



Voluntary Carbon Standard Version 2007

Verification Report

Verification Report

Name of Verification company:	Date of the issue:
Scientific Certification Services (SCS)	8 September 2011
Report Title:	Approved by:
Redd Forests Downie VCS First Verification Report	Todd Frank
Client:	Project Title:
Redd Forests	Protection of a Tasmanian Native Forest – Project 3: Peter Downie

Summary:

This verification report explains the outcome SCS verification of the Protection of a Tasmanian Native Forest (Project 3: Peter Downie) for the monitoring period 1 March 2010 to 28 February 2011 against the registered project documentation and the VCS 2007.1 and its supporting documents.

SCS conducted the verification on the basis of the monitoring methodology VM0010 (Version 1), the monitoring plan contained in the validated VCS Project Document and the monitoring report. The verification included: a) checking whether the provisions of the monitoring methodology and the monitoring plan were consistently and appropriately applied, and b) the collection of evidence supporting the reported data.

SCS planned and performed the verification by obtaining evidence and other information and explanations that SCS considers necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

The project proponent is Peter Downie. The project developer is Redd Forests. SCS has confirmed that Peter Downie has the right to all and any reductions generated by the Project during the period 1 March 2010 to 28 February 2011.

In our opinion the GHG emissions reductions of the Protection of a Tasmanian Native Forest (Project 3: Peter Downie) for the monitoring period 1 March 2010 to 28 February 2011 are fairly stated in the monitoring report. The GHG emission reductions were calculated correctly on the basis of the approved VCS methodology VM0010 (version 1.0) and the monitoring plan contained in the validated VCS Project Document.

SCS is able to verify with a reasonable level of assurance that the emission reductions from the Protection of a Tasmanian Native Forest (Project 3: Peter Downie) for the monitoring period 1 March 2010 to 28 February 2011 amount to 73,443 t CO₂ equivalents after a 15% buffer pool deduction amounting to 12,961t CO₂ equivalents.

Work carried out by:

Number of pages:

Dr Carly Green (Lead Verifier)

Zane Haxton (Technical Reviewer)

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1 Introduction

1.1 Objective

The objective of this verification is to ensure that the Voluntary Carbon Unit (VCUs) claims made by Peter Downie in relation to the Protection of a Tasmanian Native Forest (Project 3: Peter Downie) for the monitoring period 1 March 2010 to 28 February 2011 are made in accordance with the project's validated Project Document and the VCS 2007.1 standard. The verification will assess if the project proponent adequately addressed unplanned reductions in project carbon stocks, any increase in project emissions or possible leakage outside the project boundary.

1.2 Scope and Criteria

The scope of the verification was to:

- Verify that actual monitoring systems and procedures are in compliance with the monitoring systems and procedures described in the monitoring plan.
- Evaluate the GHG emission reduction data and express a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement.
- Verify that reported GHG emission data is sufficiently supported by evidence.
- Ensure that reported emission reductions are complete and accurate in order to be verified.

1.3 Project Documents Reviewed

The following documents supplied by the project proponent were reviewed as part of this verification:

- Protection of a Tasmanian Native Forest (Project 3: Peter Downie) for the monitoring period 1 March 2010 to 28 February 2011 Monitoring Report (version 1.0 of 28 March, 2011 and subsequent updated version dated 18 August 2011)
- Protection of a Tasmanian Native Forest (Project 3: Peter Downie) Project Design Document, March 2011
- VM0010 – Methodology for Improved Forest Management – Logged to Protected Forest, Version 1.0
- spreadsheets of all data necessary for verification of the emission reductions (Downie – Project Calculations – 2011-03-15.xls and subsequent updated Downie – Project Calculations – 2011-08-18.xls)
- Redd Forests Fieldwork Standard Operating Procedures Version 2

- Redd Forests Standard Operating Procedures for Data Entry and Management Version 1.8
- Redd Forests Quality assurance, document control, storage and review: Standard Operating Procedures Version 1.2
- Redd Forests Standard Operating Procedures for Stratification Version 1.3

1.4 VCS Project Description

The project is designed to protect 7,666 hectares of native Tasmanian forest which would, if not for the project, continue to undergo selective logging or be clear-felled and converted to pasture. The project is located near the towns of Bothwell, Hermitage and Waddamana in the Central Highlands of Tasmania, Australia.

The project proponent, Peter Downie, has historically implemented a regime of selective logging and clear felling on most of the forest on his land. Interspersed areas of land have also been cleared for conversion to grass pasture. The landowners have asked Redd Forests to design an Improved Forestry Management (IFM) project that will generate carbon credits resulting from the avoided greenhouse gas emissions that will otherwise take place. This will allow the landowners to avoid continued forest degradation by utilising carbon finance. Protection of the project sites under an IFM model will both prevent the emissions generated from logging and allow the forest to approach its pre-logged conditions.

Project Name:	Protection of a Tasmanian Native Forest (Project 3: Peter Downie)
Project Registration No:	587
Methodology:	VM0010 (Version1.0)
Project's crediting Period:	1 March 2010 – 28 February 2034
Period verified in this verification:	1 March 2010 - 28 February 2011

1.5 Level of assurance

The verification report expresses a conclusion with a reasonable level of assurance about whether the reported GHG emission reduction data is free from material misstatement.

2 Methodology

2.1 Verification Approach

The approach taken to conduct this verification included:

- Review of project documentation including the approved selected methodology (VM0010), the project proponent's validated Project

Documentation and Monitoring Plan dated March 2011 and the first monitoring report for the period 1 March 2010 to 28 February 2011

- On-site inspections, including; review of performance records, interviews with project participants and local stakeholders, collection of field measurements, observation of established practices and testing of the accuracy of monitoring equipment
- Review of monitoring results and verification of the correct application of monitoring methodologies
- Review of calculations to quantify reductions in GHG emissions
- Review of the management systems to support the project operation and monitoring

2.2 Verification Team

The verification team consisted of Todd Frank (Project Manager), Dr Carly Green (Lead Verifier, VCS IFM Expert) and Zane Haxton (Technical Review).

