removed from Section 4.3.2 and inserted as a special case in Sections 4.3.3 and 4.5.3. This is sufficient to resolve the non-conformity, because any lack of clarity around this special case has been removed. Pending the assessment team's review, it is possible that additional findings may be issued regarding the language inserted into Sections 4.3.3 and 4.5.3.

NCR 60 Dated 20 Jul 2018
Standard Reference: AFOLU Requirements v. 3.7
Document Reference: VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 12JUN2018, Section 5, Step 3.0
Finding: Section 4.4.7(2)(a) of the AFOLU Requirements states the following: "Methodologies shall set out criteria and procedures to identify where deforestation would likely occur using spatial analysis and projections (except for certain mosaic configurations as set out in Section 4.4.7(2)(c))." Section 4.4.7(2)(c) of the AFOLU Requirements states the following: "Where... it can be demonstrated that 25 percent or more of the perimeter of the project area is within 120 meters of land that has been anthropogenically deforested within the 10 years prior to the project start date, spatial projections to determine where in the project area deforestation is likely to occur are not required." It appears that these requirements (or a prior version of them) are the source of the requirement in Section 5, Step 3.0 stating that "In the case of a transition configuration, location analysis is not required where it can be shown that ≥ 25% of the project geographic boundary is within 50m of land that has been anthropogenically deforested within the 10 years prior to the project start date." In the proposed revision, the words "(excluding water bodies)" have been inserted so that the text reads "In the case of a transition configuration, location analysis is not required where it can be shown that ≥25% of the project geographic boundary (excluding water bodies) is within 50 m of land that has been anthropogenically deforested within the 10 years prior to the project start date". The reason given for this change, as provided via email from the methodology developed received on 12 June 2018, is that "...it can be assumed that a water body will not be part of a deforestation front e.g. in case of coastal wetlands where a portion of the project area is limited by the sea. The sea part of the boundary should be excluded from the 25%." The assessment team agrees that, in some cases, it can be logically concluded that a water body will not serve as deforestation front. However, the assessment team does not agree that the exclusion of water bodies is consistent with the quoted requirements of the AFOLU Requirements. For one thing, the phrase "water bodies" is overly broad, as it arguably would include wetlands, leading to illogical results (especially if the entire project area is a tidal wetland). Even if "water body" is replaced with a more narrowly defined term such as "sea", it appears to the assessment team that location analysis is even more relevant in the situation where "where a portion of the project area is limited by the sea" if the sea poses a significant access barrier, as an appropriately implemented location analysis would logically resulting in a modeling of the baseline deforestation/degradation pattern such that the areas bordering the access barrier are not among the first areas to be deforested or degraded. Therefore, the revision made is both inappropriate and inconsistent with the quoted requirements of the AFOLU Requirements.
Methodology Developer Response: Agreed. Addition has been removed.
Assessment Team Response: Through review of the revised version of BL-UP, entitled "VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 25JUL2018", the assessment team can confirm that the language in question has been removed. Therefore, the non-conformity has been resolved.

NCR 61 Dated 20 Jul 2018
Standard Reference: AFOLU Requirements v. 3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018; VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 12JUN2018; BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 03JUN2018
Finding: Section 4.7.1 of the AFOLU Requirements states the following: "Methodologies shall establish procedures for quantifying net GHG emission reductions and removals (the net GHG benefit), which shall be quantified as the difference between the GHG emissions and/or removals, and/or as the difference between carbon stocks, from GHG sources, sinks and carbon pools in the baseline scenario and the project scenario."

While the methodology contains criteria and procedures for the required quantification, there are gaps in the quantification structure where variables should be passed between modules, and between the respective modules and the VM0007 REDD+ Methodology Framework. For example, the Methodology Framework indicates the following in Section 8.1.4:
"Baseline net emissions from the soil carbon pool in combined projects must be estimated using Module BL-PEAT or BL-TW, whichever is relevant (see Table 3). For peat strata within tidal wetlands, Module BL-PEAT must be used. For CIW project activities (e.g., conservation of salt marshes without a tree biomass component), Module BL-UP or BL-PL (whichever is relevant) must be used applying the conversion table below... When applying BL-UP for AUWD project activities, disregard the references to Module CP-S in Part 4 and instead use Module BL-TW for soil accounting."
In review of modules BL-UP and BL-TW, it is clear that the parameters do not match up in any sense of the word. The parameters that would be sourced from CP-S, as found in Step 4.2.3 of Section 5 of BL-UP, are C(SOC,bsl,,i) and C(SOC,PD-BSLi). Module BL-TW does not provide any procedures to directly quantify these parameters. Rather, module BL-TW has its own unique quantification framework for baseline emissions, in Section 5.1.1, and the reader is not provided with any guidance regarding how to mesh the framework in Section 5.1.1, in respect of soil accounting, and the quantification in Step 4.3, Section 5 of BL-UP.

Note that the above is merely an example and not a comprehensive indication of all similar issues with the methodology. It appears that issues along the lines of the above are frequently encountered among the methodology elements.
Methodology Developer Response: For REDD-CIW and stand-alone CIW project activities, Module BL-TW has been revised to only cover soil emissions. Biomass and fuel use are now in principle dealt with in BL-UP. GHG_BSL-soil,i,t has been renamed to GHG_BSL-TW,i,t in order to better differentiate between peat (see BL-PEAT) and tidal wetland. By reconfiguring how the stratum are is used in the calculation, the term is now on a perha basis, to match the terms in the CP modules and in BL-UP. For consistency, we changed the term GHG_BSL-WRC,i,t in BL-PEAT into GHG _BSL-PEAT,i,t and the units of GHGBSL-TW,i,t and GHGBSL-PEAT,i,t are the same. NB, the terms E_peatsoil-BSL,i,t etc have been renamed to GHG_peatsoil-BSL,i,t etc for consistency in terminilogy, a minor edit. In BL-UP a new Equation 24 has been added to Step 4.3 to cater for REDD-AUWD or single AUWD project activities that use Modules BL-TW and BL-PEAT. These modules do not use a carbon stock change in soil compensated for time after deforestation/degradation and therefore Equation 23 cannot be used. In the process, BL-UP was cleaned up (redundant paramters removed from Ch6, equations renumbered).
Assessment Team Response: It appears that a good-faith effort has been made to ensure consistency between methodology elements in response to this finding. Additional findings will be

issued to address any specific discrepancies noted by the audit team, but this finding may be closed.

NCR 62 Dated 20 Jul 2018
Standard Reference: AFOLU Requirements v. 3.7
Document Reference: VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 12JUN2018
Finding: Section 4.4.7(2)(c) of the AFOLU Requirements states the following for AUDD project activities: "The criteria and procedures for establishing the baseline scenario in the frontier and mosaic configurations shall take into account such factors as historical deforestation and/or degradation rates and require the project proponent to develop a baseline by determining and analyzing a reference area (which need not be contiguous to the project area), that shall be similar to the project area in terms of drivers and agents of deforestation and/or degradation, landscape configuration, and socio-economic and cultural conditions..."

In Step 1.1.1.1 of Section 5 of BL-UP, the minimum size of the reference region for prediction of deforestation rate (RRD) is calculated, in Equation 1, by multiplying the number of hectares in the project area by a scaling factor termed the RAF. The value for RAF is calculated in Equation 2. In the currently prevailing version of BL-UP (V3.2), the following explanatory text for the calculation of RAF is given in footnote 5: "The relationship was developed from data on reference area and project area in Brown et al. 2007. Baselines for land-use change in the tropics: application to avoided deforestation projects. Mitigation and Adaptation Strategies for Climate Change, 12:1001-1026), from practical experience with pilot projects, and from expert opinion."

Through review of the referenced publication from Brown et al. 2007, it is quite clear that said publication served as the framework for the original version of the BL-UP model, as the suggested steps under Section 3.7 of that publication follow essentially the same flow as is followed in Section 5 of BL-UP. The following guidance is given for the "approximate regional analytic domain scale" (i.e., the size of the RRD): "About 5–7 times the area of large projects (e.g., greater than several hundreds of thousand ha; magnitude and thresholds recommended will vary with regional conditions), or 20–40 times the area of smaller projects (e.g., tens of thousands of ha or less; will vary by regional conditions)."

The following text has been added to BL-UP in the proposed revision: "Since Equation 1 may render projects with a relatively small project areas (e.g., 50,000 ha or less) unfeasible, project proponents of such small projects may justify a smaller MREF with emphasis on avoidance of non-conservative reference regions that may help to augment the emission reduction outcome of the project." There is also an explanatory comment provided as footnote 9: "For example, by demonstrating that all the forested area in the region or country that meets all other requirements for reference regions are included."

Through testing, it seems that the value of RAF as calculated in Equation 2 does roughly match the guidance of Brown et al. 2007 for larger-sized projects (e.g., for a project of 25,000 ha, the RAF is calculated as ~6; for a project of 300,000 ha, the RAF is calculated as ~1). However, the audit team can confirm that the RAF increases in an uncontrolled and unrealistic manner as the area of a project decreases. Therefore, the audit team agrees that "Equation 1 may render projects with a relatively small project areas... unfeasible". However, the audit team is less convinced regarding the implied definition of a "relatively small project" as being 50,000 ha or less. Equation 2 would calculate the RAF of a project of 50,000 ha as being ~4, which is well within the ballpark of the guidelines suggested by Brown et al. 2007. Furthermore, while the assessment team agrees that Equation 2 calculates a value

of RAF that is too large for certain small projects, Brown et al. 2007 do suggest that the value of RAF should be larger for smaller projects, and it seems appropriate to require the value of RAF to be scaled accordingly.

The assessment team agrees that, if all forested area in the country that meets all other requirements for the RRD is included, then an exception to Equation 1 is justified. However, the audit team is less certain that this conclusion holds true if all forested area in the "region" (a vague term that is subject to interpretation) that meets all other requirements for the RRD is included. Furthermore, the guidance that "...project proponents of such small projects may justify a smaller MREF with emphasis on avoidance of non-conservative reference regions that may help to augment the emission reduction outcome of the project" is far too open-ended to ensure that an appropriately and conservatively sized RRD is included. The purpose of the RAF calculation is to ensure that the RRD is sufficiently large that the historical deforestation rate within the RRD will provide a reasonable prediction of the baseline deforestation rate within the project area. Without clear criteria (other than an overall mandate to avoid a non-conservative outcome), the assessment team is concerned about the potential for RRDs to be selected in a manner that is inconsistent with the principles underlying the guidance provided by Brown et al. 2007.

Finally, the clear criteria sought by this finding actually seem to be provided in the paragraph above the proposed addition. Said paragraph provides reasonable guidance for "relaxation" of the criteria for RRD selection that should ensure that no project is made ineligible through inability to construct an RRD compliant with all requirements therein. In summary, the assessment team cannot conclude that the text that is proposed to be added to BL-UP is fully appropriate, and the assessment team has significant doubts regarding whether said proposed text is necessary in the first place.
Methodology Developer Response: The addition has been removed.
Assessment Team Response: Through review of the revised version of BL-UP, entitled "VMD0007 BL-UP_v3.3_RD2 SCS_02DEC2018", the assessment team can confirm that the following language has been removed:

"Since Equation 1 may render projects with a relatively small project areas (e.g., 50,000 ha or less) unfeasible, project proponents of such small projects may justify a smaller MREF with emphasis on avoidance of non-conservative reference regions that may help to augment the emission reduction outcome of the project."

Therefore, the non-conformity has been resolved.

NCR 63 Dated 20 Jul 2018
Standard Reference: AFOLU Requirements v. 3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 03JUN2018; BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 03JUN2018
Finding: Section 4.4.10 of the AFOLU Requirements states the following: "The criteria and procedures for establishing the RWE baseline scenario shall take into account the following… The long-term average climate variables influencing water table depths and the timing and quantity of water flow. The long-term average climate variables shall be determined using data from climate stations that are representative of the project area and shall include at least 20 years of data." Section 4.4.12 of the AFOLU Requirements states the following: "The criteria and procedures for establishing the CIW baseline scenario are handled differently for each of the eligible CIW activities, as follows... The long-term average climate variable shall be determined using data from climate stations that are representative of the project area and shall include at least 20 years of data."

Section 5.2.1 of the VM00007 REDD+ Methodology Framework requires the following: "While developing WRC baselines, the project must reference a period of at least 10 years in order to model a spatial trend in drainage, and it must take into account long-term (20-year) average climate variables, for which procedures are provided in Modules BL-PEAT and BL-TW." This appears to appropriately enforce the requirements from the AFOLU Requirements, except that it does not specifically require that "long-term average climate variable shall be determined using data from climate stations that are representative of the project area". In addition, the methodology lacks explicit guidance regarding how the activity data produced in Step 1 of Section 5 of BL-UP is to be combined with the spatial modeling in BL-TW to produce a baseline that fully satisfies with the requirements quoted above. Therefore, the requirements of Sections 4.4.10 and 4.4.12 of the AFOLU Requirements are not enforced in full.
Methodology Developer Response: Section 5.2.1 is only about defining the historical reference period, therefore we prefer to leave the text as is. The procedure involving "using data from climate stations that are representative of the project area" was provided in BL-TW section 5.3.2.1 related to the water table depth proxy, where the specifi criterion is "two climate stations nearest to the project area". We added the same language under the heading "Climate Variables" in section 5.1.1 to make sure that requirements 4.4.10 and 4.4.12 are taken into account when applying Module VMD0019: "To model a spatial trend in drainage, the project must reference a period of at least 10 years and it must take into account long-term average climate variables (over 20+ years prior to the project start date from two climate stations nearest to the project area)".
Assessment Team Response: Through review of the revised version of BL-TW, entitled "BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 28JUL2018", the assessment team can confirm that the referenced language has been added. The addition is sufficient to resolve the discrepancy.

NIR 64 Dated 20 Jul 2018
Standard Reference: AFOLU Requirements v. 3.7
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 03JUN2018
Finding: Section 4.4.16 of the AFOLU Requirements states the following: "Where relevant, WRC baseline scenarios shall take account of processes within the project area that reduce sediment supply associated with changes in the landscape (e.g., construction of upstream dams or stabilization of eroding feeder cliffs along the coast). The supply of sediment varies over time and the time-averaged delivery of sediment shall be considered." Through review of BL-TW, the assessment team was unable to locate any guidance to require that processes within the project area that reduce sediment supply associated with changes in the landscape are taken into account. Please clarify how such processes are taken into account in BL-TW, or provide a justification that such processes are not relevant.
Methodology Developer Response: This response pertains to this and the next NCR. The processes and activities mentioned had previously been omitted for no good reason.

Under "Land use and development patterns" we have added the following sentence: "Particular attention must be paid to existing or future construction of barriers to tidal and/or river hydrology and sediment supply from rivers and/or along the coast, as well as barriers that will impair wetland capacity to migrate landwards with sea level rise."

Under "Infrastructure impediments to tidal hydrology" we have amended the final sentence as follows: "The effect of historic, existing and planned tidal and/or river barriers and drainage structures on tidal and/or river hydrology and sediment supply (from rivers or along the coast), as well as barriers that will impair wetland capacity to migrate landwards with sea level rise, must be assessed on the basis of quantitative hydrological modeling and/or expert judgment."
Assessment Team Response: Through review of the revised version of BL-TW, entitled "BL-TW_v1.0_SCS RD2_02DEC2018 v2", the assessment team can confirm that the changes have been made as stated, and are appropriate to satisfy the AFOLU Requirements.

NIR 65 Dated 20 Jul 2018
Standard Reference: AFOLU Requirements v. 3.7
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 03JUN2018
Finding: Section 4.4.18 of the AFOLU Requirements states the following: "Where relevant, the criteria and procedures for establishing the baseline scenario shall require the project proponent to take into account current and historic management activities outside the project area that have significantly impacted or may significantly impact the project area, including the following:
1) Disruption to or improvement of natural sediment delivery, as this will alter the rate and magnitude of coastal wetlands response to sea level rise.
2) Upstream dam construction, as this will alter water and sediment delivery, as well as salinity in coastal lowlands.
3) Construction of infrastructure inland of coastal wetlands, as this will impair wetland capacity to migrate landwards with sea level rise.
4) Construction of coastal infrastructure, as this can impair sediment movement along shorelines causing wetland loss and increasing risk of carbon emissions with sea level rise."

The above requirements seem particularly intended to force the user of the methodology to explicitly take into account management activities outside the project area that may impact the baseline scenario. In Section 5.1.1 of BL-TW, under "Infrastructure impediments to tidal hydrology", it is stated that "With respect to hydrological functioning, the baseline scenario must... quantify any impacts on the hydrological functioning as caused by planned measures outside the project area (e.g., dam construction or further changes in hydrology such as culverts), by demonstrating a hydrological connection to the planned measures." This appears to address item 2 above. However, it is not clear how the remaining items are addressed in BL-TW. Please clarify how items 1, 3, and 4 are taken into account in BL-TW, or provide a justification that these items are not relevant.
Methodology Developer Response: See response to NCR 64.
Assessment Team Response: Through review of the revised version of BL-TW, entitled "BL-TW_v1.0_SCS RD2_02DEC2018 v2", the assessment team can confirm that the changes have been made as stated, and are appropriate to satisfy the AFOLU Requirements.

NCR 66 Dated 20 Jul 2018
Standard Reference: AFOLU Requirements v. 3.7
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 03JUN2018
Finding: Section 4.5.3 of the AFOLU Requirements states the following: "Where carbon would have been lost in the baseline scenario due to land use conversion or disturbance, GHG emissions from soil carbon, belowground biomass, wood products and dead wood carbon pools generally occur over a period of time following the event. It shall not be assumed that all GHG emissions from these carbon pools in the project categories specified below occur instantaneously or within a short period of time."

The effect of submergence would be categorized as a disturbance. In Section 5.2 of BL-TW, the quantification assumes that carbon stock in belowground biomass and dead wood (where these pools are included in the project boundary) is emitted immediately upon submergence. This assumption is not consistent with the requirement quoted above.
Methodology Developer Response: In response to NCR 1 we added belowground biomass to the procedure for REDD-WRC baselines in section 5.2, apparently without giving it a proper thought. The original procedure, only involving aboveground biomass REDD-WRC baslines, was in line with AFOLU requirement 4.5.3. We believe that requirement 4.3.1 as referred to in NCR 1 is propery met in modules covering the accounting of biomass, but in the particular case of submergence due to sea level rise we only consider the loss of aboveground biomass, and, more specifically, as an instantaneous loss. Belowground biomass is not considered lost, and this is more conservative than assuming a gradual loss. Therefore, we revert back to the original procedure, not including belowground biomass. However, we amended the procedure for ARR-WRC baselines to only refer to above-ground biomass, since the term used there did include below-ground biomass.
Assessment Team Response: Through review of the revised version of BL-TW, entitled "BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 28JUL2018", the assessment team can confirm that the quantification procedures no longer assume any emissions from the belowground biomass pool due to sumergence. (And the quantification procedures did not previously assume any emissions from the dead wood pool.) Therefore, the discrepancy has been resolved.

