

VERIFICATION REPORT FOR THE YUROK TRIBE SUSTAINABLE FOREST PROJECT



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Summary:
This report describes the verification audit of the Yurok Tribe Sustainable Forest project (“the project”), an improved forest management project located in Northern California, which was conducted by SCS. The purpose of the verification audit was to assess the conformance of the project with the verification criteria. The verification audit was performed through a combination of document review, interviews with relevant personnel and on-site inspections. The project complies with all of the verification criteria, and the assessment team has no restrictions or uncertainties with respect to the compliance of the project with the verification criteria. The audit team has confirmed, with reasonable assurance, that the project has resulted in a total of 1,245,840 metric tonnes of CO₂-equivalent over the reporting period, as quantified in accordance with the verification criteria.

Table of Contents

1	Introduction	4
1.1	Objective	4
1.2	Scope and Criteria	4
1.3	Level of assurance	4
1.4	Treatment of Materiality	4
1.5	Summary Description of the Project	5
2	Verification Process	5
2.1	Method and Criteria.....	5
2.2	Document Review	5
2.3	Interviews	6
2.4	Site Inspections.....	7
2.5	Resolution of Any Material Discrepancy	7
3	Verification Findings.....	8
3.1	Project Design	8
3.2	Application of Protocol	13
4	Verification conclusion	19
5	Addendum.....	21

1 INTRODUCTION

1.1 Objective

The purpose of the verification audit activity was to conduct an independent assessment of the Yurok Tribe Sustainable Forest Project project (“the project”) to determine whether the project complies with the verification criteria, as set out in the guidance documents listed in Section 1.2 of this report.

1.2 Scope and Criteria

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

- The project and its baseline scenarios;
- The physical infrastructure, activities, technologies and processes of the project;
- The GHG sources, sinks and/or reservoirs that are applicable to the project;
- The types of GHGs that are applicable to the project; and
- The reporting period, as discussed in Section 3.1.4 of this report.

The criteria for verification were contained within the following guidance documents of the Climate Action Reserve (“the Reserve”):

- Forest Project Protocol Version 3.1 (“Forest Project Protocol”; 22 October 2009)
- Forest Project Verification Protocol Version 3.0 (“Forest Project Verification Protocol”; 1 September 2009)
- Program Manual (26 October 2011)
- Verification Program Manual (20 December 2010)

1.3 Level of assurance

The level of assurance of this report is reasonable.

1.4 Treatment of Materiality

In accordance with Section 1.6.4 of the Verification Program Manual, a quantitative materiality threshold of 1% was applied, given the quantity of emission reductions and removals reported for the project. In accordance with Section 1.6.5 of the Verification Program Manual, any instance of non-conformance related to a prescriptive requirement outlined in the Forest Project Protocol was considered a material misstatement.

1.5 Summary Description of the Project

The project is an improved forest management project located in Northern California.

2 VERIFICATION PROCESS

2.1 Method and Criteria

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

2.2 Document Review

The Project Design Description (PDD) for the project was the major document that was reviewed to ensure conformance of the project to the verification criteria. The most up-to-date version of the PDD, which complies with the verification criteria set out in Section 1.2 of this report, is entitled “Yurok Tribe Sustainable Forest Project CAR 777 Project Design Document” and dated 27 June 2013.

In addition, the following written documents (e.g., reports, memos, land deeds and titles) were reviewed to ensure conformance of the project to the verification criteria:

Document (Date Created)	Date Reviewed
“Field Measurement Protocol” (22 November 2011)	November 2011
“North Klamath Timber Cruise Specifications” (1 January 2012)	January 2012
“Report of Timber Cruise of Certain Timberlands known as The Yurok Project – Phase 1 In Humboldt and Del Norte Counties, California” (7 February 2011)	Throughout audit
“Appendix III, Title Report Phase I – Weitchpec, Pecwan and Cappell” (19 June 2008)	January 2012
“Yurok Tribe Summary Forest Management Plan” (not dated)	May 2012
“Ownership Interests Documentation” (30 June 2011)	May 2012
“Yurok Indian Reservation Forest Management Plan” (January 1996)	May 2012
“Forest Management Plan (1 Year Extension), Yurok Tribe” (21 December 2011)	May 2012
“Forest Management Plan (1 Year Extension), Yurok Tribe” (20 December 2012)	January 2013
“Modeling Report” (3 January 2013)	Throughout audit

Document (Date Created)	Date Reviewed
"Inventory Report" (17 September 2012)	Throughout audit

Where multiple versions of an above document were provided to the audit team during the course of the audit, only the most recent version is described above.

2.3 Interviews

Interviews constituted an important component of the audit process. The following personnel associated with the project developer and/or implementing partners were interviewed. The phrase "throughout audit" under "Date Interviewed" indicates that the individual in question was interviewed on multiple occasions throughout the audit process.

