
Forest Project Verification Report

Verification under the Climate Action Reserve (CAR)

Reporter/Member: Mattamuskeet Ventures I, LLC (Project Developer/Forest Owner) and Blue Source, LLC (Project Developer)

Project: Alligator River Avoided Conversion Forest Project, CAR 497

Emissions Year Verified: 2011

Scientific Certification Systems

Lead Verifier: Christie Pollet-Young

Technical Reviewer: Zane Haxton

Report Date: February 21, 2012

Table of Contents

1	Summary	3
2	Introduction	3
3	Project Description	4
4	Verification.....	5
4.1	Verification Objectives.....	5
4.2	Level of Assurance	6
4.3	Treatment of Materiality	6
4.4	Verification Scope	6
4.5	Verification Team.....	7
5	Verification Process	8
5.1	Sustainable Harvesting Practices	8
5.2	Estimates of Actual Onsite Carbon Stocks	8
5.3	Check for Decrease in Standing Live Carbon Pool	8
5.4	Check for Reversals	9
5.5	Actual Carbon in Harvested Wood Products	9
5.6	Quantifying the Project's Secondary Effects	9
5.7	Calculating Total Net GHG Reductions and Removals.....	9
5.8	Reversal Risk Rating	9
5.9	Attestation of Regulatory Compliance.....	9
5.10	Attestation of Voluntary Implementation	10
5.11	Attestation of Title	10
6	Verification Statement.....	10
	Appendix I: Verification Checklist	12

1 Summary

This report presents the findings of the verification assessment of the Alligator River Avoided Conversion Forest Project developed by the Project Developer Blue Source. This assessment covers the Alligator River Avoided Conversion Forest Project's greenhouse gas emission reductions reported to the Climate Action Reserve (the Reserve) for Emission Year 2011 (January 1 through December 31 of 2011). The annual verification was undertaken to evaluate the submitted Forest Project Monitoring Report and assess whether the documentation conforms to the Climate Action Reserve Forest Project Protocol, Version 3.1 (October 2009) and the Project Developer/Project Developer/Forest Owner's Project Design Document (May 2011 and appended on December 2011).

The evaluation was undertaken using the Climate Action Reserve Forest Project Verification Protocol, Version 3.0 (September 2009).

In the course of the verification assessment that is reported herein, the SCS verification team considered the issuance of findings which included New Information Requests (NIRs), Non-Conformity Reports (NCRs) and Opportunities for Improvement (OFIs). No findings were issued to the Project Developer.

On the basis of the information provided and the analyses completed, SCS was able to reach a decision on the initial emissions reduction reported by the Project Developer on the Reserve website. SCS verified the adequacy of the information provided in the Forest Project Monitoring Report, confirming that this document meets the requirements of the Climate Action Reserve standards. Further, SCS was able to reach a positive opinion on the claimed emission reductions and removals presented in the Forest Project Monitoring Report and on the Reserve website by Blue Source. Thus, SCS has verified 203,362 metric tonnes of CO₂e reductions and removals (CRTs or Climate Reserve Tonnes) from the Alligator River Avoided Conversion Forest Project for Emission Year 2011. With a mandatory buffer pool contribution of 42,503 CRTs, a balance of 160,859 CRTs should be issued to the Forest Owner, Mattamuskeet Ventures I, LLC.

2 Introduction

This report covers the verification of the calculated carbon stock for the Alligator River Avoided Conversion Forest Project for Emission Year 2011 submitted by Blue Source to the Climate Action Reserve. This report presents the findings of the assessment and provides description of the steps involved in the verification process. This is an annual verification of emission reductions and removals reporting for the Alligator River Avoided Conversion Forest Project.

3 Project Description

The Alligator River Avoided Conversion Forest Project is located in Hyde County, North Carolina, within the boundaries of a 2,372-acre Project Area that is bordered by agricultural fields and the US Fish and Wildlife Service Alligator River National Wildlife Refuge. The Project Area is located within the Northern Atlantic Coastal Plain—Swamp Hardwood and Cypress Forest Assessment Area and the forest is a mixture of pine and bottomland hardwoods species. Of the Project Area’s 2,372 total acres, 2,308 acres are forested by multi-aged stands of native species. The other 64 acres encompass roads and canals.

The Alligator River Avoided Conversion Forest Project is owned by Mattamuskeet Ventures I, LLC, a landholding group who is interested in preserving the natural resources of the area for the purposes of carbon sequestration, recreation, hunting, and aesthetic values. The forest project was developed by Blue Source, LLC, and has been technically supported by Winrock International and Environmental Services, Inc.