NCR 67 Dated 20 Jul 2018
Standard Reference: Methodology Approval Process v3.7
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 03JUN2018
Finding: Section 6.1.4 of the Methodology Approval Process states the following: "Where the proposed methodology references tools or modules approved under the VCS or an approved GHG program, the validation/verification body shall determine whether the tool or module is used appropriately within the methodology."
BL-TW references "AR-Tool14" in a number of locations in Section 5.2. The assessment understands this to refer to the CDM tool "Estimation of carbon stocks and change in carbon stocks in dead wood and litter in A/R CDM project activities". However, as a complete reference is not provided, said tool is not used appropriately within BL-TW.
Methodology Developer Response: See also our earlier response to NCR 49. We added the reference to Tool14. Reviewing BL-ARR revealed that two parameters in chapter 6 (CTREE_BSL,t and CSHRUB_BSL,t) were not represented in equations, as leftover of the refernce to AR-Tool14, and we removed these. We also added a comma in parameter CBSL-herb,i,(t-T) between i an (t-T) in equation 3.
Assessment Team Response: The tool in questions is referenced as "CDM tool AR-Tool14 Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities" in Section 1 of the revised version of the module, entitled "BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 28JUL2018". Therefore, the non-conformity has been resolved.

NCR 68 Dated 24 Aug 2018
Standard Reference: VCS Standard v. 3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.3.1 of the VCS Standard requires the following: "The methodology shall use applicability conditions to specify the project activities to which it applies and shall establish criteria that describe the conditions under which the methodology can (and cannot, if appropriate) be applied." Section 4.4 of REDD+ MF does not contain any applicability conditions to specify which types of project activities may be included as ARR activities under the methodology. The assessment team noticed this because a public comment posted by South Pole Group Colombia during the public comment period from 21 February 2017 to 23 March 2017 posed the question, "According to the methodology, enrichment activities in a degraded wetland is an ARR activity?" The following response was provided by the methodology developer: "As long as enrichment is not IFM (ie when forest management is in place in the baseline) this is indeed ARR." However, the explanatory note in Section 4.2.1 of the AFOLU Requirements states that "Activities which improve forest management practices such as enrichment planting and liberation thinning are categorized as IFM project activities", the implication being that such activities cannot, therefore, be categorized as ARR project activities. The confusion around whether enrichment planting activities would qualify highlights the need for greater clarity regarding which project activities are applicable as ARR project activities under the methodology.
Methodology Developer Response: The central in the definition of IFM is the xistence of forest management in the baseline, which is improved under the project scenario. If enrichment planting occurs without an existing management it is a form of ARR. We believe that footnote 15 is sufficiently clear about this. For extra clarify we have underlined the words "managed" and "unmanaged".
Assessment Team Response: The assessment team now understands the distinction being drawn between whether lands included in the project area are managed in the baseline. Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that the footnote contains appropriate clarity regarding this point, particularly with the underlining applied. In addition, through reference to the VCS rules, the assessment team has been able to confirm that project activities which increase carbon stocking on degraded forest land would fall under the category of "revegation" project activities and (as set out in the VCS Program Definitions) and also meet the requirement established in Section 4.2.1 of the AFOLU Requirements. Therefore, this finding is not relevant and has been withdrawn.

NCR 69 Dated 24 Aug 2018
Standard Reference: Methodology Approval Process v3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.3.5 of the Methodology Approval Process requires the following: "At the end of the public comment period, the VCSA provides all and any comments received to the developer. The developer shall take due account of such comments, which means it will need to either update the methodology or demonstrate the insignificance or irrelevance of the comment. It shall demonstrate to each of the validation/verification bodies what action it has taken, as set out in Section 4.4.2."

The following comment was posted by South Pole Group Colombia during the public comment period from 21 February 2017 to 23 March 2017: "In Table 3, column 3, line 4 from REDD+MF, “Avoiding deforestation/forest degradation” is only referring to peatlands or to all wetlands? Why wetland degradation is separated from forest degradation?" The commenter referred to a lack of clarity in Table 3 in the text "Peatland rewetting or tidal wetland restoration and avoiding deforestation/ forest degradation". The sentence structures allows for the possibility of the following different interpretations:

1) The project activity is either peatland rewetting (by itself) or tidal wetland restoration and avoiding deforestation/ forest degradation.
2) The project activity is either: (a) peatland rewetting and avoiding deforestation/ forest degradation combined, or (b) tidal wetland restoration and avoiding deforestation/ forest degradation combined.

In response to the comment, the methodology developer provided instructions as to how Table 3 was intended to be interpreted. However, this is not sufficient. As the public comment identified a legitimate concern regarding lack of clarity within Table 3 (i.e., the public comment is not "insignficant" or "irrelevant"), the only acceptable response, per the Methodology Approval Process, is to "update the methodology" to take account of the comment. Note that the same lack of clarity exists in respect of the following other areas in Table 3 where the conjunctions "and" and "or" are combined:

- "Peatland rewetting or tidal wetland restoration and conversion to forest, revegetation, or vegetation establishment"
- "Avoiding drainage or wetland degradation and avoiding deforestation/ forest degradation"

Methodology Developer Response: We believe that the context (f.e. RWE+ARR is unlikely to be a case of peatland rewetting alone) provides sufficient guidance for the understanding of what is intended (namely that either peatland rewetting and tidal wetland restoration can be combined with avoiding deforestation/forest degradation - second bullet in the comment). To simplify we amended the cell to read: "Peatland rewetting and avoiding deforestation/ forest degradation or tidal wetland restoration and avoiding deforestation/ forest degradation".

The other cells now read: "Peatland rewetting or tidal wetland restoration# combined with conversion to forest, or revegetation, or vegetation establishment" and "Avoiding drainage or wetland degradation combined with avoiding deforestation/forest degradation".
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that the indicated change has been made. The minor change to the language is sufficient to resolve the discrepancy and clarify that the RWE+REDD category includes "avoiding deforestation/ forest degradation" project activities on either peatland or tidal wetland. Therefore, the discrepancy has been

resolved.

NCR 70 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 03JUN2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios." Section 5.3.2.2 of M-TW states the following: "A deduction must be applied to account for allochthonous carbon using the procedures set out in Section 5.3.2.6 of Module BL-TW." Section 5.3.2.6 of BL-TW does not contain such procedures.
Methodology Developer Response: The reference (also the one in 6.1) now reads "5.3.2.7".
Assessment Team Response: Through review of the revised version of M-TW, entitled "M-TW_v1.0_SCS RD2_15FEB2019", the assessment team can confirm that the section reference has been corrected as stated. Therefore, the discrepancy has been resolved.

NCR 71 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.4 of the VCS Standard requires that "The methodology shall establish criteria and procedures for describing the project boundary…" Section 5.1.4 of REDD+ MF states that "The WRC project area must meet the definition as provided in Section 4.2 of the VCS AFOLU Requirements." The assessment team understands that this text was inserted in an effort to resolve NCR 13 in consultation with Verra personnel. The assessment understands that the text intends to refer to the requirement that "The project area shall meet an internationally accepted definition of wetland, such as from the IPCC, Ramsar Convention on Wetlands, those established by law or national policy, or those with broad agreement in the peer-reviewed scientific literature for specific countries or types of wetlands" as set out in Section 4.2.16 of the AFOLU Requirements. However, given how large Section 4.2 of the AFOLU Requirements is, and given the lack of descriptive language in the text regarding what "definition" the project area must meet, the likelihood that the blanket reference to Section 4.2 would cause confusion among users of the methodology is quite high. The same is the case in respect of Sections 4.5.2 and 4.5.3 of REDD+ MF, which both state that "This methodology is applicable to… activities on project areas that meet the VCS definition for peatland (see above)".
Methodology Developer Response: The definition of WRC project activities from requirement 4.2.16 has been added to section 5.1.4.
In 4.5.2.and 4.5.3 the text now refers to the VCS Program Definitions instead of "above". The methodology does not need to repeat definitions provided in this document.
Assessment Team Response: Through review of the amendments to Sections 5.1.4, 4.5.2 and 4.5.3 of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that complete clarity is now provided regarding the definitions of "wetland" and "peatland" that are used by the methodology. A remnant issue with the restating of VCS requirements has been addressed as NCR 100.

NCR 72 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018; VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018
Finding: Section 4.4 of the VCS Standard requires that “The methodology shall establish criteria and procedures for describing the project boundary…” Section 5.1.4 of REDD+ MF states that “The maximum eligible quantity of GHG emission reductions in WRC project activities is limited to the difference between the remaining peat carbon stock in the project and baseline scenarios after 100 years.” The reference to “WRC project activities” suggests that this requirement applies to project activities on both peatlands and tidal wetlands, and procedures for both ecotypes are found in Section 5 of X-STR. However, the reference to “the remaining peat carbon stock” suggests that the requirements apply solely to projects on peat soils.
Methodology Developer Response: The word "peat" has been removed.
Assessment Team Response: The assessment team agrees that, had the word "peat" been removed as stated, the discrepancy would have been appropriately addressed. However, through review of Section 5.1.4 of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team has found that the word "peat" has not been removed. Therefore, the discrepancy has not been resolved.
Methodology Developer Response 2: "peat carbon stock" in section 5.1.4 of REDD+ MF and 5.4 in X-STR has been replaced with "soil carbon stock".
Assessment Team Response 2: Through review of the revised version of X-STR, entitled "VMD0016 X-STR_v1.2_SCS RD2_15FEB2019", the assessment team can confirm that any pre-existing references to "peat carbon stock" have been removed. Therefore, the discrepancy has been resolved.

NCR 73 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018; VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 25JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios." In Section 8.1.4, Table 11 provides an important crosswalk between the terminology used in BL-PL and BL-UP and the terminology appropriate to WRC projects. However, strictly speaking, this cross-walk is only provided "For CIW project activities (e.g., conservation of salt marshes without a tree biomass component)". For RWE+REDD and CIW+REDD project activities, BL-UP and BL-PL are used (as referenced through module BL-TW), but a cross-walk table is not provided in these instances. A corresponding cross-walk table has been included as Table 1 of BL-UP, but this does not resolve the discrepancy in respect of BL-PL.
Methodology Developer Response: Upon VCS' request after the 1st validation we have updated BL-PL with an addition to the title and with the conversion table. Also a number of less-relevant text edits were made. The amended BL-PL is added to the set of improved modules provided.

Note that BL-UP and BL-PL are not referring to RWE-REDD project activities.
Assessment Team Response: The discrepancy has been addressed through the additional of the following text to the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018": "WRC project activities that use Module BL-UP or BL-PL (whichever is relevant), must apply the conversion table below." This appropriately clarifies that Table 11 is referenced for all WRC project activities, not just CIW project activities.

NCR 74 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.4.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for describing the project boundary and identifying and assessing GHG sources, sinks and reservoirs relevant to the project and baseline scenarios." The caption of Table 4 is "Determination of When Module/Tool Use is Mandatory (M) or Optional (O)". Among the modules/tools listed as "Always Mandatory" only the REDD+ MF methodology framework is, in fact, always mandatory. All of the other modules/tools are only mandatory under certain project categories. For example, X-STR is not mandatory for ARR project activities. Therefore, the heading of "Always Mandatory" conflicts, in some cases, with the guidance that is provided for the specific category.
Methodology Developer Response: To remove such confusion we removed the left-most column, and in the legend amended "Mandatory" to "Mandatory for the given project activity". Same for "Optional".
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that the left-most column in Table 4 has been removed, which is sufficient to resolve the non-conformity.

NCR 75 Dated 24 Aug 2018
Standard Reference: VCS Validation and Verification Manual V3.1
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018; various modules
Finding: Section 5.2.5 of the Validation and Verification Manual requires the following: "When assessing quantification procedures, VVBs must determine whether appropriate formulae and calculation methods have been used… The assessment must also focus on whether appropriate parameters have been applied in the calculation methods or formulae."

Prior versions of the methodology have provided clear guidance regarding the manner in which parameters are "passed" (to use programming terminology) among modules and between modules and the methodology framework. For example, in the original M-MON module (now termed M-REDD), the parameter C(AB,tree,i) was identified in the parameter tables under "Parameters originating in other Modules", and the CP-AB module was clearly identified as the module the parameter originated in. While the parameter quantified in CP-AB was actually C(AB_tree,i), the result of a minor clerical error, it was still plain to any reader of the methodology that one should quantify parameter C(AB_tree,i) in CP-AB and use the calculated value of this parameter for parameter C(AB,tree,i) in M-MON.

The level of clarity that existed in prior versions of the methodology seems to have been significantly degraded, in a systematic fashion. The following two particularly extreme examples are provided.

1) Parameter Delta-C(BSL-biomass,i,t) is used in Equation 2 of BL-TW. There is a "dead end", with no clearer guidance regarding how to quantify this parameter. Section 6.1 of BL-TW does contain guidance as to how to quantify parameter C(BSL-biomass,i,t) (i.e., minus the delta sign), but this guidance is incomplete regarding how this parameter should be quantified. It is stated that the source of data is "From CTREE_BSL,t and CSHRUB_BSL,t in AR-Tool14, as referred to in Module BL-ARR, or CAB_tree,post,i and CAB_non-tree,post,i in Modules BL-UP and BL-PL". The only reference to "AR-Tool14" that can be found in BL-ARR is in Section 1, where it is among the list of methodologies and modules used by BL-ARR. To ask the reader to cross-reference Section 1, simply in order to identify the correct quantification reference, is to ask far too much "detective work" of the reader. It is also not exactly clear how the reader is to quantify parameter C(BSL-biomass,i,t) in BL-TW once parameters "CTREE_BSL,t and CSHRUB_BSL,t" are quantified in AR-Tool14. In respect of the reference to "CAB_tree,post,i and CAB_non-tree,post,i in Modules BL-UP and BL-PL", the guidance is likewise unclear, and is probably incorrect, as the baseline carbon stock changes are properly quantified in BL-UP and BL-PL using the difference between pre-deforestation and post-deforestation carbon stock. Another issue is that "CAB_tree,post,i and CAB_non-tree,post,i in Modules BL-UP and BL-PL" are quantified on a per-hectare basis while parameter C(BSL-biomass,i,t) is quantified on an area-expanded (i.e., totals) basis.
2) Parameter GHG(WPS-biomass) is used in Equation 1 of M-TW. This parameter is calculated in Equation 2 of M-TW, which references parameter Delta-C(WPS-biomass,i,t), as with BL-TW, discussed above. However, there is a complete dead-end in terms of parameter Delta-C(WPS-biomass,i,t) in M-TW, as there exist no other references to this parameter. There is a reference to parameter GHG(WPS-biomass) in Section 6.2, where M-ARR is referenced for "ARR project activities on tidal wetlands" and CP-AB is referenced for "REDD project activities on tidal wetlands". However, neither M-ARR nor CP-AB contains guidance for quantifying parameter GHG(WPS-biomass).

In addition, guidance is sometimes lacking regarding which specific module should be referenced, particularly between modules BL-PL and BL-UP. For example, in example (1) above, modules BL-PL and BL-UP were referenced by BL-TW, but no guidance was provided regarding which of the two modules was to be selected.

Methodology Developer Response: See response to NCR 61.
Assessment Team Response: It appears that a good-faith effort has been made to ensure consistency between methodology elements in response to this finding. Additional findings will be issued to address any specific discrepancies noted by the audit team, but this finding may be closed.

NCR 76 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018; VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017 RD1_15DEC2017 03JUN2018
Finding: Section 4.4.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for describing the project boundary and identifying and assessing GHG sources, sinks and reservoirs relevant to the project and baseline scenarios.” It is stated in Section 5.3.3 of REDD+ MF that “If included, litter must be accounted for using procedures in Modules BL-ARR and M-ARR” and that “If included, dead wood must be accounted for using procedures in Modules BL-ARR and M-ARR.” While BL-ARR does include procedures for accounting for carbon stock change in the litter and dead wood pools, M-ARR contains no such procedures. M-ARR includes procedures for quantifying parameter C(TREE_PROJ,t), which might be expected to include dead wood, but the CDM tool “Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities” which is referenced for such quantification clarifies in Section 1 that it only includes procedures “for estimation of carbon stock in living biomass of trees and shrubs”.
Methodology Developer Response: The reference to the methodology "AR-ACM0003 Afforestation and reforestation of lands except wetlands" in the parameters table for $\Delta C\_ACTUAL,t$ in section 6.1 should lead to the use of all relevant tools. Any confusion should be resolved now by the addition of the comment "This parameter is quantified based on the quantification of parameters CTREE_PROJ,t , CSHRUB_PROJ,t , CDW_PROJ,t and CLI_PROJ,t as provided in CDM tool AR-Tool12 and CDM tool AR-Tool14." to the parameters table for $\Delta C\_ACTUAL,t$ in section 6.1.
Assessment Team Response: Given that it is now clear to the assessment team that module M-ARR (version entitled "VMD0045 M-ARR_v1.1_SCS RD2_02DEC2018") contains procedures for quantification of carbon stock in litter and dead wood carbon pools, the discrepancy has been addressed. Note that any additional clarity issues regarding M-ARR will be addressed in separate findings.

NIR 77 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.4.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for describing the project boundary and identifying and assessing GHG sources, sinks and reservoirs relevant to the project and baseline scenarios.” In Table 6 in Version 1.5 of the REDD-MF methodology framework, it is indicated that accounting for CO2 emissions from combustion of fossil fuels “Can be neglected if excluded from baseline accounting.” This statement has been removed from the corresponding Table 7 within the proposed revision. Please clarify the rationale for removal of the statement.
Methodology Developer Response: Following the template we have converted the table to provide specific information for the baseline and the project scenario. The original general explanation under attention did not suite both scenarios. In this process we omitted to provide explanation. In the baseline it should be conservative to exclude CO2 emissions from fossil fuel combustion. This has been added. In the project scenario this emission can be neglected if excluded from baseline accounting. This has been added.
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that the language is as described in response to this finding. The assessment team agrees that guidance is appropriately differentiated between baseline and project scenarios, and that it is obviously conservative to exclude fossil fuel emissions from baseline-scenario accounting. Therefore, the information request has been satisfied.