Individual	Affiliation	Date Interviewed
Nathan Voegeli	Yurok Tribe	Throughout audit
Walt Lara	Yurok Tribe	3-4 January 2012
Ron Reed	Yurok Tribe	3 January 2012
Elaina Albers	Yurok Tribe	3 January 2012
Rachel Rodriguez	Yurok Tribe	3 January 2012
Kyle Holland	Ecological Carbon Offset Partners, LLC	Throughout audit
William Kleiner	Western Timber Services, Inc.	3-4 January 2012
Bill Wilkinson	Baldwin, Blomstrom, Wilkinson, and Associates, Inc.	3 January 2012
Jared Gerstein	Baldwin, Blomstrom, Wilkinson, and Associates, Inc.	3 January 2012
Ryan Anderson	Ecological Carbon Offset Partners, LLC (contractor)	17 May 2012

In addition, the following individuals who were not associated with the project proponent and/or implementing partner provided information regarding the project.

Individual	Affiliation and Role	Date Interviewed

Individual	Affiliation and Role	Date Interviewed
Jim Robbins	California Department of Forestry and Fire Prevention ("Cal Fire"), Forester, Fortuna Resource Management	23 January 2013

2.4 Site Inspections

The objectives of the on-site inspections performed were to:

- Ensure that the geographic area of the project, as reported in the project documentation, conforms to Section 3.1.6 of the Program Manual;
- Select samples of data from on-the-ground measurements for verification in order to meet a reasonable level of assurance and to meet the materiality requirements of the project;
- Perform a risk-based review of the project area to ensure that the project is in conformance the eligibility requirements of the verification criteria; and
- Confirm the appropriateness of the methodologies for monitoring and measurement of the quantified GHG emission reductions.

In fulfilment of the above objectives, the audit team performed an on-site inspection of the project area during 3-7 January 2012. The primary activities undertaken during this visit were as follows:

- Interview project personnel regarding acquisition of the project area, forest inventory protocols employed in the quantification of baseline and project emissions, project management activities, determination of ownership over the project area and eligibility of the project under the Forest Project Protocol; and
- Re-measure a total of 20 forest inventory plots, as required by the Forest Project Verification Protocol.

In accordance with Section 5.5 of the Forest Project Verification Protocol, the quantity of inventory plots to be re-measured was determined on the basis of a project area between 20,000 and 22,499 acres and a "strong attestation" for all of the verification criteria set out in Checklist 5.5, Table 1.

In addition, follow-up meetings were held with project personnel on 15 May 2012, 17-18 May 2012 and 24 August 2012. The purpose of these meetings was primarily to further discuss the methodologies employed to quantify baseline and project emissions.

2.5 Resolution of Any Material Discrepancy

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

New Information Request (NIR): An NIR signified a need for supplementary information in order to determine whether a material discrepancy existed with respect to a specific requirement. Receipt of an NIR did not necessarily indicate that the project was not in compliance with a specific requirement. However, resolution of all open NIRs was a prerequisite for issuance of a verification statement.

Opportunity for Improvement (OFI): An OFI indicated an area that should be monitored or ideally, improved upon. OFI's were considered to be an indication of something that could become a non-conformity if not given proper attention, and were sometimes issued in the case that a non-material discrepancy was identified. OFIs were considered to be closed upon issuance.

All findings issued by the audit team during the verification process have been closed. In accordance with Section 3.6 of the Verification Program Manual, all findings issued during the verification process, and the impetus for their closure, are described in a separate List of Findings that is a private document.

3 VERIFICATION FINDINGS

3.1 Project Design

3.1.1 Project scope, type, technologies and measures implemented, and eligibility of the project

The project is an improved forest management project, as defined within Section 2.1.2 of the Forest Project Protocol. The audit team's findings with respect to the specific eligibility criteria for improved forest management projects, as set out by the Forest Project Protocol, are stated below. Unless otherwise indicated, the audit team can confirm the project's eligibility with respect to each condition.

Criterion	Verification Findings
"The project takes place on land that has greater than 10 percent tree canopy cover."	The audit team can confirm, on the basis of observation of the project area through the Google Earth software and during on-site audit activities, that average canopy cover in the project area is far greater than 10 percent.
"The project employs natural forest management practices, as defined in Section 3 of this protocol."	The project employs natural forest management practices. The adherence of the project to these practices is further discussed in Section 3.1.5 of this report.
"The project does not employ broadcast fertilization."	The audit team can confirm that the "Yurok Tribe Summary Forest Management Plan" (see Section 2.2 of this report) forbids fertilization within the "Phase I lands", which include the project area (see

Criterion	Verification Findings
	Section 3.1.8 for a discussion of ownership). In addition, the audit team observed no evidence of fertilizer application during on-site audit activities, and it is not common practice, in the experience of the audit team, for fertilizer to be applied in the forest type in which the project area is located.
"The project does not take place on land that was part of a previously registered Forest Project, unless the previous Forest Project was terminated due to an Unavoidable Reversal (see Section 7)."	A search on the Climate Action Reserve's website for projects registered in the state of California returned 4 projects located in Humboldt County. The Yurok Sustainable Forest Project was listed along with 3 other projects which were all located in the vicinity of Arcata, California, approximately 30 miles from the project location. A search conducted of the American Carbon Registry website showed 3 projects in California, only 1 of which is a forest project, and it is located in southern California. A similar search of projects registered under VCS returned no forest projects located in California. The audit team considers this adequate evidence upon which to conclude that the project area is not the site of a previously registered Forest Carbon Project.