The entire Project Area (2372 total acres) has been placed under a permanent warranty easement deed through the Wetlands Reserve Program (WRP) of the USDA Natural Resources Conservation Service (NRCS).¹ The WRP easement precludes general development and active management, including such activities as wood product extraction, agriculture, and grazing. With the easement, the Forest Owner has avoided the conversion of the project area to agriculture. In lieu of this economic activity, the Forest Owner has chosen to develop an Avoided Conversion project that conforms to the FPP. The Forest Owner has agreed to promote and restore wetlands on their property as well as accepted the terms of limited land use rights on their property. Nonetheless, they have retained the carbon rights from the creation of the Alligator River Avoided Conversion Forest Project. In accordance with the WRP, the NRCS does not “assert any interest” in the carbon credits generated from the avoidance of GHG emissions that would have occurred once the land was converted from forestland to agriculture.² The carbon credits remain the property of the WRP participant, Mattamuskeet Ventures I, LLC.

Forty years ago, much of the forest in the general vicinity, including the Project Area, was slated to be converted to agriculture. In preparation for the conversion, the land was ditched and drained but allowed to naturally regenerate when the land was not cleared. In 2008, the Forest Owner began to clear 2,740 acres of their property, including the Project Area, to finally convert this land to agriculture. After 180 acres were cleared, the Forest Owner became aware that carbon revenues could potentially provide sufficient resources to maintain the entire property as forestland and suspended planned clearing and conversion activities. Thus, the Project Area delineated by the Alligator River Avoided Conversion Forest Project does not include the 180 cleared acres but only the lands that remain forested and this land was placed under the permanent warranty easement deed with the WRP.

¹ Filed in Hyde County, NC on May 14, 2010, Register of Deeds, Book 241, Page 719.

² Federal Register Volume 74, No. 10, Section 1467.20(b)

The sequestration associated with the naturally regenerating forest, combined with precluded commercial harvest, will provide reportable GHG reductions and removals net of the baseline scenario.

4 Verification

Scientific Certification Systems (SCS) is a global leader in third-party certification, auditing, testing services, and standards. Established as an independent third-party certification firm in 1984, our goal is to recognize the highest levels of performance in environmental protection and social responsibility in the private and public sectors, and to stimulate continuous improvement in sustainable development.

SCS is currently accredited to ISO 14065 for GHG Validation and Verification by the American National Standards Institute (ANSI) and offers verification under the Verified Carbon Standard (VCS) and the Climate Action Reserve. SCS also offers verification services for the American Carbon Registry (ACR) and the Climate, Community and Biodiversity (CCB) standards. SCS has verified over 42,000 acres of forest under the Climate Action Reserve and California Climate Action Registry's Forest Protocols. SCS has been verifying forest carbon offsets for over four years and conducted the first verifications of Forest Carbon Projects under the California Climate Action Registry (CCAR) Forest Sector Protocols. The Greenhouse Gas Verification Program draws upon SCS's established expertise in field forestry, biometrics, and verification activities to serve the global forest carbon market.

SCS launched its forest management certification program in 1991. In 1995, SCS's Forest Conservation Program was accredited as one of the first Forest Stewardship Council (FSC) endorsed certification bodies. Since that time, SCS has become a global leader in forest management and wood products certification. Our diverse set of certification services provides forestry operators and manufacturers with a full range of quality services.

4.1 Verification Objectives

The purposes of this verification assessment were to:

- Evaluate conformance with the verification criteria as defined in the Climate Action Reserve protocols;
- Assess the likelihood that GHG project has resulted in the GHG emissions reductions and removals stated in the project documents;
- Evaluate the project information and documentation, including forest inventory monitoring, forest growth projections, quality assurance and control, and risk management monitoring; and
- Evaluate reported project and baseline emissions, removals, emission reductions and removals.

4.2 Level of Assurance

SCS performed the core verification activities described by CAR in the Forest Project Verification Protocol to determine whether it had a reasonable level of assurance that the project's GHG removals and reductions are materially correct. Only projects in compliance with the CAR Forest Project Protocol are verified.

4.3 Treatment of Materiality

For the forest inventory, a material misstatement must be declared if the reported forest inventory does not appropriately describe the forest area and differs significantly from the verifier's assessment of the inventory.

