MUTATA REDD+ VCS CCB VALID 15

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Summary:

This report represents the final validation report for the Mutatá REDD+ project in the Chocó-Darien region of Colombia. The project is part of the eight-project BioREDD+ program instituted in the Colombian Pacific with funding from USAID and implementation by multiple partners.

The proponent is the Cabildo Mayor Indígena de Mutatá. The crediting period and project lifetime is 30 years.

The audit process was desk-based and field based and took place from October 2014 until April 2015. The audit team consisted of three Rainforest Alliance Senior Auditors and a local Colombian forestry expert, as well as a geospatial consultant who provided remote support.

The field audit occurred from October 18-21 and included stakeholder meetings with over 100 individuals representing leadership and membership from both consejos. The audit team traveled with technical and community development staff from the BioREDD+ program, who provided useful interpretation of the sequence of project development. The audit team conducted a resampling of the permanent plots used throughout the entire BioREDD+ program to measure forest carbon stocks, which was in turn used for calibration of a LiDAR model.

The field audit and resulting document review identified 31 VCS NCRs and 14 CCB NCRs. NCRs, (non-conformity reports), are required to be corrected prior to successful validation.

The audit team also identified 4 FARs which shall be taken into account at future verification events. FARs are not required to be closed prior to validation and represent future areas of potential non-conformance, or in this case, a potential future safety risk that audit teams should account for in field audits.

The proponents submitted multiple rounds of evidence for closure of NCRs. On April 27, 2015, sufficient corrective actions and evidence had been submitted to enable all NCRs to be closed and to determine a positive validation conclusion.

The Rainforest Alliance audit team has determined to a reasonable degree of assurance positive conformance to the VCS Version 3, VCS VM0006 v2.1 methodology, VCS VT0005 tool, and the CCB Third Edition Standards. The *ex-ante* net emissions reduction is estimated at 4,850,763 tCO2e, with an estimated issuance of 4,241,776 VCUs, over the project crediting period. The validation statement is based upon the PD version 3.13 dated 24 April 2015, and the AFOLU-Non-permanence risk report version 1.9 from 10 April 2015.

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1 INTRODUCTION

Rainforest Alliance certification and auditing services are managed and implemented within its RA-Cert Division. All related personnel responsible for audit design, evaluation, and certification/verification/validation decisions are under the purview of the RA-Cert Division, hereafter referred to as Rainforest Alliance or RA. Rainforest Alliance is an ANSI ISO 14065:2007 accredited validation and verification body; additionally, Rainforest Alliance is a member of the Climate, Community, and Biodiversity Alliance (CCBA) standards, and an approved verification body with a number of other forest carbon project standards. For a complete list of the services provided by the Rainforest Alliance, see http://www.rainforest-alliance.org/climate.cfm?id=international_standards.

Dispute resolution: If Rainforest Alliance clients encounter organizations or individuals having concerns or comments about Rainforest Alliance and our services, these parties are strongly encouraged to contact the local Rainforest Alliance regional office or the RA-Cert Division headquarters directly. Formal complaints or concerns should be sent in writing.

1.1 Objective

The purpose of this report is to document the conformance of the design of the Mutatá REDD+ project with the requirements of the Verified Carbon Standard V3 and the Climate, Community, and Biodiversity Standards, Third Edition. The project was developed by the Embera-Katió communities that occupy the Indigenous Reserves (Resguardos Indigenas) of Mutata, hereafter referred to as “Project Proponent”. The project was developed with the help of several implementation partners including Chemonics International LLC, Optim Consulting, USAID, and ecoPartners LLC. The report presents the findings of qualified Rainforest Alliance auditors who have evaluated the Project Proponent’s systems and performance against the applicable standard(s).

1.2 Scope and Criteria

Scope: The scope of the audit is to assess the conformance of the Mutatá REDD+ project in Colombia against the Verified Carbon Standard V3 and the Climate, Community, and Biodiversity Standards, Third Edition. The objectives of this audit included an assessment of the project’s preliminary conformance with the standard criteria for validation. The project covers an area of 34,288 hectares. The land is under tenure rights of the Embera-Katio of Chontadural Canero, Embera-Katio of Jaikerazavi, and Embera-Katio of Coribí-Bedado. The project lifetime is 30 years, crediting period is 30 years, and estimates a net GHG reduction 4,850,763 tCO2e over the course of the project lifetime, with an estimated generation of 4,241,776 VCUs over the crediting period.

Standard criteria: Criteria from the following documents were used to assess this project:

- Verified Carbon Standard Program Guide Version 3.5;
- Verified Carbon Standard Version 3.4;
- Verified Carbon Standard Agriculture, Forestry and Other Land Use (AFOLU) Requirements Version 3.4;
- Verified Carbon Standard AFOLU Non-Permanence Risk Tool Version 3.2;
- Verified Carbon Standard Program Updates
- VCS VM0006 v2.1
- Climate, Community and Biodiversity Standards, Third Edition, 2013
- Rules for the Use of the Climate, Community, and Biodiversity Standards. December 2013

Materiality: The project *ex-ante* estimates that it will produce less than 300,000 tC02e in reductions per year, hence it is a VCS "Project" and subject to a 5% materiality threshold.

1.3 Level of assurance

The validation was conducted to provide a reasonable level of assurance of conformance against the defined audit criteria and materiality thresholds within the audit scope. Based on the audit findings, a positive evaluation statement reasonably assures that the project GHG assertion is materially correct and is a fair representation of the GHG data and information.

1.4 Summary Description of the Project

This project is an Agriculture, Forestry and Other Land Use (AFOLU) project under the Reducing Emissions from Deforestation and Degradation (REDD) project category. Specifically, the project is of the "Avoided Unplanned Deforestation & Degradation" (AUDD) project category.

The project is estimated to generate approximately 4,241,776 VCUs over 30 years. The project is located within the indigenous reserves of the communities of Embera-Katio of Chontadural Cañero, Embera-Katio of Jaikerazavi, and Embera-Katio of Coribí-Bedado. These communities are within the jurisdiction of the municipality of Mutatá, located in the department of Antioquia, in northwest Colombia. Belonging to the biologically diverse Choco-Darien bioregion, forests of the area are important nationally and internationally for the ecosystem services they provide. The project area forests, however, have experienced a continued reduction in tree biomass due largely to illegal logging. Project area forests are also an important source of income for local families, who periodically harvest timber when the economic needs arise. In accordance with Colombian constitutional law and subsequent resolutions in 1996 and 1999, the project lands belong to these indigenous communities, who have the right to self-governance, including the management of natural resources. Illegal timber extraction is historically an important source of income within the project zone and is the major focus of the REDD+ project. Following from the gradual degradation of forests caused by continual timber extraction, many forest areas are ultimately converted to agriculture and pasture.

The project aims to alleviate these pressures on the forests through the support of governance capacity (including individual property titling, land-use planning and conservation zone demarcation), the generation of alternative economic activities and income sources, and through capacity building in administration and management. These project activities, beyond protecting local forests and biodiversity, contribute to social and economic development in one of the poorest areas of Colombia. The effectiveness of these activities is partially dependent on their long-term economic success and wide-spread adoption. Since the project's inception, local communities have been actively participating in the project's formulation and implementation. The early involvement of participating communities has created awareness among community members and readiness for project implementation, including the project's endorsement by community legal representatives. This endorsement demonstrates the communities' long-term commitment to emissions reductions from avoided logging and deforestation.

The project objectives are threefold: (i) to mitigate climate change by reducing deforestation and forest degradation, and recuperation of already degraded forest lands; (ii) contribute to biodiversity conservation including High Conservation Values, and, (iii) foster sustainable development of local communities.

2 VALIDATION PROCESS

2.1 Method and Criteria

Audit Team Composition:

Auditor team names and positions	***Auditor qualifications***
Ian Starr **istarr@ra.org** **Technical Specialist** **Mutatá Lead auditor**	Ian is a forester and resource manager with personal and professional experience in North America, Central and South America, and Africa. His principal interest lies in improving conservation and forest management practices of forests, particularly in the tropics. He currently serves as the Technical Specialist for the Rainforest Alliance's Climate Program. To date he has participated in auditing or advising 17 carbon offset projects and contributed to national-level REDD discussions and analysis in Africa and South America. Ian also conducts trainings on the voluntary carbon standards and provides technical expertise to other Rainforest Alliance departments and projects. In addition, he has collaborated on a variety of forestry and natural resource management projects in both Amazonia, and the temperate hardwood forests of the Northeastern United States. These projects have included modeling the carbon sequestration potential of various reforestation systems as well as designing and participating in several forest inventories in the northern United States to plan timber sales based on natural regeneration. Ian received his Masters degree in Forestry from the Yale School of Forestry and Environmental Studies with a focus on tropical forest and resource management, and received his B.A. from Colgate University where he concentrated in Native American Studies with a focus on the Amazon Basin. He is fluent in Spanish and Portuguese.
Campbell Moore **Associate Manager, Carbon Services Unit, RA-Cert** ***Sr. Auditor*** **cmoore@ra.org**	Campbell is a forester and carbon expert with professional experience in Africa and Southeast Asia. In his role as Carbon Technical Specialist with Rainforest Alliance he conducts audits against six forest carbon standards, supervises methodology assessments, manages RA accreditation, and acts as technical expert on carbon for RA-Cert globally. Campbell has participated in more than 35 AFOLU carbon audits. Previous professional experience includes consulting work for GIZ Philippines performing carbon stock assessments of different forest types including agroforestry and plantation systems, as well as work centered on reforestation in Sri Lanka for the Environmental Leadership and Training Initiative, and working with Climate Focus on LULUCF policy issues. Campbell received his Master of Forestry from the Yale University School of Forestry and Environmental Studies. Prior to his time at Yale, Campbell worked in The Gambia for over two years as a Peace Corps Volunteer designing and implementing a wide variety of forestry, agroforestry, and agricultural projects. In addition to his Master of Forestry degree, he holds a B.A. in Environmental Studies from St. Mary's College. Campbell is fluent in Pulaar and Wolof and has some experience with Spanish.

Fabian Lombo **Local expert advising audit team**	Fabian is a Colombian native with extensive knowledge of forestry practices in Colombia.
Nick Wilson **Geospatial expert advising audit team**	Nick is a remote sensing and spatial analysis expert who has worked a range of domestic and international projects focused on land cover and land use change issues. He provides technical expertise to the Rainforest Alliance on REDD+ project conformance to VCS methodologies, accuracy assessment, and remote sensing. He is also a lead developer of the UrbanFootprint Scenario Planning Model, an open-source modelling platform for assessing the impact of future land use and policy decisions. As a lead analyst on the Vision California project he helped develop long range, high resolution land use scenarios for the State of California. Nick has also worked extensively with the Idrisi Land Change Modeler, a common land cover model used for assessing REDD+ baselines. His field experience includes nearly 3 years as a Peace Core Volunteer in the West African nation of The Gambia where he worked with the Gambian Forest Service and the National Beekeepers Association of the Gambia. He holds a Master's degree in Geography from Clark University and a Bachelor's degree in International Development and Anthropology from Dalhousie University.
William Arreaga, **Consultant Auditor** ***Auditor*** **Contact info:** **warreaga@ra.org**	Guatemalan; Ing. Agr. RNR from San Carlos de Guatemala University, and M.Sc. from CATIE, Costa Rica. He is also involved in a MBA program on Financial Administration in Guatemala. William served as lead auditor for FSC Forest Management, Chain-of-Custody, and legality services in Mesoamerica. His experience on carbon projects includes: the developing of two biomass allometric equations in Guatemala (natural forest and teak plantation); participation as a fellow at Winrock International (Norman Borlaug fellowship program) and as lead auditor in more than twenty validations and verifications (VCS, CFS, CCBA) in USA, México, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, Ecuador and Uruguay. He had received formal training as carbon validator in Vermont, and as lead auditor against ISO 14001 in Guatemala. As Senior Associate of Verification Services (RA-Cert staff), he has been the point of contact of the carbon services in Mesoamerica Region Office, but also provided technical assistance to South America Region Office. He is currently an independent consultant.
Lawson Henderson **Senior Internal Reviewer (RRA Reviewer)**	Carbon Coordinator with Rainforest Alliance (2012 – current). Education: B.S.F. in forest management from University of New Hampshire, 2005. Experience, Forest Management Associate with Rainforest Alliance, US Region (2008 to 2012). Chain of Custody Associate with Rainforest Alliance, US Region (2007-2008). Forest Land Surveyor for a private forest/civil engineering firm in Western Oregon for two years. Auditor on more than 20 FSC forest management and chain of custody audits and assessments. Lead auditor or auditor on 16 forest carbon projects, including 14 IFM projects. Performed VCS audits of ARR, IFM, & REDD forest carbon projects. Project manager on over 250 forest management and chain-of-custody projects. Completed Rainforest Alliance CoC Auditor Training in April 2008, Rainforest Alliance Carbon Verification and Validation Audit Training in March 2009, and

	Rainforest Alliance Lead Forest Management Auditor Training in June 2009. Successfully completed the Climate Action Reserve Lead Verifier Training for the Forest Project, and Urban Forest Project Protocol in September 2010, CAR Lead Verifier credentials renewed in June 2014. Successfully completed the ISO Quality Management Systems Lead Auditor Training Course (ISO 9001) in December 2010. ARB Lead Verifier credentials obtained in October 2012. Member of the Society of American Foresters and the Forest Guild.

The criteria used were the VCS Version 3 and the VM0006 v2.1 methodology and associated tools, as well as the CCB Standards 3rd Edition. Please see Section 1.2 above for full criteria. The method employed in the validation was desk-based and field based with an experienced Rainforest Alliance audit team consisting of three Senior Auditors from Rainforest Alliance. Two auditors conducted high-level interviews with institutional level actors supported by a local expert for cultural and legal interpretation and translation, but who did not visit the Mutatá site. The third and lead auditor for the Mutatá BioREDD project visited the Mutatá project in person to corroborate information provided in the PD and by other members of the audit team. The evaluation of remote sensing methods and outputs, including use of LiDAR was supported by Nicholas Wilson, a content expert advising the audit team on this aspect of all the BioREDD projects.

The audit team conducted an extensive document review prior to the field audit, which was used to develop a risk-based sampling approach for the audit focusing on biophysical data, social data and community input, and legal conformance of the project. The CCB Public Comment process was initiated before the field audit to solicit additional input from both internal and external stakeholders, however no comments were received. This project is one of eight REDD+ projects in the Colombia Pacific instituted as part of the BioREDD+ project funded by USAID. The field audits of the eight BioREDD+ projects took place in largely sequential field audits from October-December 2014. Many aspects of the projects are similar across all of the BioREDD projects, particularly the PD format and the carbon accounting methods.

The audit team's assessment of the CCB Standards' community indicators, right of use, baseline scenario, and additionality assessment was heavily informed by stakeholder interviews conducted by the audit team at all relevant levels from individual farmers and illegal loggers (agents of deforestation and degradation) to consejo councils and leadership to Ministry of Forestry officials and local government representatives. Please see relevant details below in Section 2.3.

Forest carbon stocks were evaluated across all eight BioREDD+ as a unit. This is because the estimation of carbon stocks was treated as a single inventory across all eight projects. Field plot data was used only for calibration and validation purposes of the LiDAR model used to estimate forest biomass. The audit team visited seven of fifteen 1 hectare permanent plots that were part of the project in a systematic sampling method designed to be representative of and utilized for all the projects in aggregate. The audit team also evaluated the LiDAR and remote sensing analyses and methods in aggregate across all projects. This was accomplished through an office visit by the geospatial expert supporting the audit team to the offices of GeoEcoMap in California, USA as well as in-person meetings between Campbell Moore the project manager/lead auditor in Maryland USA with the principal of GeoEcoMap. Several supporting documents produced by GeoEcoMap are relevant across the entire BioREDD+ program and were evaluated as such.

Right of use, legal conformance, and additionality were assessed with the input of relevant government officials including those from INCODER (the agency responsible for permitting consejos and indigenous resguardos), the Ministry of Forestry of Colombia, and local corporations responsible for natural resource management at the departmental level in Colombia.

Following the field audit and office audit the audit team presented the proponents with a Draft Validation Audit Report identifying areas of conformance (to be confirmed in an updated PD presented after closure of NCRs) and areas of nonconformance for which the proponents shall take corrective action or provide additional evidence of conformance.

The audit team received responses to the draft report non-conformances on February 6th, 2015, and issued the draft final report on March 9th, 2015. The draft final report contained open NCRs for both the VCS and CCB standards. The audit team received additional evidence to address any remaining NCRs on March 16th, 2015 and held consultations with the various implementing partners responsible for addressing them. Additional evidence was required because of open non-conformances and additional evidence was submitted on April 13th 2015, and again on April 24, 2015. The proponent was able to fully address all identified nonconformances

The final validation report was approved and demonstrates full conformance with both the scope of this audit as listed in section 1.2 of this document.

2.2 Document Review

Ref	Title, Author(s), Version, Date	Electronic Filename
1.	Non-Permanence Risk Report Chigorodo Mutata Redd+ Project, Mauricio Mira Ponton, v3.0,Sept. 9, 2014	NPR MUTATA REV 3.pdf
2.	Project Description, Ecological Carbon Offsets Partners,LLC (ecoPartners),Offsetters,ClearSky Climate Solutions, v2.1, Nov 14 2014	Mutata PDD Final Draft v2.3.pdf
3.	Resolución No 24 de 24 Mayo 1996, INCODER, version N/A, May 24 1996	R0024-24-05-96-Chontadural Cañero.pdf
4.	Resolución No 28 de 31 Mayo 1999, INCODER, version N/A, May 31 1999	R0028-31-05-99-Jaikerazavi.pdf
5.	Acuerdo 88 de 21 Oct 2009, INCODER, Oct 21, 2009.	A088-21-09-2009-Jaikerazavi.pdf
6.	Carta de Intención USAID/BioREDD, author/NA, June 26 2013	Carta de Intención Mutatá.pdf
7.	Mutata Theory of Change Model (Annex AC), BioRedd, v1.0, Date N/A.	Mutata Theory of Change Model v1.0.xlsx
8.	Guia De Quejas Y Reclamos_Cabildo Mayor Indígena De Mutatá (ANNEX E), BioREDD, versión and date not available	Guia De Quejas Y Reclamos_Cabildo Mayor Indígena De Mutatá.Docx
9.	Presupuesto Mutata, BioREDD (ANNEX AD), version and date not available, October 16 2014	Presupuesto Mutata oct16.xlsx
10.	VM0006 Accounting MUTATA, author and date N/A, v8.21	VM0006 Accounting MUTATA v8.21.xlsm
11	Socioeconomic study " Reporte del Subcontrato BR-SUBK-FP-007" (Annex Z), Universidad de Antioquia,version N/A, Dec 2013	Producto 5 Choco Norte 18-12-2013 USAID_BIOREDD+.pdf
12	Renjifo, L. M., A. M. Franco-Maya, J. D. Amaya-Espinel, G. H. Kattan y B. López-Lanús (eds.).	Anfibios amenazados.docx

	2002. Libro rojo de aves de Colombia. Serie Libros Rojos de Especies Amenazadas de Colombia . Instituto de Investigación de Recursos Biológicos Alexander von Humboldt y Ministerio del Medio Ambiente. Bogotá, Colombia.	
13	RODRIGUEZ, José Vicente, 1998. Listas preliminares de mamíferos colombianos con algún riesgo a la extinción. Informe final presentado al Instituto de Investigación de Recursos Biológicos Alexander von Humboldt.	Aves amenazadas.docx
14	RUEDA, José Vicente, 1998. Listas preliminares de anfibios colombianos con algún riesgo a la extinción. Informe final presentado al Instituto de Investigación de Recursos Biológicos Alexander von Humboldt.	Mamíferos amenazados.docx
15	Castaño-Mora, O. V. (editora). 2002. Libro rojo de reptiles de Colombia.	Reptiles amenazados.docx
16	Salazar-Holguín, F., J. Benavides-Molineros, O.L. Trespalacios-González y L.F. Pinzón (comp.). 2010. Informe sobre el Estado de los Recursos Naturales Renovables y del Ambiente, Componente de Biodiversidad Continental - 2009. Instituto de Investigación de Recursos Biológicos —Alexander von Humboldt‖. Bogotá, D.C., Colombia. 167 p.	Humboldt 2010 State of Biodiversity
17	Análisis Ecorregional para la construcción de un Plan de Conservación de la Biodiversidad en el Complejo Ecorregional Chocó-Darién. 2008	Analisis Ecorregional Choco_WWF 2008.pdf
18	Producto 6 Informe Final, UT Econometría – CONIF, version NA, 15 Sept 2014	INFOFINAL MADERAS sep 15 rev13 .pdf
19	Apendice I del Producto 6, UT Econometría – CONIF, version NA, 15 Sept 2014	APENDICE 1 Valores Madera, Costos de Extraccion y Movilizacion.pdf
20	EVALUACIÓN PRELIMINAR DE PROYECTOS ALTERNATIVOS PRODUCTIVOS. Univ. Antioquia, vNA, Dec 2013	Producto 5 Choco Norte 18-12-2013 USAID_BIOREDD+.pdf
21	Annex C – FPIC	BIOREDD Informe Taller CMI Mutatafinal.pdf Convenio 169 OIT.pdf decreto1745-19951.pdf FPIC Guidelines_EN_final web.pdf Informe Taller Plan REDD+ Mutatá.docx BR-PT-170 Asistencias Plan REDD+ Mutatá.pdf
22	Plan REDD+ Resguardos Indigenas Mutata. vNA. 29 October 2014	PLAN_REDD_MUTATA_OCTUBRE 29 2014 .pdf
23	KML file, author NA, October 2014	AP_MUTATA_CONSEJOS.kml
24	GeoEcoMap various documents. 2014	GeoEcoMap_task1_revised.pdf GeoEcoMap_task2.pdf

		GeoEcoMap_task3.pdf GeoEcoMap_task6.pdf GeoEcoMap_task7_new.pdf GeoEcoMap_task8&9_new_13015.pdf GeoEcoMap_task12_final_2.pdf GeoEcoMap_task13_020115.pdf GeoEcoMap_Task14_MRV_020315.pdf GeoEcoMap_task16_020215.pdf GeoEcoMap_workplan_new.pdf GeoEcoMap_workplan_supplement.pdf
25	Establecimiento de 30 sistemas de parcelas permanentes y temporales para el desarrollo de la linea de base de carbono y biodiversidad de proyectos redd+. CONIF/Carbono y Bosques. 2014	CONIF Forest inventory protocol-Protocolo completo – ajustado.pdf Annex R

2.3 Interviews

Name	Title
Juan Carlos Riascos	Social expert, Bioredd program
General assembly of Cañaduzales (community meeting)	Cañaduzales
José Javier	Community member
Eusebio Canopa	Community member
Marrano Bailarín,	Community member
Laura marcela Suescun Goez,	Community member
Jaime Smigui	Community member
Elibu Sapra,	Community member
Yobani Dogari,	Community member
Jhon Jairo Tubergua Domco)	Community member
Francisco Bailarín	Community member
Carlos Alberto Domico,	Community member
Raul Embera	Community member
Hernan Garcia	Humboldt Institute
Juan Andres Lopez	General Manager OPTIM, General Coordinator Bioredd program
Daniel Lopez	USAID Colombia
Peter Doyle	Chemonics Colombia/Bioredd
Greg Minnick	Chemonics South America representative
Kyle Holland	Ecopartner, Managing Director
Sassan Saatchi	Senior Scientist, Jet Propulsion Laboratory
Juan Saldariaga	CONIF consultant
Yolima Rodriguez	CONIF, monitoring consultant
Richard Gutierrez	GIS expert, Bioredd program
Mauricio Camacho	Plan REDD general coordinator
Helena Andrade	Manager M&E and community expert
Juan Carlos Riascos	Social expert, Bioredd program
Lenaida Camilo	Regional Coordinator, Bioredd program
Hector Sepulveda	Regional Coordinator, Bioredd program
Kelber Sagastume	Regional Coordinator, Bioredd program
Bernardo Orobio	Regional Coordinator, Bioredd program
Camila Marino	Climate Change Specialist, Bioredd program
Jorge Oliveros	Administración ambiental, Corporación del Valle del Cuaca (CVC)
Mario Quintero	Oficina Ambiental Municipal,

	Buenaventura
Juan Castro	INCODER
Luis Gomez	Fondo Acción
Natalia Arango	Fondo Acción
Mauricio	Fondo Acción
Maria Claudia Garcia	Ministerio de Medio Ambiente
Hernan Garcia	Humboldt Institute

2.4 Site Inspections

The audit team completed its field audit according to the schedule below.

Location	Date
Colombia, Bajo Mira y Frontera and Tumaco, resampling of forest inventory plot,	20-21 October 2014
Colombia, Bogota, meetings with government officials	2-6 November 2014
USA, California, geospatial audit with GeoEcoMap	10-12 November 2014
USA, Maryland, continuation of geospatial audit with GeoEcoMap	14 November 2014
Colombia, Community meetings at Cañaduzales and Jaikerasavi	17 November 2014
Colombia, Chontadural, permanent plot measurement and forest and land use appraisal and community meeting in Chontadural	18-19th November 2014
Colombia, Mutatá, Meeting with Cabildo Mayor representatives	19th November 2014

2.5 Public Comments

No public comments were received through the CCBA Public Comment process which was active from 14 November – 14 December 2014. The audit team interviewed a great variety and number of stakeholders whose input is included throughout this report.

2.6 Resolution of Any Material Discrepancy

Following the field audit, the audit team issued a draft validation report on January 12th to the proponent containing a total of 31 VCS non-conformity reports (NCRs), 14 CCB NCRs, and 4 forward action requests (FARs). The proponent submitted a total of four rounds of corrective actions and associated evidence on February 5, 2015, March 18, 2015, April 13, and April 24, 2015. The audit team held a series of meetings from the end of the field audit in November through April 13 with BioREDD+ staff and consultants and external parties including Colombian government representatives to comprehensively evaluate conformance to the VCS and CCB Standards.

All NCRs were closed as a result of corrective actions submitted by the proponent. The FARs will remain open and be evaluated at the first verification event. The final validated PD is version 3.13, dated 27 April 2015. The final validated AFOLU Non-Permanence Risk Report is version 1.9, dated 10 April 2015. The final validation report demonstrates full conformance with both the scope of this audit as listed in section 1.2 of this document.