3.1.2 Project Developer

The project developer is identified, within the Reserve online software, as Yurok Tribe. Through visits to the Yurok Tribe's offices in Weitchpec and Tulley Creek, review of the Yurok Tribe's website (<http://www.yuroktribe.org/>) and conversations with Yurok Tribe personnel, the audit team has confirmed that the Yurok Tribe is a legitimate entity.

3.1.3 Project start date

As indicated within Section 2(g) of the PDD, the project start date is 14 April 2011. The audit team can confirm, through review of document "Ownership Interests Documentation" (see Section 2.2 of this report) that this is the date on which the grant deed for the project area, with the grantor as the Western Rivers Conservancy and the grantee as the project developer, was recorded by the Humboldt County Recorder. The audit team agrees that the above date can reasonably be determined to be the date of "the initiating of forest management activities that increase sequestration and/or decrease emissions relative to the baseline", as required by the Section 3.2 of the Forest Project Protocol. Prior to acquisition of the project area by the Western Rivers Conservancy, the project area was owned and managed by Green Diamond Resource Company, as substantiated by document "Appendix III, Title Report Phase I – Weitchpec, Pecwan and Cappell" (see Section 2.2 of this report). As evidenced by the clearcuts which can be

observed within the project area through Google Earth software, as well as the Timber Harvest Plans (THPs) which were approved for harvesting operations within the project area, Green Diamond Resource Company managed the project area in a manner that is generally consistent with the baseline scenario, as discussed in Section 3.2.4 of this report. As discussed with the audit team during the on-site audit activities of 3-7 January 2012, the acquisition of the project area by the Western Rivers Conservancy was intended to be temporary, as ultimately it was. Since the acquisition of the project area by the project developer, the management activities undertaken have been very different than those in the baseline scenario, as discussed in Section 3.1.8 of this report. Therefore, the audit team agrees that the project start date indicated within the PDD complies with Section 3.2 of the Forest Project Protocol.

3.1.4 Reporting period

The initial reporting period is 14 April 2011 – 31 December 2011. The reporting period complies with the verification criteria identified in Section 1.2 of this report.

3.1.5 Project activities

The activities to be undertaken by the project are described in document “Yurok Tribe Summary Forest Management Plan” (see Section 2.2 of this report). The audit team agrees that, if management activities are undertaken in accordance with the above document, maintenance or increase in standing live carbon stocks over the project lifetime, as required by Section 3.9.3 of the Forest Project protocol, is likely to result. However, it will be the responsibility of future audit teams to ensure that the requirements of Section 3.9.3 of the Forest Project Protocol are met throughout the project lifetime.

The audit team agrees that, as commercial harvesting has not yet been planned or initiated within the project area, conformance to the requirements of Section 3.9.1 of the Forest Project Protocol is not required. While a management plan is in place (“Yurok Indian Reservation Forest Management Plan”; see Section 2.2 of this report) and has been extended until 31 December 2013 (“Forest Management Plan [1 Year Extension], Yurok Tribe”; see Section 2.2 of this report), this plan only covers lands within the Yurok Indian Reservation. It will be the responsibility of future audit teams to ensure that the requirements of Section 3.9.1 of the Forest Project Protocol are met at the time that commercial harvesting is planned or initiated within the project area.

The project complies with all requirements for natural forest management, as set out in Section 3.9.2. The specific findings of the audit team with respect to each requirement, where not addressed above, are set out below.

Requirement	Verification Findings
“Project consists of at least 95% native species based on the sum of carbon in the standing live pool...”	The audit team can confirm that all species listed within Table 1 of the PDD are native to the region, and the audit team did not encounter any other species in review of the inventory data. In addition, the audit team encountered no non-native woody species during on-site audit activities.
“Where the Project Area naturally consists of a	The audit team examined the calculations