2.3 Verification Timeline

The verification timeline covered the following elements:

- Preparations: Initial document review of the project documentation and issuance of initial findings occurred between 1 November 2010 – 5 November 2010
- On-site verification: Onsite field measurements, interviews with the project proponent and project developer's staff as well as review of QA/QC processes were conducted between 9 – 13th November 2010
- Assessment of client responses to issues found: The client responses were assessed between 14 – 25 March 2011
- Reporting, calculation checks and QA/QC: Conducted between 28 March – 1 April 2011

2.4 Stakeholder Interviews

The following people were interviewed during this verification to gather and support evidence of the implementation of the monitoring plan:

- Peter Downie – Project Proponent
- Ann Downie – Wife of the Project Proponent
- Stephen Dickey – Director Redd Forests
- Sarah Colenbrander – Project Manager Redd Forests
- Jarrah Vercoe - Project Manager Redd Forests

- Stephanie O'Donnell – GIS Specialist Redd Forests

2.5 Issuance of Findings

The SCS Lead Auditor issued 4 New Information Requests (NIR), 10 Non-Conformity Reports (NCR) and 1 Opportunity for Improvements (OFI), and re-analyzed new submissions. These discrepancies were resolved with responses formally submitted in the NIR/NCR/OFI forms and the details of these responses are in Appendix 1 to this report.

3 Verification Findings

3.1 Remaining issues, including any material discrepancy, from previous validation

This is the first verification event for the Protection of a Tasmanian Native Forest (Project 3: Peter Downie) project. During the course of the verification of the Downie project corrections were required to the validated project. These corrections related to the correct application of the methodology and subsequent calculations of expected greenhouse gas reductions as a result of this project. These corrections related to Equation 22 and 24 of the methodology. The subsequent corrections lead to a revised estimate of potential VCUs from this project and corrections in the project calculation spreadsheet which is now titled Downie – Project Calculations – 2011-08-18.xls).

For more detailed explanation of the changes please see Section 3.4 of this verification report.

<u>Conformance:</u>	Yes	☒	No	☐	N/A	☐
<u>Non-Conformity Reports:</u>	None					
<u>New Information Requests:</u>	None					
<u>Opportunities for Improvement:</u>	None					

3.2 Project Implementation

The appropriate project implementation was assessed during the site visit, by observing, reviewing operation records and interviewing relevant staff. During this process SCS was able to verify that the project has been implemented and operated as described in the VCS PD dated March, 2011 for the project.

The procedures to estimate the total carbon stock in selected pools within the project area and the uncertainty of the estimate at a given point in time have been implemented sufficiently. Verification of the project areas and the application of the FullCAM model to estimate forest carbon stock changes have been applied appropriately and the site visit documentation was found to be sufficient. Carbon stocks for all strata have been estimated as per the requirements of the methodology (VM0010).

<u>Conformance:</u>	Yes	☒	No	☐	N/A	☐
<u>Non-Conformity Reports:</u>	NCR 2011.1					
	NCR 2011.2					
<u>New Information Requests:</u>	None					
<u>Opportunities for Improvement:</u>	None					

3.3 Monitoring Components and Completeness

The project proponent's validated Monitoring Plan presents five areas of monitoring: Monitoring Project Area, Monitoring Carbon Stocks, Monitoring Natural Disturbances, Monitoring Illegal Logging and Monitoring Leakage. The parameters to be monitored for each of these components are specified in the projects validated monitoring and are discussed in Table 1 below.

Table 1: Monitoring Parameters

Key Monitoring Area	Relevant Parameter	Section of Monitoring Report Discussed	Findings
Project Area	Determination of uncertainty in project area. Calculated by comparing cadastral parcels. <i>Area covered by stratum i (Ai)</i>	Project Area – page6	The area of the project was compared based on cadastral ownership boundaries registered on the Tasmanian Governments Property database. This approach can lead to confirmation that the property within the project boundary has not changed hands (i.e. that the listed project proponent is the current owner of the land within the project boundary) and also that the project proponent has not increased land holding which is related to activity leakage monitoring requirements of the selected methodology. The discussion in the monitoring plan, conversations with the project proponent as well as evidence provided indicate

			that this parameter is adequately monitored in accordance with the project documentation.
Carbon Stocks	Determination of uncertainty in the forest inventory. Determination of carbon stock in aboveground trees per unit area per stratum. Calculated from plot data Determination of carbon stock change in aboveground trees. Extrapolated from FullCAM modelling and past plot data Determination of carbon stock change in aboveground trees. Calculated from plot data. <i>Diameter at breast height of tree (DBH)</i> Determination of uncertainty in carbon sequestration projections.	Carbon Stocks – page 6	These parameters will not be reassessed until the monitoring event scheduled for 2014, as detailed in the validated monitoring plan and PDD. For the purposes of the calculations the project ex-ante figures presented in the documentation are utilised for this verification event. The information presented is consistent with the information presented in the validated ex-ante estimations as expected.
Natural Disturbances	Determination of the presence and extent of natural disturbance. Assessed by comparing satellite imagery. Area burnt in stratum i at time t (A_{burn,i,t}) Site visit to assess natural disturbances.	Natural Disturbances – page 7	A description of the approach taken to assessing area burnt is described in this section and figures presented of the satellite images and interpretation. There were no fires within the project area during the specified monitoring period. A description of the site visit is presented in the