Action Taken by Project Proponent following the issuance of the Draft Report		Date
Additional documents submitted to audit team (additional documents listed below)	☒ Yes ☐ No ☐ N/A	Feb 6; 9 and 16th March, 13th and 24th April. 2015
Additional stakeholder consultation conducted (evidence described below)	☒ Yes ☐ No ☐ N/A	Feb 6, 2015
Additional clarification provided	☒ Yes ☐ No ☐ N/A	Feb 6; 9 and 16th March, 13th and 24th April. 2015
Documents revised (document revision description noted below)	☒ Yes ☐ No ☐ N/A	Feb 6; 9 and 16th March, 13th and 24th April. 2015
GHG calculation revised (evidence described below)	☒ Yes ☐ No ☐ N/A	Feb 6; 9th March, 13th and April. 2015

9 March 2015

Ref	Electronic Filename
1.	BioREDD Mutata REDD+ Project Description v2.36.doc
2.	GeoEcoMap_task14_MRV_020315.pdf
3.	BioREDD Mutata REDD+ NCR Response Form v1.30
4.	GeoEcoMap_task13_020115.pdf

5.	Mutata Non-Permanence Risk Tool v1.4.docx
6	Financial Analysis - Mutata-Budget and Cashflow Jan30 EP edits v1.0.xlsx
7	Presupuesto Mutata Althelia Nov13.xlsx
8	Opportunity Cost of Selective Logging v1.4.xlsx
9	ACUERDOS CAMPESINOS.pdf
10	CAMPESINOS EN RESGUARDOS DE MUTATA_ENERO 2015.pdf
11	ENCUESTA TENENCIA DE TIERRA.pdf
12	JUSTIFICACION 2015.pdf
13	Informe Taller Plan REDD+ Mutatá.docx
14	BR-PT-170 Asistencias Plan REDD+ Mutatá.pdf
15	BIOREDD Informe Taller CMI Mutatafinal.pdf
16	Riesgos Mutata.xlsx
17	GeoEcoMap_task12_final_2.pdf
18	VM0006 Accounting MUTATA v9.34.xlsm
19	Clarification in email from CCBA on 25 February 2015
20	Guia Mecanismo de Quejas y Reclamos Mutata (v2).docx
21	Framework Agreement Mutatá 2C.doc
22	1.Coca Plantation Survey (2012).pdf
23	2.UNODC (Sep 2103).pdf
24	Documents related to colono settlement agreements: ACUERDOS CAMPESINOS.pdf; CAMPESINOS EN RESGUARDOS DE MUTATA_ENERO 2015.pdf; ENCUESTA TENENCIA DE TIERRA.pdf; JUSTIFICACION 2015.pdf
25	BioREDD Mutata REDD+ Project Description v2.36.doc
26	VM0006 Accounting MUTATA v9.33.xlsm
27	Annex H - Mutata_ProjectArea_updated.kml

16 March 2015

Ref	Electronic Filename
1.	BioREDD Mutata REDD+ Project Description v3.1.doc
2.	Mutata Non-Permanence Risk Tool v1.6.pdf
3.	Mutata Non-Permanence Risk Tool v1.5.pdf
4.	Financial Analysis - Mutata-Budget and Cashflow v1.0.xlsx
5.	Aprobacion Plan Financiero Mutata.pdf
6	NUEVA JUSTIFICACION (new document).pdf
7	RELACION DE ACUERDOS FIRMADOS (new document).pdf
8	Mutata_Project_Area_fixed.kmz
9	Sept17_MUTATA_PA_LULC_2012_81314.tif
10	DELIMITACION AREAS PROYECTO REDD DE MUTATA.pdf

13 April 2015

Ref	Electronic Filename
1.	BioREDD Mutata REDD+ Project Description v3.1.2.doc
2.	BioREDD Mutata REDD+ NCR Response Form v2.0.doc
3	Native forest type comparison between project and reference areas.xlsx
4	DELIMITACION AREAS PROYECTO REDD DE MUTATA.pdf (v2)

24 April 2015

Ref	Electronic Filename
1.	BioREDD Mutata REDD+ Project Description v3.13.doc (dated 27 April 2015) – Final Version
2.	DELIMITACION AREAS PROYECTO REDD DE MUTATA_V3.pdf

VALIDATION FINDINGS

3 GENERAL

3.1 Summary Description of the Project (G1)

Section 1.1.1-1.1.5 of the PD adequately describes the project's climate, community, and biodiversity objectives. Objectives are specific, measurable, and distinct. Furthermore, objectives clearly relate to the theory of change model (file: Theory of Change v3.xlsx), developed by the project which links the CCB objectives to focal areas and resultant activities, outputs, short-term outcomes, long-term outcomes, and impacts. These are measurable and monitored over the project lifetime. This approach creates a transparent and complete system for defining objectives and measuring progress towards full implementation.

3.2 Project Location (G1 & G3)

Section 1.2 of the PD provides various maps, figures, and explanations that aim to address the requirements for project location for the VCS and CCB Standards. Conformance with the relevant requirement of each standard is explained separately below.

<u>VCS</u>

Section 1.2.5 of the PD identifies the project area as being comprised of 34,288 ha of forest within the collective of the Indigenous Reserves of the Embera Katió. Section 1.2.5.1 of the PD shows a clear, well-labelled map of the project area, its spatial boundaries, and clearly identifies the name of each Resguardo (Jaikerasavi, Coribí-Bebado, Chontadural). The audit team determined consistency between the project area as listed in its maps, shapefiles, and calculations, the size of the project is clearly listed. Section 1.2.5.2, Table 1, shows the centroid coordinates. Lastly, the governmental resolutions that created each resguardo are clearly described in section 1.2.1, and 1.3.5 of the PD and establish conclusive evidence regarding ownership details. The resguardos belong to the Territorio Colectivo de los Resguardos Indígenas Embera Katío del municipio de Mutatá, composed of three reserves: Chontadural Cañero, Jaikerazavi y Coribí Bedadó as described in the governmental resolutions provided.

<u>CCB</u>

The project demonstrates conformance with G1.3 via explanations and maps presented in sections 1.2.3 of the PD related to soils, topography, climate, and precipitation. These data are sufficient as they provide a complete overview of fundamental macro-environmental aspects that influence conditions in the project area and rely on reputable sources and techniques. Vegetation types are explained separately in section 1.3.2 of the PD, and detailed vegetation analyses within the project zone are explained in section 5.3.2.3. Detailed vegetation maps are provided in section 1.3.2 as well. Section 1.3.6 provides a general and sufficient overview of the basic social parameters of the project, which rely on socio-economic data gathered by the proponent and its

implementation partners. The data presents an overview of the project's population, the local economy, and ethnic and cultural diversity (Annex Z). These data matched favourably against the observation and information gathered during the field audit visits to Cañaduzales, Chontadural, and Jaikerasavi, which confirmed relatively low indigenous population within the resguardos with a precarious socioeconomic profile.

Regarding G1.4, the proponent presents a map of the project area/zone boundaries and has been adequately represented through maps in section 1.2.5 of the PD. These maps show all of the components required by the indicator.

3.3 Conditions Prior to Project Initiation (G1)

VCS

Section 1.3 of the PD provides an adequate overview of key social and environmental conditions existing prior to the project, and which serve as a point of departure for understanding the initial conditions of the project. Aspects of Section 1.3 of the PD are addressed in section 6.2 of this report as it relates to some applicability conditions relevant to VM0006. Section 1.3 covers a general description of vegetation types, key floral and faunal attributes, land uses, as well as community socioeconomic data and history. The historical volatility in the security of the region has hampered more robust floristic and faunal inventories, but the proponent has provided a reasonable description of the vegetation classes and key wildlife given the paucity of data available of the region. Much of this information is based on various remote sensing techniques to categorize the vegetation types and levels of degradation and deforestation in the area at project start. These data are summarized here but presented in more detail later in the PD. Wildlife data is also appropriate, and presents data based on several available wildlife studies by the Humboldt institute, local forest management plans, and other secondary sources, and also includes the IUCN status of many key species. The proponent also covers general but adequate summaries of prior land uses, property rights, and main settlements. The audit team visited Chontadural, Cañaduzales and Jaikerasavi and the descriptions provided matched well against the data gathered during the field audit through direct observations and on-site interviews. The community descriptions are satisfactory as described in section 3.2 of this report.

G1.5-G1.6

Stakeholder identification and identification of communities, community groups, and other stakeholders are identified in Section 2.7 of the PD. The Consejos are the proponents themselves and have a traditional governance structure in which consent is expressed at the level of the consejo governance board and the consejo General Assemblies which may include several hundred individuals at meetings, as well as Community-level assemblies. This project is part of the USAID funded BioREDD+ program which includes eight projects. The implementing partners of the project built upon earlier stakeholder identification through the pre-existing USAID MIDAS program.

Stakeholder identification within the consejo is simplified by the fact that the consejo as a whole - through General Assembly meetings - has initially determined whether to participate in the BioREDD+ program as expressed through a Letter of Intent, and continues to provide consent for

all major steps in the project development. The audit team was able to confirm this through interviews with governance boards and community members in the project area, as well as through observation of documentary evidence provided by BioREDD+ including multiple training materials, attendance records at trainings and consultation workshops, etc. Consejo members confirmed participation in these workshops and in interviews generally strongly expressed the opinion that the project is "their" project rather than a project that is forced upon them. Individual stakeholders within the communities have the right to not participate in the project as the project activities are incentive based wherein alternative livelihood activities are targeted at corteros (loggers) the main agents of degradation, yet corteros are not mandated to participate. All communities existing in the project area were identified as communities.

All the communities and community groups, have been identified in the PD appropriately in section 2.7. Over 30 colono settlements were mentioned as being located and formally identified within the reguardos of the Mutatá project. These settlements are not part of the project area but the communities have demonstrated sufficient evidence to demonstrate they have conducted numerous diagnostic studies to better understand the status of these settlements, and reached agreements with 23 of them to curb forest conversion. The relevant stakeholder groups have been consulted and adequately identified to a reasonable degree of assurance.

3.4 Project Proponent (G4)

The proponent has been clearly and unambiguously identified as the Cabildo Mayor Indígena de Mutatá. Section 1.4 of the PD identifies a relevant contact for the proponents, who is the legal representative of the collective, or Consejo, of Embera communities. Consejo communitarios in Colombia function as semi-autonomous reserves for peoples of Afro-Colombian heritage and are recognized in the Colombian Constitution of via Ley 70 de 1993. The proponents have pre-existing organizational structures including Governing Boards which are responsible for project implementation and benefit distribution.

The PD describes that the proponents have designated Fondo Accion (the environmental action and children's fund) as a Project Implementation Agent. Specific roles and responsibilities for Fondo Accion are adequately defined.

3.5 Other Entities Involved in the Project (G4)

Fondo para la Accion Ambiental y la Niñez (Fondo Accion) is identified as an official implementation partner in section 1.5.1 as required by section 3.1.4 of the VCS AFOLU Requirements. Fondo Accion's roles and responsibilities have been clearly explained as consisting of fiduciary management

<u>G4.1</u>

Section 1.5 of the PD identifies all other entities involved in the project other than the proponents. These entities represent consulting groups hired to develop the BioREDD+ program and are summarized in Table 7 along with contact person and responsibilities. Conformance has been demonstrated.

G4.2

Key technical skills are documented in Section 1.5 of the PD. The proponent, as under-resourced indigenous communities, does not have the technical skills required to implement the project without assistance. The PD identifies Fondo Accion as the responsible party for project implementation and successfully justifies Fondo Accion's qualifications including implementation of a similar large REDD project in Colombia, management of a $44 million USD endowment, and implementation of multiple large programs. The experience and ability of Fondo Accion to act in this capacity is well documented and interviews with all relevant stakeholders have demonstrated the intent for this relationship to continue as planned. This is a sufficient level of assurance at validation.

3.6 Project Start Date

Section 1.6 identifies the project start date as 26 June 2013, which is based on the date in which the letter of intent (Annex I) was signed by the most recent signatory consejo. The audit team was able to review this letter in the field and confirmed with the community governance board that they had signed the letter of intention. The start date was faithfully replicated in the carbon accounting model. The proponent has provided a detailed justification of how the project start date led to the generation of GHG emission reductions, including direct changes in forest management.

The proponent has demonstrated that the Carta de Intención, establishing the project start date was only the final step in a sequence of activities that led to community mobilization towards effective changes in forest governance leading to emissions reductions. Initial MOUs with the communities, as well as socialization and capacity building meetings and exercises, all occurring prior to the project start date, are described in detail in the PD and its supporting annexes. The logical link between these meetings and agreements to changes in forest governance is adequately justified, which lead to enhanced forest governance activities such as park guard trainings, design of income generation activities, and characterizations of and agreements with colono settlements.

Finally, the consejo legal representatives have provided detailed explanation and justification for the timeline for early project implementation and how this justifies the project start date. This letter, approved by the consejo's legal representatives, provides further justification independent from the BioREDD program.

3.7 Project Crediting Period (G3)

Section 1.7 identifies the project crediting period and project lifetime as 30 years which is in conformance with VCS requirements for minimum crediting periods for AFOLU projects, however an Observation was created because the crediting period was not expressed in a specific date range.

Section 1.7.1 explains the project lifetime is divided into a Phase 1 in which project activities are planned and with initial implementation, and Phase 2 in which implementation of project activities continues. The project lifetime is clearly stated as lasting 30 years.

4 DESIGN

4.1 Sectoral Scope and Project Type

The project is a VCS AFOLU project falling under the category of REDD, avoiding unplanned deforestation/degradation (AUDD) in a mosaic configuration. This is an eligible project type and is correctly identified based on the field audit which observed that the area is patchwork of forested, deforested and degraded patches.

4.2 Description of the Project Activity (G3)

Section 2.2 of the PD describes the project activities. Project activities are divided into thematic areas including Governance, Productive Activities, Alternative Livelihoods, and Other Activities.

Governance

- Strengthening of Land Tenure and Forest Governance

Consejo territory is deeded by the government and the right is built into the 1990 constitution of Colombia so land tenure is secure. Tenure is communal with individuals being responsible for areas of 3-10 hectares for agriculture and other livelihood purposes. Communally owned forests however are poorly managed in all BioREDD+ projects. Typically outside timber buyers incentivize poorer members of the communities to conduct logging activities for little economic gain. These activities over many years result in widespread degradation of the majority of the consejo.

The project seeks to help communities to strengthen their internal regulations with regard to benefit sharing, levies on productive activities, etc. The vision is that updated bylaws will be approved by the General Assembly.

Based on the field audit the audit team concludes that this approach is an important aspect of reducing degradation. Community members interviewed felt that the forest was currently poorly governed or not governed at all. The audit team was not able to meet with Corteros (loggers) at Mutatá, however the audit team observed abundant informal skid trails, heard chainsaws from within the resguardos, and community members gave accounts of periodic and at times heavy wood extraction from non-residents. Community members were clearly distressed with the difficulty in governing and controlling wood extraction and illegal colono settlements. As a result the audit team does not feel there is a risk of the project activities being forced on the communities through the BioREDD program and upsetting a functional traditional land governance. The project has widespread approval from the communities. The logging activities for commercial sale are not traditional and are not preferred by community members. Furthermore this risk is reduced by the fact that changes to internal rules must be approved by the General Assembly which can include all community members. It may also reduce deforestation by more formally titling agricultural lands within the consejo and spurring additional investment in these already deforested lands.

- Sustainable Forest and Land Use Management Plans and Demarcation of different land use areas

The project is working with the consejos and other governance organizations to update and harmonize land use management plans to include grazing areas, settlements, croplands, conservation areas. These plans will also be approved by the General Assembly. Forest reserve areas will be demarcated in heavily degraded areas to allow for natural regeneration. Additionally, a patrol team will be developed to monitor the perimeter to prevent encroachment in the consejo and to report on breaches of conservation commitments.

Based on interviews with community members the audit team concludes that these activities have the support of consejo members and that consejo members expect them to be effective in reducing deforestation/degradation.

Productive Activities

- Intensification of agriculture on existing agricultural land including cocoa and plantain, and Providing Alternative Livelihoods to Agents of Deforestation/Degradation

Investing in agricultural production is one of the key activities of the BioREDD+ program. The program seeks to provide technical support and training to consejo members who otherwise are agents of deforestation and degradation. The goal of the project activity is to increase the value of production on existing agricultural lands. Consejos in the Colombian Pacific, including in the Carmen del Darien project area are typically in remote areas often with little or no road access and rely on rivers and the sea for transportation. As a result, consejos have had little chance of competing with other regions of Colombia in the production of agricultural commodities and tend to resort historically to illegal coca production and more recently to illegal logging. The BioREDD+ program, intends to break this cycle through i) technical support to farmers, ii) land use planning within consejos to identify suitable agricultural areas, and iii) the creation of production and marketing chains to enable high value agricultural products from consejos to compete economically through the creation of Special Purpose Vehicles (SPVs). The SPVs will be responsible for creating value chains, acquiring equipment and material, and establishing trust accounts for each REDD+ productive activity (i.e. acai production). In essence the SPVs will act as a charitable business creating means for consejos to sell agricultural products and recoup maximum value from this to provide an attractive alternative to deforestation and degradation which is a result of poverty in the communities. Companies that are created based on each productive activity are planned to be partially owned by communities in the BioREDD+ program.

Other alternative activities that will be supported by the REDD project are support to fisheries.

The audit team has confirmed through interviews that community members support the selection of productive/alternative livelihood activities. The activities have been collaboratively planned with the communities through the development of a REDD plan for each consejo which identifies the costs, opportunities, and expectations of participation in the REDD project. Importantly, the REDD plans build upon the pre-existing development plans that each consejo had, but never had sufficient funds to implement. In essence, the REDD plans and project activities are based on the pre-existing aspirations of the consejos with additional input from the BioREDD+ program.

- Other activities including social investments and training and capacity building

The project activities also include investments in infrastructure and human capital in the consejos which do not directly address drivers of deforestation and degradation, but in the audit team's opinion may serve to address underlying drivers such as poverty, poor health, etc. This includes investment in sanitation services, health care, food security, and access to electricity. Investment in human capital includes trainings through The National Training Service focused on accounting, financial analysis, markets, environmental management, leadership, etc.

The audit team believes, based on experience in other REDD projects, as well as interviews and observations in the field, that investment in capacity building and social and health infrastructure will serve to reduce underlying causes of deforestation and degradation and help prepare community members to participate meaningfully in the SPVs. Infrastructure investments may indirectly support the reduction of GHGs.

Summary of Evaluation of Project Activities

As the project activities have been collaboratively selected with input from the consejo members, are based upon pre-existing unfunded development plans in the consejos, and are approved by the governance entities of the consejos the audit team considers it to be a high probability that if properly funded that the project activities can reduce deforestation and degradation of the project area.

The project presents a Theory of Change model (Annex AC) which clearly identifies project activities, expected outputs, outcomes and impacts as well as causal relationships. The relation to external conditions and problems are clearly described and the project activities logically follow from these descriptions. As stated before the audit team feels the logic inherent to the Theory of Change is sound based on observations and interviews in the field, therefore conformance has been demonstrated.

4.3 Management of Risks to Project Benefits (G3)

G1.10-G1.11

Section 2.3 describes management of risks to project benefits. The proponent provides a comprehensive and reasonable overview of risks, which is adequately presented. However an Observation was raised because the proponent also presents community-level adaptive strategies to climate change but does not clearly relate these back to the project's climate benefits. The project activities implemented include the aforementioned project activities which work to address human risks to climate benefits. Human risks to climate benefits are logical and include lack of capacity and governance in the communities. However, a forward action request was raised because specific human-induced risk mitigation measures have not been defined beyond general, but appropriate measures because the proponents and implementing partners have yet to define detailed project activity plans with the communities at the time of validation.

Natural risks to climate benefits (carbon stocks) were evaluated using the VCS AFOLU Non-Permanence Risk Tool as a framework which is appropriate. Communities identified extreme weather and geological risks as potentially significant to carbon stocks. The audit team concurs with this assessment and although the audit team saw no forest damage in the project area due

to these risks they are likely risk factors due to the project's location and topography. Natural risks to climate benefits cannot be reasonably mitigated.

Community risks are appropriately identified in the PD and include inequitable distribution of project benefits or community members not all benefiting from the project. The project intends that Fondo Accion will be a long term partner in project implementation and as such will work to develop benefit sharing mechanisms to ensure all community members benefit. This will include monitoring of distribution of project benefits. Relevant monitoring indicators are identified in Section 8.1 and 8.2 and include among others:

-Effectiveness of the Grievance Mechanism measured in number of solved requests

-Number of families benefitting from Social Investments of the project

-Number of women benefiting from the Social Investments of the project

-Number of employed women in the value chains supported by the SPVs

-Number of households receiving technical assistance

The above monitoring indicators create a framework for ensuring that inequitable distribution will be detected. The audit team concludes that the community risks identified are appropriate as are the risk mitigation measures, although a forward action request is in place to review more detailed risk mitigation measures as they become increasingly more well-defined over the project's duration and evolution.

Biodiversity risks are appropriately described in the PD and the proponent claims that these risks are primarily outside of the control of the project or communities. The risks include timber prices or carbon prices which may reduce competitiveness of the REDD project, social/political instability in Colombia, and damage to migratory species habitat outside of the project area. The PD purports that if the Climate and Community risks are addressed the Biodiversity risks that are feasible to control will inherently also be addressed. The audit team finds this assertion to be credible. Biodiversity conservation in the project area is a direct result of forest conservation and reduced logging as the alternative non-forest land cover types (agriculture and grazing) hold relatively very low biodiversity and result in enduring reduced physical health of the ecosystem due to the heavy rainfall (siltation of rivers, loss of topsoil). The project has selected project activities that are relatively complementary towards the biodiversity of the area, focusing on tree crops (cocoa, chontaduro, acai, etc.) which serve to hold soil intact. Success in biodiversity conservation will be measured by monitoring of appropriate indicators.

Conformance with G1.10 and G1.11 has been demonstrated in the PD and in the field.

4.4 Measures to Maintain High Conservation Values (G3)

Section 2.4 of the PD identifies measures to maintain HCVs. HCVs 1-6 are identified in the PD. The project takes a conservative approach to HCV identification wherein if the exact location of an HCV is unknown, or if the presence of the HCV is unknown in the project area the HCV is assumed to exist throughout the project area. Several appropriate annexes are provided to justify

the selection of HCVs in section 1.3.8 of the PD including an endangered species list for birds, mammals, amphibians, reptiles, and endemic species references, evidence of mega diverse status of Colombia and finally HCV ID guidelines. The Humboldt Institute has been engaged by the BioREDD+ program to provide an initial assessment of biodiversity through the projects in the Colombian Pacific region as well as to design and provide input to a monitoring program. The audit team visited a biodiversity monitoring plot in another related BioREDD+ program project at consejo communitario Bahia Malaga, designed by the Humboldt Institute and the monitoring methods were described to the audit team including extensive camera trapping work which has already detected evidence of endangered species in the project areas. The evidence provided is appropriate for the purpose of HCV identification.

The approach of assuming HCVs exist if there is a possibility that they exist is reasonable given the very limited state of knowledge of biodiversity in the Colombian Pacific. Table 15 is provided that clearly links the HCVs with measures to protect them, which are linked to land surveillance and monitoring activities. These are appropriate measures for maintaining HCVs therefore conformance has generally been demonstrated with HCV identification and maintenance.

4.5 Project Financing (G1 & G4)

G1.12-G4.3

The project provides Annex AD, “Presupuesto Mutata” as evidence of conformance with G1.12, which provides an extensive tabulation of project income vs. project costs. Anticipated funding from an external stakeholder is not yet secured but is in advanced stages of negotiation. Additionally, Section 2.5 notes that the financial mechanism will be implemented by Fondo Accion, which per its current agreement with the proponents is only involved until March 2015. The financial health of implementing organizations is adequately described in the PD as required by G4.3. Fondo Acción has a well-developed reputation and financial capacity for managing projects in Colombia.

The audit team has reviewed the inputs to the model in depth. The audit team tested individual calculations and formulae in the model and found no errors. The assumptions for values of carbon credits sold are very conservative (less than 75% of recent market value for VCS+CCB REDD credits). The costs expected in the model are projected based on detailed evaluations of project activities undertaken in a participatory manner with the communities (which are the proponents) and external organizations such as BioREDD+ and Fondo Accion which have demonstrated project management and implementation experience. As such the audit team considers the costs inputs to be credible. The monitoring costs form the largest single expense and appear conservative to the audit team based on their expert opinion. In summary, the financial model is based on sound reasoning and conservative inputs and demonstrates the healthy financial status of the project currently and the expected financial health *ex-ante*.

4.6 Employment Opportunities and Worker Safety (G3)

Section 2.6 of the PD describes Employment Opportunities and Work Safety

G3.9

The principal "employees" to directly implement project activities are the community members with the help of consultants as needed. This was confirmed in meetings with the proponent, therefore the project's main employment opportunities are inherently open and design for participating community members. Fondo Accion is identified as the implementing partner responsible for employment training and its role has been suitably justified and explained.

The audit team did identify during forest inventory sampling that community members that were participating in it were generally well-trained and followed the project's standard operating procedures well. At validation many project activities such as income generating activities and more robust land use monitoring have only been planned for but full implementation depends on funding and work plans designed for the first phase of the project. Therefore specific training materials and schedules for all proposed project activities such as productive activities, and forest protection, etc. have yet to be developed, although the need for these trainings and materials have been identified in the PD 2.6.1. A forward action request has been requested for future verifiers to review any training materials available at verification.

G3.10

Fondo Accion is identified as the implementing partner responsible for ensuring equal opportunity employment for employees and consultants of the project. It has demonstrated historical success with managing large and complex projects and as such it is the entity responsible for ensuring equal opportunity employment. Fondo Accion, as a well established foundation managing multiple projects and grants has established procedures for ensuring a transparent RFP process such that other project implementation partners shall be guaranteed equal opportunity. Fondo Accion's employee and consultant hiring process which shall be used for hiring project workers is ISO 9000 certified and based on predefined terms of reference to mitigate risk of nepotism in hiring. The project intends to develop additional procedures by verification to ensure that positions are open to women, marginalized individuals and vulnerable populations in the project area. It is noted however that the project activities do specifically attempt to generate alternative occupations for *corteros* which are the primary agents of degradation. This approach is appropriate given the necessity of reducing GHG emissions and the fact that *corteros* tend to be some of the poorer members of the consejos.