Requirement	Verification Findings
mixed species distribution, no single species' prevalence, measured as the percent of the basal area of all live trees in the Project Area, exceeds the percentage value of standing live carbon shown under the heading 'Composition of Native Species' in Appendix F."	undertaken to produce the information presented in Table 1 of the PDD and no errors were detected. The information on Table 1 of the PDD is consistent with the observations of the audit team during the on-site audit activities. The project area is clearly a mixed-species area that is quite diverse. The audit team agrees that the Southern Cascades Mixed Conifer Assessment Area is the appropriate assessment area on which to base the assessment, and the maximum basal area threshold value that is reported within the PDD is consistent with that found by the audit team.
"On a watershed scale up to 10,000 acres (or the project area, whichever is smaller), all projects must maintain, or make progress toward maintaining, no more than 40 percent of their forested acres in ages less than 20 years..."	The analysis reported in Section 2(i)(iii) of the PDD adequately demonstrates conformance with the requirement. The project team examined the underlying calculations and no errors were detected. The existence of stands within the project area that are younger than 20 years primarily attributable to historic regeneration harvesting activity.
"Forest Owners must ensure that lying dead wood is retained in sufficient quantities..."	During on-site audit activities, the audit team observed no evidence that salvage harvesting has been undertaken since the project start date. The audit team also found no evidence that lying dead wood has been actively removed, and it is not likely that such wood would be actively removed, as most firewood cutting in the region of the project area is accomplished through felling of standing dead trees. The audit team has reviewed the calculations underlying the analysis reported in Section 2(i)(iv) of the PDD and confirmed that the project area currently contains standing dead wood that is in excess of both one metric ton of carbon per acre and 1% of standing live carbon stocks.

3.1.6 Project location

The project area is located on private land within the state of California, and thus complies with the requirements for project location as set out in Section 3.8 of the Forest Project Protocol.

3.1.7 Project compliance with applicable laws, statutes and other regulatory frameworks

As stated within the Attestation of Regulatory Compliance, the project was in material compliance with all applicable laws, statutes and other regulatory frameworks throughout the reporting period. Forest management activities in California, including all harvesting, road building and site preparation are closely regulated by the California Department of Forestry and Fire Protection (CalFire) under Title 14 of the California Code of Regulations (“the Forest Practice Rules”). Email correspondence with Jim Robbins, Forester with the Fortuna Resource Management Office of CalFire confirmed that no violations of applicable laws or regulations are known to have occurred on the subject property from 14 April 2011, the project start date, to 31 December 2011, the end of the current reporting period. Therefore, the audit team has concluded to a reasonable level of assurance that the project is in material compliance with all applicable laws, statutes and other regulatory frameworks.

In addition, the audit team confirmed that the Attestation of Regulatory Compliance form, attesting to the material compliance of the project for the duration of the reporting period, has been properly executed by an appropriate representative of the project developer. This form has been executed by Thomas O’Rourke, who holds the office of chairman of the Yurok Tribe, as confirmed through review of an article from the Times-Standard dated 9 November 2012 (http://www.times-standard.com/localnews/ci_21962915/thomas-orourke-selected-yurok-tribe-chairman; accessed 22 January 2013) and review of the Yurok Tribe website (<http://www.yuroktribe.org/government/councilmembers/councilmembers.htm>; accessed 22 January 2013).

3.1.8 Ownership

As discussed in Section 3.1.3 of this report, the audit team confirmed, through review of document “Ownership Interests Documentation” (see Section 2.2 of this report), that the project area is now owned in fee by the project developer. During the on-site audit activities and various follow-up meetings, the audit team discussed the systems were used to accurately determine the project area of 21,240.5 acres, as stated within Section 2(c) of the PDD. The audit team learned that this is the “lot” acreage, the basis of which is the legal description of the project area, as contained within document “Ownership Interests Documentation”. It should be noted that the Forest Project Protocol is not prescriptive with respect to the system to be used to report the total area of the project. The audit team agrees that lot acreage is an appropriate system for such reporting, as it is not likely to change over time (unlike area as determined through the use of a Geographic Information System) and it is more likely to be accurate than the “assessor acreage” kept on file by the assessor’s office. The audit team confirmed, through a risk-based sample of parcels, that the lot acreage for said parcels was appropriately calculated.

During the on-site audit activities of January 2012, the audit team inquired into the status of several parcels of questionable ownership. As observed through the Google Earth software, these parcels appeared to contain area within the boundaries of the Six Rivers National Forest (owned and administered by the USDA Forest Service). The audit team was told that it an act of the United States congress is required to change official National Forest boundaries, and so modification of these boundaries seldom occurs even where land ownership changes. The audit team was provided with the results of a ParcelQuest search for the parcels in question, which showed that each of them was owned by the Western Rivers Conservancy. While clearly the information on ownership retained by ParcelQuest is somewhat out of date, results of the search clarified, at the very least, that none of the parcels in

question is owned by the USDA Forest Service. The information provided to the audit team also served to increase the audit team's confidence in the control systems maintained by project personnel with respect to ownership.

The audit team confirmed that the Attestation of Title, attesting that the project developer holds appropriate title over the project area, has been properly executed by an appropriate representative of the project developer. The identity of the signatory to this form is the same as for the Attestation of Regulatory Compliance form, and the appropriateness of this signatory is discussed in Section 3.1.7 of this report.