NIR 78 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.4.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for describing the project boundary and identifying and assessing GHG sources, sinks and reservoirs relevant to the project and baseline scenarios.” In Table 8 in Version 1.5 of the REDD-MF methodology framework, it is indicated that accounting for CO2 emissions from combustion of fossil fuels are excluded from the project boundary. In the corresponding Table 9 within the proposed revision, it is indicated that this GHG source is “included” in the baseline, with explanation provided that “It is conservative to exclude”. Please clarify the rationale for including CO2 emissions from combustion of fossil fuels in the baseline, given that it is always conservative to exclude this source in the baseline.
Methodology Developer Response: In the conversion to the correct template (see also NIR 77) we corrected the classification for CO2 to "included" with as justification "Mandatory where RWE project activities on tidal wetlands include fossil fuel combustion; In CIW project activities, potential emissions are negligible" following the AFOLU requirement 4.3.3 point 3. Module BL-TW provides procedures for this source. As a consequence, for the baseline the sources is also included, but with the addition "It is conservative to exclude".
Assessment Team Response: The justification for stating that CO2 emissions from combustion of fossil fuels are included in the project boundary has been appropriately provided. It makes sense to the assessment team that one would want to formally state that this source is included in the project scenario if it is also included in the baseline scenario. Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that the indicated changes have been made, and that these changes provide appropriate clarity in differentiating between the baseline and project scenarios. Therefore, the information request has been satisfied.

NIR 79 Dated 24 Aug 2018
Standard Reference: AFOLU Requirements V3.6
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.3.3 of the AFOLU Requirements states the following: “Specific carbon pools and GHG sources, including carbon pools and GHG sources that cause project and leakage emissions, may be deemed de minimis and do not have to be accounted for if together the omitted decrease in carbon stocks (in carbon pools) or increase in GHG emissions (from GHG sources) amounts to less than five percent of the total GHG benefit generated by the project. The methodology shall establish the criteria and procedures by which a pool or GHG source may be determined to be de minimis.”

In Table 9 of REDD+ MF, it is indicated that emissions of CH4 and N2O emissions from combustion of fossil fuels are “Deemed de minimis in VCS AFOLU Requirements” for the project scenario. The assessment team understands that this language is a hold-over from Table 8 in Version 1.5 of the REDD-MF methodology framework. As applied in Version 1.5, the reference to the AFOLU Requirements likely referred to the statement in Section 4.3.3(3) of that document, which indicates that “Fossil fuel combustion from transport and machinery use in rewetting of drained peatland and conservation of peatland project activities need not be accounted for.” However, with the expansion of the methodology to encompass tidal wetlands, the following text from the same sub-section of the AFOLU Requirements becomes relevant: “Where… machinery use for earth moving activities may be significant in WRC project activities as compared to the baseline, emissions shall be accounted for if above de minimis, in accordance with this Section 4.3.3.” The assessment team understands that CH4 and N2O emissions from fossil fuel combustion have always been excluded from the project boundary as set out in the REDD-MF methodology framework, beginning with Table 3 in Version 1.0, which stated that “Potential emissions are negligibly small” for both gases. However, while potential emissions from these gases may have been negligibly small from the types of activities contemplated by the original methodology developers, it may not be that potential emissions from these gases may have been negligibly small from machinery use for earth moving activities. Therefore, it is incorrect to state, in Table 9 of REDD+ MF, that emissions of CH4 and N2O emissions from combustion of fossil fuels are “Deemed de minimis in VCS AFOLU Requirements” for the project scenario. If these sources are to be excluded, the methodology is required to establish the criteria and procedures by which a pool or GHG source may be determined to be de minimis.

Methodology Developer Response: In conjunction with NIR 78, we have amended the table to include all 3 GHGs. Via BL-TW these can be quantified using the module E-FFC.
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that language has been added to Table 9 to require that accounting for emissions from fossil fuel combustion is "Mandatory where RWE project activities on tidal wetlands include fossil fuel combustion". Therefore, the discrepancy has been resolved.

NCR 80 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 28JUL2018; VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018; VMD0007 BL-UP_v3.3_27SEP2017 RD1_15DEC2017 25JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."
Section 5.2 of BL-TW contains procedures to account for submergence and erosion. However, the procedures provided are highly confusing.

For REDD-WRC project activities, the parameter table in Section 6.1 indicates that parameter C(BSL-biomass,i,t) is quantified "From… CAB_tree,post,i and CAB_non-tree,post,i in Modules BL-UP and BL-PL". However, it is also stated in Section 5.2 that the value of both parameters is to be set to zero. This creates a strange circular logic error. Furthermore, no explicit guidance is provided regarding how parameter C(BSL-biomass,i,t) is to be quantified from the parameters in question. Finally, the referenced variables "CAB_tree,post,i and CAB_non-tree,post,i in Modules BL-UP and BL-PL" are calculated on a per-hectare basis, not in units of tCO2e.

For ARR-WRC project activities, BL-TW states that "Since CDM tool AR-Tool14 quantifies biomass carbon stocks CTREE_BSL,t and CSHRUB_BSL,t and does not provide separate terms for above-ground and below-ground carbon stocks in trees and shrubs, calculate the portion of belowground biomass that remains in the soil using procedures with root:shoot ratios provided in this tool." However, simply providing written instructions as to how the user is intended to "back-calculate" the above-ground stock is entirely insufficient. Following long-standing practice in methodologies approved under the VCS Program, clear equations are required for quantification tasks of this nature, not simply written instructions that are prone to subjective (and erroneous) interpretation.

Another concern is that, while aboveground biomass is excluded from stand-alone RWE project activities, per Section 5.3.4 of REDD+ MF, there is no guidance in BL-TW to remind the reader that the quantification in Section 5.2 is omitted for such project activities. It is quite likely that this could be seen as a conflict by a user of the methodology.

In general, the interaction between BL-TW and modules BL-UP, BL-PL and BL-ARR is also highly confusing. Section 8.1.4 of REDD+ MF suggests that BL-TW is only referenced for quantification of baseline emissions from soil, in which case it does not make sense that BL-TW would contain procedures to account for carbon stock changes in aboveground biomass (which is excluded from the project boundary of stand-alone WRC project activities per Section 5.3.4 of REDD+ MF). It seems possible to the assessment team that the intent is for some sort of tightly coupled linkage between these modules (e.g., for REDD-WRC project activities, that the intent is for Equations 16 and 17 of BL-UP to be quantified with the post-deforestation variables set equal to zero, and then for the output of Equation 23 of BL-UP to somehow be transferred to BL-TW for downstream calculations). In this case, however, the extent of the quantification procedures provided is severely inadequate to support such a structure. As with other concurrently issued findings, this seems to be indicative of a systematic issue of inadequate linkages between the various modules and the methodology framework.

A similar conflict exists in respect of monitoring project emissions, in that M-TW is referenced globally (for all WRC project activities) in Section 8.2 but also referenced specifically for calculating “Net GHG emissions from the soil carbon pool in the project scenario in combined projects”. Section 5.1.1 of M-TW states the following: “Estimation of GHG emissions and removals related to the biomass pool is based on carbon stock changes. For ARR project activities on tidal wetlands, procedures are provided in Module M-ARR. For REDD project activities on tidal wetlands, procedures are provided in Module CP-AB. When using Modules M-ARR and CP-AB, note must be taken of procedures provided in Section 5.2.” Therefore, all the comments made above in respect of BL-TW also apply to M-TW.
Methodology Developer Response: See response to NCR 61. BL-PL is WIP.
Assessment Team Response: The assessment team reviewed the revised version of BL-TW, entitled "BL-TW_v1.0_SCS RD2_02DEC2018 v2", in order to see whether the finding could be closed.

In general, significant strides have been made in the revised version of BL-TW. The revised version of BL-TW has been re-written to primarily focus on quantification of emissions from the soil organic pool, and this revision has cleaned up many of the prior points of confusion. In addition, Section 5.2 has been extensively re-written. However, some points of confusion regarding the interaction of BL-TW and BL-UP and BL-PL remain, as itemized below.

1. The following concern, as expressed in the original finding, has not been addressed: '...while aboveground biomass is excluded from stand-alone RWE project activities, per Section 5.3.4 of REDD+ MF, there is no guidance in BL-TW to remind the reader that the quantification in Section 5.2 is omitted for such project activities. It is quite likely that this could be seen as a conflict by a user of the methodology.'
2. The following concern, as expressed in the original finding, has not been addressed: 'For ARR-WRC project activities, BL-TW states that “Since CDM tool AR-Tool14 quantifies biomass carbon stocks CTREE_BSL,t and CSHRUB_BSL,t and does not provide separate terms for above-ground and below-ground carbon stocks in trees and shrubs, calculate the portion of belowground biomass that remains in the soil using procedures with root:shoot ratios provided in this tool.” However, simply providing written instructions as to how the user is intended to “back-calculate” the above-ground stock is entirely insufficient. Following long-standing practice in methodologies approved under the VCS Program, clear equations are required for quantification tasks of this nature, not simply written instructions that are prone to subjective (and erroneous) interpretation.'
3. In general, there is no clear guidance regarding the interaction between Section 5.2 of BL-TW and any part of BL-ARR. The issue identified as item 2 is merely a special case of this overall trend.
3. For REDD-WRC project activities, Section 5.2 is not as tightly coupled to BL-UP or BL-PL as is required. Part of the problem is that there is nothing in Parts 4 and 2 of BL-UP and BL-PL, respectively, to signal to the reader that they must refer back to BL-TW to quantify aboveground tree and non-tree biomass in the case of submergence. In addition, there is a conflict with BL-UP and BL-PL, even when reference is made to Table 11 of REDD+ MF, in that BL-UP and BL-PL speak of deforestation (which maps to "wetland degradation" per Table 11) and not submergence.

Finally, this finding remains open because the assessment team has not been provided with a revised version of M-TW for review.
Methodology Developer Response 2: Re 1: A note has been added to section 5.2 of BL-TW
Re 2: Procedures for applying root-shoot ratios have been added, but see point 3.

Re 3 and 2nd 3: In response to this lack of clarity, the procedures specific to tidal wetlands have been moved to BL-TW and M-TW. The section "ARR baseline influenced by sea level rise" in BL-ARR has been deleted because biomass loss due to SLR in the baseline scenario is considered small and not accounting for it is conservative, as now outlined in BL-TW. BL-PL and BL-UP coupling is thus not relevant anymore (but M-REDD coupling is, see below). The same section in M-ARR has been moved to M-TW. This way, both BL-ARR and M-ARR have no procedures related to biomass loss due to SLR anymore, although M-ARR refers to these procedures in M-TW as a reminder. M-TW now contains the procedures for biomass loss due to SLR in stead of BL-TW. Section 5.2 has two sub-section, carbon loss (biomass and soil) and long-term average GHG benefit (only biomass).
For REDD-WRC projects, module M-TW now refers to procedures provided for areas undergoing natural disturbance in Module M-REDD. These procedures cater for disturbances causing loss of biomass and submergence and erosion of tidal wetlands can be seen as such. This way the procedure is fully integrated into M-REDD.
Assessment Team Response 2: Through review of the revised module, entitled "BL-TW_v1.0_SCS RD2_15FEB2019", the assessment team has determined the following:

- Regarding item 1, the assessment team can confirm that the following note is sufficient to wholly address the assessment team's concern: "Note that for stand-alone WRC project activities, as per REDD+ MF, accounting for tree and shrub biomass is omitted."
- Regarding item 2, the assessment team has not located the procedure for quantifying root:shoot ratios, but agrees that this item is no longer relevant if procedures for quantification of baseline emissions due to submergence are no longer included in the module.
- Regarding the latter two items (both labeled as item 3), the assessment team agrees that the removal of procedures for quantification of baseline emissions due to submergence is sufficient, in principle, to address all of the assessment team's concerns. The only remaining discrepancy is in the following language, which remains in Section 5.2: "Regarding (1) above, where biomass is submerged, it is assumed that this carbon is immediately and entirely returned to the atmosphere. For the year of submergence, the aboveground carbon stock in biomass can be set to zero. For the year of submergence, the aboveground carbon stock in biomass can be set to zero". This could well cause confusion on the part of a reader, who would logically wonder what "it is assumed that this carbon is immediately and entirely returned to the atmosphere" means and where in the quantification chain such aboveground carbon stock "can be set to zero". For this reason, the finding remains open.

Methodology Developer Response 3: The procedure has been simplified following the earlier intention. The language on immediate emission has been removed as accounting for any loss of biomass due to submergence in the baseline is conservatively omitted. As a logical consequence and without further ado, projects applying BL-ARR, BL-UP or BL-PL do not have to take biomass loss into account.
Assessment Team Response 3: Through review of the revised version of BL-TW, entitled "BL-TW_v1.0_SCS RD2_19MAR2019", the assessment team can confirm that the conflictual language has been removed, and that it is now consistently indicated that biomass loss due to submergence does not need to be taken into account. Therefore, the discrepancy has been resolved.

NCR 81 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios.” In Section 8.1.4 of REDD+ MF, clear guidance is provided regarding which module(s) to apply for combined project activities and for stand-alone CIW project activities. However, guidance is not provided regarding which module(s) to apply for stand-alone RWE project activities.
Methodology Developer Response: An explanation of how stand-alone RWE projects are to be dealt with is added: "Stand-alone RWE project activities must use Module BL-PEAT or BL-TW, whichever is relevant. RWE-REDD project activities must use Module BL-PEAT or BL-TW for the estimation of baseline net emissions from the soil carbon pool, and Module BL-UP or BL-PL for all other pools – see Table 4.". In the preceding text an explanation has been added as to why CIW project must use BL-UP or BL-PL for the baseline assessment.
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that the following is now indicated in Section 8.1.4: "Stand-alone RWE project activities must use Module BL-PEAT or BL-TW, whichever is relevant." This provides guidance for treatment of stand-alone RWE project activities and is sufficient to resolve the discrepancy.

NIR 82 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.4.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for describing the project boundary and identifying and assessing GHG sources, sinks and reservoirs relevant to the project and baseline scenarios.” In Table 8 in Version 1.5 of the REDD-MF methodology framework, it is indicated that accounting for CO2 emissions from combustion of fossil fuels are excluded from the project boundary. In the corresponding Table 9 within the proposed revision, it is indicated that this GHG source is “included” in the baseline, with explanation provided that “It is conservative to exclude”. Please clarify the rationale for including CO2 emissions from combustion of fossil fuels in the baseline, given that it is always conservative to exclude this source in the baseline.
Methodology Developer Response: See response to NIR 78.
Assessment Team Response: It appears this finding was issued as an inadvertent duplicate of NIR 78. This finding is closed for the same reasons as stated in closure of NIR 78.

NIR 83 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."
In Section 5.3 of X-STR, a requirement to attain "a thickness accuracy of at least 50 cm" has been struck (relative to Version 1.1 of X-STR) from the sentence beginning with "Stratification of peat depth must be based on…" Footnote 1, which was referenced by this text and reads as follows, was likewise struck: "In the drained baseline situation peat subsidence typically amounts to up to 5 cm yr-1; the 50 cm accuracy criterion thus relates to the minimum monitoring interval of 10 year; in the project scenario subsidence rates will be considerably lower (ideally 0 cm) and the 50 cm accuracy criterion will amount to <5% error on the 100 y permanence criterion". This change was not previously not made known to the assessment team because it was not tracked as a change in Microsoft Word. Please provide a justification for the changes made. The assessment team notes that the deleted text has been added to Section 5.3.2, but only as specific to domed tropical peatlands.
Methodology Developer Response: The 50 cm thickness or depth accuracy and the associated footnote was strictly related to tropocal peatdomes. For non-peatlands the accuracy limit is set at 10 cm: "with a depth accuracy of at least 10 cm".
Assessment Team Response: The information presented is sufficient to satisfy the assessment team as to the appropriateness of the requirements. The finding may be closed.

NIR 84 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios." Section 5.3.1 of X-STR states that "Stratification of the project area by peat thickness must meet the following requirements. Procedures for the determination of peat thickness in domed peatland are provided in Section 5.3.2 below." Section 5.3.2 of X-STR states that "The height model must be combined with data from peat corings to generate a spatially explicit map of peat strata that fulfill the requirements set out in Section 5.3.1." This appears to set up a circular logic loop. Please clarify how the requirements of Sections 5.3.1 and 5.3.2 were intended to interact in this respect.
Methodology Developer Response: We do not see the circular loop. In 5.3.1 the way to obtain peat depth is described, in 5.3.2 the depth data are combined with a height model resulting in a map. Obviously, this map needs to present data that fulfils what is required in 5.3.1.
Assessment Team Response: Given the information presented, the assessment team is satisfied that the methodology provides clear guidance, and the information request is satisfied.

NIR 85 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios." The audit team has identified many changes to Section 5.3 of X-STR since this module was reviewed by the Technical Expert, Dr. Jason Keller (the version of the module reviewed by Dr. Keller is entitled "VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017"). In no case were any of the changes required in response to findings issued by the assessment team. Please provide a thorough justification for each of the changes made.
Methodology Developer Response: 5.3.1: At the top there is a language improvement (not all bullet points are requirements) and also original bullet point 4 has been split into two points 3 and 4 to improve readability.

5.3.2: Text amendments are based on feedback from a project. Original distance prescription was found to not work for the project. An alternative procedure is proposed without the prescriptive text but requiring projects to quantify number of plots in stead and to justify their method in the PD.
Assessment Team Response: The assessment team appreciates that clarification has been provided regarding the rationale for the changes. Additional questions regarding the revisions made to these modules are addressed in separate findings. However, the immediate information request has been satisfied.

NIR 86 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: M-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 2JUL2018; BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 28JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios." The audit team has identified many changes throughout the M-TW and BL-TW modules since they were reviewed by the Technical Expert, Dr. Jason Keller (the last version of the modules reviewed by Dr. Keller are entitled "BL-TW_v1.0_ESI RD1_27SEP2017 RD1_15DEC2017" and "M-TW_v1.0_ESI RD1_27SEP2017", respectively,). In some cases, the changes were made in direct response to findings issued by the assessment team, but many cases also exist of changes unrelated to any findings issued by the audit team. The changes are too many to itemize here, but can be identified through a document comparison between those versions of the modules last reviewed by Dr. Keller and those versions identified in this finding. Please provide a thorough justification for each of the changes that was not made in direct response to an assessment finding.
Methodology Developer Response: Commented versions of BL-TW and M-TW have been provided. Subsequently, a number of changes have been made though.
Assessment Team Response: The assessment team appreciates that commented versions of BL-TW and M-TW were provided for review. Additional questions regarding the revisions made to these modules are addressed in separate findings. However, the immediate information request has been satisfied.