G3.11

The section describing conformance to laws and regulations related to worker's rights relies on Fondo Accion's participation in the project. Fondo Accion is in the advanced stage of negotiation with the consejos in determining the specific agreement they have with consejos as implementation partner. The audit team confirmed in a phone call with Fondo Accion that this process was not yet complete at the time of the validation. However, the audit team confirmed with the CCBA that as the validation is an assessment of the project plan, the specific agreement does not need to be signed until verification.

Section 3.1.1 of the PD identifies laws, regulations, and treaties pertaining to worker's rights. The list is comprehensive and was evaluated by a local Colombian consultant and deemed to be sufficient. Assurance has been provided in this section that the project will comply with these.

G3.12

The proponent has identified a range of activities/occupations likely to result from implementation of the project in the document BioREDD+ SUPP REDD+ Project occupational risks. These are credible and reasonable and relate to the themes of activities to maintain carbon stocks (consejo boundary monitoring, carbon stock measurement), governance activities (consejo boundary monitoring, monitoring of degradation), productive activities (implementation of alternative income activities), and other (school construction, health, etc.).

For each activity risk factors have been identified and are classified as of biological, physical, or psychological origin.

Activities with the highest risks are identified and include measurement of forest carbon plots, biodiversity monitoring, demarcation of conservation areas, forest patrolling, ecotourism, and fishing.

The audit team finds the identification of occupations and corresponding risks to be credible and representative of the information that the audit team received while in the field from interviews about the type of likely occupations and probable risks. The audit team considers the forest patrols to be the highest risk activities due to the remote locations and the possibility of encounters with drug production areas.

The risk document identifies appropriate mitigation measures and equipment to be used. For example, the forest patrols will consist of crews of 8 people with means of transportation (boats or vehicles), computers, radios, cameras, uniforms and boots, and first aid kits and first aid training.

Likewise, fishing is another high risk activity will have the same equipment. In summary the assessment of risks to workers is complete and the mitigation measures identified are sufficient for validation and implementation shall be assessed at future verifications.

4.7 Stakeholders (G3)

G3.1

Section 2.7.4 of the PD describes the public comment period and the dissemination of relevant project documentation. The PD, PD summary and relevant documentation has been made accessible to project stakeholders as confirmed during the field audit via interviews with participating communities and their appointed legal representatives. The proponent has well-documented community assembly and generally meetings to discuss project concepts and documentation, which were reviewed by the audit team on-site at the cabildo mayor's offices. Many materials were developed in the Embera language, which were viewed directly by the audit team and deemed appropriate. The consejo mayor houses complete project documentation available to any community member interested in viewing information about the project. The community governance boards had to sign off on the PD and PD summary prior to public posting which resulted in delays to the field audit, thus providing solid evidence of conformance. Communities are also well informed through the REDD Plans which essentially take the PD and transform it into action items and expectations for all participants. The REDD plans are signed off by the consejo governance institutions. Conformance has been demonstrated and stakeholders are actively engaged with project documentation although no comments were received through the CCB Public Comment period.

G3.2

Costs, risks, and benefits to communities have been communicated effectively to stakeholders. The audit team confirmed this through interviews with community members who spoke eloquently on these topics. The audit team also was able to see documented consultation meetings the BioREDD+ program had held with communities to educate them about these issues. Numerous training presentations, and videos were developed for community-level trainings with many materials developed in the Embera language. All the communities visited by the audit team confirmed these trainings and consultations took place and that all relevant costs, risks and benefits had been adequately conveyed to them. Minutes of community meetings are available at the cabildo mayor's offices and were viewed by the audit team.

G3.3

Stakeholders and community members were well informed of the audit visit and the audit process. Consejo leadership has to provide permission for all activities on consejo land including the visit by the audit team as well as visits by BioREDD+ staff. The audit team interviewed over 100 local stakeholders in a series of formal and informal meetings, interviews, and focus groups in this specific project and several hundred over the BioREDD+ program projects which are necessarily linked in some aspects. BioREDD+ staff respected auditor requests for confidential interviews and the audit team observed that community leaders of Mutatá had strong command of the objectives and design of the BioREDD project activities and understood the purpose of validation and verification.

G3.4, G3.5, G3.6

Communities have been fundamental in the project design process as confirmed by the audit team and described in Section 2.7.1 of the PD. The audit team confirmed that the BioREDD+ program did an excellent job of stakeholder and community inclusion through i) interviews with community members who had a sophisticated understanding of not just their own project, but also REDD in general and who confirmed that they played a major role in project design, ii) observation of the fact that all decisions are approved by the traditional decision making structures of the consejos, iii) a well-documented paper trail of consultation including original and copied documentation from consultation meetings going back multiple years that were shared with the audit team. The agendas of these meetings included all relevant topics and demonstrated that consent was derived from the consejos. This was further evidenced by the fact that several consejos have chosen to leave the BioREDD+ program in other projects indicating that the final decisions rested with the consejos which are in fact the proponents.

Women were included in public meetings during the audit process with regard to the REDD project and the project has designed specific monitoring indicators designed to measure their participation during project implementation (see PD Section 8.3.2). There are no other identified community groups or other stakeholders that the audit team could detect other than the settler families in the project zone.

G3.7

The proponent in PD Section 2.7.1 explicitly acknowledges this CCB requirement and identifies measures in Annex AS to ensure that the project proponent (the consejo) and other entities involved in project implementation such as BioREDD+ and Fondo Accion, are not involved in harassment or discrimination.

Annex AS, the framework implementation agreement between Fondo Accion and the consejos requires as a condition in Section 8 of the agreement that there is no harassment or discrimination of any kind. Implementation of this condition will be assessed at future verifications.

G3.8

Section 2.7.5 of the PD identifies the Camara de Comerecio de Medellin, the Defensoria del Pueblo and/or the Organizaciones Regionales Indigenas, identified as the Mediation Bodies as entities which can play the role of a third party for mediation when conflict resolution within a consejo fails. This selection is appropriate based on interviews with communities during the field audits. Communities often suggested these institutions as appropriate for this role. This third party can be used for mediation within a consejo, between consejos, or between the consejo and an implementing partner such as Fondo Accion. These same institutions can be used for arbitration in the case that the mediation step is unsuccessful and serve to demonstrate that a suitable grievance mechanism is in place.

4.8 Commercially Sensitive Information

Section 2.8 of the PD describes commercially sensitive information as does the Annexes table following the table of contents. The annexes designated commercially sensitive and/or confidential are in conformance with VCS Standard 3.18.2. While some of these sources of information, for example, models and computer code used to create carbon calculations, do relate to the baseline scenario or GHG reductions/removals these annexes are not considered “project documents” per the definition in the VCS Program Definitions V3.5 and hence are not required to be included. Additionally, relevant summary information is included in the PD in general.

5 LEGAL STATUS

5.1 Compliance with Laws, Statues, Property Rights and Other Regulatory Frameworks (G5)

G5.6

Section 3.1 of the PD describes the list of laws and regulations in Colombia that are relevant. The project provides assurance of conformance in the PD. The audit team also detected no evidence during the field audit to contradict this and confirmed with relevant individuals from the Ministry of Environment, Forestry Department that the project was in conformance with laws and regulations. The consejos also hold legal authority over their own land and their Governance Boards have confirmed that the project activities do not violate their bylaws and are likely to strengthen them.

G5.7

The audit team met with the Director of Forestry for the Ministry of Environment of Colombia and confirmed that the project had the support of the Colombian federal government. The audit team confirmed with the governance board of the participating consejos (the proponents) that the project had their support. Conformance has been demonstrated.

5.2 Evidence of Right of Use (G5)

The audit team has confirmed that the project has described Right of Use appropriately in Section 3.2 of the PD. Right of Use #4 under VCS Standard 3.11.1 is selected and it is justified in the accompanying text that the proponents hold right of use as a result of their statutory and property rights in the land. Law 70 of 1993, which is guaranteed in the Colombian Constitution guarantees that the project area belongs to the community consejos. The proponent has provided the audit team with a copy of the original declaration from INCODER (the appropriate governmental agency in Colombia) establishing the consejos. Chapter IV of Law 70 gives the communities inalienable rights to their renewable resources and forests.

The audit team held a meeting with INCODER in Bogota in early November 2014 and confirmed that the consejos do hold right of use over the project area. Additionally the proponent has provided a legal opinion by competent Colombian law firm establishing conclusively the Right of Use is held by the proponent including in project areas that may contain mangroves which are designated *uso publico.* Conformance has been demonstrated.

5.3 Emissions Trading Programs and Other Binding Limits

Colombia does not have an emissions trading program which the project is a part of nor is there a binding limit on GHGs which is relevant.

5.4 Participation under Other GHG Programs.

The PD asserts in Section 3.4 that the project has not been registered with other GHG programs. The audit team has confirmed this by checking the websites of other programs including Plan Vivo which is the only potentially applicable program which accepts REDD projects.

5.5 Other Forms of Environmental Credit

The project is not seeking other forms of environmental credit.

5.6 Projects Rejected by Other GHG Programs

The project has warranted that it has not been rejected by any other GHG programs. The audit team has found no evidence to contradict this and considers the assertion credible as very few other programs accept REDD projects.

5.7 Respect for Rights and No Involuntary Relocation (G5)

G5.1

The statutory and customary rights in the project area are identical given that the land is under traditional ownership through an indigenous consejo which is titled by the Colombian government. The tenure within the project area is communal other than small private areas for homesteads. The audit team confirmed tenure with INCODER the relevant governmental authority, however it detected that there are colono settlements in the project zone, many of which obtained land through illegal purchases and who still reside in the project zone. However the proponent has demonstrated detailed actions and resultant agreements with these settlers to desist from forest conversion within the resguardos and to resolve any land use disputes through appropriate legal channels.

G5.2

Free, Prior and Informed Consent (FPIC) has been demonstrated in the project area.

- FPIC processes follow traditional decision making structures in the project area wherein consent is derived from the General Assembly which includes all consejo members who would like to participate. The General Assembly and/or the Governance Board has approved all relevant documentation and implementation. This was confirmed by the audit team both through interviews with several communities and community leaders in the project area and through review of signed documentation. This documentation includes the Hoja de Ruta (Letter of Intent) identified by the PD as official confirmation from the stakeholders of FPIC. The audit team feels however that the FPIC process has been much broader (and better) than simply what is communicated in the Letter of Intent.

- The process of informing stakeholders was demonstrated to the audit team through an extensive history from the BioREDD+ program of consultations, the topics of the consultations, and attendees. The audit team reviewed both original and copied documents demonstrating consultation and information processes beginning over 1 year before the project start date. The audit team also confirmed this through interviews with indigenous leaders and community meetings.

- Finally, it is noted that FPIC comes directly from the stakeholders who are themselves the proponents and the BioREDD+ program is simply a facilitator.

- The audit team has observed multiple times that FPIC is ongoing throughout project implementation as evidenced by the fact that the communities needed to sign off on project documentation before it was submitted to the CCBA for public posting.

G5.3 + G5.5

The audit team detected no evidence that the project will lead to involuntary removal or relocation of any stakeholder or right holder, nor their activities. The project as currently designed takes an incentive based approach wherein agents of deforestation or degradation are to be offered more appealing ways to make a living as the approach for reducing these activities. Any settlers within the resguardos have been approached by the consejo, agreements reached, and the disputes are on course to be resolved through legal channels.

5.8 Illegal Activities and Project Benefits (G5)

G5.4

G5.4 requires the identification of any illegal activities occurring in the project zone and evaluation of their impact on CCB benefits. The proponent has successfully evaluated illegal logging as the major illegal activity and provides evidence that coca production has been in decline and demonstrated its effect on the project is immaterial.

6 APPLICATION OF METHODOLOGY

6.1 Title and Reference of Methodology

VCS VM0006 v2.1 is the methodology applied and is a valid methodology under VCS. The proponent also uses the VCS VT0005 v1.0 tool, which is a valid tool under the VCS.

6.2 Applicability of Methodology

The proponent demonstrates conformance with the applicability conditions of VM0006 v2.1 in Section 4.2 of the PD.

- Condition 1: The proponent has provided the audit team with satellite imagery from more than ten years before the project start date to demonstrate that the land in the project area qualified as forest according to the Colombian national forest definition. The audit team reviewed the imagery provided at the office of GeoEcoMap, the consultancy that conducted LULC analysis and determined its validity for the purposes of this applicability condition.

- Condition 2: The proponent has justified that the project addresses drivers of deforestation and degradation that are identified as applicable under VM0006. The project drivers of deforestation and degradation in the baseline are illegal logging of timber for commercial sale and conversion of forest to cropland. These drivers claimed to be unplanned and mosaic. The audit team has confirmed this in the field audit through direct observation and interviews with agents of deforestation/degradation and relevant regulatory agencies including the National Department of Forests, as well as the local corporations that hold local authority over the project area for resources management. Some minor areas of potential planned degradation or deforestation, in the form of small scale logging permits which had been approved by the local corporations in charge of regional land management, have been removed from the project areas appropriately. Objective confirmation of this was provided from the local corporations.

- Condition 3: This condition requires that the proponent select imagery from within 15 years of the project start date to assess deforestation in the historical reference period. The audit team has approved a methodology deviation permitting a longer historical reference period.

- Condition 4: The proponent has demonstrated conformance with this criterion in Section 4.5.3.4 of the PD by demonstrating that the overall classification accuracy of the LULC and forest cover maps is >70%. The audit team has reviewed the imagery used, output of classification, and accuracy assessment methods and results and determined that the proponent has achieved the required minimum accuracy. The audit team reviewed the results of the accuracy assessment at the office of GeoEcoMap, the consultancy hired to conduct the land cover analysis.

- Condition 5: The Mutatá project is not located in a coastal area where mangroves are present, or where significant wetlands are present due to the topography of the project area, therefore this condition is not applicable.

- Condition 6: The proponent identifies the project activities in Section 2.2 as well as specific outputs in the Theory of Change Model. These all conform to the requirements of condition six.

Applicability Conditions from other Sources:

Per VCS AFOLU Requirements 3.1.11 all REDD projects which occur on wetlands shall also comply with the WRC requirements unless the expected emissions from the soil organic carbon pool or change in the soil organic carbon pool in the project scenario is deemed below *de minimis* as set out in Section 4.33 or can be conservatively excluded in which case the project shall not be subject to the WRC requirements. The project does not include freshwater wetland, unlike the other BioREDD projects, where such areas are considered wetlands per VCS AFOLU Requirements 4.2.16. The Mutatá project is in conformance with this requirement as the audit team did not detect a significant likelihood of wetlands in the project boundaries.

6.3 Methodology Deviations

The proponent has identified two methodology deviations in Section 4.3 of the PD.

Methodology Deviation to use a historical reference period longer than 15 years:

The VCS has released additional clarification for the interpretation of the VM0006 v2.1 methodology applicability conditions. Specifically, the VCS has officially removed the below requirements from the applicability conditions of the methodology:

• Accurate data on past LULC and forest cover in the reference region must be available for at least three points in time, with at least one remote sensing image (ie, data) from 0-3 years before the project start date, at least one image from 4-9 years before the project start date, and at least one image from 10-15 years before the project start date. No images older than 15 years can be used for the historical reference period.

• The classification accuracy of LULC and forest cover maps must be greater than 70%. Emission reductions and/or removals from avoided forest degradation can only be included if the accuracy of determining forest strata is at least 70%.

The VCS has acknowledged that these two requirements fall under data requirements for determining the baseline scenario and are therefore inappropriate for the applicability conditions section of the methodology.

As a result, the deviation from the requirement can be interpreted by the audit team as a methodology deviation.

Section 4.3 of the PD describes requested methodology deviations. In this section the proponent has requested an extension of the 15 year time limit for this project. The proponent has requested that the three time periods used to assess the historical reference period are from 23 years, 13 years, and 1 year before the project start date.

The proponent justifies this deviation based on the trade-off between accuracy and conservativeness in project implementation, recognized and endorsed by the VCS in the VCS VVB Manual. Projects and VVBs may accept a less accurate measurement or monitoring technique or result if it is determined that this less accurate approach is more conservative.

<u>Auditor evaluation of the methodology deviation:</u>

The audit team has determined that the methodology deviation is appropriate for this project. Per VCS Standard 3.5.1, methodology deviations are acceptable when they relate to monitoring or measurement and do not negatively impact the conservativeness of the methodology. The deviation clearly relates to measurement of historic deforestation in the reference region in the historical reference period.

The audit team has also confirmed that usage of the longer historical reference period (23 years) is conservative and in some ways may lead to greater accuracy in measurement of historical land use change as compared to a 15 year historical reference period.

1) The proponent asserts that it was infeasible to find quality cloud-free imagery for the reference region and project area for the 15 year period required by the methodology. The audit team finds this assertion credible. The audit team confirmed this in interviews with the remote sensing consultancy, GeoEcoMap, hired to conduct the analysis. Additionally, the project area and broader region is one of the rainiest places on earth with an aseasonal climate leading to persistent cloud cover throughout the year. During the more than one month that the audit team spent in this region of Colombia for this audit and related audits of nearby REDD projects, the audit team did not experience a single day with low cloud cover.

2) The proponent demonstrates via historical land cover change analysis that the deforestation and degradation rates increased dramatically between timestep 2 and timestep 3 (2000-2012), as compared to the time period between timestep 1 and timestep 2 (1990-2000). The combined deforestation/degradation rate increased from 2,340 ha/year in the first time period to 5,838 ha/year in the latter time period. Degradation rates increased dramatically between the two time periods from 916 ha/yr in the period one to 2,987 ha/yr in period two. This results in a lower baseline deforestation and degradation rate applied to the project area in the baseline scenario as the rate is impacted conservatively by the earlier lower rates.

The audit team confirmed that deforestation/degradation rates increases significantly following the year 2000 via interviews in the field that stakeholders including consejo members, community members, and relevant government officials from the local corporations responsible for local land use management. Following the year 2000, multiple companies came to the consejos and provided funding and material (chainsaws, etc.) to incentivize increases in logging. These companies were operating illegally in the region.

For the reasons cited above the methodology deviation is accepted by the audit team.

Methodology deviation to use LiDAR, via the VCS approved VT0005 Tool for Remote Sensing Biomass Measurements, rather than ground based inventories as required by VM0006 v2.1 Section 9.3.2 at future baseline updates.

The proponent has pioneered the approach of using LiDAR for estimation of biomass stocks of aboveground forest vegetation. To facilitate this, the proponent developed the VT0005 tool, which has been approved by the VCS for this purpose. The tool requires development of an allometric relationship between the LiDAR data and ground-based forest inventory plots. This allometric model can then be used to measure biomass of other forest areas with similar structure. As described elsewhere in this report the proponent has justified the usage of LiDAR for the first baseline update and has relied upon the expertise of Dr. Sassan Saatchi, a globally renowned LiDAR expert, for this purpose. The requested deviation is to allow this same procedure to be used in future baseline updates when biomass shall be re-measured. The only significant difference in the future, is that ground based inventories will not need to be used as the allometric models for using LiDAR have already been developed.

Auditor evaluation of the methodology deviation:

The audit team approves the methodology deviation. The deviation simply replaces a requirement of the approved VCS VM0006 methodology with the also VCS approved VT0005 tool which is a better reflection of the state of the art of technology for remote forest measurement. Several peer reviewed publications have demonstrated that LiDAR measurements can be more accurate that ground based inventories and have necessarily much higher sampling intensities. As a result the audit team considers the deviation to more accurate than the alternative. In addition, the audit team sees no reason why ground based inventories would be necessary at future baseline updates to create a new allometric model as the forest type is the same at both time points.

The deviation is approved.

6.4 Project Boundary

The project boundary has demonstrated conformance with the VCS requirements and with VM0006. The project crediting period is 30 years which exceeds the minimum crediting period for AFOLU projects. The project is claiming a longevity period (relevant for VCS AFOLU Non-Permanence Risk only) of 60 years and has justified this based on an approved management and implementation plan (REDD Plan) for the project which commits the project to maintaining carbon

stocks and project activities for 30 years beyond the crediting period. The REDD Plan has been formally approved by the consejo.

The project has selected carbon pools and GHG emission sources appropriately as well. The proponent has directly copied the relevant tables for pools and GHG sources from the VM0006 methodology and clearly identified which pools or emissions sources are included and excluded and why. Conformance has therefore been demonstrated.

6.5 Baseline Scenario (G2 & CM1)

The VM0006 methodology requires that the baseline scenario selected shall be the pre-project land use if this methodology is used. The PD appropriately selects the pre-project scenario which is that the project area would continue to be degraded and deforested due to illegal logging and conversion for agriculture continuing in a mosaic pattern.

The audit team finds this assertion to be credible based on observations of similar consejos in the same region of Colombia in which this is the land use pattern. Also this pattern is readily apparent in the project area as project activity implementation is still in a nascent stage. The audit team further confirmed this via extensive stakeholder interviews. Stakeholders did not see any other realistic baseline in the absence of the project other than continuation of the pre-project land use. In section 4.5.3 of the PD a mobility, agents are identified as the local population which part time or full time conducts illegal logging activities to provide income and converts forest areas for small scale agricultural development. The field audit confirmed the identity of these agents and the audit team held multiple interviews with agents to confirm this. The baseline scenario was visually confirmed throughout the project area as well.

The presence of colono settlers as agents of deforestation and degradation has been justified as an insignificant risk given established contracts with these settlers to limit their use of natural resources.

Appropriate spatial and non-spatial variables which can be explanatory with regard to degradation/deforestation patterns are identified along with an explanation of the relative contribution of the different drivers to both deforestation and degradation reported in sections, 4.5.3, and 5.3.3. These relative contributions make sense from the field audit information and identify selective logging for commercial sale as the primary cause of emissions with conversion for small scale agriculture as the second cause. The vast majority of forest visited by the audit team was obviously degraded with clear evidence of logging so this conforms to the observations from the field audit.

The baseline scenario is justified and was selected through following the requirements of the VM0006 methodology.

<u>G2.1</u>

The project has conformed to this indicator by using the VM0006 methodology and VT0001 additionality tool appropriately.

<u>CM1.1</u>

The PD describes the communities' socioeconomic status and well-being in Section 4.5.1. A focal issue/problem flow analysis approach based on Richard and Panfil (2011), a CCBA recommended methodology is used to identify factors which contribute to ongoing focal issues identified by the stakeholders as important. These include poverty, insufficient infrastructure and programs, and decline in ecosystem services and are described along with contributing factors, direct factors, and corresponding project intervention areas in Table 19 of the PD. Additional description of communities including community baseline conditions is provided in Section 1.3.4, 1.3.5, 1.3.6 of the PD. The community baseline is rooted in information collected in the socioeconomic study that was conducted early in BioREDD+ implementation and was conducted by Colombian Universities and foundations with expertise in socioeconomic monitoring. This study, the "Timber Study" has been provided to the audit team and was reviewed. Conformance is demonstrated.

CM1.2

Ecosystem services and areas fundamental for meeting community needs are identified as HCVs in the project area in section 1.3.8 of the PD. The audit team confirms this based on interviews and observations of the field audit. Community members are clearly reliant on the forest for provision of a healthy riverine environment as communities are heavily reliant on fishing. Additionally, given the very high rainfall of the region communities are reliant on the forest for flood control and mitigation. Conformance is demonstrated.

CM1.3

The PD plausibly describes that in the absence of the project the deforestation and degradation would continue with a resulting reduction in ecosystem services the communities rely on and decrease in well-being in the communities, particularly since the community members derive little economic benefit from logging and only rely on this income source due to lack of other opportunities.

B1.1-B1.3

The biodiversity baseline scenario is described in Section 4.5.2 of the PD and similar to the community baseline, follows a problem flow analysis approach. As the project area and the broader Colombian Pacific region is one of the most biodiverse areas on Earth with currently limited cataloguing of diversity of species, the project has asserted it is infeasible to develop a highly descriptive species-based biodiversity baseline. The audit team agrees with this assessment. The BioREDD+ program has invested in biodiversity monitoring already through a partnership with the Humboldt Institute. Appropriate academic and other references are provided to substantiate the biodiversity of the region, which is already globally recognized.

Based on a significant increase in degradation rates during the second half of the historical reference period (2000-2011) the PD asserts that this provides a reasonable indicator that the baseline scenario is one of continued loss of biodiversity, HCVs, and ecosystem services due to unabated logging. The audit team agrees with this assessment based on interviews and observations in the field audit. The assertion that increase/maintenance of biodiversity is directly linked to cessation/reduction of logging is credible and is based on field audit information which confirms this relationship which is in any event obvious in tropical forest. Table 20 describes

focal issues, threats, and contributing factors and project interventions related to the biodiversity baseline scenario. In the baseline, it is projected that the project area loses all primary forest within the next few decades. Conformance with the CCB indicators has been demonstrated.

6.6 Additionality (G2)

The project uses the VCS VT0001 v3.0 tool to demonstrate additionality which is appropriate per the VM0006 Section 7 requirements. VT0001 uses a stepwise approach and conformance is described in that manner below:

Step 1a.

The proponent identifies three alternative land use scenarios to the proposed REDD project. These include:

i) Continuation of the pre project land use of ongoing forest degradation from illegal selective logging for both commercial sale and domestic usage, combined with deforestation of easily accessible areas for subsistence and small scale agriculture. The audit team agrees that this scenario is consistent with that directly observed by the audit team and verified through stakeholder interviews in the project area and throughout the broader region.

ii) Cessation of illegal logging and similar activities resulting in deforestation in the project area through effective implementation of forest protection efforts by the Regional Environmental Authority, without registration as a VCS REDD project and carbon finance. The audit team agrees this scenario is credible and theoretically possible although it seems highly unlikely that the Regional Environmental Authority would suddenly decide to implement this after multiple decades of ineffective forest protection.

iii) Cessation of illegal logging and similar activities that cause deforestation in the project area through effective implementation of alternative livelihood activities within the project area which could serve to reduce deforestation and degradation in the absence of registration as a VCS REDD project and carbon finance. The audit team agrees this scenario is credible and theoretically possible. USAID has implemented some alternative livelihood projects in the project area in recent years, partly to reduce dependence by communities on illegal drug production. However, illegal logging has continued unabated. The audit team understands that these previous USAID funds have not been targeted through a performance-based vehicle such as REDD and may also have not been at sufficient scale to significantly reduce deforestation and degradation.