Finally, the audit team reviewed the Project Implementation Agreement (PIA) which was entered into on 11 July 2013 and extends to a period 100 years from the effective date. The copy of the agreement that was reviewed by the verification team was provided by the Reserve on 5 August 2013. The document is signed by Gary Gero, President of the Reserve, and Thomas P. O'Rourke Sr., chairperson of the Yurok Tribe. Both signatures were acknowledged by notaries public, whose stamp and signatures are affixed. The document bears a stamp from the Humboldt County Recorder's office dated 19 July 2013. The legal description of the property contained in the amended PIA matches the legal description included among the supplementary materials provided by the forest owner with the verification materials, which were verified as a part of audit activities. The audit team, therefore, finds with a reasonable level of assurance that the Project Implementation Agreement has been executed and recorded in a manner that is consistent with the requirements of the Reserve.

3.2 Application of Protocol

3.2.1 Title and Reference

The Forest Project Protocol Version 3.1 was used by the project developer.

3.2.2 GHG Assessment Boundary

The sources, sinks and reservoirs included within the project's GHG assessment boundary are set out in Section 3(a) of the PDD. The determination of the project's GHG assessment boundary is consistent with the requirements for required sources, sinks and reservoirs as set out in Section 5.2 of the Forest Project Protocol. The project does not include an optional sources, sinks or reservoirs.

3.2.3 Baseline Scenario

The identification of the baseline scenario conforms to the requirements of Sections 6.2.1.1 and 6.2.1.2 of the Forest Project Protocol. The identification of this scenario is discussed in detail in document "Modeling Report" ("the modeling report"; see Section 2.2 of this report) and reported in the PDD.

The regimes modeled in the baseline scenario are described in Section 4.1 of the modeling report. As indicated within that section, the vast majority of the project area was assigned to one of the following silvicultural prescriptions in the baseline scenario:

- Growth throughout the 100-year modeling period (the GROW prescription)
- Selection harvesting (the SLRP prescription)

- Even-age management (the CLR1, CLR2, CLR3, CLR4 and CLR5 prescriptions)

As discussed with the audit team and as presented in Sections 4.1 and 4.2 of the modeling report, the GROW prescription was primarily assigned to stands with constraints that could reasonably be assumed to prohibit timber harvesting. These constraints are set out in Section 4.2. The audit team was able to confirm that the constraints are reflective of the regulatory reality within the region and that they have been mapped in accordance with the best available data. The assumption that such stands would be completely unavailable for harvest in the baseline scenario is the most conservative assumption that could be made with respect to the constrained stands.

The project area location puts the project under special watercourse protection requirements of the Coastal Anadromy Zone (See Table 1 of Forest Practice Rules, 2012 edition). For Class 1 streams, the rules require a 30 foot wide no-harvest zone, a 70 foot wide limited harvest zone, and a 50 foot zone in which canopy cover cannot be reduced below 50%. The 150 foot no-harvest buffer zone modeled in the baseline and project scenarios is conservative compared to the rules. For Class II streams in the coastal anadromy zone, the rules require buffer zones varying from 50 to 100 feet in width in which harvest is restricted so that canopy cover remains above 80 percent. The modeling plan's provision for a 100 foot wide buffer under the SLRP regime where post-harvest basal area must be above 300 square feet per acre is a reasonable approximation, given that the FPS model does not provide a way to target canopy cover directly when simulating selection harvest. The modeling plan's provision for a 50 foot wide buffer under the SLRP regime for Class III streams is also conservative with respect to biomass stocking, in comparison to the requirements of the Forest Practice Rules.

The management activities for even-age management conform to the requirements of the Forest Practice Rules. Although the table in Section 4.1 of the modeling report describes each of the even-age prescriptions as "Clear cut for Site Class I", it was demonstrated to the audit team during the site visit that the prescriptions CLR1, CLR2, CLR3, CLR4 and CLR5 were actually intended to pertain to the class indicated by the number at the end of the prescription, with CLR4, for example, indicating a prescription for Class 4 stands. Although not made clear in the Modeling report, the minimum harvest age for the even-age prescriptions does conform to the requirements of clause 933.1(a)(1) of the Forest Practice Rules. The minimum basal area threshold for commercial thinning for each even age prescription also conforms to the requirement of the Forest Practice Rules, clause 933.3(a)(1)(A) for the Coast Forest District, for the corresponding site class. As demonstrated to the audit team during the interviews with project personnel, the requirements of clause 933.1(a)(2)-(4) were complied with in the baseline scenario. Specifically, modeling units, as further described in Section 3.2.5.1 of this report, were specifically delineated in order to ensure that no modeling unit was larger than 20 acres. Clear cut adjacency requirements were modeled in FPS by requiring at least one unit not be harvested between any two selected clear cut units at scheduled 10-year planning intervals.

Clause 912.9 of the Forest Practice Rules requires that "Cumulative Impacts Assessment Checklist" be completed following Board of Forestry Technical Rule Addendum Number 2, Cumulative Impact Assessment. The cumulative effects analysis is required to be approved prior to approval of an individual THP. While it is impossible to know whether a THP incorporating the management regime described above would be accepted by state regulatory authorities, project personnel did determine to explicitly model the constraint imposed by the requirements for a "cumulative effects analysis" by restricting total harvested area to 26% of the project over the first modeling period. In support of the proposed harvest schedule, the audit team was provided with extensive documentation indicating that a slightly higher

harvest rate than that modeled was approved for land in the nearby Elk River watershed, even considering the cumulative effects concerns that historically existed with respect to this watershed. The audit team finds that the harvest intensity in the proposed baseline scenario can reasonably be expected to adequately address cumulative effects concerns.