The CAR minimum quality standard requires that the Project Developer/Forest Owner's forest inventory data be compared to the verifier's inventory data as described in Section 5.5 of the CAR Forest Verification Protocol Version 3.0. Estimates that do not fall within this threshold are considered materially inaccurate. For the soil carbon pool, the Reserve's minimum quality standard is guided by the requirements in "Methodology to Verify Soil Carbon Estimates on Avoided Conversion Projects" (April 2011).

The Project Developer/Forest Owner's inventory data was verified to the CAR minimum quality standard during the initial verification, which verified CRTs for Emission Year 2010 (May 14-December 31, 2010). For this reason, the Project Developer/Forest Owner's inventory is considered to be materially accurate for Emission Year 2011. The verification for Emission Year 2011, described in this report, is a desk review of the annual monitoring report(as described in Section 5), and therefore does not encompass any site visit activities.

4.4 Verification Scope

The scope of this verification encompasses desk verification activities for the Alligator River Avoided Conversion Forest Project against the following requirements of the Climate Action Reserve:

- Forest Project Protocol Version 3.1 (October 22, 2009)
- Errata and Clarifications issued for the Forest Project Protocol Version 3.1 (June 8, 2010)
- Forest Project Verification Protocol Version 3.0 (September 1, 2009)
- Verification Program Manual (December 2010)
- Program Manual (October 2011)
- Methodology to Verify Soil Carbon Estimates on Avoided Conversion Projects (April 2011)
- Updated Avoided Conversion Guidance with Soils (October 2011)

The verification was performed using the client-supplied Forest Project Monitoring Report and other supporting documentation.

The verification process involved:

- Assessment of continued compliance with the “sustainable harvesting practices” criteria of Section 3.9.1 of the Forest Project Protocol Version 3.1;
- Assessment of the degree to which changes in reported carbon stocks from previous years are within expected bounds resulting from reported harvest, growth, and disturbance effects;
- Investigation to detect the possible presence of a reversal;
- Assessment of actual carbon in harvested wood products calculations;
- Assessment of secondary effects calculations;
- Assessment of calculation of total net GHG reductions and removals.

4.5 Verification Team

Lead Verifier: Christie Pollet-Young, SCS GHG Senior Verification Forester

Ms. Pollet-Young is a Senior Verification Forester for SCS’s Greenhouse Gas Verification Program. Ms. Pollet-Young has over 15 years of experience in forestry, ranging from forest ecology research to conservation planning to carbon offset verification in both tropical and temperate climates. She has previously worked for the Smithsonian Tropical Research Institute’s Center for Tropical Forest Science and The Nature Conservancy in Peru. Ms. Pollet-Young completed a Master of Forest Science from the Yale School of Forestry and Environmental Studies, and graduated with high honors from the University of California, Berkeley with a Bachelor of Science in Environmental Science, Policy and Management. Ms. Pollet-Young is a lead auditor with SCS who has validated and verified forest projects under the California Action Reserve, the Verified Carbon Standard, and the Climate, Community and Biodiversity Standards.

Verifier: Larry Wilson, SCS GHG Verification Forester

Mr. Wilson holds a Bachelor’s degree in Ecology and a Master’s degree in Forestry, and is a Registered Professional Forester in California, RPF # 2563. He has 18 years experience as a forest biometrician and growth and yield modeling specialist. Mr. Wilson has worked for the USDA Forest Service as vegetation modeling specialist on several regional scale ecosystem management analysis projects dating back to 1993 and has 5 years experience with a major forestry consulting firm working primarily with private industry. He is also an accomplished database analyst and computer programmer. Mr. Wilson’s areas of expertise include forest inventory data processing, stand based forest inventory management, growth and yield simulation modeling, development of computerized calculation and classification algorithms, and systems analysis.

Technical Reviewer: Zane Haxton, SCS GHG Verification Forester

Mr. Haxton holds a M.S. in Forest Resources from Oregon State University and a B.S. from The Evergreen State College. A well-rounded forestry professional, Mr. Haxton held a wide variety of positions in forest research and management before coming to SCS, ranging from work on logging and tree planting crews to experience as a wildland firefighter and research assistant. A specialist in forest inventory, Mr. Haxton holds significant expertise in sampling design, inventory management and growth modeling. Mr. Haxton is well versed in a wide variety of methodological approaches for

forest carbon accounting, and is currently a verifier under the Climate Action Reserve, the Verified Carbon Standard and the Climate, Community and Biodiversity Standards.