NCR 87 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

1. In the parameter table for parameter Rate(Closs-BSL,i,t) in Section 6.1 of X-STR, under "Source of data", the following is stated: "Alternatively, a conservative (low) value may be applied that remains constant over time." This conflicts with the following (correctly provided) guidance under "Comments" in the same table: In the absence of an accurate value for the determination of the SDT, a conservative (high) value may be applied, while for the determination of the maximum quantity of GHG emission reductions which may be claimed from the soil carbon pool, a conservative (low) value may be applied that remains constant over time."
2. The parameter C(i,t0) is used in Equations 6 and 7 of X-STR, but guidance for quantification of this parameter is not provided in the methodology. Equation 8 quantifies the value of parameter C(BSL,i,t0), but this parameter does not seem to be used elsewhere in the methodology.
3. The parameter VC is used in Equations 8, 15 and 16 of X-STR, but is not included in the parameter tables in Section 6.1 of X-STR.
4. X-STR uses the parameters Rate(Closs-BSL,i) and Rate(Closs-BSL,i,t) in Sections 5.6 and 5.4, respectively. However, the parameter Rate(Closs-BSL,i) is not included in the parameter tables in Section 6.1 of X-STR. The parameter table for Rate(Closs-BSL,i,t) references the guidance for parameter Rate(Closs-BSL,i) in Section 5.6, suggesting that these were intended to be the same parameter. In a different but related issue, the specification of parameter Rate(Closs-BSL,i) as "Rate of soil organic carbon loss due to oxidation in the baseline scenario in stratum i" (i.e., as a parameter that cannot take a different value for each year t) conflicts with the guidance in Section 5.6 that "Extrapolation of RateCloss-BSL,i over the project crediting period must account for the possibility of a non-linear decrease of soil organic carbon over time, including the tendency of organic carbon concentrations to approach steady-state equilibrium." By its nature, use of the same value (for a given stratum) for each year of the crediting period implies a linear decrease soil organic carbon over time.
5. Equation 12 in X-STR quantifies the same variable that is quantified by Equation 11, but has different input variables. No guidance is provided in X-STR for quantification of the variables C(peatloss−BSL,i,t100) and C(peatloss−WPS,i,t100), as used in Equation 12.
Methodology Developer Response: 1. The specific sentence under "Source of data" has been deleted.
2. CBSL,i,t0 (replacing Ci,t0) in equation 8 is now used in the amended equation 21.
Equation 21: We noticed that the original equation 21 had an open end as the procedure did not provide methods for the quantification of t_steadystate,i in section 6.1. We reverted to the original procedure in VM0036 using a carbon stock at t=0 and a carbon loss rate. The text at the end of section 5.6 was updated accordingly, as was section 6.1.
Ratepeatloss-BSL,i,t: Error in description corrected and made in line with VM0036 (see also point 1).
Ratepeatloss-WPS,i,t: Ditto
RateCloss-WPS,i,t: last sentence has been removed as it is already provided in section 6.1
3. VC added to 6.1
4. Equation 21 has been amended to include the time-variable parameter Rate(Closs-BSL,i,t)

5. Equation was a left-over and has been removed. References to equations in section 6.1 have been adjusted.
Assessment Team Response: The assessment team reviewed the revised version of X-STR, "VMD0016 X-STR_v1.2_SCS RD2_02DEC2018", in order to see if the finding could be closed. The findings of the assessment team regarding each issue raised in the finding are as follows.

1. The sentence has been stricken, as indicated, which has resolved the issue.
2. The parameter C(i,t0) is still used in the same equations (which are now Equations 10 and 11). Therefore, the discrepancy has not been resolved.
3. The parameter VC has been added to the parameter tables in Section 6.1, which has resolved the issue.
4. This issue has not been wholly addressed, as instances of Rate(Closs,i) remain in X-STR (e.g., below what is now Equation 25), which appears to be in error. In addition, what is now Equation 25 has been amended, but the result appears to be incorrect. As currently formulated, the equation calculates the soil depletion time in the baseline scenario by taking the carbon stock at the project start and dividing by the sumed rate of stock loss, from the project start up to the soil depletion time. This introduce a circular logic loop wherein one would need to know the number of years in the soil depletion time prior to implementing the equation.
5. The prior Equation 12 has been removed, which has resolved the issue.

However, the finding remains open because items 2 and 4 have not been fully addressed.
Methodology Developer Response 2: Re 2: This was an omission. Equations 10 and 11 have been adjusted to use CBSL,i,t0 in stead of C(i,t0).
Re 4: Equation numbering has been made consecutive with the result that eq 25 has become eq 24. The parameter RateCloss-BSL,i,t in the description is now completed with a "t". Equation 24 has been corrected and now mimics the original equation in VM0033.
Assessment Team Response 2: Through review of the revised version of X-STR, entitled "VMD0016 X-STR_v1.2_SCS RD2_15FEB2019", the assessment team can confirm that the parameter C(BSL,i,t0) is now used in Equations 10 and 11. In addition, the class of parameters entitled "Rate(Closs..." are now consistently completed with a "t", as mentioned. However, the discrepancy in respect of (current) Equation 23 has not been wholly resolved. The previously described circular loop issue has been addressed. However, the current equation uses the parameter Rate(Closs-BSL,i,t) to calculate a quantity that does not vary by time t (i.e., that is static across all possible values of time t). This creates a lack of clarity regarding what value should be inserted for "t" in the quantification of Rate(Closs-BSL,i,t). For this reason, the finding cannot be closed.
Methodology Developer Response 3: The rate must not be taken for each time step t but for the entire period until SDT is reached. The rate must be a constant since one does not know beforehand how long SDT is for taking an average value. The parameters has been amended to RateCloss-BSL,i and the description now is: "Rate of soil organic carbon loss due to oxidation in the baseline scenario in stratum i; a conservative (high) value must be applied that remains constant over the time from t = 0 to SDT t C ha-1 yr-1."
Assessment Team Response 3: Through review of the revised version of X-STR, entitled "VMD0016 X-STR_v1.2_SCS RD2_19MAR2019", the assessment team can confirm that the parameter Rate(Closs-BSL,i) is uniquely defined and used appropriately, which resolves the previously identified discrepancy.

NCR 88 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios." The audit team has the following concerns regarding the specification for parameter Rate(Closs-WPS,i,t) in X-STR:

1. In the parameter table, it is indicated that this parameter is "reassessed when the baseline is reassessed". This conflicts with the statement in Section 5.4 of X-STR that "The assessment must be executed ex ante, using conservative parameters."
2. The guidance provided for this parameter in Section 6.1 states that "This value is conservatively set to zero, as loss rates are likely to be negative. The value must be reassessed when the baseline is reassessed. If at that event there is evidence that SOC has decreased, the calculation must be adjusted using the carbon loss rate to date, unless it can be shown that the carbon loss was temporary." (Similar guidance is provided in Section 5.4.1, below Equation 8). Note that Section 4.5.29 of the AFOLU Requirements states that "With respect to the soil carbon pool, the maximum quantity of GHG emission reductions that may be claimed by the project shall not exceed the net GHG benefit generated by the project 100 years after its start date. This limit is established because in wetlands remaining partially drained or not fully rewetted, or where drainage continues, the soil carbon will continue to erode and/or oxidize leading to GHG emissions and eventually depletion of the soil carbon." The suggestion that it is always conservative to assume zero carbon stock loss in the project scenario appears to directly conflict with the statement in the AFOLU Requirements that "This limit is established because in wetlands remaining partially drained or not fully rewetted, or where drainage continues, the soil carbon will continue to erode and/or oxidize leading to GHG emissions and eventually depletion of the soil carbon." If it was always conservative to assume no carbon stock loss in the project scenario, it does not seem that there would be any need for the requirement set out in Section 4.5.29. The assessment team agrees that "loss rates are likely to be negative", but the purpose of Section 4.5.29 is to filter out those circumstances in which carbon stock loss continues under the project scenario (such that there is no GHG benefit to the project), which requires identification of those circumstances under which loss rates are not negative. The assessment team agrees that it is conservative to assume zero carbon stock loss under the project scenario under certain defined circumstances, but a global assumption of such, applied to any project activity that would use the methodology, does not seem consistent with the requirement of Section 4.5.29. The assessment team understands and appreciates that X-STR contains provision for ex-post revision to the quantification for this parameter in the event that carbon stock loss is observed in the project scenario. However, historical carbon stock loss may or may not correspond to future carbon stock loss. In addition, the purpose of Section 4.5.29 seems to be to preclude projects that cannot "establish and demonstrate a significant difference in the net GHG benefit between the baseline and project for at least 100 years" from participating in the VCS Program altogether; it seems that it would be problematic to have such projects enroll under the VCS Program only to later be deemed ineligible due to revision to the analysis set out in Section 5.4 of X-STR at baseline reassessment, and Section 4.5.29 of the AFOLU Requirements contains no provision for such an eventuality.
Methodology Developer Response: 1. We do not think this is a conflict. When the baseline is re-assessed, this is not concerning the baseline so far, but the baseline forward looking (thus ex ante).

2. Req 4.5.29 was introduced at the time the VCS standard started with peatland projects. In peatland, even if rewetted, the soil may continue to degrade to some extent. Tidal wetland scientists in the team state that - in this context - mineral wetland soils behave differently from organic soils. If one restores the hydrology and sedimentology of a tidal wetland, the SOC will not continue to degrade. Therefore, we maintain the statement of conservatively setting to zero. The additional statement, that this may need revision when the baseline is reassessed, has been dropped, as this was a matter of being too careful and lack of logic.
Assessment Team Response: The rationale provided in response to this finding is deemed appropriate by the assessment team. The finding is closed.

NCR 89 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios." The following is stated in Section 5.5 of X-STR: "If tPDT-BSL,i falls within the Crediting Period, subsequent organic carbon loss from remaining mineral soil may be estimated as well using the procedure for SDT in Section 5.6." Please clarify the rationale for this statement.
Methodology Developer Response: The rationale is that if within the CP all organic soil has been oxidized (i.e. PDT reached), during the remaining period within the CP organic matter from an underlying mineral soil may become oxidized as well. Baseline emission are then not limited to emissions from the organic soil, but also from that mineral soil. If these emissions are claimed, the project must assess the SDT.
Assessment Team Response: The assessment team appreciates the explanation provided. Based on the information provided, it appears that the quoted language is not in conformance with the requirements of Section 4.5.25(1)(a) of the AFOLU Requirements. Therefore, NCR 110 will be issued. However, as the information request has been satisfied, this finding will be closed.

NIR 90 Dated 24 Aug 2018
Standard Reference: AFOLU Requirements V3.6
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018
Finding: Section 4.5.29 of the AFOLU Requirements states the following: "With respect to the soil carbon pool, the maximum quantity of GHG emission reductions that may be claimed by the project shall not exceed the net GHG benefit generated by the project 100 years after its start date… To determine this long-term net GHG benefit, methodologies shall establish criteria and procedures to estimate the remaining soil carbon stock adjusted for any project emissions and leakage emissions in both the baseline and project scenarios for 100 years, taking into account uncertainties in modeling and using verifiable assumptions."

The procedures in Section 5.5 and 5.6 of X-STR do not include any adjustment for leakage emissions. The assessment team understands that Section 4.5.2 of REDD+ MF contains provisions to avoid leakage for stand-alone RWE project activities, and that LK-ECO provides guidance to avoid ecological leakage for WRC projects in general. However, given the inclusion of CIW activity types in the scope of the methodology, there is a possibility that activity-shifting leakage may occur (as acknowledged in Section 4.6.21 of the AFOLU Requirements). Please provide a justification for why it is not necessary to explicitly account for emissions from activity-shifting leakage in X-STR.
Methodology Developer Response: We assume that this NIR pertains to the procedures in section 5.4. Sections 5.5 and 5.6 relate to the determination of the PDT and the SDT, for which project and leakage emissions do not need to be known.

For cases where leakage emission will occur we have included equations that allow for the adjustment based on such emissions. Since the quantification of leakage emissions (if existing) are limited to the project crediting period, there is a disparity with the timeframe for the estimation of the difference between baseline and project carbon stock at the 100-year mark. Therefore, we have chosen the ratio between the leakage and baseline emissions resulting from ex-ante application of the procedures set out in REDD+ MF as an approximation for setting an adjustment factor for leakage.

To remove some redundancy in parameter descriptions, the equations on significance of the difference between baseline and project have been moved upwards.
Assessment Team Response: As this finding has been responded to through a revision to X-STR to explicitly account for leakage, the information request is no longer relevant.

NCR 91 Dated 24 Aug 2018
Standard Reference: Methodology Approval Process V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 6.1.4 of the Methodology Approval Process states that “Where the proposed methodology references tools or modules approved under the VCS or an approved GHG program, the validation/verification body shall determine whether the tool or module is used appropriately within the methodology.”

The module E-BPB is referenced by REDD+ MF, both in Table 4 and Section 5.4.4, for all WRC project activities. However, Section 4 of E-BPB states “This module is applicable to avoiding unplanned deforestation or degradation (AUDD), avoiding planned deforestation (APD) and avoiding degradation project activities…” While the reference to “avoiding degradation project activities” presumably includes AUWD and APWD in its scope, the scope of applicability as stated in Section 4 of E-BPB excludes RWE project activities. This creates a conflict within the methodology.
Methodology Developer Response: Module E-BPB may be applied in CIW-REDD and RWE-REDD projects due to the significant biomass component but it is irrelevant for stand-alone CIW and RWE project. Therefore we added "; biomass burning is not accounted for in stand-alone WRC project activities" to "Procedures provided in Module E-BPB".
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the audit team can confirm that it is stated in Section 5.4.4 that "biomass burning is not accounted for in stand-alone WRC project activities". Therefore, the inconsistency with E-BPB has been removed and the specific discrepancy has been resolved. Note, however, that NCR 101 has been issued regarding a gap that has arisen in the accounting procedures.

NCR 92 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.4.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for describing the project boundary and identifying and assessing GHG sources, sinks and reservoirs relevant to the project and baseline scenarios.” Section 5.4.4 of REDD+ MF omits the GHG sources quantified in modules BL-TW and M-TW (for example, no mention is provided of methane and nitrous oxide emissions from the soil organic carbon pool in respect of project activities on tidal wetlands).
Methodology Developer Response: We have added the 3 GHGs for "Emissions from tidal wetlands mineral soil".
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the audit team can confirm that "Emissions from tidal wetlands mineral soil" have been added for all three relevant greenhouse gases under both baseline emissions and project emissions. This is sufficient to resolve the discrepancy.

NCR 93 Dated 24 Aug 2018
Standard Reference: AFOLU Requirements V3.6
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 28JUL2018
Finding: Sections 4.4.10-4.4.18 of the AFOLU Requirements contain many requirements for WRC project baselines. For the most part, these requirements are directly addressed by BL-TW. The issue is that BL-TW is not referenced globally by the methodology for establishment of the baseline scenario (in terms of the detailed modeling of hydrological processes affecting the project area under the baseline scenario). Rather, in Section 8.1.4, BL-TW is specifically referenced by the methodology for quantifying emissions from the soil carbon pool, whereas modules BL-PL and BL-UP are generally referenced (with the implication being that they are to be used for establishing the baseline scenario). This sets up a conflict between the BL-TW and BL-PL/BL-UP and, with exception of two sentences in Section 8.1.4 ("When comparing landscape factors for the reference region (Section 1.1.1.1), elevation classes must be appropriate to the use in tidal wetlands…"), no guidance is provided regarding how the guidance in BL-TW is to be combined with that in BL-PL/BL-UP. The net effect of this is that (1) the guidance for establishment of the baseline in respect of WRC project activities on tidal wetlands is quite confusing and (2) if the user of the methodology does not specifically reference BL-TW for establishment of the baseline scenario, then the requirements of Sections 4.4.10-4.4.18 of the AFOLU Requirements may be disregarded. Please note that the requirements of Sections 4.4.10-4.4.18 of the AFOLU Requirements may potentially affect carbon pools other than soil organic carbon. For example, if a given area transitions from wetland to open water, the death of trees in the area in question may result in carbon dioxide emissions from carbon stock loss.
Methodology Developer Response: The text in section 8.1.4 has been extended to explain how modules are to be used in WRC projects. See also responses to NCRs 61 and 80.
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the audit team can confirm that significant changes have been made to Section 8.1.4. The changes that have been made resolve some of the prior confusion, but a core issue remains.

The current guidance of Section 8.1.4 essentially requires that, for CIW-REDD or RWE-REDD or CIW project activities on tidal wetlands, module BL-TW must be used to account for baseline emissions from the soil organic carbon pool and BL-PL or BL-UP must be used for all other pools. The difficulty with this is that the requirements for establishment of the baseline scenario in Sections 4.4.10-4.4.18 of the AFOLU Requirements are not necessarily specific to the soil organic carbon pool. To use the example cited in the finding, if a given area transitions from wetland to open water, the death of trees in the area in question may result in carbon dioxide emissions from carbon stock loss. Therefore, it is not permissible to only follow the requirements of Sections 4.4.10-4.4.18 of the AFOLU Requirements in respect of the soil organic carbon pool. The most obvious example of a disconnect is in respect of the procedures in Section 5.2 of BL-TW to account for submergence and erosion. BL-TW even states that "... for the year of submergence in a REDD-WRC baseline (see Modules CP-AB, BL-UP and BL-PL), the following applies...", although the discrepancy would remain even if BL-TW contained no references to a REDD-WRC baseline.

Therefore, the discrepancy has not been fully addressed.
Methodology Developer Response 2: Section 5.1.1 of BL-TW has been revised. General equation 1 has been moved to section 5.3 as in its current state it only deals with soil. 5.1.1 now applies to all WRC project activities. Sub-Section 5.1.2 is not specific for soil. Chapter 2 was also updated to clarify

the scope of the module.
Assessment Team Response 2: Through review of the revised module, entitled "BL-TW_v1.0_SCS RD2_15FEB2019", it appears that procedure for quantification of emissions from carbon stock change in biomass have been excised from BL-TW. This is a conservative decision (in terms of baseline emissions), and one that has substantively addressed all of the concerns expressed in the finding. Although the language of the finding suggests otherwise, it is now the assessment team's opinion that the requirements in Sections 4.4.10-4.4.18 of the AFOLU Requirements need not be specifically considered for WRC project activity baselines emissions where the conservative decision highlighted above has been made.