	Determination of carbon stock change in the carbon pools by natural disturbances.		monitoring report. Signed forms which provide evidence of the monitoring events was supplied and supported by interviews with Jarrah Vercoe and the project proponent.
			No natural disturbances were recorded and therefore the parameters were correctly reported as zero in the calculation spreadsheet provided.
Illegal Logging	Complete a Participatory Rural Appraisal <i>Result of limited illegal logging survey</i> <i>Area potentially impacted by illegal logging in stratum i (ADIST_IL, i)</i> <i>Total area of illegal logging sample plots in stratum i (APi)</i>	Illegal Logging – page 8	A Participatory Rural Appraisal was conducted at the first monitoring event as described in the monitoring report. The outcome of this found that illegal logging is not an issue in the area and therefore it is not necessary to assess the illegal logging parameters (i.e. 'area potentially impacted by illegal logging in stratum i (ADIST_IL, i)' and 'total area of illegal logging sample plots in stratum i (APi)'). In accordance with the methodology this PRA process will need to be repeated every 2 years.
Leakage	Evaluate the dimensionless market leakage factor of zero. <i>Merchantable biomass as a proportion of total above-ground tree biomass for stratum i (PMPi)</i>	Leakage – page 9	In accordance with the selected methodology the geographic boundaries for the area within the country where market leakage is most likely to occur was specified as Tasmania as this has historically been the market for timber from private native forests . The leakage factor of zero was justified as specified in the monitoring plan. The detailed response to the

approach is outlined in the SCS double approval elements report, which was completed as part of this verification.

In general it appears that the described project activity and monitoring events are in conformity with the registered project design document and selected methodology.

Conformance: Yes ☒ No ☐ N/A ☐

Non-Conformity Reports: NCR 2011.3
NCR 2011.8
NCR 2011.9
NCR2011.13

New Information Requests: NIR 2011.7
NIR 2011.10
NIR 2011.11

Opportunities for Improvement: OFI 2011.12

3.4 Accuracy of Emission Reduction Calculations

The calculations of the emission reduction in the spreadsheet and the monitoring report for the monitoring period were checked by SCS and found to be correct, as detailed below:

- The project area was quantified using commercial GIS software that has been shown to be reliable when compared against third party data stored in the Tasmanian Government Property Database.
- Vegetation cover typing was performed using industry best practice approaches.
- Stratified sampling of vegetation cover types was performed. SCS independently re-measured a subsample of tree measurements and, where trees could be relocated, re-measurements corresponded to the data, adjusting for growth since the original measurement.
- Calculations that estimate carbon stocks per hectare based on field measurements of biomass were reviewed in detail. SCS found no significant project emissions to be included in the calculations for the monitoring period in question.
- SCS performed an independent risk rating and selected the risk buffer proportion used by the project. This analysis is presented in the SCS double approval elements report dated March 2011.
- Calculations of net emission reductions were reviewed in detail and were found to use proper inputs and coefficients, and the calculations were performed correctly.

- The transfers of data used in the calculation of emission reductions were checked by reviewing relevant documents, with no remaining issues outstanding.

The calculations in this spreadsheet were presented in accordance with the registered project documentation and selected methodology with the exception of the NCRs and OFI presented in this report. All issues were corrected and closed during the verification. The project proponent has adopted a simplified approach to uncertainty propagation. This approach does not take into account the relative contribution of each parameters uncertainty to the overall project uncertainty. The approach taken results in the conservative reporting of total uncertainty in this project case. However an uncertainty propagation approach consistent with IPCC Good Practice Guidance should be considered.

Note:

Following the issuance of the final verification report for this project, the VCS identified an inaccuracy in the reported figures. On further assessment of the project documentation an error was found in the project spreadsheet relating to Equation 24 of the methodology. This equation can be summarised as follows:

Net carbon credits = CO₂ emitted from dead wood + CO₂ emitted from retired wood products - CO₂ sequestered in baseline scenario + CO₂ sequestered in project scenario – CO₂ emissions from disturbance/leakage

The specific parameters for the above are:

Equation 10 = CO₂ emitted from dead wood + CO₂ emitted from retired wood products - CO₂ sequestered in baseline scenario

Equation 22 = CO₂ sequestered in project scenario – CO₂ emissions from disturbance/leakage

Equation 22 therefore generates a positive value if the project scenario has a net reduction in greenhouse gases (i.e. where sequestration is greater than disturbance/leakage), and a negative value if the project scenario causes a net increase in emissions (i.e. leakage/disturbance is greater than sequestration). The product of Equation 22 should therefore be added to the total number of carbon credits the proponent can claim. However, Equation 24 leads to a subtraction of this value instead.

This means that the proponent subtracted credits from sequestration in both the baseline and project scenarios. The actual equation should require proponents to subtract sequestration in the baseline scenario and allow them to add sequestration in the project scenario.

During the process of determining the most appropriate way to represent this in the calculations the spreadsheet was adjusted to represent the product of Equation 22 as a negative number by recognising that the sequestration parameters be allocated

a negative sign and emissions a positive sign. This approach ensured that all Equations were applied correctly.

As an alternative approach the project developer proposed to adjust Equation 24 to add the sequestration rather than subtract, however the representation of sequestration as a negative number was considered the preferred approach.

Adjustments to the spreadsheets were made and it appears that the project developer applied both options which the verification process missed. As a result the buffer calculations were not consistent with the presented GHG benefits and subsequently VCS picked up on this issue.

The lead verifier consulted again with the project developer to resolve the issue and subsequently the project developer reissued the calculation spreadsheet and the project monitoring report.