Step 1b

The proponent demonstrates conclusively that all scenarios identified above are in conformance with enforced mandatory laws.

Scenario i), the pre-project land use, is not in conformance with some environmental laws, but these laws are systematically unenforced. The audit team confirmed through interviews with some local corporations (Corporacion del Narino, Code de Choco, Corpo Urabá) responsible for local forest governance, that these organizations are typically unable to implement effective forest protection. Other stakeholders interviewed indicated that it was commonplace for illegal timber to be “laundered” by using timber transportation permits from one of a handful of small approved forest management areas for timber illegally sourced from large swathes of the Colombian Pacific

region. Although the selective logging is illegal, the audit team confirmed that there were no effective disincentives to logging on the ground and evidence of the ongoing logging is ubiquitous and totally open. Consejos and resguardos do have legal right to manage non forest areas in their territories for agricultural production and the deforestation resulting from these activities is legal.

Scenario ii) implementation of effective enforcement of forest protection by local/regional governmental authorities, is in conformance with laws and regulations by virtue of being implemented by the government itself.

Scenario iii) implementation of alternative livelihood activities by an international development or other NGO can be assumed to be legal as this entity would have to seek approval from the Colombian government and relevant authorities to operation in the region.

Step 1c

The proponent has correctly selected scenario i) continuation of illegal logging and unplanned deforestation for subsistence and small scale agricultural production as the baseline scenario. The VM0006 methodology stipulates in Section 6 that the project shall select the pre-project land use as the baseline for this methodology to be applicable. This scenario matches the results of on the ground observations and stakeholder interviews collected by the audit team during the field audit. Traveling through the project area it is abundantly clear that illegal logging is ongoing, as evidenced by stumps, log yards, and boats transporting logs. Deforestation for small scale agricultural activities surrounds each community in the project area and exists as isolated settlements as determined by flying over project areas and/or river travel in the project area. Stakeholders, including local authorities, community leadership, and the actual agents of deforestation/degradation, confirmed that they expect these activities to continue unabated (as they have for the last couple decades) in the absence of effective implementation of the REDD project which will provide alternative livelihood options. The other alternative scenarios are theoretically possible and the audit team sees no evidence of their existence on the ground with the exception of some recent USAID funded projects which have not been specifically targeted at reducing deforestation/degradation, are not performance based, and as a result are not considered a more credible baseline than the existing land use at the project start date, which could be readily observed during the validation field audit.

Step 2

The PD skips step 2 and preferentially selects to conduct the Barriers Analysis. This is permitted per Step 1c of VT0001

Step 3a

The PD provides a thorough and justified summary of barriers to the proposed REDD project including:

- investment barriers (i.e. no debt funding is available as the consejos are poor and community lands cannot be used for loan guarantee),
  - The audit team concurs with this assertion based on field audit. In addition the consejos are extremely poor and have suffered from instability due to conflicts with the FARC which have acted as a disincentive to investment.

- institutional barriers (i.e. uncertainty in REDD regulations as the REDD+ national strategy is being developed)
  - The audit team acknowledges that the uncertainty in REDD regulations would provide a disincentive for the communities to conserve the forest in the absence of the REDD project, however this is not relevant.
- technological barriers (i.e. facilities for commercialization of agricultural products do not exist in the absence of the REDD project)
  - There are major technological barriers to all aspects of project development and implementation in the absence of VCS related REDD finance. The consejo members are undereducated with little resources and without the expectation of REDD finance, and the additional help from implementing partners it leverages, would find it impossible to conduct any of the technical aspects of conservation to avoid GHG emissions and would be unable to implement the project activities. The project activities enable the REDD project including agricultural improvement and development of complex production and value chains. The audit team observed in the field audits that the current state of agriculture is low tech and lacking inputs which could greatly increase production.
- barriers from land tenure and property rights (i.e. communal land ownership provides limited incentive for conservation of forest stocks as rights to timber are not clearly defined)
  - The assertion that the rights to timber are not clearly defined is true based on community interviews. Corteros (loggers) currently treat the forest as an unregulated public resource and as such conduct logging in a haphazard way. The forests are obviously degraded from this.
- lack of access to markets (i.e. lacking infrastructure, electricity, etc.)
  - The consejos are very remote with either minimal road access or access only by river/sea. Electricity is not present across the consejos.
- lack of infrastructure (i.e. consejos have typically very limited road access and/or water access)
  - As described above, infrastructure in the project area does not lend itself to alternative income generation activities other than logging and a small number of other relatively unprofitable activities.

<u>Step 3b</u>

The PD asserts that the barriers listed above would not prevent implementation of the baseline scenario as this is the pre-project land use.

<u>Step 4</u>

The proponent has revised the Common Practice Analysis in section 4.6.4 of the updated PD to demonstrate conformance with the VCS requirements and the VT0001 requirements.

The proponent asserts that implementation of similar projects to reduce deforestation and degradation in the region are rare. The only somewhat similar program is the MIDAS program funded by USAID (which also funded the development of this REDD project. The MIDAS program did focus on poverty alleviation and generating environmental benefits. The MIDAS program is described in the PD and the audit team investigated the program in-depth during the field audit, including in interviews with USAID staff. The audit team can confirm however that the

programs like the MIDAS program are uncommon. The project area and the broader region is politically and geographically isolated. The region is one of historic and recent social unrest, often of a violent nature. These obstacles have prevented the effective distribution of government and NGO capacity building and development aid to the region. The MIDAS program is also qualitatively different than the REDD project. Although the program does intend to generate environmental benefit, the program does not seek to reduce deforestation and degradation specifically through the means of the REDD project.

G2.2

The PD justifies that project benefits would not have occurred in the absence of the project in Section 4.6.1-4.6.2. The justification rests on the assertion that the consejos are impoverished and as a result are unable to implement their development plans which would achieve community benefits in the absence of REDD finance. Biodiversity benefits are considered unlikely to occur in the absence of the project due to the expected continued trend of deforestation and degradation without the REDD project.

These assertions are generally credible based on the evidence collected by the audit team in the field. The audit team considers it self-evident that the pattern of deforestation/degradation would occur without the project and hence that biodiversity benefits are additional.

Community benefits are considered likely to be additional as well and this is sufficient for validation. However a Forward Action Request (FAR) has been issued as some of the project activities (i.e. aquaculture) do exist in the project area prior to the implementation of the project. The additionality of community benefits comes from the increased scale of implementation and support with marketing and processes available through the SPVs which the project will provide. The audit team agrees this increased implementation will not occur in the absence of the project. The FAR is issued so that future verification auditors can confirm that project activities which have been implemented are due to the REDD project rather than a pre-existing practice or other support.

7 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

7.1 Project Scale and Estimated GHG Emission Reductions or Removals

The project is correctly identified as a “Project”, as the average annual emissions reductions are less than 300,000tC02e. The proponent provides a summary of the *ex-ante* estimated GHG emissions reductions in the PD Section 5.1 that is consistent with other representations in the PD.

7.2 Leakage Management

Section 5.2 of the PD indicates that as the major *ex-ante* estimated source of leakage is activity shifting leakage in which the agents of leakage are the same agents of deforestation in the project area, that there is no differentiation between leakage management activities and project activities. The proponent lists the project activities/leakage mitigation measures in Section 5.2 in detail.

Based on the field audit the audit team has found positive evidence that leakage mitigation activities are likely to reduce activity shifting leakage from the project area. The project boundaries generally are farther from logging infrastructure (rivers, ports, and roads) than other parts of the consejos which somewhat mitigates the risk of leakage in any event. The communities have confirmed that currently community members do not travel across consejo boundaries to log in other areas because it is both physically very challenging due to the distance travelled and likely uneconomical. The audit team confirmed via multiple interviews with agents of degradation that agents do not prefer logging as an economic activity due to the difficult labor involved, low economic return, illegal nature of the activity, and destruction to their culture and commonly owned resources. There is little risk of activity shifting of agriculture outside the project area as the consejo forms the project area and consejo members would lose land tenure by shifting outside of their consejo. The leakage management activities identified are in conformance with the relevant VCS and CCB requirements.

7.3 Baseline Emissions

Reference Region Delineation

The proponent uses a reference region as directed by the methodology to measure historical LULC changes used to create the baseline emissions scenario in the project area.

The proponent has demonstrated conformance to the similarity criteria defined in VM0006 v2.1 Section 8.1.1.2. Specifically:

- Minimum size requirements: As required, the proponent has demonstrated that the minimum size of the reference region is greater than 250,000 hectares. The reference region is 254,766 hectares and includes the project area and leakage areas.

- Unbiased boundaries requirements: The proponent has selected a reference region constructed only of other land use designations that are sufficiently similar to the project area. The reference region consists entirely of other Afro-Colombian consejos with similar cultural, social, governance and economic characteristics. The boundaries are defined by the consejo boundaries or naturally occurring boundaries (Pacific Ocean). All consejos in close proximity to the project area were selected until the 250,000 hectare threshold was met. Some consejos were excluded if the consejo did not meet other reference region definition criteria from VM0006. For example, if any part of a consejo did not meet the slope similarity thresholds then the entire consejo was excluded to avoid bias.

- Exclusion of restricted access areas: The proponent has demonstrated that all national parks, military installations and other conservation areas have been excluded from the reference region. The proponent justified the source of shapefiles of these areas to the audit team. All shapefiles were from appropriate government sources.

- Exclusion of planned deforestation areas: The proponent has demonstrated that no planned deforestation areas exist in the project area from logging or commercial agriculture. The proponent sourced this information from the Ministry of Forestry

database on plantation location. The proponent has demonstrated the location of mining areas from the appropriate government agency (Geominas) for the end of the historical reference period via shapefiles from 2005 onward which is the only time period for which government data has been collected and the only time period in which mining in the Colombian Pacific is legal. The proponent has also collected all relevant information from the corporacion responsible for issuing permits for community and other logging concessions in the project area and reference region,. The proponent submitted an official request to the Choco department for all records of any forest management plans in the region from 1991-2015. Any areas for which a "resolucion", a harvesting permit, was issued were removed from both the project area and the reference region. This resulted in a change of 1,497 hectares in the reference region as a series of small forest management areas where planned degradation or planned deforestation may have occurred were removed from the reference region and project area.

The proponent has transparently provided the audit team with a significant amount of documentation of this process including:

-the official letter of request to CORPONARINO and CORPOURABA;

-the report of the BioREDD+ staff member that went to the office of the corporacion to receive the data;

-copies of the original resoluciones;

-updated maps of the reference regions and project areas depicting the areas that have been excluded;

-an excel file demonstrating the areas that have been excluded;

-contact information for the relevant individuals at the local corporation to facilitate independent confirmation by the audit team.

The proponent provided an in depth justification for selection of the reference region via supporting annexes referenced in the PD as well as in an in depth presentation to the audit team at the BioREDD+ office in Bogota. The audit team had the opportunity to question the justification of the reference region and probe for potential sources of bias. Information sources used for identifying the reference region were appropriate and includes:

-Basemap of 1:100,000 from IGAC which is public information and the appropriate source for Colombia. Basemap includes basic map information such as roads, hydrology, water bodies, relief, airports, etc.

-National Parks, military bases, indigenous reserves and consejos all come from la Sistema de Informacion Geografica Para La Planeacion Y El Ordenamiento Territorial (SIG-OT), a government run public access mapping information source. Forest reserve data comes from the Ministry of Forestry and includes all forest reserves designated from 1956 onward

-Plantations come from the Ministry of Forestry and a plantation map was only available for 2009. However, the map indicates very few plantations and none in the entire Colombia Pacific region. Additionally the audit team observed no evidence of plantations during more than one month in the field in the Colombia Pacific. The audit team concludes that the assumption that large plantations have not existed in the project area during the historical reference period to be credible.

-Slope information came from DEM (Digital Elevation Model) which is appropriate

-Mining data came from Geominas the government agency responsible for permitting mines. Mining was only permitted in the Colombian Pacific from 2005 onwards and the proponent included all data from 2005 appropriately.

The proponent has transparently provided the metadata for each Landsat scene used in the historical deforestation/degradation analysis in the reference region.

Carbon Stock Measurements

The BioREDD+ program, of which this project is one of eight projects uses field plot data to measure carbon stocks which are then estimated using LiDAR across a broader region.

Sampling Approach for Field Plots

The project is one of eight projects in the BioREDD+ program which are distributed across the Colombian Pacific region. As the field plots are used only to calibrate and validate the LiDAR data the BioREDD+ program has instituted a single forest inventory across all eight projects BioREDD projects consisting of 15 one hectare permanent sampling plots which are each surrounded with 8 systematically laid out temporary sampling plots of 0.25 ha each. Each permanent one ha plot is treated (for the purpose of LiDAR calibration and validation) as four 0.25 ha plots. In addition the program implemented 45 additional 0.25 ha plots in a single LiDAR transect for estimation of sampling and measurement errors, LiDAR calibration. The total used to develop and test the LiDAR model was 214 plots. The total inventory plots were representative of the diversity of the region as observed by the audit team and included both intact and degraded forests, as well as different forest types including terra firme (Colinas), freshwater swamp forests (guandal), and mangrove forests.

The audit team conducted resampling in 7 of 15 permanent 1 hectare plots using a systematic approach wherein the four corner subplots of each 1 hectare plot were remeasured by the audit team. This approach allowed the audit team to evaluate the full range of diversity in each plot (for example some plots contained multiple forest types) and to strategically pick up on any obvious discrepancies from the Standard Operating Procedures (SOPs) as the audit team had to crisscross the entire plot to reach each corner. In addition the audit team was able to verify the coordinates of the corner markers of each 1 hectare plot and as such detect errors in plot layout. Each 20 x 20m subplot was treated as an individual plot and the audit team compared data collected by the original inventory with the team's measurements. Discrepancies between data collected by the audit team and the original inventory were identified in most of the seven plots and included i) flawed DBH measurements from measuring below the top of the buttress on buttressed trees, ii) incorrect height measurements, and iii) recording errors in the data sheets.

However, at the time the audit team did not consider these errors to be systematic or sufficiently large to be material. The audit team has conducted analyses on the data collected and not detected significant errors in the inventory data. Additionally, GeoEcoMap provided the audit team with an error propagation report (GeoEcoMap Task 16) which demonstrated via QA/QC remeasurements implemented systematically across 45 plots that measurement errors were insignificant and not material. Based on the information collected in the field the audit team has confirmed that the field data collected is valid under the VCS VM0006 methodology and VT0005 tool..

Forest Inventory SOPs and In-Field Conformance to SOPs

The BioREDD+ program used the RAINFOR protocols as the SOPs for the forest inventory. These protocols were developed by a broad consortium of experts in South American tropical forests and are considered appropriate for use by BioREDD+. The audit team had the forest inventory team demonstrate implementation of the SOPs on the first plot that was visited in the inventory. Members of the original inventory team including individuals from CONIF (Corporacion Nacional de Investigacion y Fomento Forestal) were present at each visited plot. The demonstration of SOPs showed conformance with the printed SOPs and best practice. However, subsequent discrepancies in the implementation of SOPs were identified in some plots and included i) inconsistent tree labelling procedures, ii) inconsistent plot marking procedures. However, as described later in this section of this report, the proponent provided an uncertainty and error propagation report that demonstrated that these errors observed by the audit team were immaterial. The audit team did not see the original errors as systematic. Additionally, there is not a risk of these errors being repeated in future monitoring activities as future monitoring will use LiDAR rather than forest inventory measurements to measure carbon stocks.

Selection of Allometric Equation

GeoEcoMap selected the local model developed by Saldarriaga (2011) based on a comparison of this allometric model with three other models including two regional models (Saldarriaga 2014, Alvarez et al. 2012) and one commonly used global model (Chave et al. 2014). Biomass was estimated using the four models and although no significant difference was observed (ANOVA; P>0.5), the selected model produced the lowest average biomass values and was hence the most conservative, estimating biomass at between 3.9% and 10% lower than the other models. The Saldarriaga allometric models including a sample used to develop the allometric models is representative of the entire BioREDD+ program area and includes 296 trees and 97 palms harvested in terra firme forest, flooded forest, and mangrove forest from sites in the northern and southern Colombian Pacific.

A model was developed from published data throughout Panama and Colombia for trees less than 10cm dbh with an r^2 of 0.91 which the audit team considers acceptable for usage.

It is considered good practice by the audit team that allometric models shall not be applied to trees with diameter or height measurements (or other input parameters) outside of the range of the sample that the allometric model was originally based. The maximum dbh of trees used in the sample to develop the Saldarriaga equation used by the project was 155.4cm. GeoEcoMap disagrees with this limitation and feels that this “good practice” status is misguided. As a result of

conversations during the field audit GeoEcoMap conducted and submitted to the audit team an analysis of the impact of including trees greater than the 155.4cm cut off in the biomass estimation and demonstrated it was less than 1% impact (RMSE 1.58 Mg/ha) allometric model and demonstrated that the impact of this is immaterial Additionally, it is noted that only three of the plots included individuals with dbh greater than 155.4cm and in these plots the number of individuals is minimal.

Root to Shoot Ratio

The root to shoot ratio used is from Saatchi et al. (2011) who is the principal of GeoEcoMap, which is developed based on Mokany et al. (2006), a widely used root to shoot ratio. The audit team has conducted a simulation of estimated belowground biomass using the root to shoot equation developed by Saatchi et al. (2011) and Mokany et al. (2006) and determined that the Saatchi et al. (2011) equation results in higher estimates of belowground biomass for very small trees (<20cm dbh) but then results in lower (more conservative) estimates of belowground biomass for medium and large trees. This approach is more conservative than the Mokany equation and regardless comes from a valid source.

Non-tree Carbon Stocks

The BioREDD+ program used published literature from Panama, Costa Rica, and Peru to develop a relationship between the biomass of trees >10cm and shrub and liana biomass in the same forests. The program reports the model developed by this data transparently in the document GeoEcoMap Task 12. The VM0006 methodology does not require direct measurement of non-tree biomass and this approach is more in conformance with the VCS principle of Accuracy than if the proponent were to use default data from another location (which would be acceptable under VM0006) so the audit team accepts this approach.

Dead wood Carbon Stocks

The BioREDD+ program estimated the optional dead wood carbon stocks from field plots and later used this field level data to develop a predictive model estimating standing dead wood and lying dead wood in a given area based on the measurement of aboveground tree biomass. This approach is innovative and logical given in degraded forests where the volume of dead wood is closely related to the amount of recent anthropogenic disturbance from logging which increases dead wood through damage to residual trees and from wood waste and slash left on the site. The actual initial deadwood measurements followed the RAINFOR protocols and included 462 point samples of deadwood spread across the full inventory area. VM0006 requires users to apply a biomass discount factor for standing dead wood due to the assumed loss of some branch biomass. Although the project does not use this approach the project instead includes only bole biomass which is more conservative as this discounts all branch biomass and is acceptable. Three decomposition classes were identified with corresponding reductions in wood density as required by VM0006. Actual measurements were based on diameter and length/height. The audit team has confirmed that the dead wood measurement methods conform to the VM0006 methodology and best practice.

Litter Carbon Stocks

The BioREDD+ program has included litter and stump biomass based on a published model from Sierra et al (2007) relating aboveground biomass to stump and litter biomass. These models are transparently presented in the PD in Table 35.

Soil Organic Matter

The proponent has chosen to conservatively exclude soil organic matter, as is permitted by the methodology. The audit team agrees this exclusion is conservative as SOM can be expected to be lower in the post deforestation/degradation degraded agriculture and degraded forest classes as compared to the intact forest.

Other Inputs and Parameters

The BioREDD+ program used a more conservative carbon fraction (CF=0.485) in estimation of forest and nonforest carbon stocks, than is referenced in VM0006 (CF=0.5) which is in conformance with the VCS principle of Conservativeness.

The proponent's calculation of plot level carbon stocks is transparently reported in GeoEcoMap Task 12 and conforms both to the VCS requirements and VM0006 v2.1.

<u>Sampling Approach with LiDAR</u>

The BioREDD+ program reports on the LiDAR methods in GeoEcoMap Task 8 & 9. Dr. Sassan Saatchi, the principal of GeoEcoMap is a global authority on the usage of LiDAR for remote estimation of forest carbon stocks and has used this technology and other remote sensing approaches to produce both regional and global maps of forest carbon stocks. The BioREDD+ program used 49 LiDAR transects to sample 83,000 hectares of forest within the eight BioREDD+ projects. Field inventory plots described above were located within LiDAR plots and served to calibrate and validate the LiDAR model. Each LiDAR transect was > 1000 ha. The proponent uses 1 hectare permanent field sampling plots for calibration and validation of the LiDAR. This follows the recommendation of Asner and Mascaro (2014) with regard to using 1 hectare plot size for field plots, which the paper indicates was able to reach 90% agreement on carbon density estimations based on a large sample of 884 1 hectare plots remeasured using LiDAR. The proponent also appropriately ensured randomness in the LiDAR transects by using randomly located central points for each transect. The direction of travel of the transect was also randomized ensuring representative coverage of the different forest and non-forest cover types. The LiDAR enables a high degree of accuracy in sampling with vertical accuracy of height (which is used to estimate carbon stocks) 25cm at 95% CI.

Once the LiDAR data was obtained GeoEcoMap tested multiple forms of allometric model using different input values and finally selected mean Top Canopy Height (TCH) as the primary input type based on the parsimonious nature of this model and its similar performance to other tested models. The model was validated against approximately 1/3 of the ground plots.

In summary the methods used for the LiDAR estimation of biomass values follow best practice as defined in published scientific literature and conform to the rules of the VCS, the VT0005 tool v1.0, and the VM0006 v2.1 methodology.

Uncertainty and Error Propagation

Summary of Error Propagation Approach

The proponent acknowledges the uncertainty inherent in carbon estimation using complex products with multiple input sources including input data, models, and other error sources. The proponent rightly acknowledges limitations of models and that residual noise is inherent due to inevitable errors inherent in ground measurements, remote sensing imagery and processes, and statistical models. As a result the proponent uses a bootstrapping (resampling without replacement) approach to evaluating uncertainty and justifies this approach. Bootstrapping assumes that the observed data represents only one of many possible realizations of data and reconstructs a large number (1,000 in this case) of alternate realizations based on random resampling of the residuals, which serves to bracket the range of unobserved values. The proponent provides appropriate academic reference for the bootstrapping approach (Efron and Tibshirani, 1993). It is also noted by the audit team that Dr. Sassan Saatchi, who led the estimation of forest biomass including field measurements, LiDAR sampling, and remote sensing, and error propagation, is considered a foremost global authority on this approach and has produced significant published literature representing the state of the art.

Uncertainty in Plot Based Estimates of Aboveground Biomass (AGB)

Measurement Errors

The forest carbon stocks identified in the project do not come directly and only from the plot level measurements of aboveground biomass. The plot level data rather serves to calibrate and validate the AGB estimated by a model developed for the LiDAR sampling. The proponent used 30 plots for calibrating the actual LiDAR model (which estimates AGB from top canopy height per pixel—see below), with 15 plots retained for validation of the model. This sampling intensity/approach was based on previously published methods from Asner and Mascaro (2014) which is considered among the state of the art approaches for using remote sensing data to estimate AGB. The proponent follows the recommendation of Asner and Mascaro (2014) with regard to using 1 hectare plot size for field plots, which the paper indicates was able to reach 90% agreement on carbon density estimations based on a large sample of 884 1 hectare plots remeasured using LiDAR. In addition GeoEcoMap used a set of 45 systematically located 0.25 ha plots used to estimate the spatial uncertainty of the LiDAR estimation of biomass.

Three potential sources of measurement error were identified including diameter (D), height (h), and wood density (p). The audit team evaluated the forest inventory across all eight BioREDD+ projects and did find examples of measurement errors with regards to D and h. Examples of errors included i) direct measurement error, for example, when the inventory team failed to measure D fully above the buttress of a buttressed tree, ii) errors from misuse of inventory equation for example when the inventory team overestimated palm heights due to error in usage of the hypsometer, and iii) recording errors for example when a tree was actually 145cm D but was recorded as 14.5 cm D. The errors were not systematic yet were observed in each of the 8 (out of 15) 1 hectare permanent plots resampled by the audit team. The audit team has determined based on statistical comparison of the subsamples remeasured that these errors were not material in nature and were not biased. Furthermore, the proponent used an error

propagation approach to estimate the cumulative impact of these errors following methods in published literature. QA/QC procedures were implemented for the 45 systematic sample plots laid out in a single LiDAR transect. A first forest inventory team measured all trees in each 0.25 ha plot and a second inventory team remeasured 10 randomly selected trees per plot to compare measurements. Errors were assessed through the following methods:

1. Errors and discrepancies with regard to D measurements were collected and biomass per plot was calculated using the selected allometric equations for team 1 and team 2 to assess significance of differences. Of the 429 trees resampled approximately 6-8 depicted great difference in measurement between the two teams. The resulting impact on biomass was both *de minimis* per VCS rules and less than the 5% materiality threshold applicable to this project.

2. Errors in tree height (h) were quantified using the same methods and also impacts on estimated biomass were measured. The project uses the subsample of tree heights (minimum 50 heights per 1 hectare plot) to develop a height-dbh relationship applied at the level of each permanent project area. This is appropriate given the edaphic, phylogenetic, and ecological differences across the BioREDD+ project areas which span the entire Colombian Pacific. GeoEcoMap developed two different height – dbh measurements using the replicated QA/QC measurements and presented the results to the audit team. Although there are some significant differences in tree measurements between the two groups there is nearly no bias observed (0.28m) and the height-dbh models developed are nearly identical and when applied in the allometric equation to estimate biomass across the 45 plots results in a difference of less than 0.5%, below *de minimis* per VCS rules and less than the 5% materiality threshold applicable to this project.

3. Errors associated with wood density (due to different species ID) were calculated and impacts on estimated biomass were measured. Wood density differences as a result of different species identification between the two inventory teams were also insignificant and had an RMSE=0.02 g/cm^3. In general the wood density measurements applied in the BioREDD projects are considered more reliable than those typically used by VCS projects as the BioREDD program used destructive sampling to develop their own wood density measurements per species per project rather than using academic literature sources which are typically quite variable and provide multiple options with greater variety than the (0.02 g/cm^3) figure cited above.