NIR 94 Dated 24 Aug 2018
Standard Reference: AFOLU Requirements V3.6
Document Reference: BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 28JUL2018; M-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 2JUL2018
Finding: Section 4.5.27 of the AFOLU Requirements requires, in respect of the use of proxies, that "Where relevant, the micro-topography of the project area (e.g., the proportion of hummocks and hollows and vegetation patterns in peatlands) shall be considered." It is unclear whether this requirement is duly enforced in modules M-TW and BL-TW. Please clarify how this requirement is accounted for in the above modules or provide a justification for why the requirement does not apply to tidal wetlands.
Methodology Developer Response: Module BL-TW applies only to mineral tidal wetland soils. Requirement 4.5 27 with respect to microrelief is specifically for peatlands.
Assessment Team Response: The finding requested the following; "Please clarify how this requirement is accounted for in the above modules or provide a justification for why the requirement does not apply to tidal wetlands." As a justification has not been provided (a statement is not equivalent to a justification), the finding cannot be closed.
Methodology Developer Response 2: The justification intended was that becaue of what has been stated in the previous response, the said requirement with respect to micro-relief does not apply to mineral soils in tidal wetlands (i.e. the scope of soil accounting in TW modules), because the requirement states that "Where relevant, the micro-topography of the project area (e.g., the proportion of hummocks and hollows and vegetation patterns in peatlands) shall be considered", clearly limiting this part of the requirement to peatlands.
Assessment Team Response 2: Through review of the information provided, the assessment team agrees that the requirement in question does not apply mineral soils in tidal wetlands. While "the proportion of hummocks and hollows and vegetation patterns in peatlands" was only given as an example of where micro-topography needs to be considered, the assessment team agrees that it is unlikely that micro-topography is relevant to tidal wetlands. Therefore, the information request has been satisfied.

NCR 95 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018; BL-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 28JUL2018; M-TW_v1.0_ESI RD1_27SEP2017_SCS RD2_25JAN2018 2JUL2018
Finding: Section 4.4.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for describing the project boundary and identifying and assessing GHG sources, sinks and reservoirs relevant to the project and baseline scenarios." Section 5.4.4 of REDD+ MF does not include the GHG sources for which quantification procedures are provided in BL-TW and M-TW. Table 9 in Section 5.4.4 of REDD+ MF appears to be exclusively applicable to project activities on peat soils.
Methodology Developer Response: We have added the 3 GHGs for "Emissions from tidal wetlands mineral soil". See the response to NCR 92.
Assessment Team Response: It appears this finding was issued as an inadvertent duplicate of NCR 92. This finding is closed for the same reasons as stated in closure of NCR 92.

NCR 96 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios." Section 8.3 of REDD+ MF states the following: "For WRC project activities that are not combined with REDD or ARR, where pre-project activities may be displaced to undrained or partially drained peatland areas or to tidal wetlands with organic soils, the procedures provided for activity shifting to peatland areas in Module LK-ASP (planned drainage of peatland) or Module LK-ASU (unplanned drainage of peatland) must be used." There is an internal conflict in this language in that the references to LK-ASP and LK-ASU suggest that they are only referenced for project activities on peatland, while the first part of the sentence suggests that they may be applicable in any situation "where pre-project activities may be displaced to undrained or partially drained peatland areas or to tidal wetlands with organic soils". In addition, the specific mention of "tidal wetlands with organic soils" is confusing, since one would think that LK-ASP and LK-ASU should be used even if the activities are displaced to tidal wetlands with mineral soils.
Methodology Developer Response: This para originates from an earlier version of REDD+ MF where the the 4 bullet points at the top of the section did not refer to wetlands. With the current changes in these bullet points it is made clear that LK-ASP and LK-ASU should be used (indeed, even if the activities are displaced to tidal wetlands with mineral soils) by which the procedures provided for activity shifting to peatland areas, if relevant, must be followed. Therefore, the text under attention is redundant an we have removed it.
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the audit team can confirm that the language in question has been removed. The audit team agrees that it was somewhat redundant with respect to the bullet points at the beginning of Section 8.3. Therefore, the discrepancy has been resolved.

NCR 97 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 4.7.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios.” Section 8.3 of REDD+ MF states the following: “Combined RWE-ARR projects may use Module LK-ASP.” This does not clearly state whether or not combined projects are required to use LK-ASP. If combined projects are only required to use LK-ASP under certain conditions, the requirement to “establish criteria and procedures… for the project (including leakage)” requires that specific criteria be provided regarding under what conditions LK-ASP is mandated to be used.
Methodology Developer Response: The intention was to require RWE-ARR projects to use LK-ASP. The language has been changed accordingly, using "must" in stead of "may".
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018", the assessment team can confirm that the indicated change has been made. Therefore, the non-conformity has been resolved.

NCR 98 Dated 24 Aug 2018
Standard Reference: Methodology Approval Process V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_12JAN2018 v2 26JUL2018
Finding: Section 6.1.4 of the Methodology Approval Process states that "Where the proposed methodology references tools or modules approved under the VCS or an approved GHG program, the validation/verification body shall determine whether the tool or module is used appropriately within the methodology." Section 8.3 of REDD+ MF references LK-ASP and LK-ASU for use with WRC projects (whether combined with REDD or ARR activities or not). However, LK-ASP and LK-ASU were specifically designed for use with REDD project activities, and there are many instances in which conflict and confusion can potentially be caused by these modules being referenced as they are in REDD+ MF. To use just a few examples:

- In Equation 4 of LK-ASU, parameter C(OLB) is the "Area-weighted average aboveground tree carbon stock for forests available for unplanned deforestation outside the leakage belt". It is completely unclear how this parameter would be quantified for use with a project activity that takes place in a non-forested tidal wetland.
- The approach of LK-ASU is to calculate the total forest area in the country available for deforestation and then determine the carbon impact in terms of leakage (both due to deforestation actors being shifted to the leakage belt and avoided in-migration into the leakage belt) within this area. It is completely unclear how this approach would be utilized for use with a project activity that takes place in a non-forested tidal wetland. Even for a project activity that takes place on a forested wetland (i.e., an avoided unplanned wetland degradation project), there are limitations and incongruities. For example, Equation 4 calculates the "The proportional difference in carbon stocks between areas of forest available for unplanned deforestation both inside and outside the leakage belt". However, this value is calculated solely in terms of "aboveground tree carbon stock". For terrestrial REDD projects, "aboveground tree carbon stock" is probably a good proxy for total carbon stock. However, this is not necessarily the case for avoided unplanned wetland degradation projects, for which the soil organic carbon stock may be a really significant component of overall carbon storage. It is also unclear how KL-ASU should be adapted to the circumstance in which the project activity takes place on a forested wetland but the activities causing deforestation or degradation may be shifted to non-forested wetlands (or vice versa).
- While LK-ASP does contain specific criteria and procedures for project activities on peatland, the module still does not seem to provide for the possibility of a project activity on tidal wetland or the possibility of a project activity taking place within a non-forested location. Therefore, many of the concerns specifically set out above in respect of LK-ASU also apply, in principle, to LK-ASP.

Methodology Developer Response: The leakage procedures in 8.4.4 for WRC projects have been rewritten to include a term GHG_LK-WRC covering leakage emissions associated with planned and unplanned degradation and ecological leakage. The notation follows the leakage parameters used in REDD projects.
In conjunction with these changes, modules LK-ASU and LK-ASP have been updated to also reference these WRC leakage terms through a conversion table. In line with the added explanation in section 8.1.4 ("Socio-economic processes causing the degradation of wetlands are similar to those causing deforestation or forest degradation"), leakage mechanisms for WRC and REDD are similar.
Assessment Team Response: This finding has been addressed through substantive expansion of LK-ASU and LK-ASP to encompass project activities on tidal wetlands. Additional findings have been issued regarding discrepancies noted in review of those revised modules by the assessment team.

NCR 99 Dated 24 Aug 2018
Standard Reference: VCS Standard V3.7
Document Reference: VMD0045 M-ARR_v1.1_ESI RD2_27SEP2017 RD1_15DEC2017 03JUN2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios." M-ARR references methodology "AR-ACM0003 Afforestation and reforestation of lands except wetlands" for quantification, but also references "AR-Tool14 Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities". It is confusing to reference a methodology and then also reference a different tool to quantify very similar or identical parameters.
Methodology Developer Response: This was in fact intended and meant to avoid confusion. For the determination of the "Actual net GHG removals by sinks", which is one component of the "Net GHG removal under the ARR project scenario", the methodology AR-ACM0003 must be used with all the relevant associated tools. However, for the long-term average change in carbon stock, we specifically target the "Carbon stock in tree biomass in the project scenario", for which procedures are provided in Tool 14. Whomever will apply ACM0003 will (have to) be acquainted with the tools associated with it and therefore we believe the specific reference to Tool 14 is just helpful.
Assessment Team Response: Through additional review of M-ARR in conjunction with the AR-ACM0003 methodology, the assessment team has arrived at the conclusion that the response of the methodology developer is correct. The assessment team had previously failed to note that the "AR-Tool14 Estimation of carbon stocks and change in carbon stocks of trees and shrubs in A/R CDM project activities" is itself referenced by the AR-ACM0003 methodology. Therefore, this finding is withdrawn.

NCR 100 Dated 4 Jan 2019
Standard Reference: VCS Validation and Verification Manual V3.0, page 46
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018
Finding: The VCS Validation and Verification Manual requires that "Methodologies must not restate VCS requirements". Section 5.1.4 of REDD+ MF contains a restatement of the following requirement from Section 4.2.16 of the AFOLU Requirements: "The project area shall meet an internationally accepted definition of wetland, such as from the IPCC, Ramsar Convention on Wetlands, those established by law or national policy, or those with broad agreement in the peer-reviewed scientific literature for specific countries or types of wetlands. Common wetland types include peatland, salt marsh, tidal freshwater marsh, mangroves, wet floodplain forests, prairie potholes and seagrass meadows."
Methodology Developer Response: Requirement 4.2.16 provides the exact definition of wetland to be used in this methodology. It therefore seems impossible to deviate from this language, just to meet the requirement in the VVM. We suggest to request guidance from the VCS.
Assessment Team Response: On further reflection, the assessment team agrees with the importance of having the definition included verbatim, irrespective of the Validation & Verification Manual. Therefore, the finding will be withdrawn.

NCR 101 Dated 4 Jan 2019
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018
Finding: Section 4.7.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios.”

Section 5.4.4 of REDD+ MF indicates that "Peat or biomass combustion" is an included (i.e., "selected") GHG source. However, it is also stated that "biomass burning is not accounted for in stand-alone WRC project activities". This is in contradiction to Section 4.5.2 of REDD+ MF, which states that "The prescribed burning of herbaceous and shrub aboveground biomass (cover burns) as a project activity may occur". If prescribed burning of biomass may occur as a project activity it is not appropriate or conservative to omit accounting of emissions from such burning.
Methodology Developer Response: Our response to NCR 91 is herewith withdrawn. Table 9's section on "peat or biomass combustion" has been reverted to its original language. In response to NCR 91 and this NCR, module E_BPB has been amended to extend its scope to REDD and WRC and to include shrub and herbal biomass. In conjunction, a number of errors in E-BPB have been corrected.
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_15FEB2019", the assessment team can confirm that it is now indicated that "Procedures provided in Module E-BPB" in Table 9 regarding peat or biomass combustion. Therefore, the discrepancy has been resolved.

NCR 103 Dated 4 Jan 2019
Standard Reference: Methodology Approval Process V3.7
Document Reference: BL-TW_v1.0_SCS RD2_02DEC2018 v2
Finding: Section 6.1.4 of the Methodology Approval Process states the following: "Where the proposed methodology references tools or modules approved under the VCS or an approved GHG program, the validation/verification body shall determine whether the tool or module is used appropriately within the methodology."
In Section 5.3.2.1, BL-TW contains the following reference to BL-PEAT: "Soil subsidence of organic soils may be used as a proxy for CO2 emissions from the SOC pool, see Module BL-PEAT." This reference is insufficiently precise to allow the reader to locate the procedure in BL-PEAT that will be required to use "Soil subsidence of organic soils may be used as a proxy for CO2 emissions from the SOC pool". Therefore, BL-PEAT is not used appropriately within the methodology in this instance.
Methodology Developer Response: The text now refers to section 5.3 in BL-PEAT.
Assessment Team Response: Through review of the revised version of the module, entitled "BL-TW_v1.0_SCS RD2_15FEB2019", the assessment team can confirm that Section 5.3 of BL-PEAT (which does contain guidance for use of soil subsidence as a proxy for emissions) is referenced. Therefore, the discrepancy has been resolved.

NCR 107 Dated 4 Jan 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0010 LK-ASU v1.1_RD2 SCS_02DEC2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

Procedures for quantifying leakage emissions are provided in LK-ASU. However, the following discrepancies have been identified in respect of these procedures:

1. Equations 12 and 13 would be appropriate if the quantification procedures in the methodology were calculated out on the basis of a given monitoring period (or "year"). However, these procedures are carried out on a cumulative basis. As such, Equations 12 and 13 are only correct if they provide output on a cumulative basis, as does Equation 11. These equations do not currently provide output on a cumulative basis. In addition, these equations are missing a procedure whereby leakage emissions are set to zero in the event that parameter A(LK-OLB,t) takes a value less than or equal to zero (such a procedure is contained above Equations 10 and 11), leading to the possibility of quantification of positive leakage, which is precluded by Section 4.6.7 of the AFOLU Requirements.
2. It is stated in Section 5.1.6 that "CPDT-LB or CSDT-LB may be estimated by applying the guidance provided in Module X-STR (noting that similarity in peat depth (for PDT) or soil organic carbon content (for SDT) and land use with stratum i referred to must be demonstrated". However, X-STR does not contain guidance for quantification of C(PDT-LB) or C(SDT-LB).
Methodology Developer Response: Re 1: Equation 12 and 13 are now cumulative. A procedures has been added for setting ALK-OLB,t to zero in case ALK-OLB,t =< 0.
Re 2: This procedure has been amended and is based on parameters assessed in X-STR, and it is aligned with the one in LK-ASP sections 5.3.1 and 5.3.2.
Assessment Team Response: Through review of the revised module, entitled "VMD0010 LK-ASU v1.1_RD2 SCS_15FEB2019", the assessment team has determined the following:

- Regarding item 1, Equations 12 and 13 have been appropriately modified to reflect the "cumulative" quantification approach. However, there is one remaining discrepancy in respect of these equations. The clarification that variable t represents "1, 2, 3, … t* years elapsed since the start of the project activity", which is so critical to an understanding of the "cumulative" nature of the quantification approach, is missing from below the equations.
- Regarding item 2, the quantification approach has been significantly revised such that this item is no longer applicable. However, please see NCR 115 regarding the additional concerns of the assessment team regarding the revised quantification approach.

This finding remains open for the reason stated regarding item 1.
Methodology Developer Response 2: Re 1: Description for t has been added
Assessment Team Response 2: As the clarification that variable t represents "1, 2, 3, … t* years elapsed since the start of the project activity" has been added to the revised version of LK-ASU, entitled "VMD0010 LK-ASU v1.1_RD2 SCS_17APR2019", the discrepancy has been resolved.

NCR 108 Dated 4 Jan 2019
Standard Reference: AFOLU Requirements V3.6
Document Reference: VMD0016 X-STR_v1.2_SCS RD2_02DEC2018
Finding: Section 4.5.29 of the AFOLU Requirements states the following: “With respect to the soil carbon pool, the maximum quantity of GHG emission reductions that may be claimed by the project shall not exceed the net GHG benefit generated by the project 100 years after its start date… To determine this long-term net GHG benefit, methodologies shall establish criteria and procedures to estimate the remaining soil carbon stock adjusted for any project emissions and leakage emissions in both the baseline and project scenarios for 100 years, taking into account uncertainties in modeling and using verifiable assumptions.”

The module X-STR contains procedures for carrying out the required accounting. However, insufficient guidance is provided for quantification of parameter LKF. In addition, there appears to be an error in Equation 5, in that the 1.05 value is missing.
Methodology Developer Response: Re LKF: we have added the rationale for the use of the LKF factor as well as a brief guidance.
Re 1.05: this value has been added to equation 5.
Assessment Team Response: Through review of the revised version of X-STR, entitled "VMD0016 X-STR_v1.2_SCS RD2_15FEB2019", the assessment team can confirm that clarification regarding the variable LKF has been provided in Section 5.4.1, and that Equation 5 has been modified to include the 1.05 factor. Therefore, the discrepancy has been resolved.

NIR 109 Dated 4 Jan 2019
Standard Reference: AFOLU Requirements V3.6
Document Reference: VMD0016 X-STR_v1.2_SCS RD2_02DEC2018
Finding: Section 4.5.25(1) of the AFOLU Requirements states that "For WRC activities on peatland the peat depletion time (PDT) shall be included in the quantification of GHG emissions and removals in the baseline scenario, and for non-peat wetlands, the soil organic carbon depletion time (SDT) shall be included in the quantification of GHG emissions and removals in the baseline scenario..." The assessment team notes that the following guidance, previously included in X-STR, has been stricken from the most recent version: "Extrapolation of RateCloss-BSL,i over the project crediting period must account for the possibility of a non-linear decrease of soil organic carbon over time, including the tendency of organic carbon concentrations to approach steady-state equilibrium. For this reason, a complete loss of soil organic carbon may not occur in mineral soils. This steady-state equilibrium must be determined conservatively." Please provide a rationale for this deletion.
Methodology Developer Response: This language was moved to the parameter table for RateCloss-BSL,i,t
Assessment Team Response: The explanation provided is sufficient to address the information request.

NCR 110 Dated 7 Jan 2019
Standard Reference: AFOLU Requirements V3.6
Document Reference: VMD0016 X-STR_v1.2_ESI RD2_27SEP2017 RD1_15DEC2017 26JUL2018
Finding: Section 4.5.25(1)(a) of the AFOLU Requirements states the following: "PDT is the time it would have taken for the peat to be completely lost due to oxidation or other losses, or for the peat depth to reach a level where no further oxidation or other losses occur. No GHG emission reductions may be claimed for a given area of peatland for longer than the PDT." The following is stated in Section 5.5 of X-STR: “If tPDT-BSL,i falls within the Crediting Period, subsequent organic carbon loss from remaining mineral soil may be estimated as well using the procedure for SDT in Section 5.6.” In response to NIR 89, the following information is provided regarding the rational for this language: "The rationale is that if within the CP all organic soil has been oxidized (i.e. PDT reached), during the remaining period within the CP organic matter from an underlying mineral soil may become oxidized as well. Baseline emission are then not limited to emissions from the organic soil, but also from that mineral soil. If these emissions are claimed, the project must assess the SDT." While the assessment team does not necessarily take issue with the factual assertions made by the methodology developer, the AFOLU Requirements does not permit GHG emission reductions to be "claimed for a given area of peatland for longer than the PDT", irrespective of whether mineral soil may be present, and prone to oxidization in the baseline scenario, below the peatland.
Methodology Developer Response: Our take is that the requirement was not intended to limit all emission reduction claims to the PDT, but only the emissions associated with loss of peat itself. One could also argue that if the peat is gone, the area is not anymore a peatland. Thus, "No GHG emission reductions may be claimed for a given area of peatland for longer than the PDT." does not anymore apply and one can continue with assessing whether or not this SOC is depleted within the CP. If there is a different interpretation of this requirement, we suggest to seek clarification from the VCS.
Assessment Team Response: Upon further consideration, and in light of the justification provided by the methodology developer, the assessment team agrees that, if the peat depletion time is reached in respect of a given area, it holds by definition that said area is no longer a peatland and is no longer bound by the PDT requirements. Therefore, the finding has been withdrawn.