To avoid future confusion on this issue, the lead verifier would recommend a correction to the methodology such that Equation 22 be corrected as:

Equation 22 = CO₂ emissions from disturbance/leakage - CO₂ sequestered in project scenario

<u>Conformance:</u>	Yes	☒	No	☐	N/A	☐
<u>Non-Conformity Reports:</u>	NCR 2011.4					
<u>New Information Requests:</u>	NIR 2011.14					
<u>Opportunities for Improvement:</u>	None					

3.5 Quality of Evidence to Determine Emission Reductions

The project performed several kinds of project-specific measurements including a combination of interviews, mapping, modelling, statistics and field patrols.

Land cover was assessed for natural disturbance changes and carbon stock losses using SPOT images taken at the end of the monitoring period supplemented by field patrols. The FullCAM model was used to project biomass stocks during the monitoring period. This tier 3 model is specific to the project area and is used by the Australian Government for reported to the United Nations Framework Convention on Climate Change.

Multiple strategies were used to obtain data quality and accuracy of numbers including checks by two data entry personnel. Quality assurance and quality control procedures exist and were used to check and clean data and calculations were checked by a minimum of two people.

The fieldwork is conducted by trained Redd Forest staff with expertise in tree identification and strong relationships with the project proponent have been developed to utilise their knowledge and experience of the project area.

<u>Conformance:</u>	Yes	☒	No	☐	N/A	☐
<u>Non-Conformity Reports:</u>	NCR 2011.5					
	NCR 2011.6					
	NCR 2011.15					
<u>New Information Requests:</u>	None					
<u>Opportunities for Improvement:</u>	None					

3.6 Management and Operational System

The quality assurance and quality control procedures in terms of sampling, stratification, maintenance and data reporting are appropriate. The project developer has formalised additional standard operating procedures since project validation. These standard operating procedures are relevant to data quality control both in the field and during data entry. The new standard operating procedures describe a series of field measurement and data entry checks that are conducted. Random checks conducted by the validator of both the measurements taken in the field plots and the translation of the field sheets into the data storage files indicate a high level of accuracy in field work and stored data. The creation of these additional procedures indicates a continuous improvement approach to the project management and operational system. During the field visit evidence of the implementation and ongoing improvement of this system was evident.

<u>Conformance:</u>	Yes	☒	No	☐	N/A	☐
<u>Non-Conformity Reports:</u>	None					
<u>New Information Requests:</u>	None					
<u>Opportunities for Improvement:</u>	None					

3.7 Net Greenhouse Gas Emissions

The project avoids 86,404 tCO₂-e being emitted each year compared with the business-as-usual conditions of ongoing selective logging. The net greenhouse gas emissions are reported to be 73,443 tCO₂-e, which take into consideration both the uncertainty deduction (0 tCO₂-e) and the risk buffer deduction (12,961 tCO₂-e).

Applying the calculated project baseline emissions and the results of the monitoring showed that no detectable forest degradation or natural disturbance was found within the project boundary. Avoided emissions are calculated using the inputs and methods stated in the project document, and achieved emission reductions are as stated in Table 3 of the monitoring report. As per VM0010, leakage was assessed based on an increase in annual extracted volume. The approach to demonstrate this showed that there was no increase and therefore in accordance with the project documentation, the leakage deduction factor of zero was appropriately applied. The

detailed analysis of this can be found in the SCS double approval elements assessment report.

In accordance with the project documentation, uncertainty was assessed to conform to VCS 2007.1 and was reported as 90% confidence interval. The uncertainty is calculated to be below 10% using simple propagation of error as specified in VM0010 and is therefore considered to be zero.

<u>Conformance:</u>	Yes	☒	No	☐	N/A	☐
<u>Non-Conformity Reports:</u>	None					
<u>New Information Requests:</u>	None					
<u>Opportunities for Improvement:</u>	None					

4 Verification conclusion

Scientific Certification Services (SCS) has performed the verification of the emission reductions that have been reported for the Protection of a Tasmanian Native Forest (Project 3: Peter Downie) for the monitoring period 1 March 2010 to 28 February 2011.

SCS conducted the verification on the basis of the monitoring methodology VM0010 (Version 1), the monitoring plan contained in the validated VCS Project Document dated March, 2011, and the monitoring report dated March, 2011. The verification included: a) checking whether the provisions of the monitoring methodology and the monitoring plan were consistently and appropriately applied, and b) the collection of evidence supporting the reported data.

SCS planned and performed the verification by obtaining evidence and other information and explanations that SCS considers necessary to give reasonable assurance that reported GHG emission reductions are fairly stated.

The project proponent is Peter Downie. SCS has confirmed that Peter Downie has the right to all and any reductions generated by the Project during the period 1 March 2010 to 28 February 2011.

In our opinion the GHG emissions reductions of the Protection of a Tasmanian Native Forest (Project 3: Peter Downie) for the monitoring period 1 March 2010 to 28 February 2011 are fairly stated in the monitoring report dated 23 March, 2011. The GHG emission reductions were calculated correctly on the basis of the approved VCS methodology VM0010 (Version 1.0) and the monitoring plan contained in the validated VCS Project Document of 14 March, 2011.

SCS is able to verify with a reasonable level of assurance that the emission reductions from the Protection of a Tasmanian Native Forest (Project 3: Peter Downie) for the monitoring period 1 March 2010 to 28 February 2011 amount to 73 443 tCO₂-e tonnes of CO₂e after a 15% buffer pool deduction amounting to 12 961 tonnes CO₂e.