Errors from use of Allometric equation

GeoEcoMap selected the local model developed by Saldarriaga based on a comparison of this allometric model with three other models including two regional models (Saldarriaga 2014, Alvarez et al. 2012) and one commonly used global model (Chave et al. 2014). No significant differences were observed between the models yet the model that provided the lowest average estimate was used. The error in the allometric equation selected was approximately 4% over the 240 trees harvested to develop the equation. The cumulative percent error associated with error from allometric equations and error from measurements is approximately 2% (variable dependent on number of trees per plot) and below the *de minimis* threshold applied by VCS as well as the materiality threshold.

Errors from LiDAR

GeoEcoMap asserts that due to the inherent lack of reliability of ground-based tree height measurement using hypsometer that the project used (and which is common practice) that these should not be considered "true" forest height measurements to compare the LiDAR height estimations too. It is well known and accepted that tree heights in tropical forests are notoriously difficult to estimate accurately due to the dense canopy, and in fact many inventory methods select dbh only allometric equations to avoid these measurement errors. The audit team agrees with this assertion based on professional experience and experience at the project site. However, in this case as the allometric model used for the LiDAR is based on Top Canopy Height (TCH) height data is important. GeoEcoMap performs a new ground classification of LiDAR point clouds using a random sample of LiDAR scenes and compares this with data provided by the commercial vendor to estimate measurement errors. The difference in the two samples is a result of differences in DEM provided by the commercial vendor and DEM provided through GeoEcoMaps own programming and visual examination. Tree canopy height is evaluated at the 1m pixel level and measurements are evaluated over 2500 pixels and result in 0.032m standard error at this scale. As a result GeoEcoMap concludes LiDAR height measurement error is negligible and can be ignored. The audit team accepts this assertion based on the minimal error, fact that VCS methodologies do not provide requirements at this level of specificity, and the fact that the method represents best practice at this time.

GeoEcoMap uses Top Canopy Height (TCH) measured by the LiDAR strips as the input data for the estimation of biomass. This approach follows best practice in published literature (Meyer et al. 2013; Asner and Mascaro 2014) cited by the proponent.

<u>Land Use Change and Baseline Rate of Deforestation/Degradation</u>

The proponent has justified a methodology deviation to assess historic land use change and the baseline rate of deforestation and degradation over a time period longer than that specified in the VM0006 methodology. VM0006 specifies 15 years whereas the proponent has used a historical reference period of 23 years.

Section 4.3 of the PD describes requested methodology deviations. In this section the proponent has requested an extension of the 15 year time limit for this project. The proponent has requested that the three time periods used to assess the historical reference period are from 23 years, 13 years, and 1 year before the project start date.

The proponent justifies this deviation based on the trade-off between accuracy and conservativeness in project implementation, recognized and endorsed by the VCS in the VCS VVB Manual. Projects and VVBs may accept a less accurate measurement or monitoring technique or result if it is determined that this less accurate approach is more conservative.

<u>Auditor evaluation of the methodology deviation:</u>

The audit team has determined that the methodology deviation is appropriate for this project. Per VCS Standard 3.5.1, methodology deviations are acceptable when they relate to monitoring or measurement and do not negatively impact the conservativeness of the methodology. The deviation clearly relates to measurement of historic deforestation in the reference region in the historical reference period.

The audit team has also confirmed that usage of the longer historical reference period (23 years) is conservative and in some ways may lead to greater accuracy in measurement of historical land use change as compared to a 15 year historical reference period.

1) The proponent asserts that it was infeasible to find quality cloud-free imagery for the reference region and project area for the 15 year period required by the methodology. The audit team finds this assertion credible. The audit team confirmed this in interviews with the remote sensing consultancy, GeoEcoMap, hired to conduct the analysis. Additionally, the project area and broader region is one of the rainiest places on earth with an aseasonal climate leading to persistent cloud cover throughout the year. During the more than one month that the audit team spent in this region of Colombia for this audit and related audits of nearby REDD projects, the audit team did not experience a single day without low cloud cover.

2) The proponent demonstrates via historical land cover change analysis that the deforestation and degradation rates increased dramatically between timestep 2 and timestep 3 (2000-2012), as compared to the time period between timestep 1 and timestep 2 (1990-2000). The combined deforestation/degradation rate increased from 2,340 ha/year in the first time period to 5,838 ha/year in the latter time period. This results in a lower baseline deforestation and degradation rate applied to the project area in the baseline scenario as the rate is impacted conservatively by the earlier lower rates.

The audit team confirmed that deforestation/degradation rates increase significantly following the year 2000 via interviews in the field that stakeholders including consejo members, community members, and relevant government officials from the local corporations responsible for local land use management. Following the year 2000, multiple companies came to the consejos and provided funding and material (chainsaws, etc.) to incentivize increases in logging. These companies were operating illegally in the region.

For the reasons cited above the methodology deviation is accepted by the audit team. Conformance has been demonstrated.

The historical deforestation/degradation analysis demonstrated that deforestation and degradation rates both increased in the 2000-2012 period as compared to the 1990-2000 period. This matches qualitative data gathered by the audit team in interviews with deforestation/degradation agents and community members who confirmed that these rates have been rising over time with the introduction of better logging technology (chainsaws) and increasing demand. The LULC transition types observed during the historical reference also further confirm the baseline scenario as the most significant transitions are from primary forest to degraded forest and from degraded and primary forest to cropland. The deforestation and degradation rates are severe with an annual average deforestation rate of 1.1% and an annual average degradation rate of 1.0%.

The proponent has provided an in depth Spatial Modeling Report v1.11 to describe usage of the spatial model and conformance to the VM0006 requirements. The Spatial Modeling Report describes conformance to each specific step of relevant VM0006 sections, enabling clear evidence of conformance. The proponent has used the IDRISI Land Change Modeller program to develop the transition potentials and end LULC classes for the baseline scenario and

emissions. The scarcity factor, which simulates the impacts of resource scarcity (forest scarcity in this case) on agent behaviour is calculated correctly and in conformance with VM0006. Final project and baseline scenario LULC maps are generated for each of the BioREDD+ project areas. Visual assessment of the maps provides evidence that the explanatory variables selected for the LULC transitions were correctly selected. Variables include those with well established relationships to deforestation and degradation patterns globally, and which are reasonable based off observations in the field audits, including:

-slope: audit team confirmed visually that deforestation and degradation is predisposed away from steep slope areas due to difficult access and poor soil quality for agriculture

-distance to urban centers: audit team confirmed that deforestation and degradation is concentrated near population centers as expected

-distance to roads: audit team confirmed in the field that byways along roads are typically deforested and that roads serve as timber conduits

-distance to timber routes and areas of influence: audit team confirmed, that logically, timber is exported from the project site via established timber routes and that degradation is more prominent near these routes due to ease of access. The routes were identified as part of a thorough socioeconomic and timber analysis conducted by Colombian research institutes.

-distance to timber collection centers (centros de acopio) and areas of influence: These timber collection centers were also mapped based on the timber analysis study

-distance to rivers and or the ocean: the audit team confirmed that waterways are the primary means of transport for goods, people, and timber in the BioREDD+ projects.

The audit team geospatial expert held an extensive multi-day meeting with the technical consultancies that developed the baseline scenario, remote sensing analyses, LiDAR analyses, and spatial modelling.

7.4 Project Emissions

Section 5.4 of the PD reports on project emissions per VM0006.

<u>Ex-Ante Effectiveness of Project Activities</u>

Project activities fall under program areas coinciding with project activities identified in VM0006 including i) strengthening land tenure status, ii) sustainable land use plans, iii) property demarcation, iv) agricultural intensification, and v) alternative livelihoods. *Ex-ante* maximal effectiveness of project activities is reported in Section 5.4.1.9. Adoption rates are identified in Section 5.4.1.10 and vary from 10% to 50% per annum dependent on project activity. The net result is that project activities reach maximal *ex-ante* effectiveness at addressing drivers of deforestation in 2023 (90% effective), and drivers of degradation reach maximal effectiveness in 2023 (65% effective). The exercise is inherently hypothetical as efficacy of project activities depends greatly on funding which is uncertain and the audit team views it as such. However, based on stakeholder interviews conducted during the field audits the audit team has confirmed

that generally agents of deforestation and degradation feel that the proposed project activities would address their need to deforest and degrade the forest if fully implemented. As such the audit team finds the 90% and 65% values effectiveness estimates 10 years after the project start date to be credible if the project is fully implemented. The audit team has confirmed that the effectiveness rates reported in the PD match those in Annex AB the accounting model where emissions reductions calculations take place.

Emissions from Project Activities

The PD reports no emissions resulting from implementation of project activities. The audit team detected no evidence that proposed project activities would result in emissions included in the scope of VM0006 for project emissions.

7.5 Leakage

Section 5.5 of the PD reports on leakage which comes from *ex-ante* activity shifting leakage as well as *ex-ante* market leakage. The proponent calculates leakage cancellation rates correctly according to VM0006 using the appropriate equations. As required by VM0006 8.3.2.1.4 leakage cancellation rates for logging is 100% as it is assumed that domestic demand for wood products and timber is inelastic.

Definition of Leakage Belts

The proponent describes the methods for defining the leakage belts in Section 5.5.2.3 of the PD. The methods were also described in detail by the consultant who conducted the geospatial analyses to determine the leakage belts. These analyses followed the requirements of VM0006 and a correct leakage belt has been defined. The leakage belts are built upon the assumption of an area of influence around centro de acopios (logging storage centers) and that leakage belts occur where these areas of influence extend beyond the project boundary. In response to previous observations by the audit team that the leakage degradation appeared to be occurring outside the area of influence of the centros del acopios, the proponent increased the leakage belt size several hundred percent to demonstrate conformance both with the VM0006 requirements and the VCS principle of conservativeness. The leakage belt covers 21,492 hectares. The leakage belt as defined in the PD has both a parsimonious shape surrounding most of the project area, and is focused on areas near the centros de acopio which are logical places for leakage to occur such as near rivers and other timber transport routes. Conformance has been demonstrated.

Market Leakage

Section 5.5.5 of the PD indicates that a discount factor of 0.2 was applied to the net change in carbon stocks in the project area to account for market leakage per VCS requirements. The audit team confirmed this value was used in the accounting model.

7.6 Summary of GHG Emission Reductions and Removals

Section 5.6 of the PD summarizes ex ante GHG emissions reductions based on the requirements of the VM0006 methodology. Conformance has been demonstrated. The proponent has

included the summary table required by VM0006 for calculated NERs (Net Emissions Reductions). NERs are transparently reported as 4,850,763 tCO2e over the project crediting period. All 11 terms of equation 105 from VM0006 are reported transparently in the table and match with the final validated Accounting Model.

Section 5.6.4 correctly calculates the estimated VCU issuance as 4,241,776 VCUs over the project crediting period.

The PD has transparently reported all assumptions data used in the calculation of VCUs. All data sources are either primary data or are derived from published scientific literature, as described throughout this report in each relevant section. The audit team has reviewed the data and parameters available at validation tables in the PD and confirmed that the appropriate data and parameters were utilized in quantification of VCUs.

The proponent has demonstrated conformance with the VM0006 methodology and the VT0005 tool in the quantification and summarization of GHG reductions and removals, as described throughout this report.

7.7 Climate Change Adaptation Benefits (GL1)

The project is not seeking recognition for exceptional climate change adaptation benefits.

8 COMMUNITY

8.1 Net Positive Community Impacts (CM2)

CM2.1

The project provides a detailed assessment of project positive impacts on stakeholders using the CCBA recommended theory of change methodology in section 4.5.1 and 6.1 of the PD. The assumptions of changes in well-being are substantiated in the PD and were supported by stakeholders interviewed during the field audit. The audit team verified that the socio-economic situation of the communities visited during the field visit is precarious and lack sufficient access to basic resources. The activities designed by the proponent with the implementation partners have a high likelihood of producing net-positive community benefits since they are specifically designed to address issues of income generation, education, and access to basic services. No interviewed stakeholders expressed a preference for the baseline community scenario which is expected given the substantial potential improvements the project represents to the project area and Embera communities. The assessment of impacts is organized around each of the program areas which project activities are divided into including governance, productive activities, social investments, and training and capacity building. The baseline data against which community indicators are to be measured was established through a socio-economic survey conducted by a local university. All the community members and leaders interviewed (over 100) during the field audit corroborated that the survey had been conducted and that local community members were involved in the study. The conclusions of the study are reasonable and are corroborated through the audit team's direct observation of the several communities during the audit, which are in precarious economic circumstances. The proponent's theory of change models present plausible logical connections between causes and effects related to social indicators and also the basis

from which to select community indicators for monitoring. Therefore conformance with CM2.1 has been sufficiently demonstrated.

CM2.2+CM2.3

The same section of the PD (6.1) identifies mitigation measures for negative impacts. The primary potential negative impact is inequitable benefit distribution. The responding mitigation measure is the designation of Fondo Accion as the responsible party for benefit distribution. Fondo has demonstrated experience in implementation of large complex projects including REDD projects based on previous large development projects. No other potential negative impacts are identified. The audit team as well cannot identify any other potential negative impacts given that logging is not preferred by the stakeholders, is minimally profitable, and holds no cultural importance. The PD correctly notes that the grievance mechanism will serve to detect any unanticipated negative impacts. The project is also following the World Bank safeguards and SBIA guidelines to mitigate any other potential negative impacts. As mentioned in the previous sections of this report the overall net effect of project activities has a high likelihood of producing net-positive results for communities. Therefore the proponent has demonstrated conformance with CM2.2 and CM2.3.

CM2.4

The same section of the PD (6.1) evaluates impacts to community HCVs and correctly assumes that the project activities will support these HCVs given that the project will serve to protect the forest resources, which generate the HCVs. Conformance is therefore adequately demonstrated.

8.2 Negative Offsite Stakeholder impacts (CM3)

CM3.1-CM3.3

Section 6.2 of the PD evaluates potential negative offsite stakeholder impacts. The primary potential negative impacts are from leakage impacting resources in surrounding consejos and community lands outside the resguardos participating in the project, loss of access to commodities from logging trucks (which deliver commodities as well) visiting the region less, and loss of revenue for corteros. The PD asserts that these negative impacts will be offset by alternative livelihood activities which serve to manage potential leakage. Impacts will also be offset by development of agricultural commodity production chains which can serve to maintain the flow of goods into the project area, and finally the same project activities will serve to provide alternative livelihoods for corteros. Corteros interviewed in similar BioREDD projects nearly universally stated that they would prefer other sources of employment other than logging and that they felt that the risk of leakage was low given the long distances one would have to travel to log on another consejo and the fact that this would violate the territorial integrity of a sovereign consejo. The project description clearly relates the project activities to the indicators CM3.1 and CM3.2 and explains that the offsite stakeholder impacts are expected to be negligible since the impacts of the project activities occur within the resguardos with potentially positive impacts felt as value-added activities from the project are implemented. The audit team agrees with this assessment because project activities are designed for conservation and income generation for the legal residents of the resguardos.

8.3 Exceptional Community Benefits (GL2)

GL2.1

The project demonstrates conformance through national law establishing that community members hold right of use in the consejos in section 6.3, 3.2 and 3.1 of the PD. This point has been verified by the audit team with the government of Colombia and its relevant institutions (INCODER).

GL2.2

The project demonstrates that both short term and long term net positive well-being for smallholders is likely based on the existence of a broad array of impact indicators in the monitoring plan which will serve to detect this. This is substantiated through its theory of change models presented in various parts of the PD along with indicators that can plausibly detect the impacts of the project, as explained in section 6.3.1 of the PD. Conformance has therefore been demonstrated.

GL2.3

The project has identified risks and benefits from participation in the project using a participatory approach as outlined in section 6.3.3 of the PD. The project is innovative in that the communities are the proponents and as such have taken a great deal of responsibility in project design and are well informed about potential risks as verified by the audit team through interviews and documentation from a series of sensitization exercises focusing on this.

GL2.4-GL2.5

Vulnerable groups identified include women and the particularly disadvantaged even within communities that exhibit economic positions below the poverty line. In addition, all of the communities have been defined and identified as living in highly precarious and marginalized socioeconomic situations, therefore a further analysis of sub-groups that are particularly vulnerable points to women and especially disadvantaged individuals within the communities. This is acceptable given that the consejos are ethnically and culturally quite homogenous so further analysis leads to sub-categories of the same ethnic and cultural communities. Several impact monitoring indicators are designed to measure participation of women and especially disadvantaged individuals. Women were present in the governing boards of each consejo visited. Project activities are targeted towards corteros which tend to be the poorest members of the consejos. The project aims to identify these individuals through township committees and by focusing their analysis at the household level. In sum, the proponent has adequately demonstrated conformance against GL2.4 and GL2.5.

GL2.6-GL2.7

The benefit sharing mechanism is described with sufficient detail in section 6.3.5 and 6.3.6 of the PD and it was designed with input from the communities. Additionally, information about the costs, benefits, and risks has been transparently shared with community members as the consejos themselves have to approve the project implementation budgets and select project

activities. The audit team inspected minutes from consejo meetings with community leaders that corroborated that these meetings have taken place as described through confirmations given during larger community meetings held during the field audit. These meetings have adequately involved all participating communities and their leaders and all identified participants have been informed in great detail regarding expected project activities, costs, expenses, and budgets.

GL2.8

Section 6.3.7 of the PD reaffirms the governance structure of the project, which relies principally on the autonomy and capacity of the communities and their governmental structure. The audit team has verified with INCODER and with community leaders that communities indeed are granted this structure by law and that they are also following this model in practice. The audit team examined the cabildo mayor's bylaws which explain the rules and responsibilities of governance. The community members are fully involved in project design and the consejos have to approve all major aspects of project development and implementation. The communities are the proponents and as such the final authority in the project rests with them.

GL2.9

The community members are fully involved in project design and the consejos have to approve all major aspects of project development and implementation. This was verified by the audit team based on community member and community leader responses, which demonstrated a strong understanding and grasp of their role in the project design and management. The communities are the proponents and as such the final authority in the project rests with them.

The project has demonstrated conformance with the Exceptional Community Gold status indicators.

9 BIODIVERSITY

9.1 Net Positive Biodiversity Impacts (B2)

B2.1

The project uses a biodiversity problem flow model (Richards and Panfil, 2011), a CCBA recommended methodology, and through a theory of change approach identifies likely changes in biodiversity. The assessment in section 7.1 of the PD is comprehensive and thoughtfully executed with appropriate academic references and conforms to the audit team's understanding from the field audit.

B2.2

The *ex-ante* impacts of the project described in section 7.1 of the PD are positive for biodiversity as the project will serve to reduce deforestation and degradation. If executed successfully the project's activities to promote the conservation of intact tropical forest will serve to maintain the important components of the project area's biodiversity reliant on that forest ecosystem.

B2.3

Appropriate measures are identified in section 7.1 of the PD to identify and to mitigate negative impacts on biodiversity which are expected to be minimal. The proponent cites the displacement of forest degrading activities and the effects of hunting pressures on wildlife as some of the chief potential negative impacts. The proponent does not currently involve wildlife management activities to mitigate the risk on fauna because the majority of activities are aimed at generating alternative livelihoods, income, and reducing forest degradation. The proponent does have wildlife monitoring practices as part of their monitoring plan and leaves open the possibility for this kind of activity as needed. The risk of displacement (leakage) on biodiversity is addressed elsewhere in the PD. In general, the audit team agrees with the proponent's assessment that the negative risk to fauna from the project activities is minimal, however plans are in place to adapt to changing circumstances.

B2.4

The PD demonstrates that no HCVs will be negatively impacted by the project with specific reference to the identified HCVs. Section 7.1.1 argues that the project activities have minimal negative impacts on biodiversity because they are designed to conserve and restore habitat. The audit team agrees with this assessment and confirmed with communities that their project activities are designed for conservation and economic improvement. Conservation of habitat is valued traditionally by the communities although subsistence needs are derived from the forest (protein, building materials). The project has monitoring measures to determine whether wildlife management is required in the future. In sum, the proponent has demonstrated conformance with B2.4.

B2.5-B2.6

The project warrants that no invasive species will be used in the project. The agricultural species proposed for use by the project are all either pre-existing in Colombia or in the project area and are not invasive.

B2.7

The PD warrants that no GMOs will be used. The audit team found no evidence to contradict this assertion and this will be verified in future field audits.

B2.8

The PD warrants that only organic fertilizers and pest control methods will be utilized by the project since these are the methods community members are familiar with. The project will not promote reliance on agricultural chemicals but if any are used safe operating procedures will be provided for future verification. The field audit confirmed that project participants wish to use organic agricultural methods. Conformance to this will be assessed in future verification audits.

B2.9

SOPs for waste product storage and disposal will be developed during the project implementation phase. This is acceptable for validation since the specific activities that would generate waste have not yet been identified to a great deal of certainty and any storage and disposal procedures

at this point would be hypothetical to the point of uselessness. Conformance shall be assessed at future verifications but this is acceptable for validation

9.2 Negative Offsite Biodiversity Impacts (B3)

B3.1-B3.3

The major potential source of negative offsite biodiversity impacts comes from leakage of logging to adjacent areas. The project attempts to mitigate this through providing alternative income generation activities for current agents of deforestation/degradation which would enable them to pursue alternate livelihoods. Interviews with community members confirmed that they felt the risk of leakage was low as it was considered generally, but not always, infeasible to log outside of their consejo territory. Several positive offsite benefits for biodiversity could be expected from the project including soil conservation, reduced siltation of downstream aquatic resources, enhanced fisheries, support for migratory populations of animals, etc.

The proponent has updated the PD in Section 7.1.1 with the assertion that the project will only support fishing activities which promote sustainable fishing practices and which maintain fish stocks for the long term. The BioREDD+ program has demonstrated that it has the technical ability to provide guidance to Colombian fisherman in other project areas to help ensure sustainability in the process of commercialization of fisheries. The promotional activities around sustainable fisheries are sufficient for validation to demonstrate that the project is likely to have a neutral to minimal impact on fisheries. In combination with the unequivocal positive impacts on terrestrial biodiversity from forest conservation this is sufficient for validation to demonstrate likely net positive biodiversity impacts. Future audit teams will assess the implementation of sustainable fishing activities at future verification events.

9.3 Exceptional Biodiversity Benefits (GL3)

The project is not seeking gold status for exceptional biodiversity benefits.

10 MONITORING

10.1 Description of the Monitoring Plan (CL4, CM4 & B4)

Records

The proponent has confirmed that all documentation and records have been transferred and are maintained by Fondo Accion. The audit team held a meeting with Fondo Accion on 26 February 2015 and confirmed that the process of transferring documentation to Fondo Accion's document control and storage infrastructure has proceeded. Fondo Accion is holding a series of training meetings with BioREDD+ to ensure a sophisticated understanding of the full suite of documentation for use in future verification and monitoring events.

Monitoring procedures, roles and responsibilities are described sufficiently in Section 8 of the methodology and associated annexes. Section 8.1.1 clearly lays out the organization of monitoring roles and is in conformance with the anticipated plan expressed to the audit team during the field audit and afterwards by the consejos and Fondo Accion. Fondo Accion, as

project implementation partner, is expected to liaise with communities and external partners such as funders and consultancies to oversee all aspects of project implementation and monitoring. Fondo Accion, as described elsewhere in this report has demonstrated experience with management of large and complex projects including REDD projects. Fondo Accion's qualifications include implementation of a similar large REDD project in Colombia, management of a $44 million USD endowment, and implementation of multiple large programs.

Monitoring will be conducted by biodiversity monitoring experts, climate monitoring experts, and community monitoring experts. All experts are anticipated to come from external consultancies to be hired by Fondo Accion in collaboration with the consejos. Consejo members will also participate heavily in monitoring as they have in project development.

Section 8.1.2-8.1.3 of the PD describes the data storage and management procedures. Project liaisons to be hired by Fondo Accion are responsible for generating, cataloguing and storing data collected in project implementation and monitoring. Data shall be stored through Fondo Accion's ISO certified management system. The audit team evaluated Fondo Accion's system while in Bogota and confirmed it to be adequate for storage of data for two years longer than the crediting period as required by VCS. Fondo Accion receives frequent funding from USAID and other financing institutions and is subject to periodic audits. The audit team has confirmed at the time of validation that documents and data have already been transferred to Fondo Accion, and that Fondo is undergoing training with BioREDD+ staff to provide useful contextual knowledge for data.

The PD establishes that the project liaison is responsible for development of QA/QC protocols which is acceptable given that new data has not been generated yet. Additionally the PD establishes that the community, biodiversity, and remote sensing experts are responsible for an internal audit of approximately 10% of the measurements for data and parameters monitored, using a risk based assessment for selection. As data is collected, implementation of this will be evaluated in future verification audits.

Remote sensing procedures, including LiDAR, for future monitoring will follow the GeoEcoMap Task 14 monitoring plan which has been reviewed in depth by the audit team and evaluated over several meetings with GeoEcoMap and EcoPartners. The monitoring plan clearly identifies the data that shall be monitored, relevant SOPs, and responsibilities for collection of data. The monitoring plan relies on future usage of the VT0005 tool for generating biomass measurements of different LULC classes with LiDAR, which is in conformance with the VCS. The monitoring plan provides detailed procedures for LiDAR flights, processing, and usage of the models generated during the project development, and corresponding updating of carbon stocks of primary forests and degraded forests. LiDAR flights will only be flown at baseline updates, which is acceptable. Carbon stock changes during verifications between baseline updates will be calculated based on activity data (transitions from one LULC to another) such as conversion from primary forest to degraded forest or primary forest to agricultural land. As it is possible that some small scale selective logging occurring in primary forest LULCs could remain undetected until a baseline update when LiDAR would detect this. This would lead to temporary overcrediting during these verification events, which would then be aligned during a baseline update. Due to an NCR issued by the audit team around this issue the proponent has built into the monitoring procedures a model from a peer reviewed publication (Pearson et al 2014) which assumes a

fractional loss of carbon stocks in the Primary Forest class related to the fractional change represented by the transition from the Primary Forest LULC to the Degraded Forest LULC, as determined by remote sensing. This approach leads to conservativeness during these verifications between baseline updates, and accuracy at the time of baseline updates when LiDAR will be used to update emissions factors and the "true" quantity of degradation in the Primary Forest LULC will then be known. At baseline updates the carbon stock value applied to Primary Forest LULCs and Degraded Forest LULCs will be updated using LiDAR data.