NCR 116 Dated 1 Mar 2019
Standard Reference: Methodology Approval Process V3.7
Document Reference: M-TW_v1.0_SCS RD2_15FEB2019
Finding: Section 6.1.4 of the Methodology Approval Process states the following: "Where the proposed methodology references tools or modules approved under the VCS or an approved GHG program, the validation/verification body shall determine whether the tool or module is used appropriately within the methodology."

Section 5.1 of M-TW states that "For REDD-CIW and stand-alone CIW project activities, procedures for biomass, fossil fuel use and biomass burning are provided in Module M-REDD, in combination with Modules CP-AB, E-FFC and E-BPB. When using Module CP-AB, for non-tree biomass, project proponents may apply default values for carbon stocks in herbal biomass in tidal wetlands provided in Module M-ARR." While the reference to M-REDD is appropriate for REDD-CIW project activities, a blanket reference to M-REDD is inappropriate for stand-alone CIW project activities because M-REDD was not designed for use with such activities. While certain, select, portions of M-REDD may be applicable to stand-alone CIW project activities, a blanket reference to M-REDD will likely result in confusion regarding which portions of M-REDD are applicable.
Methodology Developer Response: M-REDD has been updated to accommodate stand-alone CIW. See NCR 106 point 4. *** PENDING REVIEW OF M-REDD ***
The sentence “When using Module CP-AB, for non-tree biomass, project proponents may apply default values for carbon stocks in herbal biomass in tidal wetlands provided in Module M-ARR.” has been removed, following NCR 112 point 1.
Assessment Team Response: Given that M-REDD is now being revised, as part of the methodology assessment process, to include procedures for CIW project activities, this finding is no longer relevant and will be withdrawn.

NCR 119 Dated 14 Mar 2019
Standard Reference: AFOLU Requirements V3.6
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_15FEB2019
Finding: Section 4.3.3 of REDD+ MF states the following: “Note that where the project activity involves the avoidance of future deforestation under deforestation or conversion concessions, which are without legal authorization and documentation at the project start date, the project qualifies as AUDD.” The situation, as described, does not qualify as an Avoiding Unplanned Deforestation and/or Degradation (AUDD) project. The reasons have been described in full in an email sent 14 March 2019 and are summarized as follows:

1. Section 4.2.7 of the AFOLU Requirements states that “Activities covered under the REDD project category are those that are designed to stop planned (designated and sanctioned) deforestation or unplanned (unsanctioned) deforestation and/or degradation.” By logical extension, activities cannot be covered under the REDD project activity where it cannot be demonstrated that deforestation or degradation would occur under the baseline scenario. There are few, if any circumstances, in which a planned deforestation threat is not currently present but in which conclusive evidence can be provided to show that such a planned deforestation threat would, without a doubt, emerge at a later time in the baseline scenario. This is the reason why Section 4.2.9(1) of the AFOLU Requirements specifically indicates that Avoiding Planned Deforestation and/or Degradation (APDD) only includes “activities that reduce net GHG emissions by stopping or reducing deforestation or degradation on forest lands that are legally authorized and documented for conversion”—because, if forest lands are not currently legally authorized and documented for such conversion, the additionality claims regarding such lands become very tenuous. Suggesting that such circumstances could qualify as AUDD projects seems to skirt the requirements and leaves the door open for such questionable project activities.
2. There is a potential conflict with an existing applicability condition in Section 4.3.2 of REDD+ MF, which states that “Baseline agents of deforestation must… clear the land for tree harvesting, settlements, crop production (agriculturalist) or ranching or aquaculture, where such clearing for crop production or ranching or aquaculture does not amount to large scale industrial agriculture or aquaculture activities”. In many cases, conversion activities under a concession license would constitute “large scale industrial agriculture or aquaculture activities”.
3. The procedures established under the methodology, and under the VCS rules in general, for AUDD project activities are not applicable to a circumstance in which a baseline deforestation would purportedly occur under a to-be-issued concession. To use one example, areas of planned deforestation are required to be excluded from the RRD boundaries per Part 1, step 1.1.1.1(f) of BL-UP, which means that the projected deforestation rate would solely consider unplanned deforestation and, as such, would be a poor descriptor of baseline deforestation in an area under a to-be-issued concession.

Methodology Developer Response: The language in section 4.3.3 and 8.3 concerning avoiding future deforestation has been removed.
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_19MAR2019", the audit team can confirm that the text in question has been removed, such that REDD+ MF no longer suggests that projects activities which involve the "avoidance of future deforestation under deforestation or conversion concessions, which are without legal authorization and documentation at the project start date" are eligible AUDD activities. Therefore, the non-conformity has been resolved.

NIR 120 Dated 19 Mar 2019
Standard Reference: VCS Standard V3.7
Document Reference: M-TW_v1.0_SCS RD2_15FEB2019; BL-TW_v1.0_SCS RD2_15FEB2019
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

Procedures for quantifying GHG emissions in the project scenario are provided in BL-TW and M-TW. However, in Section 5.3.2, it appears that the procedures are insufficiently precise regarding quantification for soils exposed to temporary periods of oxidation. While Equations 5 and 6 (BL-TW) and Equations 9 and 10 (M-TW) appear to be correct in respect of soils within a given stratum i that are exposed to oxidation over the course of a given year t, it is unclear how these equations are implemented in respect of soils that are exposed to oxidation conditions during only a portion of a given year. Please provide justification regarding the adequacy of the quantification procedures in light of the concerns expressed.

Methodology Developer Response: This concern has been addressed by providing a definition of "aerobic environment", see chapter 3 of both modules. The definition in the context of the modules reads "An aerobic environment – in the context of this module – is defined as an ecosystem that does not meet the definition of a wetland". Tidal wetland soils can be exposed to some oxidation during part of the oxidation, but if the conditions for "aerobic environment" are met the treatment of the soil within the modules should be different.
Assessment Team Response: Through review of the updated versions of BL-TW and M-TW, entitled "BL-TW_v1.0_SCS RD2_19MAR2019" and "M-TW_v1.0_SCS RD2_17APR2019", respectively, the assessment team can confirm that the indicated change has been made. The addition of a definition for "aerobic environment" makes it clear that this is to be used for fully drained systems and not areas within a wetland where periodic oxidation occurs due to tidal dynamics. The response is sufficient to allow closure of the finding.

NCR 121 Dated 20 Mar 2019
Standard Reference: VCS Standard V3.7
Document Reference: M-TW_v1.0_SCS RD2_15FEB2019; BL-TW_v1.0_SCS RD2_15FEB2019
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

Procedures for quantifying GHG emissions in the project scenario are provided in BL-TW and M-TW. However:

1. In Sections 5.3.4 (both modules), 6.1 (BL-TW) and 6.2 (M-TW), the terms "piled-up tidal wetland soil" or "piled-up soil" are used. It is not clear exactly what these terms refer to.
2. In Section 5.3.2 (both modules), it is stated that "In case of alternating mineral and organic horizons, CO2 emissions may be determined for all individual horizons." This makes it unclear whether determination of CO2 emissions for all individual horizons is ever optional in the case of alternating mineral and organic horizons.

Methodology Developer Response: We added a definition of "piled-up" in footnotes in BL-TW and M-TW: ""Piled up soil" refers to a body of soil material accumulated in piles or layers as a result of excavation."

We changed the "may" into "must".
Assessment Team Response: Through review of the updated versions of BL-TW and M-TW, entitled "BL-TW_v1.0_SCS RD2_19MAR2019" and "M-TW_v1.0_SCS RD2_17APR2019", respectively, the assessment team can confirm that the indicated changes have been made. The addition of a definition for "piled-up" appropriately clarifies what is meant, and includes the fact that piled up soil need not be in a pile to be considered. In addition, the use of "must" in place of "may" makes it clear that there is no option but to comply with the requirement; the response appropriately clarifies the situation. The response is sufficient to allow closure of the finding.

NIR 122 Dated 21 Mar 2019
Standard Reference: VCS Standard V3.7
Document Reference: BL-TW_v1.0_SCS RD2_15FEB2019
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

Procedures for quantifying GHG emissions in the project scenario are provided in BL-TW. However, the assessment team has the following information requests relating to the value of 1.6 that is used in Equation 11:

1. The assessment team has been unable to replicate the derivation of the value for the factor from the cited literature source (Table 2 in David et al. 2009). Please provide a clear written description of the process used to derive this value from the referenced literature.
2. Please provide a justification for the use of literature (David et al. 2009) that appears, on first glance, to be inapplicable to project activities within tidal wetlands.
3. Please provide a justification for the conservativeness of using the "mean value of resampled cultivated and drained mineral soils", as stated in footnote 6 in BL-TW, instead of using the lower end of the range of carbon stock loss.

Methodology Developer Response: 1.6 % C is the mean value of the cultivated soils in Table 2 (all depths), with the two organic soil data points (Margarity) removed. Note that this default factor is only to be used for mineral soils, we have added text "for mineral soils" immediately before equation 10 in BL-TW to clarify this.

The ideal data set would have been studies of tidal wetland soils that have been drained, but we were not aware of a sufficient number of such studies. However, the David et al. 2009 paper is a close proxy in that it is a study of non-tidal wetland soils that have been drained. It is a study of soil organic carbon in Mollisols classified as "poorly drained" and all sites in the study (except the virgin prairie remnants) were tile drained. The Mollisol classification indicates that these soils were initially high in organic carbon. The tile drainage is evidence that these sites were wet prairies before being drained for agriculture and the "poorly drained" classification indicates that they were almost certainly non-tidal wetlands. The study had 19 locations where soil samples had been taken in the early 1900s (1901-1907), 1957, and 2002. They roughly date the virgin prairie to 1870. Thus, it is an unusual study where there was actual long-term data on the same sites over time (16 sites) as opposed to space-for-time substitution data (3 sites). The study was also unusual because soils were sampled to a depth of 100 cm. The processes that operate to oxidize carbon in wetland soils following drainage are likely very similar in these high organic matter non-tidal soils that have been drained. One weakness of this approach is that the soils were both drained and cultivated. However, the effects of drainage could be observed below the plow layer, so drainage was clearly a strong driving factor.

We have followed the common protocol of using a measure of central tendency (in this case the mean) to derive a default factor from a large data set. This is a common procedure within the IPCC to provide default values.
Assessment Team Response: The assessment team reviewed the updated version of BL-TW,

entitled "BL-TW_v1.0_SCS RD2_19MAR2019", to see whether the finding could be closed. The feedback of the assessment team is as follows:

1. The information provided clarifies the derivation of the value used from David et al. 2009. The addition of “for mineral soils” in the text as well as the inclusion of “mineral” in the associated footnote provide additional clarity. This response is appropriate.
2. This response is appropriate. While the data set from David et al. 2009 is not an “ideal data set,” it is a reasonable approach given that an ideal data set does not likely exist. The extended time of oxidation in this data set (>100 years) suggests that the value would be conservative (e.g., maximal carbon loss) over the 20-year time horizon required by the protocol.
3. An appropriate justification has been provided to support the use of the mean value from David et al. 2009.

Therefore, the information request has been satisfied.

Findings That Were Open At the Time of Service Discontinuation

NCR 102 Dated 4 Jan 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0007 BL-UP_v3.3_RD2 SCS_02DEC2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

Procedures for quantifying GHG emissions in the baseline scenario are provided in BL-UP. However, the following discrepancies are present in those procedures:

1. In Equation 8 in Part 2, Step 2.3, the index of summation and lower limit of summation are given as "t - 1" instead of "t = 1", as is the case in the currently prevailing version of BL-UP.
2. Parameter C(BSL,PD-BSL,i) is referred to as "Post-deforestation carbon stock in (non-wetland) soil organic carbon in stratum i", suggesting that this parameter is only quantified for non-wetland strata. However, guidance is lacking regarding how to implement Equation 21 for wetland strata.
3. In the second term of Equations 23 and 24 in Part 4, Step 4.3, the upper limit of the summation of parameter A(unplanned,i,t) is given as "t*", whereas it should be simply "t" (as is indicated in the currently prevailing version of BL-UP).
4. In the prevailing version of BL-UP, the parameter C(TOT) is calculated in Step 4.3 and this same parameter is used in the calculation of total baseline emissions in the project area and leakage belt in Step 4.5. It is understood that the same is intended in the version of BL-UP submitted for review, but critical linkages has been degraded or lost. For project activities not carried out on wetlands, Equations 28 and 29 reference Equation 23 for the calculation of C(TOT). This is erroneous, as parameter C(TOT) is quantified in Equation 22. Furthermore, the text immediately above Equation 22 indicates that it is calculated only "For REDD project activities (non-wetland)". For project activities carried out on wetlands, there is, therefore, no linkage with parameter C(TOT). Equations 31 and 32 appear to reference Equation 24 for the calculation of C(TOT), but this reference has no meaning, as Equation 24 calculates the parameter C(BSL,i,t), which is substantively different from C(TOT) in that it is quantified uniquely for each stratum-year combination, whereas C(TOT) is the result of the summation across all years and strata.
Methodology Developer Response: Re 1: Corrected
Re 2: In section 4.2.3, we added language to distinguish between terrestrial and wetlands and refer to step 4.3 where GHG emissions from the SOC pool in the baseline scenario are calculated in equation 25 and 26.
Re 3: The asterixes have been removed from equation 23 and 24.
Re 4: The text preceding eq 22 now contains the following guidance: "For AUWD-REDD or RWE-REDD project activities, Equation 23 and Module CP-S must not be used. Instead, use Equation 24 for carbon stock change in all pools except soil, and Equation 25 or 26 for the quantification of GHG emissions from the SOC pool".
The link to eq 23 provided in eqs 29 and 30 now reads "Equations 22 and 23". In eqs 32 and 33 this is "Equations 22 and 24". We think this makes clear enough how C_TOT must be calculated.
Assessment Team Response: The assessment team reviewed the revised version of BL-UP, entitled "VMD0007 BL-UP_v3.3_RD2 SCS_15FEB2019", to see whether the finding could be closed. The

assessment team's feedback regarding the responses to each item raised in the finding is as follows.

1. As Equation 8 has been corrected as indicated, the discrepancy has been resolved.
2. As BL-UP currently contains guidance in Step 4.3 of Section 5 for quantification of baseline emissions from the SOC pool for wetland strata, the discrepancy has been resolved.
3. Through review of Equations 23 and 24, the assessment team can confirm that the issue with the upper limit of summation has been corrected. However, an additional (minor) discrepancy has been introduced. These equations reference the parameter C(WP,i,i) but no such parameter exists. It appears likely that the intent was to reference the parameter C(WP,i) from CP-W. In this case, it should also be noted that parameter C(WP,i) is not listed below Equations 23 and 24, nor is it included in the parameter tables in Section 6.
4. Strides have been made in the effort to introduce clarity to the procedures, but additional effort is needed to resolve the issues. At least some of the remaining issues are:
4a. The module states that "For AUWD-REDD or RWE-REDD project activities, Equation 23 and Module CP-S must not be used. Instead, use Equation 24 for carbon stock change in all pools except soil, and Equations 25 or 26 for the quantification of GHG emissions from the SOC pool. For AUWD-REDD, stand-alone AUWD or RWE-REDD project activities, use Module BL-TW or BL-PEAT (whichever is relevant) to estimate soil GHG emissions following wetland degradation and apply Equation 25 or 26, respectively." It appears that the intent is to substitute the written word (which is prone to misinterpretation and confusion) for mathematical equations (which are, when correctly composed, completely clear) in respect of the quantification procedures. This opens a number of avenues for confusion. For example, one could infer, for stand-alone AUWD project activities, that the result of either Equation 25 or 26 should be made equal to C(TOT) in Equation 22. However, this is not clearly stated. For AUWD-REDD project activities, one could presume that the result of either Equation 25 or 26 should be added to the result of Equation 24. However, this would cause an incorrect result, as Equations 25 and 26 perform quantification on a "cumulative basis" (summing across years from the project start date) while Equation 24 performs quantification on an "annual basis" (being quantified uniquely for each stratum-year combination).
4b. Equations 25 and 26 in BL-UP are duplicative of Equation 1 in modules BL-PEAT and BL-TW, respectively.
4c. Equations 34-37 do not seem to connect with any of the equations in REDD+ MF. For example, Equation 34 quantifies the parameter GHG(BSL-PEAT,PA,unplanned), which seems similar, but identical, to the parameter GHG(BSL-PEAT,unplanned) in Equation 8 of REDD+ MF.

Due to the remaining issues regarding items 3 and 4, the discrepancy has not been fully resolved.
Methodology Developer Response 2: [A further response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response 2: This finding remained open as of the time of discontinuation of assessment services.

NCR 104 Dated 4 Jan 2019
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018
Finding: Section 4.7.2 of the VCS Standard requires that “The methodology shall establish criteria and procedures for quantifying net GHG emission reductions and removals generated by the project, which shall be quantified as the difference between the GHG emissions and/or removals, and/or as the difference between carbon stocks, from GHG sources, sinks and reservoirs relevant for the project and those relevant for the baseline scenario."