While the project developer has assumed a Habitat Conservation Plan, the constraints of the Habitat Conservation Plan are not required by the Forest Project Plan to be explicitly addressed in the baseline scenario (in fact, Section 6.2.1.1 of the Forest Project Protocol explicitly lists Habitat Conservation Plans as a type of agreement that need not be considered a legal requirement). This position was substantiated by an email from Robert Z. Lee of the Reserve, who indicated the same in an email dated 22 March 2012.

The conformance of the baseline scenario to Section 6.2.1.2 of the Forest Project Protocol is discussed in Section 4(a)(ii) of the PDD. The conformance to these requirements has been satisfied through the second option of Section 6.2.1.2, which requires that the user “Providing evidence that activities similar to the proposed baseline growth and harvesting regime have taken place on other properties within the Forest Project’s Assessment Area within the past 15 years...” The audit team can confirm the validity of all assumptions, analytical procedures and data sources used for the analysis. As many THPs have been filed for management activities on land within the project area in the five years prior to the project start date, the audit team agrees that such THPs constitute the best indication of the financial feasibility of the baseline scenario. As indicated in Figure 1 of the PDD, the analysis demonstrates that the majority acreage under the above THPs has been assigned to even-age management (i.e., commercial thinning, clear cut, shelterwood removal and seed tree removal). The audit team agrees that the proposed baseline growth and harvesting regime is similar to the regime as planned within the above THPs, and thus can be considered financially feasible in accordance with Section 6.2.1.2 of the Forest Project Protocol.

3.2.4 Additionality

The GHG reductions occurring as a result of the project activity exceed the GHG reductions that would occur as a result of the baseline scenario discussed in Section 3.2.4 of this report. No timber harvest has occurred since the project start date, and thus the project is already leading to GHG reductions in excess of those that would occur as a result of the baseline scenario. In addition, the proposed management activity to occur as part of the project, as described in document “Yurok Tribe Summary Forest Management Plan” (see Section 2.2 of this report), are highly likely to GHG reductions in excess of those that would occur as a result of the baseline scenario, as demonstrated through the use of forest modeling (see Figure 2 within the PDD for a summary graph). Thus, the project meets the legal requirement test. In addition, as an improved forest management project, the project automatically meets the performance test, as set out in Section 3.1.2.2 of the Forest Project Protocol.

Finally, the audit team confirmed that the Attestation of Voluntary Implementation, attesting that the project has been voluntarily implemented for the duration of the reporting period, has been properly executed by an appropriate representative of the project developer. The identity of the signatory to this form is the same as for the Attestation of Regulatory Compliance form, and the appropriateness of this signatory is discussed in Section 3.1.7 of this report.

3.2.5 Quantification of Project GHG Emission Reductions and Removals

3.2.5.1 Quantification of baseline emissions

Baseline emissions were modeled using the Forest Projection and Planning System (FPS). As set out in Appendix B.1 of the Forest Project Protocol, FPS is considered to be an approved model for the state of California.

The source data for quantification of baseline emissions is derived from a forest inventory installed in the fall and winter of 2008 (termed the “WTS inventory” in the terminology of the PDD). As explained to the audit team during on-site audit activities, the primary purpose of the WTS inventory was to establish the value of a tract of land (which is larger than the project area and includes the project area in its entirety) for sale and acquisition. In addition, the WTS inventory was designed to be compliant with FPS. From review of document “North Klamath Timber Cruise Specifications” (see Section 2.2 of this report), the audit team can confirm that the inventory design conforms to all requirements of Appendix A of the Forest Project Protocol. In addition, from interviews with personnel responsible for planning and implementation of the WTS inventory, the audit team learned the following:

- Approximately 10% of the inventory plots were audited by Green Diamond Resource Company;
- Green Diamond Resource Company performed a thorough evaluation of measurements in the above set of inventory plots; and that
- Any plots considered, by Green Diamond Resource Company, to “fail” the audit were required to be re-done.

While none of the attestations in the above bullet points was independently confirmed by the audit team, all such attestations appear consistent with common practice with respect to the sale of timberland, wherein both parties have a keen interest in ensuring that the forest inventory, and thus the calculated timberland value, is as accurate as possible.

It should be noted that, as all inventory plots installed as part of the WTS inventory were temporary plots, the audit team was not able to confirm any of the actual inventory measurements. However, given the information provided to the audit team, the audit team was able to arrive at a reasonable level of assurance as to the quality of the inventory.

As described in document “Report of Timber Cruise of Certain Timberlands known as The Yurok Project – Phase 1 In Humboldt and Del Norte Counties, California” (see Section 2.2 of this report), the WTS inventory also employed a stratification system that was used in the quantification of baseline emissions. From interviews with the personnel responsible for planning and implementation of the inventory effort, the audit team has gained a reasonable level of assurance that this work was conducted properly.