VCS 2007 Verification Report

Reporting period:	From 1 st March 2010 to 28 th February 2011
Project Reductions	86,404 t CO ₂ equivalents
Buffer Pool Deduction	12,961 t CO ₂ equivalents
Verified Emission Reductions	73,443 t CO ₂ equivalents



Dr. Carly Green
Lead Verifier
Contractor to Scientific Certification Systems
September 8, 2011



Todd Frank
Program Manager, Greenhouse Gas Verification
Scientific Certification Systems
September 8, 2011

5 References

Project Specific Documentation

VCS AFOLU Project Elements Verification – SCS First Assessment in the Market Leakage and Non-Permanence Risk Assessment Double Approval Process 2009 - 2010: Protection of a Tasmanian Native Forest – Project 3 Peter Downie

Protection of a Tasmanian Native Forest (Project 3: Peter Downie) for the monitoring period 1 March 2010 to 28 February 2011 Monitoring Report (version 1.0 of 28 March, 2011)

Protection of a Tasmanian Native Forest (Project 3: Peter Downie) Project Design Document, March 2011

VM0010 – Methodology for Improved Forest Management – Logged to Protected Forest, Version 1.

Spreadsheets of all data necessary for verification of the emission reductions (Downie – Project Calculations – 2011-03-15.xls)

Redd Forests Fieldwork Standard Operating Procedures Version 2.

Redd Forests Standard Operating Procedures for Data Entry and Management Version 1.8

Redd Forests Quality assurance, document control, storage and review: Standard Operating Procedures Version 1.2

Redd Forests Quality assurance, document control, storage and review: Standard Operating Procedures Version 1.2

Redd Forests Standard Operating Procedures for Stratification Version 1.3

Background Documentation

Approved VCS methodology: “VM0010 – Methodology for Improved Forest Management – Logged to Protected Forest, Version 1.”

VCS Association, Voluntary Carbon Standard 2007.1, November 2008.

VCSA, VCS Sectoral Scopes (http://www.v-c-s.org/sectoral_scopes.html).

VCSA, Guidance for Agriculture, Forestry and Other Land Use Projects, 18 November, 2008.

VCSA, Tool for AFOLU Non-Permanence Risk Analysis and Buffer Determination, 18 November, 2008.

VCSA, Update to the VCS 2007.1: Tool for Non-Permanence Risk Analysis and Buffer Determination, 8 September, 2010.

VCS VT0001 Tool for the Demonstration and Assessment of Additionality in VCS Agriculture, Forestry and Other Land Use (AFOLU) Project Activities Version 1, 21 May, 2010.

6 Appendix 1: Verification Findings

NCR Number 2010.1 of 15 Dated 7th February 2011

Finding: The report provided is incorrectly titled 'Verification Report' and at many locations throughout the document verification is used. This report required under the standard and the methodology is a "Monitoring Report" not a verification report. Verification is conducted by a third party. Please ensure that the correct terminology is used throughout all documentation. In addition the title of the report is "Protection of a Tasmanian Native Forest Project 3 Peter Downie. This title is not consistent with the title presented in the PD for this project. This makes it difficult for a third party to evaluate it against the correct PD for this project area.

Proponent Response: The project title is now consistent among all documentation. The terminology has been corrected from 'verification' to 'monitoring' where required.

Validator Response: The client's response and changes to the documentation was adequate to close this issue out.

NCR Number 2010.2 of 15 Dated 7th February 2011

Finding: The methodology states that "The following parameters must be monitored in this methodology:

1. Illegal logging PRA
2. Result of limited illegal logging survey
3. Area burnt in stratum i at time t ($A_{burn,i,t}$)
4. Area potentially impacted by illegal logging in stratum i ($ADIST_{IL, i}$)
5. Total area of illegal logging sample plots in stratum i (AP_i)
6. Merchantable biomass as a proportion of total above-ground tree biomass for stratum i ($PMPI_i$)
7. Area covered by stratum i (A_i)
8. Diameter at breast height of tree (DBH)

These parameters will be required at each verification and are used in equations 16, 17, 19 at Step 4 and in Step 5. The monitoring report should cover each of these aspects individually as required and detailed in the methodology. It is unclear why the elements listed under the baseline scenario are being addressed as they do not appear to be consistent with the methodology requirements, nor what is presented in the PD.

Proponent Response: The necessary parameters have been identified and addressed in the Monitoring Report:

- "The first monitoring parameter, area covered by stratum i , was confirmed on the 8th of December 2010..." (page 6)
- "Current projections of the carbon stock are based on the original field data

(i.e. the parameters 'diameter at breast height of tree' and 'merchantable biomass as a proportion of total aboveground tree biomass', collected and calculated in 2010) and FullCAM projections for one year of growth." (page 6)

- "This was confirmed by the completion of a Preliminary Rural Appraisal. Between November 16 and 26 2010, key stakeholders in the timber industry were contacted (see the results in Table No. 02) and absolutely ruled out any risk of illegal logging. A site visit to through the Redd Forests Project area with the landowner on the 9th of November 2010, revealed no evidence of any timber extraction. Therefore, there was no need to determine an area potentially impacted by illegal logging or conduct any sample plots to quantify the figures." (page 8)
- "Fire (specifically the parameter 'area burnt in stratum i at time t '), pests and disease are therefore monitored through ongoing surveillance..." (page 7)

The elements originally listed under the baseline scenario have been corrected to the project scenario.

Validator Response: The client's response and changes to the documentation was adequate to close this issue out.

NCR Number 2010.3 of 15 Dated 7th February 2011

Finding: The report states that the monitoring period will be every 5 years, however the monitoring plan in the PD states that the monitoring will occur every year. The monitoring plan should be consistent with the validated PD otherwise a deviation from this plan is required to be approved. Please ensure the monitoring plan is correctly and consistently implemented and reported in the monitoring report.

Proponent Response: All documents have been corrected to state that monitoring events will be conducted annually, and that a more comprehensive monitoring event including a field assessment of carbon stocks must be completed every five years.