Quantification procedures are provided in Section 8 of REDD+ MF. However, the following discrepancies have been identified in respect of these procedures:

1. In Section 8.1.4, the parameter "GHGBSL-SOC,i, in Module BL-TW" is referenced in two instances. There is no such parameter.
2. The assessment team understands that parameters BL-TW and M-TW no longer contain procedures for quantification of emissions from fossil fuels. These procedures are now, it seems, included in BL-UP, BL-PL, M-REDD, BL-ARR and M-ARR. The problem with this, in terms of the quantification procedures in Section 8.4 of REDD+ MF, is that those emissions are "tracked" as being associated with REDD or ARR project activities (i.e., they are included in the calculation in Equations 2 or 5 in REDD+ MF) even when at least some of the emissions may be associated with the WRC project activities. This is an issue with stand-alone RWE project activities in terms of the baseline, since such projects do not use any baseline modules other than BL-TW for quantification of baseline emissions. It is also an issue with stand-alone CIW project activities in terms of the project scenario, because M-REDD and M-ARR are not used for such activities. Furthermore, it would be qute logical to conclude that Sections 8.4.2 and 8.4.3 of REDD+ MF do not apply to stand-alone WRC project activities, but failure to apply these sections in respect of stand-alone WRC project activities would lead to omission of fossil fuel emissions from baseline- and project-scenario quantification. In appears an attempt to partly mitigate the issues described above has been made in Section 8.2 of REDD+ MF, which references use of M-REDD for "stand-alone CIW project activities and CIW-REDD project activities" in two locations, but note that Table 4 of REDD+ MF indicates that M-REDD is not used for CIW project activities, and that a blanket reference to M-REDD for stand-alone CIW project activities is likely to cause widespread confusion (see also NCR 105).
3. Section 8.4.5 of REDD+ MF indicates the following: "For WRC project activities on peatland – where carbon stock changes are not estimated – the proxy for the net change in carbon stocks applied in this methodology is NERWRC. As this proxy includes all net GHG emissions reductions, it provides a conservative (larger) estimate of the buffer." This does not take into account projects on tidal wetlands.
4. Section 8.4.6 of REDD+ MF indicates the following: "This adjusted Adjusted_NERREDD+ must be the basis of calculations at each point in time in Equation 13." The equation reference appears to be incorrect.
5. The equation below the line "The adjusted value for NERREDD+ to account for uncertainty must be calculated as..." in Section 8.4.7 of REDD+ MF appears incorrect, in that 15% is added multiple times to the second term.
Methodology Developer Response: Re 1: This has been corrected to read "GHGBSL-TW,i,t. Moreover, "GHGBSL-PEAT,i,t" has been added. Note that the table was removed from REDD+ MF and only occurs in modules BL-PL and BL-UP, to remove redundancy.
Re 2:

Stand-alone RWE
Section 8.4.4 has been revised to provided clearer instructions for stand-alone RWE projects. An equation (10) adding fuel burning has been included. BL-ARR covers biomass burning in RWE-ARR projects.
Redundant language has been removed.
Definitions of GHG_BSL-PEAT and GHG_BSL-TW have been made consistent across modules.
The chapeau of 8.1 has also been removed as it was redundant.
In table 3, RWE is now clearly defined as being without vegetation establishment. RWE with a biomass component is treated as RWE-ARR.
In table 5, some adjustments have been made to better deal with trees, shrubs and herbaceous vegetation.
In table 6, herbaceous biomass now reads "excluded" as it is covered under ARR. There is some tension between the ARR accounting mores that excludes herbaceous vegetation from the biomass pools, and the reality of certain wetland restoration projects that see the establishment of herbaceous vegetation and even use prescribed burning. In this methodology, herbaceous vegetation is part of ARR.
For the project scenario, module M-REDD has been modified to include procedures for SOC in wetlands (in lign with the modifications in BL-UP and BL-PL).
The scope of BL-ARR and M-ARR was explicitly extended to include RWE-ARR. In table 3 of REDD+ MF and in footnotes 1 in BL-ARR and M-ARR, the relevance of herbaceous vegetation in RWE-ARR has been clarified.
Stand-alone CIW
The lack of M's in table 4 was an omission since 8.2.4 already indicated that CIW must use M-REDD. M-REDD has been updated to cater for CIW.
Equations is sections 8.4.2 and 8.4.3 summarise the results from the modules. These sections do not provide guidance on when to use which module. That guidance is given in previous sections, e.g 8.1.4 and 8.2.4 for WRC.
Re 3: The addition "on peatland" as well as "– where carbon stock changes are not estimated –" have been removed.
Re 4: This has been corrected.
Re 5: This has been corrected and is now the same as in X-UNC
Assessment Team Response: The finding response had not been reviewed by the assessment team prior to the discontinuation of assessment services. Given that the finding response had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 105 Dated 4 Jan 2019
Standard Reference: Methodology Approval Process V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_02DEC2018
Finding: Section 6.1.4 of the Methodology Approval Process states the following: "Where the proposed methodology references tools or modules approved under the VCS or an approved GHG program, the validation/verification body shall determine whether the tool or module is used appropriately within the methodology."
In Section 8.2, REDD+ MF references use of M-REDD for "stand-alone CIW project activities and CIW-REDD project activities" in two locations. From review of M-REDD, it appears that the only aspect of this module that has any bearing on stand-alone CIW project activities is the section "Monitoring project emissions" in Part 5 or, perhaps, monitoring of deforestation in the leakage belt (for use in LK-ASU and LK-ASP). A blanket requirement to use M-REDD, for such project activities, is likely to result in a high level of confusion and, as such, is not appropriate.
Methodology Developer Response: The chapeau of section 8.2 has been deleted as it was fully redundant given the content of the following sub-sections. Sub-section 8.2.4 has been amended to provide better guidance on use of modules M-TW and M-PEAT versus M-REDD. M-REDD has been edited to better cover CIW. *** PENDING REVIEW OF M-REDD ***
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_19MAR2019", the assessment team can confirm that the text of Section 8.2.4 has been re-written. However, the revised text is also very confusing. For example:

1. There is a reference to the use of "Module M-PEAT or M-TW (whichever is relevant) for baseline net GHG emissions from the SOC pool", which is confusing because M-PEAT and M-TW do not quantify baseline emissions.
2. It is stated that "RWE-ARR project activities must also use Module M-ARR for the accounting of biomass and biomass burning (if relevant)", which is confusing because (1) E-BPB is referenced for quantification of emissions from biomass burning in Section 5.4.4 of REDD+ MF and (2) M-ARR does not contain procedures to account for emissions from biomass burning.

Therefore, the discrepancy has not been fully resolved.
Methodology Developer Response 2: [A further response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response 2: This finding remained open as of the time of discontinuation of assessment services.

NCR 106 Dated 4 Jan 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0009 LK-ASP v1.2_RD2 SCS_02DEC2018
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

Procedures for quantifying leakage emissions are provided in LK-ASP. However, the following discrepancies have been identified in respect of these procedures:

1. The parameter LKA(planned,i,t), which exists in the currently prevailing version of LK-ASU (Version 1.2), is inconsistently represented. In Equation 6 it is correctly represented as LKA(planned,i,t), while elsewhere (e.g., in Equation 15) it is represented as LKA(planned).
2. It is not clear where the values for parameter Rate(Closs,t) in Equation 12 should come from. While the parameters Rate(Closs-BSL,t) and Rate(Closs-WPS,t) are included in X-STR, parameter Rate(Closs,t) is not present.
3. The heading of Section 5.3.1 refers to "the Peat Carbon" and is, thus, confusing when this section is applied to project activities on tidal wetlands.
4. The parameter LKA(planned,i,t) is calculated in Equation 6, but the guidance for quantification of this parameter does not, in some cases, have meaning for project activities other than REDD project activities. For example, the parameter A(defLK,i,t) in Equation 6 is specific to deforestation within the leakage belt. Furthermore, the guidance for monitoring this parameter in M-REDD is specific to monitoring of deforestation and may not be appropriate for monitoring of wetland degradation (e.g., standardized remote sensing methodologies exist for monitoring deforestation, as described in M-REDD, but these methodologies may not apply fully to remote monitoring of wetland degradation).
5. Equations 15 and 16 would be appropriate if the quantification procedures in the methodology were calculated out on the basis of a given monitoring period (or "year"). However, these procedures are carried out on a cumulative basis. As such, Equations 15 and 16 are only correct if they provide output on a cumulative basis, as does Equation 1. These equations do not currently provide output on a cumulative basis.
6. In Equations 17 and 18, the parameter D%(planned,i,t) should be inside the double-summation (i.e., it should be inside the summation across all strata), as it is potentially calculated uniquely for every year and stratum.

Methodology Developer Response: Re 1: Corrected to LKA(planned,i,t
Re 2: Procedure has been overhauled/simplified and aligned with LK-ASU
Re 3: Amended to read Soil Organic Carbon Loss
Re 4: M-REDD has been updated to cater for CIW. Blue carbon RS experts have advised that RS methods for wetlands are quite similar.
Re 5: Procedure has been overhauled/simplified and aligned with LK-ASU
Re 6: Corrected
While updating the module, procedures for PDT and SDT in X-STR have been improved as well. In 5.5 and 6.1 adding that for the purpose of determining the PDT peat depth may be determined as the depth of the peat layer down to a level where no further oxidation or other losses occur (e.g., the average water table depth). This is in line with the VCS requirements and was omitted in the previous version.

Assessment Team Response: Through review of the revised module, entitled "VMD0009 LK-ASP v1.2_RD2 SCS_15FEB2019", the assessment team has determined the following:

- Regarding item 1, the assessment team can confirm that the parameter in question is now consistently represented as LKA(planned,i,t). However, a small discrepancy remains. It is indicated in Section 5.3.3 that this parameter is "from Equation 5" when, in fact, it is calculated in Equation 6.
- Regarding item 2, the parameter Rate(CLoss,t) is no longer used in LK-ASP. Therefore, this item is no longer relevant.
- Regarding item 3, the heading of Section 5.3.1 is no longer specific to peat. Therefore, the discrepancy has been resolved.
- Regarding item 4, the revised version of M-REDD has not been reviewed by the assessment team. Therefore, the response to this item cannot be reviewed.
- Regarding items 5 and 6, Equations 15-17 have been corrected to reflect a "cumulative" quantification basis and correctly position the parameter D%(planned,i,t). However, there is one remaining discrepancy in respect of Equation 17. The clarification that variable t represents "1, 2, 3, … t* years elapsed since the start of the project activity", which is so critical to an understanding of the "cumulative" nature of the quantification approach, is missing from below Equation 17.

Because items 1, 4 and 5-6 have not been completely addressed, the finding must remain open.

Methodology Developer Response 2: Re 1: Corrected

Re 4: *** PENDING REVIEW OF M-REDD ***

Re 5 and 6: Descriptions of i and t have been added

Assessment Team Response 2: The finding response had not been reviewed by the assessment team prior to the discontinuation of assessment services. Given that the finding response had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 111 Dated 1 Mar 2019
Standard Reference: AFOLU Requirements V3.6
Document Reference: VMD0016 X-STR_v1.2_SCS RD2_15FEB2019
Finding: Section 4.5.29 of the AFOLU Requirements states the following: “With respect to the soil carbon pool, the maximum quantity of GHG emission reductions that may be claimed by the project shall not exceed the net GHG benefit generated by the project 100 years after its start date… To determine this long-term net GHG benefit, methodologies shall establish criteria and procedures to estimate the remaining soil carbon stock adjusted for any project emissions and leakage emissions in both the baseline and project scenarios for 100 years, taking into account uncertainties in modeling and using verifiable assumptions. Projects unable to establish and demonstrate a significant difference in the net GHG benefit between the baseline and project for at least 100 years are not eligible.”

The module X-STR contains procedures for carrying out the required accounting. However, the following discrepancies regarding the accounting guidance have been identified by the assessment team:

1. Equations 1, 2, 3, 5, 14 and 15 have been modified such that the parameters representing the number of hectares in a given project and baseline stratum are represented as A(WPS,i,t) and A(BSL,i,t), instead of A(WPS,i) and A(BSL,i), respectively. This clarifies that the area of strata may very depending on the year, which is generally a helpful clarification to make. However, the aforementioned equations specifically make use of the area of the strata in question at t=100. The representation of the parameters in question as A(WPS,i,t) and A(BSL,i,t) cause it to be unclear which value is to be used for t in quantification. An inconsistency is also introduced relative to other parameters in the aforementioned equations, in which "t100" is substituted for t to make clear that t=100 for quantification purposes. The assessment team is aware of the language in Sections 6.1 and 6.2 for these parameters indicating that "In Equations 1, 2, 5, 15 and 16, the area for AWPS,i,t100 must be used", for example. However, this point is sufficiently important that it seems inadequate to tuck clarification away in the parameter tables. (In addition, please note that the numbering in the parameter tables seems off--Equation 14 is not represented and Equation 16, which does not include these parameters, appears to be incorrectly represented).
2. Similarly, the parameters pertaining to "Volumetric carbon content of the peat below the water table in the project scenario" and "Volumetric carbon content of the peat below the water table in the project scenario" are represented as C(vol_lower,WPS,i,t) and C(vol_lower,BSL,i,t), instead of C(vol_lower,WPS) and C(vol_lower,BSL), respectively. The comments made in item 1 above also apply to this situation.
3. Equation 3 is comprised of three distinct lines. It appears that the third line, to the immediate left of the "(3)", is a duplication of the term in the second line.
4. In Equations 3 and 5, the parameter C(BSL,t0) is not multiplied by an area value. Since C(BSL,t0) is in units of tC per ha, this results in incorrect dimensional analysis.
5. For the total stock approach in Section 5.4.1 of X-STR, Equations 2 and 5 are provided in order to determine whether "the difference between carbon stock in the project scenario and baseline scenario at t = 100 (CWPS-BSL,t100) is significant". No parallel equations exist for the stock loss approach in Section 5.4.2 of X-STR. Formally speaking, Section 5.4.2 of X-STR lacks a test for "significance" as required by Section 4.5.29 of the AFOLU Requirements.
Methodology Developer Response: Re 1: In equations 1-5 and 15-16 AWPS,i,t and ABSL,i,t have been changed to AWPS,i,t100 and ABSL,i,t100, respectively, and their descriptions have been

amended accordingly. Refs to equation number have been checked and edited where necessary.
Re 2: Similar corrections made
Re 3: In our document the equation consists of 2 lines with no duplications. This may be an issue with Word. PDF file to be provided.
Re 4: The unit for CWPS-BSL,i,t100 was correct to tC. The dimensional issue has been corrected by multiplying C(BSL,t0) with the area at t=100.
Re 5: New equations 16 and 18 have been added.
Assessment Team Response: The finding response had not been reviewed by the assessment team prior to the discontinuation of assessment services. Given that the finding response had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 112 Dated 1 Mar 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0013 E-BPB v1.1 25JAN2019
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

Procedures for quantifying emissions from biomass and peat burning are provided in E-BPB. However, the following discrepancies have been identified in respect of these procedures:

1. In Section 4, the scope of the module has been expanded to include WRC project activities. The module uses CP-AB, CP-D and CP-L to quantify variables that are inputs to the calculation of carbon stock prior to burning, per Equation 2 of E-BPB. This is appropriate for REDD and REDD-WRC project activities, as the aforementioned modules are applicable to such activities, per Table 4 of REDD+ MF. However, for ARR-WRC project activities and stand-alone WRC project activities, this is not appropriate, as the aforementioned modules are not used by said project activities according to the framework set out in Table 4 of REDD+ MF. Project activities in the ARR-WRC and stand-alone WRC categories have their own frameworks (as set out in BL-ARR and M-ARR, and BL-TW and M-TW, respectively) for quantifying variables corresponding to those used as inputs to Equation 2 of E-BPB. Even if Table 4 of REDD+ MF were to be modified so as to indicate that CP-AB, CP-D and CP-L are used for ARR-WRC and stand-alone WRC project activities, the use of different modules to calculate closely related variables would result in unnecessary and inappropriate confusion for the user of the methodology.
2. Equation 2 of E-BPB includes herbaceous biomass, as represented through the parameter C(AB_herb,i,t). While the inclusion of herbaceous biomass is appropriate for ARR-WRC project activities, it is not appropriate for stand-alone WRC project activities, as the methodology currently stands, because herbaceous biomass has been excluded from the scope of such activities per Table 6 of REDD+ MF (note, however, that this exclusion does not appear to be conservative when burning is taking place under the project scenario, as addressed in NIR 113).
3. The parameter E(peatburn,i,t) has apparently been renamed GHG(peatburn,i,t). However Equation 3 has not been revised accordingly. In addition, the change in name has resulted in other inconsistencies. For example, M-PEAT (a module that is specifically excluded from the scope of this assessment) references a variable entitled E(peatburn-WPS,i,t). The linkage between this variable and E(peatburn,i,t) is self-evident, but the linkage with respect to GHG(peatburn,i,t) is not evident. This "broken link" is likely to cause confusion on the part of users of the methodology.
4. It is indicated that the parameter A(burn,i,t) is quantified in M-REDD. (Procedures in M-PEAT were referenced for quantification of this parameter in the previous version of E-BPB.) The module M-REDD is only applicable to REDD project activities, per Table 4 of REDD+ MF. Therefore, it is inappropriate, as it stands, to reference M-REDD for quantification of this parameter in respect of ARR-WRC or stand-alone WRC project activities. Furthermore, M-REDD is not listed as a referenced module in Section 1 of E-BPB.
Methodology Developer Response: Re 1 and 2: The procedures that extended the scope have all been removed as for ARR and RWE-ARR activities CDM-Tool 08 must be used via module M-ARR. This was an oversight.
Re 3: Equation 3 has been revised. These links between the PEAT modules will be made correct.

Re 4: See above. We added M-REDD to the referenced modules.
Assessment Team Response: The assessment team reviewed the updated version of E-BPB, entitled "VMD0013 E-BPB v1.1 18APR2019", to see whether all of the noted issues had been addressed. The assessment team's conclusions are as follows:

1. The assessment team agrees that the particular identified discrepancy has been addressed through exclusion of stand-alone WRC project activities from the scope of the module, as the modules CP-AB, CP-D and CP-L are all applicable to REDD-WRC project activities.
2. The assessment team agrees that the particular identified discrepancy has been addressed through exclusion of WRC-ARR project activities from the scope of the module, as herbaceous biomass is not within the project boundary for REDD projects or WRC projects. In addition, the parameters C(AB_non tree,i,t) and C(AB_herb,i,t) have been removed from Equation 2, reverting Equation 2 to its appearance in the prevailing version of E-BPB.
3. The variable GHG(peatburn,i,t) is now correctly referenced in Equation 3. The other identified naming discrepancies have been corrected as well. The modules BL-PEAT and M-PEAT have been revised to use the updated nomenclature.
4. Since the issuance of the finding, M-REDD has been revised to contain procedures for CIW project activities in addition to REDD project activities, and this module is now listed in Section 1 of E-BPB. However, the issue has not wholly been addressed, because E-BPB is, per Section 4, applicable to "...REDD-WRC project activities". Therefore, E-BPB is applicable to ARR-RWE project activities but M-REDD is not applicable to such activities, creating a gap in coverage for such activities.

Because of the issues described under #4 above, the discrepancy has not been fully resolved.
Methodology Developer Response 2: [A further response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response 2: This finding remained open as of the time of discontinuation of assessment services.

NIR 113 Dated 1 Mar 2019
Standard Reference: VCS Standard V3.7
Document Reference: VM0007 REDD+MF_v1.6_SCS RD2_15FEB2019
Finding: Section 4.1.4 of the VCS Standard requires that "Methodology elements shall be guided by the principles set out in Section 2.4.1". The principle of "conservativeness", as set out in Section 2.4.1, is defined as "Use conservative assumptions, values and procedures to ensure that net GHG emission reductions or removals are not overestimated."