In meetings with project personnel, the audit team confirmed, through review of layers of strata (as assigned in the WTS inventory) and constraint classes, that the “modeling units” (in the terminology of the modeling report; also known as “stands”) were appropriately delineated and assigned to strata as described in Section 5.1 of the modeling report. The audit team also confirmed, through appropriate cross-checks, that the data from the WTS inventory was appropriately imported into the FPS database for modeling, as described in Section 5.2 of the modeling report. The audit team has reviewed the output of

the automatic “cruise compilation” process employed by FPS and confirmed that it is reasonable, thus providing assurance that this process was conducted correctly. As a further check on the output of the “cruise compilation” process and the quality of the WTS inventory, the audit team was provided with a demonstration that the average CO₂-equivalent mass in aboveground trees for the project area as calculated through the “cruise compilation” process, is equal to the average CO₂-equivalent mass in aboveground trees for the project area as calculated through the quantification procedure discussed in Section 3.2.5.2.

As discussed in Section 5.3 of the modeling report, the FPS model required a site index value to be assigned to each stand. The audit team agrees that the procedure undertaken to assign site index to stands is reasonable and consistent with the intended usage of FPS. The audit team also agrees that the derivation of the factor used to convert values from the 50-year-base-age site index system used by FPS to the 100-year-base-age Timber Site Classification system used by the Forest Practice Rules is reasonable.

As discussed in Sections 5.4 and 5.5 of the modeling report, growth and yield for each stand in the project area was modeled over the 100-year modeling period. Through interviews with project personnel and thorough review of model output, the audit team has reached a reasonable level of assurance that the modeling was performed correctly and in a manner consistent with the baseline scenario discussed in Section 3.2.4 of this report. The audit team can confirm that the output values are within the range of expected growth patterns for the project area.

Both aboveground CO₂-equivalent mass in live trees only and aboveground CO₂-equivalent mass in live and dead trees were calculated as a function of (weighted) average basal area using separate regression equations. As explained and demonstrated to the audit team during meetings with project personnel, the input values for the regression equations were live and dead aboveground CO₂-equivalent mass (the quantification of which is described in Section 3.2.5.2 of this report), as calculated for each plot in the WTS inventory, and basal area, as calculated for each plot in the WTS inventory. During meetings with project personnel, the audit team reviewed the equations and their derivation and arrived at a reasonable level of assurance that the equations were derived in accordance with sound statistical practices. The audit team confirmed that belowground CO₂-equivalent mass was quantified as a function of live aboveground CO₂-equivalent mass in accordance with Appendix A.3, Step 2 of the Forest Project Protocol.

As required by Section 6.2.1 of the Forest Project Protocol, since the initial carbon stocks (as discussed in Section 3.2.5.2 of this report) are above the common practice value for the project's assessment area, the average live aboveground carbon stocks were not permitted to fall below the common practice value for the project's assessment area. The derivation of the common practice value is described in Section 4(a)(iii) of the PDD. The audit team has reviewed the input values and procedures for the derivation analysis and confirmed that they are correct. It should be noted that the Forest Project Protocol does not specifically allow for the derivation of a weighted average common practice statistic (stratifying between high and low site class); however, such an analysis is not explicitly prohibited. In addition, Appendix F of Version 3.2 of the Forest Project Protocol explicitly permits such an analysis. The audit team has confirmed that average live aboveground carbon stocks do not fall below the weighted average common practice statistic.

In addition to quantification of CO₂-equivalent mass in trees in the baseline scenario, it was also necessary for the CO₂-equivalent mass in wood products to be quantified. The two input values for the quantification procedure were the sum total gross (including merchantable and non-merchantable species) and net (including merchantable species only) cubic-foot volume harvested, per species, over the 100-year modeling period. The audit team reviewed the quantification procedure and confirmed that it was performed correctly and in conformance with Appendix C of the Forest Project Protocol.

Baseline emissions were first calculated on a per-acre basis and later expanded to the area of the project. As described in Section 4(a)(iii) of the PDD, an adjustment factor was applied to convert from “GIS acreage” (the acreage of the project area as determined through a Geographic Information System) to lot acreage. This was necessary to ensure conformance between the calculations of baseline and project emissions, as calculation of project emissions rely on the area of the “cruise” and “pre-cruise” strata, as determined through GIS acreage (see Section 3.2.5.2 of this report for a more detailed discussion of the stratification employed for quantification of project emissions). The audit team confirmed the soundness of the rationale behind the use of the adjustment factor, as well as the correctness of its application.