Validator Response: The corrections made to the monitoring report relating to the frequency which parameters will be monitored are now consistent with the monitoring plan. These corrections are evident in the Activity/Indicator/Frequency tables presented for each of the key project indicators (i.e. Project area, Carbon stock, Illegal logging rates, Natural disturbance and Leakage. Forest biomass will be monitored through field measurements every five years and was not required for this monitoring period. The parameters to be monitored annually, and relevant to this monitoring period have been addressed. The client's response and changes to the documentation was adequate to close this issue.

NCR Number 2010.4 of 15 Dated 7th February 2011

Finding: In accordance with the standards requirements, monitoring reports shall include all the monitoring data, calculations, estimations, conversion factors and other standard factors as defined in the monitoring clause of the applied VCS Program methodology and set out in the VCS PD. The monitoring report presented does not provide evidence of monitoring data specified in the validated monitoring plan nor does it present the ex-post estimation of GHG emissions and removals by the project such that a third party can verify the VCUs to be issued.

Proponent Response: The text now includes the recent satellite image, used to check whether natural disturbance occurred to date; and the results of the PRA. This was the data used to monitor the site. Moreover, the following information was added to the monitoring report:

“The project start date was 1 March 2010. Therefore, on 28 February 2011, the project proponent and developer are seeking to have one year’s worth of GHG emissions and reductions verified.

The project avoids 46 433 tCO₂-e being emitted each year compared with the business-as-usual conditions of ongoing selective logging. In this way, it prevents net emissions of 1 160 828 tCO₂-e by the project’s completion in 2034. The annual avoided emissions and the corresponding VCUs being claimed per strata are detailed in Table No. 03.

Table No. 03. GHG emission reductions for the project area per year.

Stratum:	Carbon emissions avoided by the project (tCO ₂ -e/year):	Voluntary carbon units generated once uncertainty and the VCS buffer have been considered (tCO ₂ -e/year):
Interlaken	9 380	7 105
Lake Echo	4 206	3 278
Lagoon of Islands (high biomass)	20 702	16 317
Lagoon of Islands (low biomass)	11 724	8 439
Mt Vernon	4 334	3 586
Southern Central	5 182	3 842
Total:	55 527	42 566

Validator Response: The client’s response and changes to the documentation was adequate to close this issue out. The data presented was consistent with the monitoring requirements described in the validated plan and the Verified Carbon Units presented in the Table are consistent with those validated in the calculator.

NCR Number 2010.5 of 15 Dated 7th February 2011

Finding: Throughout the monitoring report reference is made to observations made in the field from which conclusions were drawn. Please provide evidence of data collection and storage to support these assertions

Proponent Response: An additional table documenting the dates of this visit have been added. However, the site visit has been rendered merely supplementary with the use of recent satellite images instead to address the question of natural disturbance. Future site visits will include documentation of observations, including GPS tracking and photographs.

Validator Response: The client's response and changes to the documentation was adequate to close this issue out.

NCR Number 2010.6 of 15 Dated 7th February 2011

Finding: Monitoring natural disturbance using Google Earth is not good practice given the land cover image is unlikely to match the monitoring period of the project. Please present the SOP for monitoring land use change from disturbance that can ensure the land cover data from the actual monitoring period is being used.

Proponent Response: The monitoring plan has been revised to specify that a recent satellite image must be used, if available. In the first monitoring report, a recent SPOT image was obtained (as detailed in the revised report) for the analysis of project areas and to check for any natural disturbance. The monitoring plan is now, in itself, an SOP for the project proponent.

Validator Response: The client's response and changes to the documentation was adequate to close this issue out.

NIR Number 2010.7 of 15 Dated 11th March 2011

Finding: It is difficult to determine if all the data parameters required by Methodology and the validated Monitoring Plan are adequately monitored as the parameters are not always consistently referred to. Please present the results of the implementation of the monitoring plan for each of the identified parameters and evidence of the completion of the monitoring activity such that a third party can evaluate the monitoring approach against the monitoring plan.

Proponent Response: The Monitoring Report has been edited to ensure that it is more consistent with the Monitoring Plan. This should make it easier to assess the implementation of the Monitoring Plan to evaluate all identified parameters

Evidence for the completion of tasks has been included in the Monitoring Report or is available for separate review, including:

- Original satellite images
- Images adjusted for biomass analysis

- Tracklogs of site visits
- The outcome of the PRA

Logging data to demonstrate the absence of market leakage.

Validator Response: The changes to the Monitoring Report made it clearer that the monitoring approach taken was consistent with the approved monitoring plan.

NCR Number 2010.8 of 15 Dated 11th March 2011

Finding: Please clearly state the monitoring period (Date/Month/Year - Date/Month/Year) that the monitoring period relates to.

Proponent Response: The following text has been added to the Monitoring Report, under the heading 'Monitoring Period':

"This document is intended to enable the verification of the project by an external party for the period 1 March 2010 to 28 February 2011."

And under the heading '*Ex post* estimation of GHG emissions and removals':

"The project start date was 1 March 2010. Therefore, on 28 February 2011, the project proponent and developer are seeking to have one year's worth of GHG emissions and reductions verified."

Validator Response: This clarification was adequate to close this potential non-conformity.

NCR Number 2010.9 of 15 Dated 11th March 2011

Finding: Please ensure that the correct versions of PD and the approved methodology are referred to in the Monitoring Report.

Proponent Response: All documents have been corrected to state that monitoring events will be conducted annually, and that a more comprehensive monitoring event including a field assessment of carbon stocks must be completed every five years.

Validator Response: This clarification is consistent with the approved monitoring plan and is sufficient to close this potential non-conformity.