Detailed requirements are included in the Task 14 monitoring plan for all data sources, data processing, and data archiving. The Rainforest Alliance geospatial consultant and the lead auditor have reviewed these processes in depth and held multiple meetings with GeoEcoMap and EcoPartners. The final monitoring plan is expected to lead to results likely more accurate than most VCS REDD projects as it leverages state of the art technology.

The data and parameters available at validation are reported in Section 8.2 of the PD. The audit team has reviewed these data and parameters and confirmed that the required parameters from the VM0006 methodology are present and appropriate sources, descriptions, units, values, and justifications have been reported. The list is exhaustive and sufficiently detailed to enable replicable analyses in the future.

Data and parameters monitored are reported in Section 8.3 of the PD and are appropriately separated into climate, community, and biodiversity sections. The audit team has reviewed the climate section and confirmed that the appropriate data and parameters required by VM0006 have been reported.

A broad range of qualitative and social data and parameters are identified which will be used to demonstrate the net positive community and biodiversity benefits during project implementation. The monitoring indicators correspond directly to the theory of change model that has been presented and the anticipated project activities. Indicators are designed to detect and measure:

-community involvement and participation including of women and vulnerable groups;

-efficacy and implementation of training and capacity building;

-benefit distribution;

-adoption of agricultural interventions;

-employment;

-income generation;

-strengthening of governance;

-effectiveness of ongoing consultation and grievance mechanisms

A number of biodiversity indicators have also been identified and are designed to detect and measure:

-changes in forest cover;

-changes in forest biomass;

-tree species dynamics;

-populations of rare, endemic, and endangered species;

-health of mangrove swamps;

-hunting pressure

The monitoring plan and monitoring indicators developed for the project are sufficient, detailed and likely to be able to measure meaningful changes in climate, community, and biodiversity impacts over time. The plan demonstrates conformance to the VCS and CCB Standards.

10.2 Non-Permanence Risk Analysis

The proponent has submitted the Non-Permanence Risk Report v1.9. The audit team has reviewed the report and determined that it conforms to the relevant VCS requirements. The risk rating is 13% and has been correctly calculated and VCUs have been discounted appropriately.

Risk Factor	Self-Assessment Risk Rating	Findings (including description of any mitigation activities as required per VCS AFOLU Non-Permanence Risk Tool Section 2.1.2.2)
Project Management: Shall be assessed using Table 1 of VCS AFOLU Risk Tool.	2	a) 0, justified. The proponent has justified that the GHG credits are not based on non native species. The credits come from protection of native forest b) 0, justified. No credits have been previously issued. c) 2, justified. Proponent acknowledges the current management team does not have this entire skills set d) 0, justified. The management team maintains a presence in the project area.
Financial viability: Shall be assessed using Table 2 of VCS AFOLU Risk Tool.	0	d) 0, justified. The project has justified that the expected cash flow breakeven point is less than four years from the current risk assessment. The proponent has provided a detailed budget and cash flow model projecting cash flow for twenty years from validation. The cash flow model demonstrates that the project will break even in year 2, which corresponds to 2016, or slightly over one year from the current risk assessment with the validation taking place in 2015. The audit team notes as well that for the first two years of project

		implementation from the start date in August 2013 the project was funded completely through the BioREDD+ using funds from USAID which covered all project development and validation costs. These funds continue to this day. As such 2015 is the only year in the project lifetime in which the project is expected to have costs greater than revenues. The financial model depends heavily on funding from a single large investor. Although this funding is not yet secured, this is immaterial for the validation audit as the cash flow model is based on projected revenues and expenses. The audit team has reviewed the inputs to the model in depth. The audit team tested individual calculations and formulae in the model and found no errors. The assumptions for values of carbon credits sold are very conservative (less than 75% of recent market value for VCS+CCB REDD credits). The costs expected in the model are projected based on detailed evaluations of project activities undertaken in a participatory manner with the communities (which are the proponents) and external organizations such as BioREDD+ and Fondo Accion which have demonstrated project management and implementation experience. As such the audit team considers the costs inputs to be credible. The monitoring costs form the largest single expense and appear conservative to the audit team based on their expert opinion. In summary, the financial model is based on sound reasoning and conservative inputs and demonstrates that the project should reach breakeven less than four years from the current risk assessment. h) 0, justified. The project has secured more than 80% of the funding needed to cover the total cash out before breakeven. All project development validation, and initial implementation is completely funded by USAID.
Opportunity cost: Shall be assessed using Table 3 of the VCS AFOLU Risk Tool.	-6	f) -4 justified. The proponent appropriately asserted that the project activity is expected to be more than 50% more profitable than the most profitable alternative scenario (continuation of illegal logging). The proponent has provided a cash flow model and an opportunity cost analysis to justify this selection. The project activity includes a broad range of income sources including revenues from sales of carbon credits, investment from carbon credit investors which have provided loans for project implementation to be repaid by transfer of credits, improved agricultural production and sales, etc. The sum of these activities is substantially more valuable than the revenues from continued illegal logging. The proponent has calculated the NPV of the project activity to be more

		than 100% greater than the NPV of the alternative scenario, using a discount rate of 10%, which is appropriate. h) -2, justified. The proponent has successfully justified the project longevity score of 0 and that the project longevity is 60 years. Under Law 70, which gives the consejos legal title to the land in the consejo and autonomous governance rights, decisions of the consejo General Assemblies are considered legally binding. As the General Assembly has voted to approve the PD and project implementation plan (REDD Plan), which describe maintenance of the project area carbon stocks for 30 years after the end of the crediting period, the assertion that the project longevity is 60 years is justified.
Project longevity: Shall be assessed using Table 4 of the VCS AFOLU Risk Tool.	15	The proponent has correctly calculated the project longevity as a score of 15, using the crediting period as the project longevity. 30-(30/2)=15
Total Internal Risk: Shall be calculated using Table 5 of the VCS Risk Tool.	11	The proponent has correctly calculated the total internal risk.
Land and resource tenure: Shall be assessed using Table 6 of the VCS Risk Tool.	1	b) 0, justified. The proponent has legal right to the land and all resources on the land in the project area, as protected by the Colombian constitution. c) 0, justified. The consejo right to own the project area is enshrined in the Colombian Constitution. There are no land tenure conflicts. There are issues with colono settlers but they only constitute 4.6% of the project area. d) 5, justified. The consejo right to own the project area is enshrined in the Colombian Constitution. However there are settlers in the resguardo with disputes over land tenure. e). 0, justified. There are no WRC elements f) -2, justified. The consejo is required by law to manage the project area sustainably and has further approved the REDD Plan through a General Assembly vote which is legally binding. g).-2 justified. The Cabildo has reached signed agreements with all colono settlers which restrict use of existing forest resources, especially conversion of forest.
Community engagement: Shall be assessed using Table 7 of the VCS Risk Tool.	-5	a) 0, justified. The General Assembly has voted to participate in the project and FPIC has been demonstrated. The General Assembly is open to the entire population of the consejo and as such all community members have been consulted.

		b) 0, justified. No households outside the project boundary are reliant on the project area. The consejo has clearly enforced boundaries and individuals outside the consejo are not permitted to use resources in the consejo. c) -5, justified. The project is seeking simultaneous validation under the CCB Standards which demonstrate net positive community benefit.
Political risk: Shall be assessed using Table 8 of the VCS Risk Tool.	2	. b) 4, justified. The proponent has correctly calculated the governance score as -0.32 using the most recent data. An observation is issued because the score is listed as -0.34, but this is immaterial to the final risk score. f) -2 justified. Colombia is implementing REDD+ readiness activities with the World Bank FCPF
Total external risks: Shall be calculated using Table 9 of the VCS Risk Tool.	0	The total external risk has been calculated correctly. The total is -2 but the total cannot be below 0 so the proponent has correctly selected 0.
Natural risks: Shall be assessed using Table 10 of the VCS Risk Tool.	2	The proponent uses the DesInventar online disaster tracking system which covers Colombia, Venezuela, Ecuador, Peru, and Bolivia. The DesInventar system is supported by the UN Office for Disaster Risk Reduction and the UN Development Programme have endorsed the system for tracking and recording disasters and the system is a valid resource for assessing natural risks in the project area. The system has files dating back to 1938 for some risk types. The proponent has appropriately submitted to the audit team the output of the analyses using Desinventar. <u>Fire</u>: 0, justified. The proponent has selected an insignificant risk rating for fire with likelihood between 50 and 100 years. The selection is justified based on the DesInventar system recording no incidents of forest fires in the project area and immediate region during its tracking period. The audit team considers this selection justified based on the field audit. The project area lies in the Colombian Pacific ecoregion which is composed entirely of wet tropical forest and is one of the rainiest places on earth. The audit team so no evidence of forest fires while spending more than one month traveling through the region. Pest and Disease Outbreaks: 0, justified. The proponent has selected an insignificant risk rating for pests and disease outbreaks with likelihood between 50 and 100 years. The selection is justified based on the DesInventar system recording no incidents of significant outbreaks in the project area and immediate region during its tracking period. The audit team considers this selection justified based on the field audit. The project area lies in the Colombian Pacific ecoregion which is composed entirely of wet tropical forest and is one of the most biodiverse forest regions

		on earth. The high species diversity of the project area reduces the risk that pest outbreaks would impact a significant proportion of the biomass I the forest as most tropical forest pests are species or genus specific. The audit team saw no evidence of pest outbreaks while spending more than one month traveling through the region. Extreme Weather: 2, justified. The proponent has selected an appropriate rating for extreme weather with an insignificant impact every 10 years or less. The proponent identifies flooding as the primary extreme weather risk. The audit team concurs that flooding is an extreme weather risk. The audit team also believes, based on observations in a small part of the project area that downbursts and strong localized wind events are present during thunderstorms. The audit team saw a small area of the project (approx. 20 hectares) that had been impacted by a wind event. Interviews with community members confirmed that these wind events due occur but are quite localized. The audit team saw no evidence of blowdowns or significant loss of forest carbon stocks while flying over the project area and the broader region. Despite the proponent not identifying the risk of wind events, given the large scale of the project area and the minor impacts observed in a localized area the audit team considers the selection to be justified. No mitigation factor is selected. Geologic Events: 0, justified. The proponent selects insignificant impacts with likelihood every 50 to less than 100 years. This is based on the DesInventar data and other sources like the USGS, which demonstrates that earthquakes are a more rare event in this area and the risk to carbon stocks is negligible. The audit team concurs that these events are unlikely to cause significant impacts to forest carbon stocks. No mitigation factor is selected. An observation was generated because the web links to USGS were no longer valid. This does not affect the proponent's claims, and the audit team was able to confer with the updated site to establish the low risk of seismic activity near the project area.

11 VALIDATION CONCLUSION

The project has clearly conformed to the validation criteria for the VCS Version 3 and the CCB Standards Third Edition standard requirements, without qualification or limitation. Based on the PD and the extensive field audit the audit team concludes that the project is likely to achieve the estimated GHG reductions and community and biodiversity benefits expected.

Based on Project's conformance with audit criteria, the auditor makes the following recommendation:

Final Report Conclusions		
☒	Validation approved: *NCR(s) closed*	
☐	Validation not approved: *Conformance with NCR(s) required*	
Draft Final Report Conclusions		
☐	Validation approved: *No NCRs issued*	The Project Proponent has 7 days from the date of this report to submit any comments related to the factual accuracy of the report or the correctness of decisions reached. The auditors will not review any new material submitted at this time.
☒	Validation not approved: *Conformance with NCR(s) required*	
Draft Report Conclusions		
☒	Validation approved: *Conformance with NCR(s) required*	The Project Proponent has 30 days from the date of this report to revise documentation and provide any additional evidence necessary to close the open non-conformances (NCRs). If new material is submitted the auditor will review the material and add updated findings to this report and close NCRs appropriately. If no new material is received before the 30 day deadline, or the new material was insufficient to close all open NCRs the report will be finalised with the NCRs open, and validation and/or verification will not be achieved. If all NCRs are successfully addressed, the report will be finalised and proceed towards issuance of a assessment statement.

CCB STANDARDS CRITERIA CHECKLIST:

GENERAL SECTION	**CONFORMANCE**	
G1. Project Goals, Design & Long-Term Viability (Required)	YES X	NO __
G2. Without-Project Land Use Scenario/Additionality (Required)	YES X	NO __
G3. Stakeholder Engagement (Required)	YES X	NO __
G4. Management Capacity (Required)	YES X	NO __
G5. Legal Status and Property Rights (Required)	YES X	NO __
CLIMATE SECTION		
CL1. Without-project Climate Scenario	YES X	NO __
CL2. Net Positive Climate Impacts (Required)	YES X	NO __
CL3. Offsite Climate Impacts (“Leakage”) (Required)	YES X	NO __

CL4. Climate Impact Monitoring (Required)	YES X	NO __
GL1. Climate Change Adaptation Benefits (OPTIONAL)	N.A.	

COMMUNITY SECTION

CM1. Without-project Climate Scenario (Required)	YES X	NO __
CM2. Net Positive Community Impacts (Required)	YES X	NO __
CM3. Offsite Community Impacts (Required)	YES X	NO __
CM4. Community Impact Monitoring (Required)	YES X	NO __
GL2. Exceptional Community Benefits (OPTIONAL)	YES X	NO __

BIODIVERSITY SECTION

B1. Without-project Biodiversity Scenario	YES X	NO __
B2. Net Positive Biodiversity Impacts (Required)	YES X	NO __
B3. Offsite Biodiversity Impacts (Required)	YES X	NO __
B4. Biodiversity Impact Monitoring (Required)	YES X	NO __
GL3. Exceptional Biodiversity Benefits (OPTIONAL)	N.A.	

12 APPENDIX I: NON-CONFORMITY REPORT

Note: A non-conformance is defined in this report as a deficiency, discrepancy or misrepresentation that in all probability materially affects carbon credit claims. Non-conformance Request (NCR) language uses "shall" to suggest its necessity but is not prescriptive in terms of mechanisms to mitigate the NCR. Each NCR is brief and refers to a more detailed finding in the appendices.

NCRs identified in the Draft Report must be closed through submission of additional evidence by the Project Proponents before Rainforest Alliance can submit an unqualified statement of conformance to the GHG program.

NCR#:	01/15
Standard & Requirement:	VCS Standard 3.10.1; VCS AFOLU Requirements 3.4.1 – Project Location, KML
Report Section:	3.2
Description of Non-conformance and Related Evidence:	
The documentation provided to the audit team included a KML file of the project area boundary as required by VCS Standard 3.10.1 and AFOLU Requirement 3.4.1, however the boundaries shown by the KML file do not exactly match those indicated in Figure 6 of the PD. This inconsistency prevents the audit team from clearly determining whether the KML file is an accurate representation of the project area.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	**9 March 2015** BioREDD Mutata REDD+ Project Description v2.36.doc VM0006 Accounting MUTATA v9.33.xlsm Annex H - Mutata_ProjectArea_updated.kml **Update, 16 March 2015** Mutata_Project_Area_fixed.kmz Sept17_MUTATA_PA_LULC_2012_81314.tif
Findings for Evaluation of Evidence:	**9 March 2015** The resolution to this NCR is incomplete until the audit team can verify the shape of the KML file against

	the benchmark forest cover map (forest cover at project start). The proponent asserts that the KML file was updated to match the updated project area map (Figure 6) in section 1.2.5.1 of the PD, and that the correct hectare count (34,288 ha), which occurs in the Parameters tab in "VM0006 Accounting MUTATA v9.33.xlsm" is the correct figure and has also been updated in the PD as necessary. The audit team confirms that the reference to 33,797ha as the size of the project area has been corrected to 34,888ha. This reference only needed to be changed in section 1.2.5, and the proponent has done this. The updated KML file was compared to Figure 6 and also with the raster files that depict the forest benchmark map. At this time the audit team needs assistance from the proponent to confirm a one-to-one correspondence between the KML and the benchmark forest map. VM0006 Accounting MUTATA v9.33.xlsm contains the project's carbon calculations and the size of the project area. The audit team must be able to determine that the project's maps are consistent with the calculation tables, as currently it cannot do so. Also, NCR 02/15 and 03/15 indicate the additional clarifications are required to resolve any uncertainties regarding the project area and to fully understand how the legal limits of the project's legal boundaries were drawn. These issues are considered OPEN until these issues can be resolved. **Update, 16 March 2015** The proponent submitted two files to help the audit team determine that the project's KML file indeed matched all of the proponent's maps and representations of the project area. During consultations with the proponent the week of March 11th the audit team determined that the KML file submitted previously "Mutata_ProjectArea_updated.kml" exhibited some drawing errors in the polygon, which was likely an error during the conversion from SHP to KML format. The proponent reviewed the file and sent the corrected KML file "Mutata_Project_Area_fixed.kmz". The proponent also sent a georeferenced TIFF file "Sept17_MUTATA_PA_LULC_2012_81314.tif", which is a raster file of the project area at the start of the project. This permitted the audit team to open the new KML file and superimpose it over the TIFF file, The two files matched exactly and also with the representations in Figures 5 and 6 of the PD, and the area listed in the carbon calculations. The correct project area is 34,288 ha and this is now represented consistently throughout the PD and its annexes. The audit team has attained reasonable assurance that the proponent has produced an accurate KML file that is consistent with its calculations and maps. NCR 02/15 was resolved, which affected the listing of the project area in the PD, and NCR 03/15 was also resolved. Therefore any uncertainties linked to the representation of the project area as a KML file have been resolved and this NCRs is considered to be completely CLOSED
NCR Status:	CLOSED.
Comments (optional):	Related to NCR 02/15 and NCR 03/15 and their resolution.

NCR#:	02/15
Standard & Requirement:	VCS Standard 3.10.1; VCS AFOLU Requirements 3.4.1 – Project Area
Report Section:	3.2
Description of Non-conformance and Related Evidence:	
There is a discrepancy in the project's stated official project area size, which creates uncertainty regarding the project's net GHG emissions reductions estimates. Section 1.2.5 of the PD cites the project area – the area that generates emissions reductions – as 33,797 ha, whereas the document "VM0006 Accounting MUTATA v8.21.xlsm" cites the project area as 34,288 ha in the tab "VCU's by Consejo". This discrepancy has not been discussed or explained and negatively affects the accuracy of the project's GHG emissions reductions estimates and its representations of the project area.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc VM0006 Accounting MUTATA v9.33.xlsm Annex H - Mutata_ProjectArea_updated.kml
Findings for Evaluation of Evidence:	The proponent has acknowledged that this NCR was caused by having used outdated maps and kml files, and that inconsistencies were formerly present in the PD but not in the calculations. This had generated auditor findings in NCR 01/15 and NCR 02/15. Based on the updated auditor findings in NCR 01/15, the proponent has fully corrected the root causes of NCR 02/15. As a result, NCR 02/15 is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	The findings in NCR 01/15 are sufficient for closing this NCR

NCR#:	03/15
Standard & Requirement:	VCS AFOLU Requirements 3.4.1, 3.4.2
Report Section:	3.2

Description of Non-conformance and Related Evidence:

The audit team detected inconsistencies and ambiguities related to the legal physical extent of the resguardos, which prevents the audit team from understanding the ownership details of the legal territories that contribute to the project's area.

First, although the proponent provides a map (Figure 5) in section 1.2.4 of the PD to convey the full legal area of all the Embera reserves that are participating in this project as 42,437ha, this figure does not coincide with the figures presented in the governmental resolutions cited by the proponent that legally established the boundaries of the resguardos. For instance, resolutions R0028 and A088 for Jaikerasavi result in an area of 32,604ha, while R0024 results in an area of 9,850ha for the resguardo of Chontadural (Annexes A +B). Meanwhile the resolution for Coribí-Bebado is missing from the project documentation. The figures available in the mentioned resolutions/decrees total 42,454ha, while the PD section cites a figure of 42,437ha. Meanwhile, section 5.1 of the PD identifies Yaberaradó, Polines, Jaikerasavi, and Chontadural, with a combined physical extent of 55,862 ha. No explanation is given to assist the reader to clearly and consistently understand the individual physical boundary of each parcel and how the maps provided in the PD relate back to the resolutions identified in section 1.2.1 and 5.1 of the PD. Therefore there is uncertainty regarding how much territory encompasses all the participating resguardos, which causes difficulties in determining the exact ownership details of the boundaries of the resguardos.

Second, section 1.2.5.3 of the PD states that the project consists of <u>two</u> discrete parcels, yet figure 5 and 6 of the PD (maps) show <u>four</u> polygons, while section 1.2.1 and Figure 1 of the PD state that <u>three</u> parcels encompass the project area (Jaikerasavi, Chontadural, Coribibebado). Section 5.1 of the PD mentions four parcels. This inconsistency prevents the audit team from making a clear assessment of the extent of the proponent's ownership claims because the physical extent and number of parcels involved in the project is inconsistent in the project documentation. The audit team cannot easily trace the official and legal physical boundary of each resguardo and match it between the respective resolution or directive that created it, and the maps/polygons presented in section 1.2.4.

Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation

Evidence Provided by Organization:	**9 March 2015** BioREDD Mutata REDD+ Project Description v2.36.doc Annex A - R0024-24-05-96-Chontadural Cañero.pdf Annex B - A088-21-09-2009-Jaikerazavi.pdf; R0028-31-05-99-Jaikerazavi.pdf **Update, 16 March 2015** BioREDD Mutata REDD+ Project Description v3.1.doc DELIMITACION AREAS PROYECTO REDD DE MUTATA.pdf **Update, 13 April 2015** DELIMITACION AREAS PROYECTO REDD DE MUTATA.pdf (v2) **Update, 24 April 2015** DELIMITACION AREAS PROYECTO REDD DE MUTATA.pdf (v3)
Findings for Evaluation of Evidence:	**March 9, 2015** Additional clarification is required in order to understand how the project's legal boundaries were created. In section 1.2.4 there is one sentence that simply explains that the boundaries were reconstructed according annex A and B. Annex A and B contain these files: Annex A - R0024-24-05-96-Chontadural Cañero.pdf Annex B - A088-21-09-2009-Jaikerazavi.pdf; R0028-31-05-99-Jaikerazavi.pdf The proponent has not presented an explanation of the methodological approach that was used to construct this boundary. For example, boundary inconsistencies have not been identified, no explanation was presented as to how the original boundary was obtained in digital form, the proposed areas of correction are not clearly identified, and no justification for these corrections is given. Until this methodological question can be addressed this NCR remains OPEN. **Update 16 March, 2015** The proponent provided the document "DELIMITACION AREAS PROYECTO REDD DE MUTATA.pdf" to explain and justify reconstructing the legal boundaries of the resguardos. The justification deferred to work done under a previous USAID project that uncovered discrepancies between official shapefiles of the resguardos vs the municipal boundaries. However no details have been provided regarding the full extent of the methodology used to identify and correct the legal borders of the resguardos or the source from where the shapefiles were obtained.

	The proponent corrected earlier references made in section 3.1 to "Polines" and "Yaberaredó". These were errors where only Coribibebado was intended to have been mentioned... **Update 13 April, 2015** The relevant documentation was updated to provide the source of the shapefiles but no further explanations were provided regarding how all the inconsistencies with the boundary were identified and justification for the corrections that were made were also not provided. **Update 24 April, 2015** The proponent submitted a revised version of the technical annex used to explain and justify the methods used to create more accurate and appropriate shapefiles of the legal limits of the resguardos that contain the project area. The document provided clearly identifies and explains that IGAC shapefiles were acquired and compared to the descriptions provided in the legal resolutions for each resguardos. Some inconsistencies were detected by the proponent with respect to the eastern boundary of Jaikerazavi and were corrected to match the description provided in the official legal resolutions. The documents fully justify and explain this method and the audit team affirms to a reasonable degree of assurance that the proponent has taken appropriate and conservative measures to assure the accuracy and faithfulness of the final shapefiles against the official legal resolutions. Therefore this issue has been CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	04 /15
Standard & Requirement:	VM0006 8.1.3; VCS Standard 3.13.1
Report Section:	3.3
Description of Non-conformance and Related Evidence:	
The audit team detected a risk that the proponent may not have adequately identified or justified the relationship of colono settlements within the resguardos as related to requirement 8.1.3 of VM0006. NCR 33/15 identified that there is conflicting information, and therefore ambiguity, in how project stakeholders were identified. This issue potentially affects the accuracy of the proponent's analysis of agents and drivers of deforestation as required in section 8.1.3 of VM0006. Specifically, section 4.5.3.1 of the PD identifies agents such as "communities", "external agents", "private companies" and "armed illegal groups" but never identifies colono settlements within the resguardos as relevant agents, or explains whether they are appropriate to include or exclude in this analysis. The audit team gathered direct observational evidence from the onsite visit, and which was also confirmed by community leaders, that there are colono settlements within the resguardos. The audit team has insufficient information to understand whether this situation is relevant to the proponent's analysis	

and whether this may affect the proponent's baseline GHG estimates. In sum, there is conflicting information as to whether the proponent's agent and driver analysis related to VM0006 8.1.3 is correct based on discrepancies between the information given in the PD and the field audit.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	**9 March 2015** ANNEX AO – [ACUERDOS CAMPESINOS.pdf; CAMPESINOS EN RESGUARDOS DE MUTATA_ENERO 2015.pdf; ENCUESTA TENENCIA DE TIERRA.pdf; JUSTIFICACION 2015.pdf] BioREDD Mutata REDD+ Project Description v2.36.doc **Update, 16 March 2015** BioREDD Mutata REDD+ Project Description v3.1.doc NUEVA JUSTIFICACION (new document).pdf RELACION DE ACUERDOS FIRMADOS (new document).pdf
Findings for Evaluation of Evidence:	The proponent has updated section 4.5.3.1 of the updated PD and has provided ANNEX AO in order to justify that colono settlements within the resguardo do not pose a serious risk of deforestation/degradation, and are not significant enough to include in the analysis of agents and drivers of deforestation. However, additional clarifications are required to conclusively close this NCR. Section 4.5.3.1 of the PD contains a new paragraph that acknowledges that the proponents are aware of the potential risk posed by colonos to the project's net emissions reductions but cites ANNEX AO as evidence that these colonos are not a significant risk and that in fact these colonos have already entered into agreements with the cabildo mayor. Annex AO serves the primary evidence to justify the claim in 4.5.3.1 of the PD. Annex AO contains four documents whose contents and function are summarized below: 1. Justificación 2015.pdf – This document provides a comprehensive narrative of activities undertaken by the proponent to acquire information about colono land uses within the resguardo and the measures

	taken to resolve these conflicts and to ensure the territorial and natural resource integrity of the resguardos. These include land use appraisals and diagnostics, outreach to government and civil society such as INCODER and Corpourabá, and agreement between the cabildos and colono settlers in or around the resguardos. The document also clarifies the goals of the agreements, which aim to conclusively and legally resolve land use and land occupancy conflicts with colono settlers or land owners. 2. CAMPESINOS EN RESGUARDOS DE MUTATA_ENERO 2015.pdf – This document provides an analysis of the colono land use patterns between 1996-present, and the effects of the armed conflict on this dynamic especially since 2002. It provides a typology of the motivations of colono settlers in the resguardos before, during, and after the establishment of the resguardos. Further, it documents the relocation patterns and motivations of both indigenous residents and colonos in and around the resguardos. Also, it asserts that the armed conflict, especially in 2002, forced the vast majority of colono settlers out of the resguardos such that when the Emebera people returned to the resguardo's area most of these settlements had and continue to be abandoned. 3. ENCUESTA TENENCIA DE TIERRA.pdf – These are examples of field surveys given to colono settlers to better understand their land use patterns and motivations for living in the resguardos. 4. ACUERDOS CAMPESINOS.pdf – A sample of the agreements reached between the proponent and colono settlers, which were agreed upon in Feb 2011 as part of the activities undertaken by the cabildo mayor to improve its governance in the resguardos and mitigate the risks posed to its natural resources. The document CAMPESINOS EN RESGUARDOS DE MUTATA_ENERO 2015.pdf provides a narrative that adequately clarifies why colono settlements are not seen by the proponent as a major driver of deforestation/degradation. This is justified in Annex AO by the sharp abandonment of settlements following the rising armed conflict in 2002. Further, Justificación 2015.pdf, ENCUESTA TENENCIA DE TIERRA.pdf, ACUERDOS CAMPESINOS.pdf show tangible evidence that the proponent's efforts to establish governability within the legal limits of the resguardo predates the REDD Project start date, and that efforts have been made at resolving any disputes with colono settlers. In parallel the competent legal authorities and NGOs are being consulted to resolve these matters through legal and peaceful means. The evidence described above corresponds with many observations made by the audit team during the field audit. The audit team did not observe abundant colono settlements and the Embera leaders expressed a strong historical understanding of the area's land uses, and of the cabildo mayor's attempts to improve the governance of the resguardo, which predates any involvement with BioREDD activities. The Embera leaders expressed a detailed understanding of the number and type of colono settlements, and Annex AO now complements and clarifies this information in a sufficient manner.