5 Verification Process

Per the guidance of Section 10.2 of the Forest Project Protocol Version 3.1, verifier site visits are required only once every six years. Between site visits, as is discussed in Section 10.2.2, “an ISO-accredited and Reserve-approved verification body may optionally conduct a desk review of annual monitoring reports for the purpose of determining creditable GHG reductions and removals.” The desk review undergone to verify the annual reductions and removals for the Alligator River Avoided Conversion Forest Project is described in this section. The verification team worked through Checklist 5.3, supplied on page 12 of the Forest Project Verification Protocol Version 3.0, to evaluate continuing conformance to the Reserve’s standards (Appendix I).

5.1 Sustainable Harvesting Practices

Section 3.9.1 of the Forest Project Protocol Version 3.1 requires that “at the time commercial harvesting is either planned or initiated within the Project Area, the Project Developer/Forest Owner must employ and demonstrate sustainable long-term harvesting practices on all of its forest landholdings.” As stated in the PDD and guaranteed by the Warranty Easement Deed between the Forest Owner and the USDA’s Wetlands Reserve Program, no commercial forest harvesting has occurred or will occur within the Project Area. Therefore, the Project Developer/Forest Owner is not required to demonstrate sustainable harvesting practices by the criteria listed in Section 3.9.1.

Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this item of the checklist.

5.2 Estimates of Actual Onsite Carbon Stocks

The Project Developer/Forest Owner is reporting 203,362 metric tonnes of CO₂e reductions and removals (prior to the buffer pool contribution) for Emission Year 2011. The reported increment in live-tree carbon stocks is approximately 3.31 metric tonnes CO₂e/ac/yr, which was calculated based on the FVS growth and yield model for the forest type within the Project Area. As FVS is an approved model under the Forest Project Protocol, the proposed growth rate is acceptable for the projection of forest carbon stocks in the Alligator River Avoided Conversion Forest Project.

Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this item of the checklist.

5.3 Check for Decrease in Standing Live Carbon Pool

Checklist 5.3 requires that the verification body “determine if there has been a decrease in the project’s standing live carbon pool over any ten-year consecutive period not accounted for by allowable exceptions.” A ten-year period has not elapsed since the start date of the Alligator River Avoided Conversion Forest Project. **Therefore, this item of the Checklist does not apply to verification of the Alligator River Avoided Conversion Forest Project for Emission Year 2011.**

5.4 Check for Reversals

No decrease in carbon stocks has been reported by the Project Developer/Forest Owner since the Project's start date in 2010, and the Project Developer/Forest Owner has attested in the Forest Project Monitoring Report that no reversals have occurred. **Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this item of the checklist.**

5.5 Actual Carbon in Harvested Wood Products

Because no harvest has been reported within the Project Area, actual carbon in harvested wood products has not been reported by the Project Developer/Forest Owner. It was not necessary to determine that mill efficiency and decay rates are accurate for the assessment area. **Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this item of the checklist.**

5.6 Quantifying the Project's Secondary Effects

The Project Developer/Forest Owner's secondary effects calculation was verified using the Reserve's approved Forest Project Calculation Worksheet (April 11, 2011). The secondary effects calculations were identical to those provided by the Project Developer/Forest Owner. **Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this item of the checklist.**

5.7 Calculating Total Net GHG Reductions and Removals

The Project Developer/Forest Owner's calculation of total net GHG reductions and removals was verified using the Reserve's approved Forest Project Calculation Worksheet (April 11, 2011). The calculation of total net GHG reductions and removals was identical to that provided by the Project Developer/Forest Owner for EY 2011. **Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this item of the checklist.**

5.8 Reversal Risk Rating

The reversal risk rating of 20.9%, assigned at the initial verification, is present in the Forest-Owner-supplied calculation workbook. **Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this item of the checklist.**

5.9 Attestation of Regulatory Compliance

As per the requirements of Section 3.4.1 of the Verification Program Manual (December 2011), the desktop review included a review of the required attestations.

The required Attestation of Regulatory Compliance has been uploaded to the Reserve's online database and reviewed by the verification team. In addition to examination of this Attestation, Section 3.5.1.7 of the Verification Program Manual (December 2011) requires that a "risk-based review of project documentation" be performed to ensure that the project continues to pass the

Regulatory Compliance Test. Therefore, a risk-based review of project documentation was undertaken.