NIR Number 2010.10 of 15 Dated 11th March 2011

Finding: Please provide detail as to how natural disturbance was assessed from satellite imagery, especially in the case of images with obstructive cloud cover as in the case of Mount Vernon.

Proponent Response: The following text was added to the Monitoring Report:

"On 8 February 2011, the Redd Forests' Technical Consultant compared the original satellite image of the project site (cloud-free summer images acquired midmorning local time: 10-Jan-2010, 23:56:34 UTC and 15-Dec-2009 00:15:21 UTC, for the eastern and western images respectively) to the more recent images obtained from SPOT (acquired mid-morning local time: 29-Nov-2010, 00:06:09 UTC and 09-Jan-2011

00:17:25 UTC, for the eastern and western images respectively). The SPOT images from both timeframes were analysed for vegetation coverage with an [ISOCCLASS] unsupervised classification into 30 classes. The classification was based on a composite image formed from all four SPOT bands plus the digital elevation model (DEM), topographic aspect and topographic slope. The topography was included to counteract differentiation due to, for example, sun angle, while still allowing topographic effects on biomass or vegetation type to be differentiated through the SPOT radiances. Of the thirty classes, trees were typically in classes < 9, bare soil in classes > 25 and grass cover between these two. Classes greater than nine were therefore removed from the data array for clarity. These images were examined and contrasted at a zoom level of 1:10 000 to confirm that there has been no perceptible deforestation during the monitoring period (see Appendix 2).

Cloud-free images were unavailable for the project area at Mt Vernon and Southern Central. Thus, the image analysis was substantiated by a site visit by a Redd Forests Project Manager. The tracklogs from this visit are available for review.

...

To further check these reports, a site visit was conducted through the RFPA on the 9 November 2010 with Redd Forests and the landowner. This site visit confirmed no fire events have occurred during the project period commencing March 2010. In addition to fire monitoring, there is no evidence of any damage from other forms of natural disturbance such as insects.

There was therefore no need to further calculate deforestation and associated carbon stock changes from natural disturbance.”

Validator Response: This clarification is consistent with the approved monitoring plan and is sufficient to close this potential non-conformity.

NIR Number 2010.11 of 15 Dated 11th March 2011

Finding: Please provide evidence that the monitoring activities of the project area took place as described in the Monitoring Report and that the storage of such files/evidence is in accordance with the methodology.

- **Proponent Response:** The satellite images (original and analysed) have been included in the appendices of the Monitoring Report.
- The tracklogs are attached for review.

A snapshot of the filing structure and associated files (on a hard drive in the Redd Forests' Sydney office) is attached for review.

Validator Response: This clarification is consistent with the approved monitoring plan and is sufficient to close this potential non-conformity.

OFI Number 2010.12 of 15 Dated 11th March 2011

Finding: Text in the Monitoring report relating to illegal logging and leakage that is not directly related to the monitoring of the parameters adds confusion to the report. The report would be clearer and easier to follow if all unnecessary text was removed and the material refocused on presenting the results of monitoring the required parameters.

Proponent Response: The extra text has been removed, and only the analysis relating to the monitoring parameters is now included.

Validator Response: The changes made have improved the ability for a third party to verify the claims made.

NCR Number 2010.13 of 15 Dated 11th March 2011

Finding: Please present the required evidence that annual extracted volumes have not increased above the baseline threshold during the monitoring period as outlined in your monitoring plan.

Proponent Response: The following text has been added to the Monitoring Report:

Market Leakage:

Using the annual report from the Tasmanian Forest Practices Authority, figures on extraction (tonnage), area (hectares) and harvesting methods can be attained and compared annually. Figure No. 04 shows a steady decline in land area (ha) being subjected to harvesting from native forests across Tasmania (i.e. excluding the first two treatments).

Figure No. 04. Forest area under different harvesting regimes (2000 – 2010)¹.