	The audit team concludes that sufficient information has been presented to justify not having colono settlers as part of the analysis of agents and drivers requested in VM0006 and that reasonable measures have been taken to mitigate the potential impact of these settlers on the integrity of forest resources in the resguardo. However, the audit team requests clarifications to better understand whether the evidence provided is a). only a sample of a larger number of agreements, b), whether the 32 identified colono settlements (Annex AO - CAMPESINOS EN RESGUARDOS DE MUTATA_ENERO 2015) all have agreements (are there agreements with all of them? If not, why not?) **Update, 16 March 2015** The explanation in section 4.5.3.1 of the PD was already deemed appropriate in the previous version of the PD as explained above. The proponent submitted additional evidence to clarify the nature and extent of the agreements with the colono settlers. "NUEVA JUSTIFICACION (new document).pdf" clearly explains that 23 of the 32 colono settlements have formal agreements with the indigenous government/communities to not deforest additional land. The nine that do not are explained as not having recently lived in the settlement and have not been available to sign documents. All have been consulted about the restrictions on their use or conversion of forest resources. "RELACION DE ACUERDOS FIRMADOS (new document).pdf" specifies the names and area of the 23 colono settlements with which there are agreements. The audit team has not received any evidence during the field audit to suggest this information is incorrect. In fact, the audit team did go through various clearings in and around the official project area where colono settlements were visibly not being used at capacity. Also, the information conveyed in the documents matches accounts given by all the parties interviewed. The audit team has received sufficient explanation to justify the exclusion of colono settlers in the resguardos as significant agents of deforestation and potential threats to future deforestation/degradation, therefore this NCR is CLOSED.
NCR Status:	CLOSED
Comments (optional):	See NCR 33/15 for a related issue

NCR#:	05/15
Standard & Requirement:	VCS Standard 3.7.1, VCS AFOLU guidance 3.2.1; CCB Standards 3rd Ed. G1.9
Report Section:	Section 3.6
Description of Non-conformance and Related Evidence:	

The project start date shall be the date on which the project began generating GHG emission reductions. The AFOLU guidance clarifies for AFOLU projects that this shall have direct physical impacts on the ground such as preparing land for planting, changed forestry practices, etc. The proponent has not justified how the signed letter of intent leads to actual GHG emissions reductions starting on that date.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Annex I – letter of intent Annex AR - Justificación VCU Mutatá (FINAL).pdf Annex AC - Mutata Theory of Change Model v1.0.xlsx
Findings for Evaluation of Evidence:	The proponent has updated PD section 1.6, which contains a revised justification for the project start date. However additional clarifications are required to close this NCR. The proponent has maintained that Annex I (the signed letter of intent) establishes the start date, however the justification has been clarified that it does because of two reasons. First, the REDD project could not have legally or logistically continued without a complete ratification of the project by all the Embera communities, which the cabildo mayor represents and who signs Annex I. The audit team confirmed through community meetings that all communities needed to approve the BioREDD project in order for these activities to continue and have indeed done so. Second, the letter of intent is justified as an indicator of a conscious change in forest governance, one that utilizes a REDD project as a means of safeguarding the environmental integrity of the project area. This is further justified by Annex AC (theory of change), which had already been provided as part of original PD prior to this NCR and has not been altered in response to this NCR. Meanwhile Annex AR details the historical context of forest governance issues since 2002 and details the evolution of forest governance as a forefront topic of the Embera communities, culminating recently in the agreement to use REDD+ as a means for achieving their collective objectives. The documentation clearly identifies several tangible actions that were able to be completed fully or that were set into motion as a result of the signed letter of intent, which include indigenous park guard training, design plausible income generating activities, characterization of illegal or unsanctioned settlements with the help of INCODER, and confiscation of chainsaws among others. The audit team confirmed through interviews with Embera communities and its leadership that the communities support the REDD project together, that their governance and community development plans are aided by the REDD project's official approval, and that the activities described have occurred

	because of the signed letter. Therefore the proponent has demonstrated sufficient evidence to conclusively establish that the signed letter of intent on June 26, 2013 is a justifiable start date that has resulted in tangible activities to reduce emissions from avoided deforestation and degradation. As a result this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	06/15
Standard & Requirement:	VCS Standard 3.18.2; VCS Principle of Transparency
Report Section:	Section 4.8
Description of Non-conformance and Related Evidence:	
A non-conformance has been identified in that, at minimum, the carbon stock values of each LULC class shall be included in the PD to cohere with the VCS Principle of Transparency and as the current approach of only including the carbon stocks of a single (unidentified LULC class) in Section 1.3.3 of the PD treats carbon stocks as if they are confidential which does not conform to the VCS.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent appears to be unclear about the NCR and the requirement. The proponent has clarified the description in section 1.3.3 of the PD as being the weighted average carbon stocks across all LULC classes. However, a reader of the PD is much more likely to be interested in the carbon stocks per LULC class, which are clearly presented in Table 30 of the PD. As this is clearly presented in Table 30 of the PD the non-conformance is CLOSED but an observation is issued instead.
NCR Status:	CLOSED
Comments (optional):	OBS 04/15 was issued after this NCR was closed.

NCR#:	07/15
Standard & Requirement:	VCS Standard 3.1.3
Report Section:	6.2
Description of Non-conformance and Related Evidence:	
The proponent has used the VCS Tool for Remote Sensing biomass Measurement. This Tool is in the second assessment stage of validation and is not yet a valid tool to use under the VCS	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	Confirmation of acceptance of tool on VCS website
Findings for Evaluation of Evidence:	The VT0001 Tool for Remote Sensing Biomass Measurement was approved by the VCS on 6 March 2015. Conformance has therefore been demonstrated.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	08/15
Standard & Requirement:	VCS VM0006 Applicability Conditions Section 4.1.1, Bullet 4
Report Section:	6.2
Description of Non-conformance and Related Evidence:	
The VM0006 methodology requires that the LULC change analysis in the reference region during the historical reference period contain "No images older than 15 years [before the project start date]". All 8 BioREDD projects fail to comply with this criterion as the first image used is typically 23-24 years before the project start date.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc VCS Erratum & Clarifications statement for VM0006 Carbon Accounting for Mosaic and Landscape-scale REDD Projects, v2.1, 10 December 2014
Findings for Evaluation of Evidence:	The VCS has released additional clarification for the interpretation of the VM0006 v2.1 methodology applicability conditions. Specifically, the VCS has officially removed the below requirements from the applicability conditions of the methodology: • Accurate data on past LULC and forest cover in the reference region must be available for at least three points in time, with at least one remote sensing image (ie, data) from 0-3 years before the project start date, at least one image from 4-9 years before the project start date, and at least one image from 10-15 years before the project start date. No images older than 15 years can be used for the historical reference period. • The classification accuracy of LULC and forest cover maps must be greater than 70%. Emission reductions and/or removals from avoided forest degradation can only be included if the accuracy of determining forest strata is at least 70%. The VCS has acknowledged that these two requirements fall under data requirements for determining the baseline scenario and are therefore inappropriate for the applicability conditions section of the

	methodology. As a result, the deviation from the requirement can be interpreted by the audit team as a methodology deviation. Section 4.3 of the PD describes requested methodology deviations. In this section the proponent has requested an extension of the 15 year time limit for this project. The proponent has requested that the three time periods used to assess the historical reference period are from 23 years, 13 years, and 1 year before the project start date. The proponent justifies this deviation based on the trade-off between accuracy and conservativeness in project implementation, recognized and endorsed by the VCS in the VCS VVB Manual. Projects and VVBs may accept a less accurate measurement or monitoring technique or result if it is determined that this less accurate approach is more conservative. Auditor evaluation of the methodology deviation: The audit team has determined that the methodology deviation is appropriate for this project. Per VCS Standard 3.5.1, methodology deviations are acceptable when they relate to monitoring or measurement and do not negatively impact the conservativeness of the methodology. The deviation clearly relates to measurement of historic deforestation in the reference region in the historical reference period. The audit team has also confirmed that usage of the longer historical reference period (23 years) is conservative and in some ways may lead to greater accuracy in measurement of historical land use change as compared to a 15 year historical reference period. 1) The proponent asserts that it was unfeasible to find quality cloud-free imagery for the reference region and project area for the 15 year period required by the methodology. The audit team finds this assertion credible given the physiographic and climatic conditions in the Chocó. The audit team confirmed this in interviews with the remote sensing consultancy, GeoEcoMap, hired to conduct the analysis. Additionally, the project area and broader region is one of the rainiest places on earth with an aseasonal climate leading to persistent cloud cover throughout the year. During the more than one month that the audit team spent in this region of Colombia for this audit and related audits of nearby REDD projects, the audit team did not experience a single day without low cloud cover. 2) The proponent demonstrates via historical land cover change analysis that the deforestation and degradation rates increased substantially between timestep 2 and timestep 3 (2000-2012), as compared to the time period between timestep 1 and timestep 2 (1990-2000). The combined deforestation/degradation rate increased from 8040.7 ha/year in the first time period to 9661.9 ha/year in the latter time period. Deforestation, which results in the greatest emissions, increased more

	dramatically with an increase from 2790.3 ha/yr in the first time period to 4470.1 ha/yr in the second period. This results in a lower baseline deforestation and degradation rate applied to the project area in the baseline scenario as the rate is impacted conservatively by the earlier lower rates. The audit team confirmed that deforestation/degradation rates increases significantly following the year 2000 via interviews in the field with stakeholders including consejo members, community members, and relevant government officials from the local corporations responsible for local land use management. Following the year 2000, multiple companies came to the consejos and provided funding and material (chainsaws, etc.) to incentivize increases in logging. These companies were operating illegally in the region. For the reasons cited above the methodology deviation is accepted by the audit team. Conformance has been demonstrate and this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	09/15
Standard & Requirement:	VCS VT0001 Additionality Tool Steps 1a-1c and VCS Standard Section 3.1.3
Report Section:	6.6
Description of Non-conformance and Related Evidence:	
The VCS Standard Section 3.1.3 requires that methodologies shall be applied in full including, the full application of any tools or modules referenced in the methodology. VM0006 Section 7 requires that the VT0001 tool be used. Although Section 6 of VM0006 notes that “under this methodology, the most plausible baseline scenario for a project is the existing or historical changes in carbon stocks in the carbon pools within the project boundary”. The proponents appear to have interpreted this requirement such that steps 1a-1b of VT0001 can be skipped and that the user of the methodology shall go straight to step 1c of VT0001 and select the historical land use change as the baseline scenario. The audit team acknowledges that this aspect of VM0006 is confusing, but the actual intent of Section 6 of VM0006 is that the methodology shall only be used when the outcome of steps 1a-1c of VT0001 is the historic land use in the project area. This was confirmed with the VCS. As a result the proponents have not completed steps 1a-1b of the VT0001 in which alternative land use scenarios shall be evaluated.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.

	Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc <u>Update, 24 April 2015</u> BioREDD Mutata REDD+ Project Description v3.12.doc BioREDD Mutata REDD+ NCR Response Form v2.0.doc
Findings for Evaluation of Evidence:	The proponent has updated the PD section 4.6.4 such that Steps 1a-1c are complete. However, the non-conformance remains open as the proponent appears to have incorrectly conducted the analysis. The proponent identifies four alternative land use scenarios including: 1. Continuation of selective logging 2. Continuation of subsistence agriculture 3. Effective implementation of enforcement by the Regional Environmental Authority to cease illegal logging and activities resulting in deforestation and degradation without the project being registered as a VCS REDD project 4. Effective implementation of enforcement by the national or international NGOs to implement alternative livelihood, governance, and capacity building activities to reduce deforestation and degradation without the project being registered as a VCS REDD project. The NCR remains open however as the proponent has divided the pre-project land use into two scenarios including i) a scenario in which illegal selective logging (unplanned degradation) continues and ii) a scenario in which subsistence agriculture resulting in unplanned deforestation continues. These are actually both just components of the pre-project land use, rather than differing scenarios. The project shall only have a single baseline scenario and the PD otherwise correctly treats i) and ii) as components of a single baseline scenario. If the proponent intends to select either i) or ii) the entire project shall be revised to be either an avoiding planned degradation or avoiding planned deforestation project, but not both as it currently is. The NCR also remains open as the proponent has removed scenario 3 and 4 in Sub step 1a b) under the determination that these scenarios are not credible. However, the VT0001 tool requires that the project activity in absence of registration under the VCS (scenario 3 and 4) proceed through Sub step 1b in the additionality analysis. These baseline scenario shall be selected in Sub step 1c by eliminating scenarios generated in Sub step 1a in a manner consistent with the VM0006 requirements. The scenarios generated in Sub step 1a shall not be eliminated prior to Sub step 1c.

	The NCR remains open. Update, 24 April 2015 The proponent has corrected the additionality analysis such that the alternative scenarios identified are credible and the VT0001 Version 3 tool is followed correctly and in full. Please see the additionality section of this report for full details on demonstration of conformance. The nonconformance is closed.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	10/15
Standard & Requirement:	VCS VT001 Step 4 Common Practice Analysis
Report Section:	6.6
Description of Non-conformance and Related Evidence:	
A nonconformance has been identified as the PD Section 4, Step 4 describes only the common logging practice in the project area which is not required. The intent of the VT0001 common practice analysis is to assess the extent to which activities similar to the VCS AFOLU activity (i.e. REDD projects or forest conservation projects which reduce deforestation/degradation in a similar manner as the project activities of governance, agricultural investment, etc.) exist in a defined geographical area near the project area. Sections 2.4.1-2.4.3 of the additionality tool appears to not be evaluated by the PD.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has revised the Common Practice Analysis in section 4.6.4 of the updated PD to demonstrate conformance with the VCS requirements and the VT0001 requirements. The proponent asserts that implementation of similar projects to reduce deforestation and degradation in

	the region are rare. The only somewhat similar program is the MIDAS program funded by USAID (which also funded the development of this REDD project). The MIDAS program did focus on poverty alleviation and generating environmental benefits. The MIDAS program is described in the PD and the audit team investigated the program in depth during the field audit, including in interviews with USAID staff. The audit team can confirm however that the programs like the MIDAS program are uncommon. The project area and the broader region is politically and geographically isolated. The region is one of historic and recent social unrest, often of a violent nature. These obstacles have prevented the effective distribution of government and NGO capacity building and development aid to the region. The MIDAS program is also qualitatively different than the REDD project. Although the program does intend to generate environmental benefit, the program does not seek to reduce deforestation and degradation specifically through the means of the REDD project. The Common Practice Analysis has met the requirements of the additionality tool and effectively concludes that the BioREDD project in Mutatá does not constitute common practice in the area, therefore this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	11/15
Standard & Requirement:	VCS VM0006 Section 8.1.4.4
Report Section:	7.3
Description of Non-conformance and Related Evidence:	
The VM0006 methodology requires that soil carbon stocks be measured directly by sampling in the forest LULC classes. Carbon stock values in non-forest LULC classes can be estimated using conservative default values from the literature. The proponent has not demonstrated conformance with this requirement by using default values for the soil carbon stocks in the forest LULC classes for all 8 BioREDD projects.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation

Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Annex Q - GeoEcoMap_Task14_MRV_020315.pdf
Findings for Evaluation of Evidence:	The proponent has requested a methodology deviation to use default values for soil carbon stocks in the forest LULC classes. This is a measurement deviation and as such is acceptable under the VCS if considered reasonable and conservative. The proponent claims that it was not feasible to conduct sufficient field measurements of SOM for the validation. A commitment is added to the PD in Section 4.3, and in, Annex AA, the MRV plan, noting that SOM will be measured and updated before the first verification. The procedures for estimating SOM are described in great detail in the MRV plan and were designed by highly qualified individuals. The proponent claims that this deviation is conservative as the default literature values used for SOM are derived from measurements taken in 30cm depth. The proponent plans to measure SOM stock to a depth of 1 meter before the first verification. The assumption that the SOM changes represented by LULC change measured at 30cm depth will be more conservative than SOM changes measured at 1 meter depth is reasonable. The proponent has adequately justified this proposed deviation therefore this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	12/15
Standard & Requirement:	VCS Principle of Accuracy
Report Section:	7.3
Description of Non-conformance and Related Evidence:	
The VM0006 methodology specifies a carbon fraction (CF) 0.5 for dry matter in wood, although the proponents have the options of using more conservative values. Varying and inconsistent values are reported for the carbon fraction throughout the PD and supporting documents. For example, Section 8.2 of the PD identifies 0.5 as the CF, while the report on carbon stock calculations identifies CF of 0.485. It appears that the actual value used is 0.485 as this is cited in the relevant report from GeoEcoMap (task 8&9). Having inconsistent CF values does not comply with the VCS principle of Accuracy and does not enable accurate quantification of VCUs at future monitoring events.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above.

	Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Annex Q - GeoEcoMap_task8&9_new_13015.pdf
Findings for Evaluation of Evidence:	The proponent has clarified that in section 8.2 of the PD and in the updated document from geoEcoMap (task8+9) that, although IPCC/VM0006 allows a 0.5 value to be used for the carbon fraction, the proponent has used 0.485 which is more conservative. This 0.485 value was cited consistently in the technical documentation and used in the carbon calculations as confirmed by interview and document review. The 0.5 value was cited only in the PD originally. This has now been corrected. The auditor has confirmed that the PD has been updated and only the 0.485 carbon fraction is reported in all project documentation. As a result this non-conformance is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	13/15
Standard & Requirement:	VCS VM0006 Section 8.1.1.2
Report Section:	7.3
Description of Non-conformance and Related Evidence:	
The proponent has not demonstrated full conformance with the similarity criteria identified in VM0006 Table 3, taking into account the historical reference period. The intent is such that these similarity criteria shall be assessed throughout the length of the historical reference period as this is the time period in which the baseline deforestation rate is calculated and logically the reference region shall be similar to the project area throughout this period to serve as a good reference. The proponent has assessed and justified similarity for drivers of deforestation between the project area and the reference region at the end of the historical reference period, but has not assessed or justified similarity for drivers of deforestation throughout the historical reference period. Specifically the proponent has not evaluated whether areas of planned deforestation, planned degradation, and mining were occurring in the reference region before the end of the historical reference period.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.

Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has expanded the description in Section 5.3.1 of the PD to better justify the analysis of similarity criteria in the reference region during the historical reference period. The similarity analysis has not been changed in response to the NCR, nor has additional information been collected on historic planned deforestation or degradation in the reference region which would change the spatial boundaries of the reference region. The proponent has clarified that with respect to mining, the data set used to exclude areas from the reference region is from INGEOMINAS (confirmed by the audit team during the field audit) and includes all areas with active mining from 2005-2012. The proponent asserts that no mining was permitted in the Colombian region prior to 2005. The shapefiles used for this analysis are from the government. With regard to other sources of planned deforestation/degradation the proponent has cited resolution 1926 from 2013 which is the first time an official planning process and registry was created for land use conversion in the Colombian Pacific. The audit team has not been presented with clear evidence that areas of planned deforestation and planned degradation did not exist in the reference region during the historical reference period. The Resolution 1926 does not specifically confirm whether or not planned deforestation and degradation took place in the Colombian Pacific prior to 2013. The NCR remains OPEN. The proponent has collected all relevant information from the corporacion responsible for issuing permits for community and other logging concessions in the project area and reference region, CODECHOCO and CORPOURABA. The proponent submitted an official request to the Choco department for all records of any forest management plans in the region from 1991-2015. Any areas for which a “resolucion”, a harvesting permit, was issued were removed from both the project area and the reference region. This resulted in a change of 1,497 hectares in the reference region as a series of small forest management areas where planned degradation or planned deforestation may have occurred were removed from the reference region and project area. The proponent has transparently provided the audit team with a significant amount of documentation of this process including: -the official letter of request to CODECHOCO and CORPOURABA -the report of the BioREDD+ staff member that went to the office of the corporacion to receive the data

	-copies of the original *resoluciones* -updated maps of the reference regions and project areas depicting the areas that have been excluded -an excel file demonstrating the areas that have been excluded -contact information for the relevant individuals at the local corporation to facilitate independent confirmation by the audit team. Based on the information provided and the adjustments made to the reference regions the non-conformance is closed.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	14/15
Standard & Requirement:	VCS VM0006 Section 8.1.1.2
Report Section:	7.3
Description of Non-conformance and Related Evidence:	
The proponent has not demonstrated conformance with all similarity criteria in VM0006 Table 3. Specifically, the methodology requires that the proportion of native forest types be the same in the reference region and project area +/-10%, as differences in forest types may impact land-use change dynamics. The proponent has not completed this analysis or provided evidence of conformance to this criterion.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Annex AP - Native forest type comparison between project and reference areas.xlsx <u>Update, 24 April 2015</u> Land Configuration Comparison Methodology v1.0.docx NCR13_14-class_LULC_map.pdf

Findings for Evaluation of Evidence:	The approach described by the proponent is sufficient to close some aspects of the non-conformance, for example, to demonstrate similarity of forest types within the reference region. Annex AP summary excel file is helpful in this regard. However, the analysis is insufficiently described. For example, the proponent has not described the definitions of the different slope categories, which classes in the 14 LULC class map were aggregated to form the "old growth", "degraded", and "guandal" classes, nor has the proponent provided the audit team with the map of the 14 LULC classes. For these reasons the NCR remains OPEN. <u>Update, 24 April 2015</u> The proponent has submitted a concise yet detailed description of the methodology used which resolves the original uncertainty about aggregation of classes into old growth, degraded, and guandal classes, provides the actual 14 class map, and describes in detail the slope and aspect class definitions. The analysis is sufficiently detailed to demonstrate that the proportion of each forest type within the reference region is within 10% of the proportion in the project area. The non-conformance is closed.
NCR Status:	CLOSED
Comments (optional):	n/a

NCR#:	15/15
Standard & Requirement:	VCS VM0006 8.3.2
Report Section:	7.5
Description of Non-conformance and Related Evidence:	
The proponent describes the methods for defining the leakage belts in Section 5.5.2.3 of the PD. The methods were also described in detail by the consultant who conducted the geospatial analyses to determine the leakage belts. While these analyses followed the requirements of VM0006 a nonconformance was identified as the audit team identified that the leakage belts as currently defined do not match the patterns of degradation that occur in the project areas. The leakage belts are built upon the assumption of an area of influence around centros de acopio (logging storage centers) and that leakage belts occur where these areas of influence extend beyond the project boundary. However the audit team does not find the area of influence to be credible given that remote sensing imagery from the proponent clearly indicates that corteros conduct logging activities much farther from the centros de acopio than the leakage belt delineation suggests	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.

Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Annex T <u>Update, 24 April 2015</u> Leakage Area Methodology_EN v1.3.pdf BioREDD Mutata REDD+ Project Description v3.12.doc BioREDD Mutata REDD+ NCR Response Form v2.0.doc
Findings for Evaluation of Evidence:	The proponent has generically described the updated approach for defining the leakage belts in section 5.5.2.3 of the PD and referred to Annex T.. The newly defined leakage belt is many times larger and appears much more consistent with degradation patterns observed in the field as well as in historic deforestation/degradation patterns. Despite this, some problems remain which prevent closure of the NCR including: In conversations with the audit team the proponent has clarified that they have increased the area of influence around each centro de acopio as well as added new risk points with larger areas of influence around them as well such as rivers and logging roads. Despite these improvements the proponent has not provided the audit team with specific details about these changes that were made including the new sizes of the areas of influence, the risk points, and maps depicting this. Due to these issues the NCR remains open. <u>Update, 24 April 2015</u> The proponent has described the updated approach for defining the leakage belts in the documentation provided to the audit team. The newly defined leakage belt is larger and appears much more consistent with degradation patterns observed in the field as well as in historic deforestation/degradation patterns. The nonconformance is therefore closed.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	16/15
Standard & Requirement:	VCS Principe of Accuracy, VM0006 Appendix 1, Section 1.2, VCS Standard 3.16.2
Report Section:	10.1

Description of Non-conformance and Related Evidence:

Multiple measurement errors were identified during the resampling of forest inventory plots used for calibration of the LiDAR. These errors do not represent a non-conformance in the measurement of carbon for validation.