In Table 6 of REDD+ MF, it is indicated that aboveground shrub (i.e., non-tree) biomass and herbaceous biomass are excluded from the project boundary for stand-alone WRC project activities. However, it is also stated in Section 4.5.2 of REDD+ MF that, for RWE project activities, "The prescribed burning of herbaceous and shrub aboveground biomass (cover burns) as a project activity may occur". The assessment team suspects that this may create a situation where emission from burning of herbaceous and shrub aboveground biomass are not accounted for in the quantification of GHG emission reductions or removals, and where this omission results in a quantification that violates the principle of conservativeness. Please provide a clear justification that exclusion of aboveground shrub (i.e., non-tree) biomass and herbaceous biomass from the project boundary for stand-alone WRC project activities does not violate the principle of conservativeness.
Methodology Developer Response: This applicability condition - as a consequence of the meaning of WRC project activities (i.e. only considering the soil component) - applies to RWE-ARR project activities. This has been added to the language.
Assessment Team Response: Through review of the revised version of REDD+ MF, entitled "VM0007 REDD+MF_v1.6_SCS RD2_19MAR2019", the assessment team can confirm that the allowance for prescribed burning in Section 4.5.2 is now limited to RWE-ARR project activities, and Table 6 now indicates that the herbaceous biomass pool is "Covered under ARR". Therefore, it is agreed that carbon dioxide emissions (through carbon stock change) are covered under the accounting framework of the methodology. However, the methodology does not appear to contain any procedures to account for non-carbon-dioxide emissions caused by burning of biomass for RWE-ARR project activities. Table 9 of the revised version of REDD+ MF states that procedures are "provided in Module E-BPB". However, the latest version of E-BPB submitted for review, entitled "VMD0013 E-BPB v1.1 18APR2019", states in Section 4 that "This module is applicable to REDD and REDD-WRC project activities" (i.e., it excludes RWE-ARR project activities from its use). Similarly, the methodology does contain any procedures to account for emissions caused by burning of biomass for stand-alone WRC project activities or ARR-WRC project actiivities, for the reasons stated above. Therefore, the issue has not been fully resolved.
Methodology Developer Response 2: [A further response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response 2: This finding remained open as of the time of discontinuation of assessment services.

NCR 114 Dated 1 Mar 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0009 LK-ASP v1.2_RD2 SCS_02DEC2018
Finding: Section 4.7.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios.”

Procedures for quantifying leakage emissions are provided in LK-ASP. However, these procedures make reference to a "leakage belt". This term is missing from the currently prevailing version of LK-ASP (Version 1.2) and does not have a clear meaning or definition in the context of activity-shifting leakage related to avoided planned deforestation.
Methodology Developer Response: The reference to leakage belt has been removed throughout.
Assessment Team Response: The finding response had not been reviewed by the assessment team prior to the discontinuation of assessment services. Given that the finding response had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 115 Dated 1 Mar 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0009 LK-ASP v1.2_RD2 SCS_02DEC2018; VMD0010 LK-ASU v1.1_RD2 SCS_15FEB2019
Finding: Section 4.7.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios.”

Procedures for quantifying leakage emissions are provided in LK-ASP and LK-ASU. However, the following discrepancies have been identified in respect of these procedures:

1. In Section 5.3.1 of LK-ASP, the following is stated: "Where the deforestation agent has been identified or where Approach 1 when only the agent class has been identified is used, the cumulative carbon lost at tPDT (Closs-PDT-LB) in the undrained peatland in the leakage belt or the cumulative soil organic carbon loss at tSDT (Closs-SDT) in all of the agent´s concessions in the leakage belt, as well as the PDT or SDT itself, must be estimated using the principles in Sections 5.4 and 5.5, as applicable, in Module X-STR... Where the agent has not been identified and Approach 2 (market leakage) has been applied, the estimation of Closs-PDT-LB or Closs-SDT-LB must be carried out for the alternative areas in the country where the production of the identified commodity is feasible according to Step 1 of Part 2 above." The above language does not provide adequate guidance regarding quantification of the parameters C(PDT-LB) or C(SDT-LB). It is insufficient to provide a vague reference to "the principles in Sections 5.4 and 5.5, as applicable, in Module X-STR". The module LK-ASU is missing even the vague reference to "Sections 5.4 and 5.5, as applicable, in Module X-STR". The assessment team is aware that reference to specific equations in X-STR is provided in the parameter tables in Section 6.2 of each of the respective modules. Even with these equation references, however, guidance for quantification of these parameters is insufficient.
2. The parameters C(loss-PDT-LB) or C(loss-SDT-LB) are represented in LK-ASP and LK-ASU as being in units of t C per hectare. However, in quantification of the "CO2 emission leakage factor", these parameters are divided by an area value and the result is intended to be on a per-hectare basis, in both LK-ASP and LK-ASU. The results of the operation are not consistent with the principles of dimensional analysis.
Methodology Developer Response: Re 1: The remark referring to the principles in X-STR is a general one and the instructions making this operational are provided in the equations 12 and 13 and the tables for the parameters in section 6.2. We believe this together is quite sufficient as guidance. To avoid confusion we removed the remark and made the guidance more specific. LK-ASU section 5.1.6 has been amended accordingly.

Re 2. Closs-PDT and Closs-SDT have been corrected to tCO2e ha-1. This value and its unit thus serves as the leakage factor as amount of carbon per ha (see eqs 14 and 15) to be multiplied with the area of leakage and the proportion of undegraded wetland (see eqs 16 and 17). Therefore, the language at the top of section 5.3.2 has been adapted. LK-ASU section 5.1.6 has been amended accordingly.
Assessment Team Response: The finding response had not been reviewed by the assessment team prior to the discontinuation of assessment services. Given that the finding response had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of

that time.

NCR 117 Dated 1 Mar 2019
Standard Reference: Methodology Approval Process V3.7
Document Reference: M-TW_v1.0_SCS RD2_15FEB2019; BL-TW_v1.0_SCS RD2_15FEB2019
Finding: Section 6.1.4 of the Methodology Approval Process states the following: "Where the proposed methodology references tools or modules approved under the VCS or an approved GHG program, the validation/verification body shall determine whether the tool or module is used appropriately within the methodology."

The M-TW and BL-TW modules both reference E-FFC and E-BPB for quantification of emissions from fossil fuels and peat/biomass burning, respectively. The M-TW module also references M-REDD explicitly. However, it is notable that both M-REDD (for monitoring of project-scenario emissions) and BL-PL and BL-UP (for quantification of baseline emissions), which are paired with BL-TW and M-TW under certain circumstances, also contain procedures for quantification of emissions from fossil fuels and peat/biomass burning. This results in double-count of such emissions within the quantification framework and, thus, inappropriate use of the various modules within the methodology.
Methodology Developer Response: See the response to NCR 112.
Assessment Team Response: As it is not clear what response has been taken in response to this finding, the finding must remain open.
Methodology Developer Response 2: [A further response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response 2: Given that a further response to this finding had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 118 Dated 1 Mar 2019
Standard Reference: VCS Standard V3.7
Document Reference: M-TW_v1.0_SCS RD2_15FEB2019
Finding: Section 4.7.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios.”

1. Procedures for quantifying GHG emissions in the project scenario are provided in M-TW. However, these procedures contains various references to the "baseline", which are likely a holdover from other modules. These references introduce confusion into the quantification procedures.
2. M-TW references, in Section 5.3.2.2, the parameter "deduction_alloch". There are no other references, in M-TW or BL-TW, to this parameter.
Methodology Developer Response: This has been corrected
Assessment Team Response: Through review of the revised version of M-TW, entitled "M-TW_v1.0_SCS RD2_17APR2019", the assessment team can confirm the parameter in question has been renamed Deduction(alloch) for consistency with the parameter used in Equation 7. In addition, most of the references to "the baseline" have been removed. The only remaining reference is in Section 6.2, in the parameter table for parameter R(TREE). Therefore, the discrepancy has not been fully resolved.
Methodology Developer Response 2: [A further response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response 2: Given that a further response to this finding had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 123 Dated 1 May 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0015 M-REDD, v2.1_RD2 SCS_15FEB2019
Finding: Section 4.8.4 of the VCS Standard requires that “The methodology shall establish criteria and procedures for monitoring…"

Procedures for monitoring are provided in the module M-REDD. However, in that module, a revision (which may or may not have been intentional) has been made relative to the currently prevailing version of M-REDD. In the currently prevailing version, the "Net carbon stock change as a result of forest growth and sequestration..." is subtracted from the result of the preceding terms of the equation, which is appropriate, given that the outcome of Equation 1 is a calculation of project-scenario emissions (and so any carbon stock change attributable to growth in the project scenario offsets emissions in the project scenario). In the revision to M-REDD, the "Net carbon stock change as a result of forest growth and sequestration..." is added to the result of the preceding terms of the equation, leading to erroneous quantification of emissions in the project scenario.
Methodology Developer Response: [A response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response: Given that a response to this finding had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 124 Dated 1 May 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0015 M-REDD, v2.1_RD2 SCS_15FEB2019
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

Procedures for quantifying GHG emissions in the project scenario are provided in M-REDD. However, these procedures refer to the parameter A(WPS,i,t) in Equations 2 and 3 the parameter A(WPS,LB,i,t) in Equations 4 and 5. No further procedures are provided in M-REDD regarding quantification of these parameters.
Methodology Developer Response: [A response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response: Given that a response to this finding had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 125 Dated 1 May 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0042 BL-PEAT v1.0_SCS RD2_15JAN2019
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

1. In Section 5.2 of the BL-PEAT module, the parameter A(i,t) is referenced as "Total area of stratum i at year t in the baseline scenario (ha)". However, no procedures are provided regarding quantification of this parameter.
2. In Section 5.2 of the BL-PEAT module, it is stated that "For water bodies, the area Ai in Equation 1 must be replaced with Aditch-BSL,i,t." This statement appears to be correct in respect of the quantification of emissions from ditches and other open water bodies. However, for project activities with some areas of open water and some areas without open water, this statement will likely result in confusion, due to the following factors:
2a. Through thorough review of the BL-PEAT module, it appears the intent is that parameters GHG(peatsoil-BSL,i,t) and GHG(peatburn-BSL,i,t) are quantified as zero in respect of areas of ditches and open water bodies. While this is the intent, it is not clearly stated. Given the absence of clear instruction and given that the parameters GHG(peatsoil-BSL,i,t), GHG(peatditch-BSL,i,t) and GHG(peatburn-BSL,i,t) all make use of the same parameter for expansion to a totals basis in Equation 1, it is quite possible that a reader of the methodology could presume that, for areas of ditches and open water, the parameters GHG(peatsoil-BSL,i,t) and GHG(peatburn-BSL,i,t) somehow need to be quantified.
2b. It only "works" to instruct the user of the methodology to replace A(i) (or, more precisely, A(i,t)) with A(ditch-BSL,i,t) if areas of ditches and open water are differentiated as separate strata. The module X-STR does state, in Section 5.3.1, that "The area of channels and ditches must be quantified and treated as separate strata." However, X-STR contains no parallel guidance regarding other bodies of open water.
3. As referenced in Equation 1, the parameter GHG(peatburn-BSL,i,t) is on a per-hectare basis. In Section 5.5, module E-BPB is referenced for quantification procedures for this parameter. However, module E-BPB quantifies this parameter on a totals basis (already expanded to the number of hectares involved) in Equation 3.
Methodology Developer Response: [A response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response: Given that a response to this finding had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 126 Dated 1 May 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0042 BL-PEAT v1.0_SCS RD2_15JAN2019
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

1. In Section 5.1 of the M-PEAT module, the parameter A(i,t) is referenced as "Total area of stratum i at year t in the project scenario (ha)." However, no procedures are provided regarding quantification of this parameter, although a reference to X-STR is provided in Section 6.2 regarding quantification of the parameter A(i).
2. In Section 5.1 of the M-PEAT module, it is stated that "For water bodies, the area Ai in Equation 1 must be replaced with Aditch-WPS,i,t." This statement appears to be correct in respect of the quantification of emissions from ditches and other open water bodies. However, for project activities with some areas of open water and some areas without open water, this statement will likely result in confusion, due to the following factors:
2a. Through thorough review of the M-PEAT module, it appears the intent is that parameters GHG(peatsoil-WPS,i,t) and GHG(peatburn-WPS,i,t) are quantified as zero in respect of areas of ditches and open water bodies. While this is the intent, it is not clearly stated. Given the absence of clear instruction and given that the parameters GHG(peatsoil-WPS,i,t), GHG(peatditch-WPS,i,t) and GHG(peatburn-WPS,i,t) all make use of the same parameter for expansion to a totals basis in Equation 1, it is quite possible that a reader of the methodology could presume that, for areas of ditches and open water, the parameters GHG(peatsoil-WPS,i,t) and GHG(peatburn-WPS,i,t) somehow need to be quantified.
2b. It only "works" to instruct the user of the methodology to replace A(i) (or, more precisely, A(i,t)) with A(ditch-WPS,i,t) if areas of ditches and open water are differentiated as separate strata. The module X-STR does state, in Section 5.3.1, that "The area of channels and ditches must be quantified and treated as separate strata." However, X-STR contains no parallel guidance regarding other bodies of open water.
3. As referenced in Equation 1, the parameter GHG(peatburn-WPS,i,t) is on a per-hectare basis. In Section 5.4, module E-BPB is referenced for quantification procedures for this parameter. However, module E-BPB quantifies this parameter on a totals basis (already expanded to the number of hectares involved) in Equation 3.
4. In the currently prevailing version of the M-PEAT module, the parameters E(peatsoil-WPS,i,t) and E(peatsoil-BSL,i,t) are on a totals basis (already expanded to the number of hectares involved) in the equations in which the Fire Reduction Premium is calculated. In the revision to M-PEAT, the corresponding parameters GHG(peatsoil-WPS,i,t) and GHG(peatsoil-BSL,i,t) are calculated on a per-hectare basis, but no amendment has been made to the corresponding equations to account for this modification.
Methodology Developer Response: [A response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment

team's internal records.]
Assessment Team Response: Given that a response to this finding had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 127 Dated 1 May 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0013 E-BPB v1.1 18APR2019
Finding: Section 4.7.1 of the VCS Standard requires that "The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios."

Procedures for quantification of emissions from biomass burning are provided in E-BPB. However, the table in Section 6.2 of the module for the parameter C(AB_tree,i,t), which is present in the prevailing version of the module, has been removed from E-BPB. This introduces confusion into the procedures for quantification of emissions from biomass burning.
Methodology Developer Response: [A response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response: Given that a response to this finding had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 128 Dated 1 May 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0013 E-BPB v1.1 18APR2019; VMD0015 M-REDD, v2.1_RD2 SCS_15FEB2019
Finding: Section 4.7.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios.”

It is stated below in Section 4 of M-REDD that "The module is mandatory for REDD and CIW project activities." While it seems appropriate to make M-REDD mandatory for REDD and REDD-WRC project activities, M-REDD is, as it stands, poorly suited to handle stand-alone WRC project activities. Example of issues that arise when M-REDD is used for such activities are as follows:

1. Parameters from the "CP modules" (e.g., CP-AB and CP-D) are referenced throughout M-REDD. However, such modules are not required (per Table 4 of REDD+ MF) for use with stand-alone WRC project activities; therefore, there is a disconnect in the methodology guidance.
2. Step 1 of M-REDD contains procedures for "Selection and analyses of sources of land-use and land-cover (LU/LC) change data", and Step 2 of Section 5 of M-REDD contains procedures for "Monitoring deforestation" and "Monitoring forest degradation". It is understood that, per application of Table 1 of M-REDD; the sub-sections of Step 2 should be read as "Monitoring wetland degradation" in the context of stand-alone CIW project activities. However, Steps 1 and 2 reference remote sensing methods that are not likely to be capable of accurately monitoring degradation in non-forested wetlands. Step 1 refers to the use of medium-resolution remotely sensed imagery that seems incapable of detecting degradation of non-forested wetlands. Step 2 references "IPCC 2006 GL AFOLU, Chapter 3A.2.4 and the GOFC-GOLD 2008 Sourcebook for REDD for additional guidance", but this source does not contain guidance for assessing degradation of non-forested wetlands.
3. Furthermore, very few, if any, of the procedures under "Monitoring forest degradation" are logical in the context of project activities on non-forested wetlands. This section references degradation from "extraction of trees for illegal timber or fuelwood and charcoal" and "selective logging of forest management areas possessing a FSC certificate", but neither of these appear likely to be sources of degradation in non-forested wetlands.

In addition, M-REDD mentions "RWE-REDD project activities" in Step 2 of Section 5. This conflicts with Section 4 of M-REDD, which suggests that M-REDD does not apply to such project activities.
Methodology Developer Response: [A response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response: Given that a response to this finding had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.

NCR 129 Dated 1 May 2019
Standard Reference: VCS Standard V3.7
Document Reference: VMD0013 E-BPB v1.1 18APR2019; VMD0015 M-REDD, v2.1_RD2 SCS_15FEB2019
Finding: Section 4.7.1 of the VCS Standard requires that “The methodology shall establish criteria and procedures for quantifying GHG emissions and/or removals, and/or carbon stocks, for the selected GHG sources, sinks and/or reservoirs, separately for the project (including leakage) and baseline scenarios.”

1. It is stated in M-REDD that "This module produces the following parameter..." and then suggested that the module produces the parameter C(WPS-REDD,LB). The module does not produce this parameter.
2. The module produces the parameters GHG(WPS-PEAT,LB) and GHG(WPS-TW,LB). However, these parameters do not seem to be used in any downstream location in the quantification flow (i.e., there is a "dead end" in the quantification structure).
3. The module states that "For CIW-REDD, stand alone CIW and RWE-REDD project activities, for each land use u, areas AWPS,i,t in Equations 2 and 3 and AWPS,LB,i,t in Equations 5 and 6, equal ADefPA,u,i,t and ADefLB,u,i,t, respectively." This language is guaranteed to be a source of confusion. In large part, this is related to a gap between the parameters A(DefPA,u,i,t) and A(DefLB,u,i,t), which are quantified for each post-deforestation land use and are limited to areas where deforestation has occurred, and the parameters A(WPS,i,t) and A(WPS,LB,i,t), which are quantified uniquely for each year and stratum and are calculated for the entirety of the project area and leakage belt, respectively. An attempt has been made to mitigate any confusion through insertion of the words "for each land use u". However, this does not adequately address the situation.
4. The module duplicates quantification that occurs in other modules. For example, Equation 3 in M-REDD duplicates Equation 2 in M-TW.
5. The parameter tables in Section 6.3 of M-REDD reference modules BL-PEAT and BL-TW for parameters which should originate in modules M-PEAT and M-TW, respectively.
Methodology Developer Response: [A response to this finding had not been received by the assessment team prior to the discontinuation of assessment services. Please note that it was not feasible to budget time to review findings responses after 3 May 2019 and before discontinuation of assessment services was requested. It is possible that a response was sent to the assessment team regarding this finding during the period after 3 May 2019 and prior to the discontinuation of assessment services but, in such case, this response will not have been reviewed or saved to the assessment team's internal records.]
Assessment Team Response: Given that a response to this finding had not been reviewed prior to the time of discontinuation of assessment services, this finding remained open as of that time.