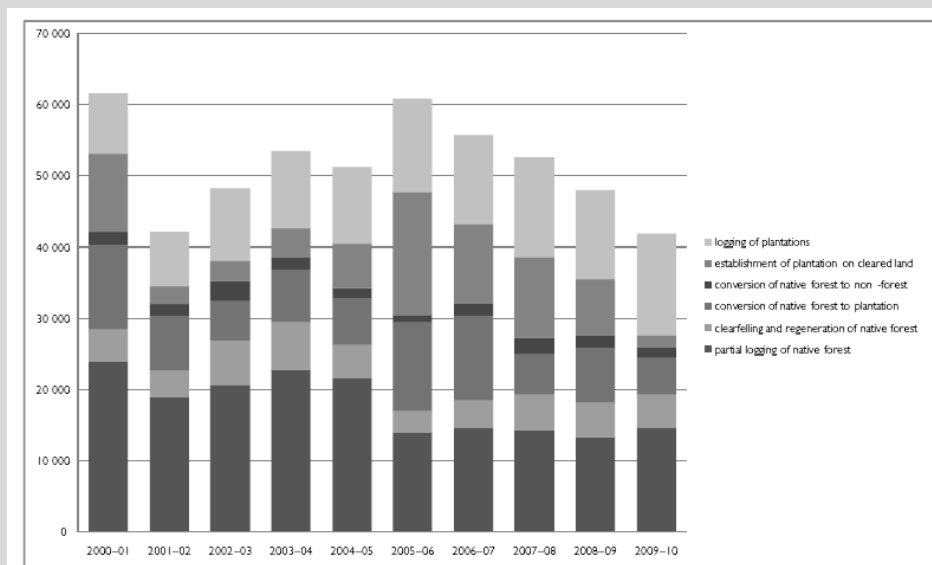


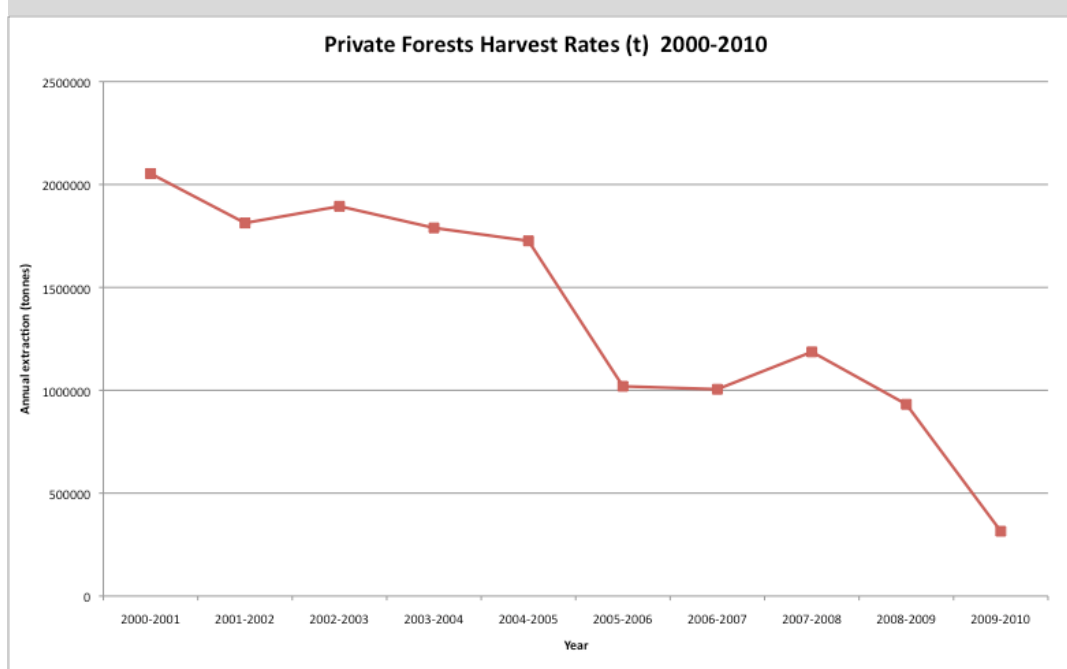
Figure I.3.1 Area of forest (hectares) by various treatments from 2000–2010

¹ Tasmanian Forest Practices Authority Annual Reports, www.fpa.tas.gov.au<accessed 11/3/2011>

Data from Private Forests Tasmania further confirms that there is a downward trend in harvested timber (tonnage) from native forests on private land in Tasmania. This is the most likely area for market leakage from the project to occur, due to the quota-oriented harvesting on public land and the sawlog-oriented harvesting on the mainland (see PDD 14 March 2011 version for more details). Figures No. 5 and 6 demonstrate and quantify the declining rates of timber extracted (tonnage) from private native forests across Tasmania.

Using the data from the Tasmanian Forest Practices Authority, the average area (ha) of native forest subjected to 'partial logging' on private land was 9840 hectares per annum between 2000 and 2009.

Figure No. 05. The tonnage of native hardwood extracted per year has fallen steadily over the past decade.²



Using data from Private Forests Tasmania (Figure No. 05), the average tonnage harvested for native hardwood (including sawlog, veneer, ply, pulp wood and 'minor log products') was calculated by adding the private forest harvest figures (tonnage) and dividing this by the number of years. The average quantity of extracted timber over the 10-year period was 1,373,233 tonnes per annum.

Figure No. 05 also indicates that during the year 2009-2010, the total quantity of extracted timber was 315,107 tonnes. This reflects a 77% decline from the average extraction of 1, 373, 233t per annum for the last ten years.

During the period 2009-2010 this tonnage of timber was extracted from an area 6 865ha, i.e. a 30% decline from the average area of 9840ha over the previous decade. The area subjected to logging for this period was derived from Figure No. 04, above.

² Private Forests Tasmania, annual reports, http://www.privateforests.tas.gov.au/publications/annual_reports <accessed 11/3/2011>

The State-wide figures are expressed in tonnage as this is the standard parameter for commercial forestry reporting within Australia. Given the obvious declines in both harvest area and tonnage of timber extraction, it is implicit that harvesting volumes are also declining. Converting this tonnage figure to volume would require establishing a wood density that can be applied to the entire forest estate. Given the variation between species (0.65–0.8t/m³) with no state-wide averages available and the fact that the reported extraction rates do not identify specific species, the application of an arbitrary wood density value would prove inaccurate and could not be justified.

An annual decline in the extracted tonnage of timber (which in the year 2009-2010 was 77% from the ten year average) directly translates to a decline in extracted volume. This decline demonstrates that there has been no shift in timber harvesting due to market leakage, and a leakage factor of zero was still considered appropriate.

The FPPs issued over the year 2010-2011 will not be available until after the end of the financial year. These figures will be used for assessment at the next monitoring event.

Validator Response: This clarification is consistent with the approved monitoring plan and is sufficient to close this potential non-conformity.

NIR Number 2010.14 of 15 Dated 11th March 2011

Finding: Please provide the calculation spreadsheet which details the approach taken to arrive at the final estimate of VCUs listed in the monitoring report.

Proponent Response: The spreadsheet has been submitted for review.

Validator Response: Review of the spreadsheet found the calculations were conducted correctly and the figures were consistent with those reported in the monitoring report.

NCR Number 2010.15 of 15 Dated 11th March 2011

Finding: The validated PD states that the project proponent will sign and date the monitoring report. Please provide the version of the monitoring report that is signed and dated.

Proponent Response: The monitoring report was signed by the project proponent and provided to the validator.

Validator Response: The response to this NCR was sufficient to close this non-conformity.