The Project Design Document uploaded to the Reserve website states that the Alligator River Avoided Conversion Forest project's activity is the preclusion of all future commercial timber harvests. Since no commercial timber harvest has occurred, regulatory non-compliance related to forest management is highly unlikely. Additionally, SCS requested and received from the Natural Resources Conservation Service a letter of compliance confirming that, to the knowledge of the Natural Resources Conservation Service, none of the conditions of the Warrantee Easement Deed were violated. Following this risk-based review, SCS has no reason to doubt the Project Developer/Forest Owner's attestation of regulatory compliance. **Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this requirement.**

5.10 Attestation of Voluntary Implementation

The required Attestation of Voluntary Implementation has been uploaded to the Reserve's online database and reviewed by the verification team. In addition to examination of this Attestation, Section 3.5.1.5 requires that "a risk-based review of relevant legal requirements which could require the project activity" be performed in order to ensure that the project continues to be implemented voluntarily. This risk-based review was performed by comparing the proposed project activity of maintaining forestlands under a Warranty Easement Deed to the common practice of agricultural activities in the Project Area, as is described in Section 6.3 of the Verification Report dated May 6, 2011. The verifier found no evidence that any activities of the project are required by law. **Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this requirement.**

5.11 Attestation of Title

The required Attestation of Title has been uploaded to the Reserve's online database and reviewed by the verification team. In addition to examination of this Attestation, the verification team contacted the Hyde County Register of Deeds Office on January 18, 2012 and confirmed that the two parcels which comprise the Project Area continue to be owned in full by Mattamuskeet Ventures I, LLC. **Therefore, SCS has attained a reasonable level of assurance that the Project Developer/Forest Owner is in conformance with this requirement.**

6 Verification Statement

Blue Source has supplied all the evidence requested during the verification process to enable SCS to arrive at an opinion on the accuracy of the calculated and claimed emission reductions and removals. SCS has determined that the Alligator River Avoided Conversion Forest Project, developed by Blue Source, is in conformance with the CAR Forest Project Protocols. Furthermore, all issues identified during the verification were resolved in conformance with CAR standards. The



Forest Project Monitoring Report and associated calculation workbook are considered accurate, complete, transparent, and free of material misstatements.

The Lead Verifier recommends that SCS issue a Verification Statement for 203,362 CRTs for the Emission Year 2011, with a buffer pool contribution of 42,503 CRTs and a balance of 160,859 CRTs recommended for issuance to the Project Developer/Forest Owner. These tonnes of CO₂e emissions reductions and removals are consistent with those reported by Blue Source on the Reserve website.

Appendix I: Verification Checklist

CAR Checklist -- Improved Forest Management (FPP 3.1 and FPVP 3.0)

Client: The Blue Source	Date: 1/17/12
Project: Alligator River Avoided Conversion Forest Project	Verifier: Christie Pollet-Young

Checklist to be used during all verifications

Checklist 5.3: ANNUAL MONITORING AND VERIFICATION :

Verification Criteria		As specified in § of FPP	C / NC	Notes
1. Change in Project Developer/Forest Owner or Landholdings	1.If Project Developer/Forest Owner has acquired additional forestlands outside of the project area, the newly acquired land must incorporate the newly acquired land in their demonstration of sustainable long-term harvesting practices within 5 years of the acquisition.	§3.9.1	N/A	See Section 5.1 of Verification Report.
2. Estimates of Actual Onsite Carbon Stocks	2.a. Changes in reported carbon stocks from previous years are within expected bounds resulting from reported harvest, growth, and disturbance effects.	§6.1.3, §6.2.4, §6.3.3, Appendix A, Appendix B	C	See Section 5.2 of Verification Report.
3. Check for Decrease in Standing Live Carbon Pool	3. Determine if there has been a decrease in the project's standing live carbon pool over any ten-year consecutive period not accounted for by allowable exceptions; review actions taken in compliance with FPP.	§3.9.3	C	See Section 5.3 of Verification Report.
4. Check for Reversals	4. Determine if a reversal has occurred and been properly compensated for per the requirements of the FPP.	§7.3	C	See Section 5.4 of Verification Report.

5. Actual Carbon in Harvested Wood Products	5. Determine if mill efficiency and decay rates are accurate for the assessment area.	§6.1.4, §6.2.5, §6.3.4, Appendix C	N/A	See Section 5.5 of Verification Report.
6. Quantifying the Project's Secondary Effects	6. Check calculations for quantifying secondary effects.	§5..2, §6.1.5, §6.2.6, §6.3.5	C	See Section 5.6 of Verification Report.
7. Calculating total net GHG reductions and removals	7. Check calculations for annual total net GHG reductions and removals.	§6	C	See Section 5.7 of Verification Report.
8. Reversal Risk Rating	8. Reversal risk rating should be the same used since the previous site verification.	Appendix D	C	The reversal risk rating of 20.94% is still in use. See Section 5.8 of the Verification Report.
Observations:				