3.2.5.2 Quantification of project emissions

The source data for quantification of project emissions is derived from both the WTS inventory, as described in Section 3.2.5.1 of this report, and a forest inventory installed in the fall and winter of 2011 (termed the “EP inventory” in the terminology of the PDD). From review of document “Field Measurement Protocol” (see Section 2.2 of this report), the audit team can confirm that the inventory design for the EP inventory conforms to all requirements of Appendix A of the Forest Project Protocol. In addition, as required by Section 5.5 the Forest Project Verification Protocol, a subset of inventory plots was re-measured by the audit team. As required, a paired t-test (using an alpha-level of 20%) was employed to test the quality of the EP inventory. The EP inventory “passed” this t-test. In addition, the audit team observed that the inventory measurements were of generally sound quality.

The quantification of tree-level CO₂-equivalent mass in aboveground live and dead trees is described in Section 3(e) of the PDD and Section 7 of document “Inventory Report” (“the inventory report”; see Section 2.2 of this report). The audit team confirmed, through review of the C-sharp code and calculated biomass values, that the calculation of biomass for each tree in the dataset was conducted in accordance with the FIA biomass and volume equations that are available on the Reserve website. (This analysis constitutes the “verification plot” exercise required by Section 5.5 of the Forest Project Verification Protocol.)

Quantification of CO₂-equivalent mass in all portions of live trees and the aboveground portion of standing dead trees was calculated, at the project level, as described in the inventory report. A stratified sampling approach was used to quantify CO₂-equivalent mass in the “cruise” and “pre-cruise” strata and appropriately combine the total. For plots within the EP inventory where only basal area was measured, CO₂-equivalent mass was predicted using a regression equation using data from plots within the EP inventory where both basal area and CO₂-equivalent mass was measured. The audit team reviewed the calculations employed to determine the regression equation and confirmed that they are consistent with best practice for regression estimation. The audit team also confirmed that belowground CO₂-equivalent mass was quantified as a function of live aboveground CO₂-equivalent mass in accordance with Appendix A.3, Step 2 of the Forest Project Protocol. Expansion of values from a per-acre to a total-area basis was done with the use of the adjustment factor discussed in Section 3.2.5.1 of this report.

The uncertainty of the combined forest carbon inventory was quantified as described in Section 9.2 of the inventory report. For the “pre-cruise” stratum, the uncertainty was calculated using standard simple random sampling formulas as commonly applied in forestry. For the “cruise” stratum, the uncertainty was calculated using a “bootstrap” sampling approach. The audit team agrees that, while unconventional in forest inventory application, such an approach is statistically valid for estimation of uncertainty in this context. The audit team was able to review the script used to determine the bootstrap estimator of uncertainty and confirm that it was implemented correctly. The audit team also confirmed that the uncertainties in the “cruise” and “pre-cruise” stratum were correctly aggregated. Finally, the audit team confirmed that the confidence deduction was appropriately quantified in accordance with Appendix A.4 of the Forest Project Protocol.

As no timber harvest occurred in the project scenario for the duration of the reporting period described in Section 3.1.4 of this report, no quantification of CO₂-equivalent mass in wood products for the project scenario has occurred.

3.2.5.3 Quantification of secondary effects emissions

Secondary effects have been quantified in accordance with Equation 6.5 of the Forest Project Protocol. The audit team confirmed that the equation was appropriately implemented.

3.2.5.4 Summary of GHG emission reductions or removals

Quantification of GHG emission reductions and removals was appropriately conducted in accordance with the Reserve’s calculation workbook. The audit team confirmed the appropriate transfer of all values to this workbook. The audit team assumes that, as the calculation workbook is a product of the Reserve, the calculation procedures employed within the workbook appropriately conform to the Forest Project Protocol.

3.2.6 Quantification of Project Reversal Risk Rating

The reversal risk rating employed for the project is described in Section 7 of the PDD. The audit confirmed that the reversal risk rating was appropriately calculated in accordance with Appendix D of the Forest Project Protocol. Furthermore, the audit team confirmed that the reversal risk rating was appropriately transferred to the Reserve’s calculation workbook.

4 VERIFICATION CONCLUSION

The audit team affirms, with a reasonable level of assurance, that the GHG emission reductions and removals set out below have been quantified in accordance with the verification criteria, as set out in the guidance documents referenced in Section 1.2 of this report. Furthermore, the audit team affirms, with a reasonable level of assurance, that the project was in compliance with the verification criteria described above for the duration of the reporting period described in Section 3.1.4 of this report.

Table 1. Project Summary (all values tCO₂e)

Vintage	Baseline Removals	Project Removals	Secondary Effects	Net GHG Removals	Buffer Pool Contribution
2011	1,255,153	0	9,313	1,245,840	196,843

5 ADDENDUM

This Verification Report was revised on 23 July 2015 to change the SCS representative in the “Approved by” field on the cover page to conform with the COI Mitigation Plan to only include SCS personnel on the verification who did not work with Kyle Holland, a consultant for the Yurok Tribe. Brendan Grady, the Director of the Forest Management Program, who did not work concurrently with Kyle Holland during his tenure at SCS, replaced Christie Pollet-Young, the Director of the GHG Program, as the approving entity of the Verification Report. The Verification Report and Verification Statement were also updated to include the date of 23 July 2015.