The errors do represent a non-conformance in the monitoring procedures as there is a high risk of material errors in future verifications if these errors are not corrected. The errors include the following:

1 Several trees were identified where the inventory team failed to measure above the buttress of the trees, as is universally recognized to be the appropriate measurement approach for buttressed trees. Allometric equations typically estimate biomass from the lowest point of the bole of the tree above the buttresses, so this can result in significant errors. In some cases the errors may have overestimated tree biomass by as much as 50%. Although multiple examples were encountered, the audit team has not observed this to be a systematic error at this point and it remains unclear whether this is a non-conformance in the measurement of carbon stocks at this point. However, this does represent a non-conformance to the identified SOPs, as well as to the climate monitoring plan which relies on those SOPs. The RAINFOR methods require measurement above the buffer and suggest the use of ladders to attain this level, and/or using a digital camera method as a last resort. At minimum the inconsistency in measurements at validation creates a high risk of material errors in subsequent verifications.

2. The inventory team has measured all trees on slopes on the downhill side of the tree which systematically results in a higher dbh measurement than measuring on the uphill side of the tree. To the audit team's knowledge, most or all major published allometric equations assume dbh measurement on the uphill side of the tree and most major published guidance on carbon measurements identify the uphill side of the tree as the appropriate measurement location. The audit team notes that the RAINFOR methods do advocate measuring on the downhill side of the tree. The non-conformance comes from the risk that the allometric models used for calculating carbon stocks are based upon measurements on the uphill side of trees on slopes.

3. The PD and supporting documents do not appear to identify QA/QC measures used to control quality across forest carbon stock measurements. This likely resulted in some of the errors in tree measurement that the audit team observed. Examples include a palm that was originally reported to be over 10m taller than its true height, three large trees in a single plot that were overestimated by approximately 50 cm each, and a large tree that was recorded in the database as 13.5cm. Local community members involved in the plots in which these errors occurred reported that they felt incompletely trained.

4. The plot in the Carmen del Darien project was recorded as being approximately 400 meters from its true location. This error resulted from a lack of communication between different parties on the appropriate datum to be used with the GPS with the end user of the data (GeoEcoMap) anticipating that WGS 1984 was used and the inventory team of the CDD plot using the Observatorio Bogota datum. As a result it is unclear how this plot was used to calibrate the LiDAR transect. The Climate Monitoring SOPs do not address this issue leading to a risk of future material errors in verifications.

5. The climate monitoring SOPs do not provide guidance on how future inventory teams shall deal with several issues encountered by the audit teams in the field. For example, missing stakes that mark the plot coordinates, trees where paint that marks the point of measurement have flaked off, trees where the dbh was not measured 30cm below the ID tag, trees where the original point of measurement is incorrect, trees with missing tags, etc. All of these issues were encountered by the audit team and are likely to create material errors in future verification events if specific SOPs are not developed and implemented.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Annex Q - GeoEcoMap_task16_020215.pdf; GeoEcoMap_task14_MRV_020315.pdf <u>Update, 24 April 2015</u> GeoEcoMap_task14_MRV_031215.pdf
Findings for Evaluation of Evidence:	The assessment of the proponent's response is organized according to the numbering of the issues above: 1. The audit team noted that this item was not an NCR for validation of the emissions factors. This is because the audit team did not see this as a systematic pattern of errors. Additionally, the proponent has presented an error propagation report which has justified that the sum of these errors is not material or significant (GeoEcoMap task 16). The error propagation report is described in depth in this report and in summary it relied upon re-measurements of plots by different inventory teams and quantification of the impacts of discrepancies in measurements on carbon stock measurements. These errors were propagated into the LiDAR calibration (which was the sole purpose of the plots) and the effect was demonstrated to be insignificant. The NCR was issued due to the risk of material errors in the future during re-measurement of permanent plots and measurements of other plots for updating emissions factors. The proponent used the RAINFOR protocols as SOPs but had no specialized SOPs for this project when the procedures differed from the RAINFOR protocols. Additionally, community members of some communities that participated in the carbon stock measurements confirmed that they felt poorly trained in conducting the inventory measurements. The proponent has not responded to the NCR, which is based on the risk of errors in future monitoring events, nor has the proponent implemented corrective actions to reduce this risk. 2. As with number 1 above, the proponent has not responded to the actual NCR as it was issued nor have they implemented corrective actions to reduce these errors at future monitoring events.

	3. As with number 1 and 2 above the proponent has not responded to the actual NCR as it was issued nor have they implemented corrective actions to reduce these errors at future monitoring events. This aspect of the NCR is based on the lack of established QA/QC protocols. The proponent's response does not address this. 4. As with all issues described above, the proponent has not responded to the NCR in the context of implementing corrective actions that will reduce the risk of material errors in future monitoring events. Due to the error propagation report the NCR was not issued based on material errors in the inventory used for validation. Furthermore, the proponent has asserted that there will be no future field inventory measurements which is not in conformance with the VM0006 and contradicts the proponents MRV plan (GeoEcoMap Task 14). <u>Update, 24 April 2015</u> The proponent has now fully clarified and justified that there will be no more forest inventories implemented as part of a verification audit or a baseline update. Future carbon stocks will be estimated using LiDAR and applying the same biomass estimation models which have been otherwise evaluated in this validation audit and demonstrated to meet the requirements of the VCS VT0005 Tool for Measuring Aboveground Live Forest Biomass using Remote Sensing v1.0. The proponent has requested a methodology deviation such that specific requirements of the VM0006 methodology which stipulate that future baseline updates require re-measurement of forest biomass using ground based plots can be replaced by the VT0005 tool. The audit team has accepted the methodology deviation. The proponent has also now chosen to conservatively exclude soil organic matter, thus eliminating the need to measure soil carbon stocks as they had originally planned on doing prior to the first verification. As such, the proponent has justified that no forest inventory measurements will be required in future verifications or baseline updates. The NCR was originally issued because the forest inventory SOPs and monitoring plan were insufficiently detailed to prevent material errors in future inventories. As the proponent has justified the exclusion of any future forest inventories, the non-conformance is now closed.
NCR Status:	CLOSED
Comments (optional):	Refer to NCR 17/15 for related findings

NCR#:	17/15
Standard & Requirement:	VCS Principle of Accuracy
Report Section:	10.1
Description of Non-conformance and Related Evidence:	
While the forest inventory measurement procedures when fully implemented enable accurate carbon stock measurement, there is a high risk that these measurement procedures will result in underestimation of forest degradation in these plots in the future verification periods. The permanent plots are well marked with colored stakes and point of measurement lines painted on every tree. However, this is likely to influence the behaviour of agents of degradation such that they are less likely to conduct logging activities in the permanent plots, meaning the plots will not accurately represent the degradation occurring in the area. This risk was emphasized by a community member that emphasized that the fact that they are not currently logging the permanent plots shows their level of respect for the project.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc GeoEcoMap_task14_MRV_020315.pdf **Update, 24 April 2015:** GeoEcoMarp_Task14_031215.pdf BioREDD Mutata REDD+ NCR Response Form v2.0.doc BioREDD Mutata REDD+ Project Description v3.12.doc
Findings for Evaluation of Evidence:	The proponent has noted in their response to this NCR that “no future field inventory measurements are planned” and implicitly, that therefore there is no need to develop specific field measurement SOPs which will serve to prevent future errors of the types observed by the audit team. This assertion contradicts the proponents own documentation and is not in conformance with the VM0006 methodology. Review of the MRV plan (GeoEcoMap Task 14) indicates that the assertion that permanent plots will not be used in the future is incorrect. The Executive Summary, page 5, states that “The methodology [presumably this means the MRV document?] will also show how to integrate remote sensing data specific for the region in monitoring tools and demonstrate how the remote sensing data can be

	integrated with existing permanent and temporary inventory plots to calculate annual carbon change” The MRV plan makes it clear that the proponent intends to update the carbon stocks and emissions factors before the first verification, which contradicts the assertion that no field inventory measurements are planned. Furthermore, additional ground based biomass plots are required to be re-measured as part of the baseline update which requires updating carbon stocks and emissions factors. (see new NCR 31/15) Additionally, the proponent has not accounted for the fact that the VM0006 methodology requires re-measurement of carbon stocks in areas experiencing ongoing degradation during the project scenario if PRAs indicate degradation is occurring. The NCR remains open. The errors observed by the audit team were justified in the error propagation report to be insignificant for the validation audit. The audit team found these errors deeply concerning but did not detect that they were systematic at this point. Based on this observation and the error propagation report, the audit team did not issue an NCR requiring the carbon stocks to be re-measured as the errors were determined to not be material. However, the audit team is confident that the errors and the lack of SOPs and training to be the cause of these errors and are a material risk to the accuracy of future carbon stock measurements to take place during the monitoring and updating of the baseline after 10 years. The technical groups assisting the proponent with the project have no long term agreement with the proponents covering the entire crediting period. At this point the project does not have effective SOPs or a monitoring plan for measurement of carbon stocks and updating of emissions factors. Several other aspects of the MRV Task 14 document are confusing or contradictory and shall be resolved and corrected including: 1. “The BioREDD project will be using the Verified Carbon Standard methodology…” There is no Verified Carbon Standard methodology. This VCS is a standard not a methodology. The proponent presumably means to say VM0006, however this is unclear as the proponent uses the word “methodology” generically through the document to refer to the VM0006, the MRV document itself and other documentation which is unclear. 2. Section 2.3 “The baseline revision will only apply to the temporal boundary of the project, reference and leakage areas”. This is incorrect. The baseline revision shall reassess all aspects of the VM0006 methodology that relate to establishing the baseline, including but not limited to updating. As a result of these findings this NCR remains OPEN.

	Update, 24 April 2015 The proponent has now fully clarified and justified that there will be no more forest inventories implemented as part of a verification audit or a baseline update. Future carbon stocks will be estimated using LiDAR and applying the same biomass estimation models which have been otherwise evaluated in this validation audit and demonstrated to meet the requirements of the VCS VT0005 Tool for Measuring Aboveground Live Forest Biomass using Remote Sensing v1.0. The proponent has requested a methodology deviation such that specific requirements of the VM0006 methodology which stipulate that future baseline updates require re-measurement of forest biomass using ground based plots can be replaced by the VT0005 tool. The audit team has accepted the methodology deviation. The proponent has also now chosen to conservatively exclude soil organic matter, thus eliminating the need to measure soil carbon stocks as they had originally planned on doing prior to the first verification. As such, the proponent has justified that no forest inventory measurements will be required in future verifications or baseline updates. The NCR was originally issued because the system of clearly marking permanent plots that were expected to be re-measured was expected to influence the behaviour of agents of deforestation and degradation in a way that could bias carbon stock data. The proponent has chosen a new approach which eliminates the need for re-measurement of these permanent plots and as a result the non-conformance is closed.
NCR Status:	CLOSED
Comments (optional):	NCR 31/15 was generated during the second round of findings.

NCR#:	18/15
Standard & Requirement:	VCS Standard 3.17.1
Report Section:	10.1
Description of Non-conformance and Related Evidence:	
VCS Standard 3.17.1 requires that all documents and records are kept in a secure and retrievable manner for the project crediting period plus 2 years. Section 8.1.3.1.4 of the PDs identifies Fondo Accion as the entity responsible for data handling and retention. The audit team has confirmed that Fondo Accion has a robust system for this purpose, but that the relevant documentation and records is not currently stored with Fondo Accion. The audit team observed that the cabildo mayor's office has an extensive repository of physical data from the project yet its process for handling data as well as its role and responsibility in the project's data handling process has not been explained in the PD.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation

Evidence Provided by Organization:	BioREDD Mutata REDD+ NCR Response Form v1.30
Findings for Evaluation of Evidence:	The proponent has confirmed that all documentation and records have been transferred to Fondo Accion. The audit team held a meeting with Fondo Accion on 26 February 2015 and confirmed that the process of transferring documentation to Fondo Accion's document control and storage infrastructure has proceeded. The only outstanding documents are those that are currently in a state of revision due to open NCRs. Fondo Accion has holding a series of training meetings with BioREDD+ to ensure a sophisticated understanding of the ecosystem of documentation for use in future verification and monitoring events. The nonconformance is therefore considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	19/15
Standard & Requirement:	VCS 3.16.3
Report Section:	10.1
Description of Non-conformance and Related Evidence:	
As currently described, the monitoring plan is lacking information on methods and frequency for measurement of aboveground tree biomass. Monitoring indicators in Section 8.3 stipulate that aboveground tree biomass is to be measured annually using LiDAR. This approach would be very robust, however, interview with GeoEcoMap staff has indicated that it is uncertain at which frequency the LiDAR will be used, or even if it will be used in the future to update carbon stock data from aboveground tree biomass in all LULC classes. The current supplemental monitoring plan documents from GeoEcoMap (Task 13) do not clearly state whether or if LiDAR shall be used in the future for this purpose and the methods indicated are confusing and inconsistent. The survey method described in P.32 has problems described in another NCR. Table 3.6 of GeoEcoMap indicates that for measuring biomass loss in a given LULC class that some combination of Landsat, ALOS-2 PALSAR, LiDAR, and/or surveys and forest inventory methods shall be used. There is no guidance on when or if a certain method shall be used. The level of detail is insufficient such that a future entity trying to conduct monitoring according to this document would likely be unable to follow the methods. This restricts future monitoring to those with personal knowledge of GeoEcoMap's methods and intentions which does not meet the requirements of VCS Standard 3.16.3.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s)

	referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc GeoEcoMap_Task14_MRV_020315.pdf <u>Update, 24 April 2015</u> GeoEcoMap_Task14_MRV_031215.pdf
Findings for Evaluation of Evidence:	Based on review of the MRV plan (GeoEcoMap Task 14) as well as discussions with various members of the BioREDD+ team there remains substantial confusion about what will be monitored, when, how, and how it conforms to VM0006 requirements. The nonconformance remains open. <u>Update, 24 April 2015</u> The proponent has submitted an updated monitoring plan (GeoEcoMap Task 14, dated 12 March 2015) that clearly identifies the monitoring priorities, steps, and methods. -Ground based inventory plots will no longer be used as part of the monitoring. The proponent has requested a methodology deviation (approved) such that the VT0005 tool will be used to update biomass stocks at future baseline updates, as required by the VM0006 methodology. The VT0005 tool is specifically designed for this process, and this specific project, and was approved by the VCS. -The proponent has now chosen to conservatively exclude the soil carbon pool. The proponent asserts that this pool could be expected to decrease in carbon stocks in the baseline scenario. The audit team agrees as preservation of the forest area in the project scenario prevents oxidation of soil carbon associated with soil disturbance from deforestation and degradation in the baseline. -The proponent has now clarified that they will use the VT0005 tool and LiDAR flights to update the carbon stocks and emissions factors at each baseline update. The LiDAR will use the same allometric models which were validated during this validation process and which will continue to be valid during the rest of the project crediting period. -The proponent will use a conservative model to update the emissions factors of primary forest remaining as primary forest in verification years when no LiDAR flights are flown. At subsequent baseline updates

	the carbon stocks and emissions factors will be updated with precision. The model selected to discount carbon stocks in primary forests is based on peer reviewed literature and is likely to lead to highly conservative results. The nonconformance is closed.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	20/15
Standard & Requirement:	VCS Principle of Accuracy and Transparency
Report Section:	Section 10.1
Description of Non-conformance and Related Evidence:	
The survey approach for measuring project scenario emissions from degradation as described in GeoEcoMap Task 13 is not an appropriate method for this project P. 32 of GeoEcoMap Task 13 states that "emissions due to illegal logging will be tracked by conducting surveys surrounding the project, leakage and reference areas annually or every two years." If >10% of the surveys indicate that illegal logging is taking place temporary sample plots will be allocated to identify changes in biomass stocks. No details are provided for the survey methodology including sampling approach, sampling intensity, how the surveys will be able to spatially delineate the impacted area, etc. Furthermore the survey approach is of questionable validity in light of the VCS principle of Accuracy, given that illegal logging is the main driver of GHG emissions and that until the project activities are fully implemented, is likely to continue to some degree. Indeed the audit team has confirmed in all BioREDD+ project areas that illegal logging is ongoing at the time of the field audit which is more than 1 year after the project start date. Finally, given that the agents of degradation that would be conducting the illegal logging are also the proponents, the idea of a self-survey to evaluate whether degradation is occurring, which would result in the proponents losing carbon finance if said degradation were occurring, is not credible or in conformance with the VCS principle of Transparency.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation

Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc GeoEcoMap_Task14_MRV_020315.pdf GeoEcoMap_task13_020115.pdf <u>Update, 24 April 2015</u> GeoEcoMarp_Task14_031215.pdf
Findings for Evaluation of Evidence:	The proponent has responded by claiming that any degradation occurring in the project and leakage areas will be quantified using remote sensing LULC change analyses as described in the MRV report (GeoEcoMap Task 14). However, GeoEcoMap Task 13 correctly acknowledges that "In general remote sensing approaches may not be able to detect selective and illegal logging where a small number of trees are extracted by local communities. "However, for consistency with project documents, we will rely on degradation defined and detected by the remote sensing approach as part of the monitoring activities and will not include any ground surveys in the future monitoring activities." The proponent has still not developed an implementable approach for measuring project scenario emissions from degradation in the project areas and leakage areas. Using remote sensing will not enable the proponent to detect impacts of selective logging. Based on the field audit, selective logging is ongoing in all BioREDD+ projects. The nonconformance remains open. **Update, 24 April 2015** LiDAR flights will only be flown at baseline updates, which is acceptable. Carbon stock changes during verifications between baseline updates will be calculated based on activity data (transitions from one LULC to another) such as conversion from primary forest to degraded forest or primary forest to agricultural land. As it is possible that some small scale selective logging occurring in primary forest LULCs could remain undetected until a baseline update when LiDAR would detect this. This would lead to temporary overcrediting during these verification events, which would then be aligned during a baseline update. Due to an NCR issued by the audit team around this issue the proponent has built into the monitoring procedures a model from a peer reviewed publication (Pearson et al 2014) which assumes a fractional loss of carbon stocks in the Primary Forest class related to the fractional change represented by the transition from the Primary Forest LULC to the Degraded Forest LULC, as determined by remote sensing. This approach leads to conservativeness during these verifications between baseline updates, and accuracy at the time of baseline updates when LiDAR will be used to update emissions factors and the "true" quantity of degradation in the Primary Forest LULC will then be known. At baseline updates the carbon stock value applied to Primary Forest LULCs and Degraded Forest LULCs will be updated using LiDAR data. The nonconformance is closed.

NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	21/15
Standard & Requirement:	VCS Non-Permanence Risk Tool; Project Management
Report Section:	Section 10.2

Description of Non-conformance and Related Evidence:

The project has not provided clear and complete justifications with appropriate references for several risk factors in Table 1, which affects the accuracy of the project's buffer withholding amount. Specific issues are described below.

Risk Factor a)

Component a) refers to species that are planted or managed by the project as part of its VCS project activities for the purposes of generating GHG removals or reductions. The proponent provides a risk rating of "0" and justifies this by indicating that "All crops to be promoted are native or adapted (i.e. cocoa and plantain). This justification is incomplete because the proponent does not explicitly explain whether the crops it is promoting are intended to be incorporated in their GHG removals or reductions estimates. No further references are provided. The audit team understood from the field audit that the project is purely based on avoided deforestation and degradation of forested areas, and that project activities that utilize other crops are done so with the motivation to stimulate alternative income sources to reduce the risk of conversion or degradation of forests. Although the risk rating of "0" may be accurate, the justification for it is ambiguous and conveys a misinterpretation of the intent of risk factor a).

Risk Factor c) and e)

The proponent has selected a score of "2" for risk factor c) in Table 1 (Project Management), which shall be selected in cases where the management team does not have significant experience in relevant project implementation. The proponent appears to have selected this in error as the proponent is claiming that Fondo Accion does have significant experience, yet no specific evidence is presented to justify this risk factor selection. Additionally, the proponent has not provided justification for Fondo Accion having the relevant experience and there is currently no long term agreement between the proponent and Fondo Accion that will ensure Fondo Accion actually participate in the project.

Risk factor e) is indicated as having a score of "-2", but because of lacking justification as mentioned previously this score is not fully explained and justified.

Risk factor d)

The "Management Team" is referred to but is not clearly identified or defined, therefore the audit team cannot clearly determine whether it can access the project area in one day from its base of operations, and whether the risk factor score of "0" is appropriate.

For the reasons mentioned above there is insufficient justification for the audit team to clearly understand and assess the risk score of Table 1.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Mutata Non-Permanence Risk Tool v1.4.docx
Findings for Evaluation of Evidence:	The proponent has submitted an updated Risk Report (v1.4), which includes updates to Table 1. The proponent has demonstrated sufficient information to close this NCR. Below are the audit findings related to each risk factor listed in the original finding in Table 1 of the VCS Non Permanence Risk Tool. <u>Risk factor a).</u> The proponent has clearly indicated that credits are not generated on planted species, and that therefore this factor is not applicable. A risk score of 0 has been provided and is deemed to be accurate based on the project's AUDD activities. However the proponent has not provided clear references to its project activity description (OBS 05/12) <u>Risk factor c)</u> The proponent has clarified that the selection of risk factor c) (value 2) is correct. The proponent is acknowledging that the management team does not have the listed skills set based on the fact that Fondo Accion is still in the process of assigning management roles and bringing on technical staff to help manage the project. The proponent intends to update this score at verification. This aspect of the nonconformance is closed. <u>Risk factor d</u> The proponent asserts that the management team is located in the country and that Fondo Acción will hire a permanent presence in the area. Although the audit team has understands that Fondo Acción is intended to be the management team, the proponent has not provided clear references to the correct section of the project activity description (OBS 05/12). <u>Risk factor e</u> The proponent has elected to not claim this mitigation credit and has clearly indicated it is not applicable

	and selected a score of 0. In conclusion, the project proponent's risk factor selections are justified by the project's PD and associated evidence, therefore the final risk score of 2 is appropriate and this NCR is considered CLOSED. However, a lack of references to the appropriate sections of the PD that justify these selections has resulted in OBS 04/15.
NCR Status:	CLOSED
Comments (optional):	OBS 04/15 was raised when NCR 21/15 was closed.

NCR#:	22/15
Standard & Requirement:	VCS Non-Permanence Risk Tool 2.2.2; Financial Viability, risk factor c), risk factor h); CCB Standard 3rd Ed. G4.3
Report Section:	Section 4.5 and 10.2
Description of Non-conformance and Related Evidence:	

The project has not provided clear and complete justifications with appropriate references for risk factors in Table 2, which affects the accuracy of the project's buffer withholding amount.

The proponent has selected risk factor c) and risk factor h) in Table 2 (Financial Viability), however the proponent has provided no documentation or other evidence to support these claims as the proponent has not referred to evidence of a cash flow model and related documentation that supports that 80% or more of the funding needed to break even has been secured.

Additionally, the proponent appears to misunderstand the requirement of the risk tool by stating that the project will start generating revenues at year 4. The risk tool requires the proponent to estimate when the project will reach break-even point which is different than a date when it will generate revenue.

The financial health of implementing organizations is not described in the PD as required by G4.3, and the VCS Non-permanence Risk Tool 2.2.2 (4).

The project provides Annex AD, "Presupuesto Mutata" as evidence of conformance with G1.12. However a non-conformance has been identified as the PD claims the project has secured the necessary financing through 2022. The audit team is under the impression that this is not accurate given that the anticipated funding from an external stakeholder is not yet secured. Section 2.5 notes that the financial mechanism will be implemented by Fondo Accion, which per its current agreement with the proponents is only involved until March 2015.

As a result, the PD lacks the information needed by the audit team to properly assess the proponent's risk factor scores in Table 2.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	**9 March 2015** BioREDD Mutata REDD+ Project Description v2.36.doc Mutata Non-Permanence Risk Tool v1.4.docx Annex AD - Financial Analysis - Mutata-Budget and Cashflow Jan30 EP edits v1.0.xlsx Presupuesto Mutata Althelia Nov13.xlsx **Update, 16 March 2015** Mutata Non-Permanence Risk Tool v1.5.pdf Financial Analysis - Mutata-Budget and Cashflow v1.0.xlsx
Findings for Evaluation of Evidence:	**9 March 2015** The proponent has described the financial health of Fondo Accion which is the proposed implementing partner and is in very secure financial health. Fondo Accion has an endowment of $44 million. The proponent has clarified that they have not in fact secured funding through 2022. However, the proponent has developed a budget based upon a likely funding source. Indicator G1.12 states that projected revenues can be considered in evaluation of conformance. However, the nonconformance is still considered open until the audit team receives a functioning version of the cashflow file and can review the case for Mutatá. **Update, 16 March 2015** The proponent submitted a working version of the cashflow analysis. The proponent has provided a detailed budget and cash flow model projecting cash flow for twenty years from validation. The cash flow model demonstrates that the project will break even in year 2, which corresponds to 2016, or slightly over one year from the current risk assessment with the validation taking place in 2015. The audit team notes as well that for the first two years of project implementation from the start date in August 2013 the project was funded completely through the BioREDD+ Program using funds from USAID which covered all project development and validation costs. These funds continue to the present day. As such 2015 is the only year in the project lifetime in which the project is expected to have costs greater than revenues.

	The financial model depends heavily on funding from a single large investor. Although this funding is not yet secured, this is immaterial for the validation audit as the cash flow model is based on projected revenues and expenses. The proponent is justified in presenting a final score of "0" for this table. As a result this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	23/15
Standard & Requirement:	VCS Non-Permanence Risk Tool; Opportunity Cost, risk factor d), risk factor g)
Report Section:	Section 10.2

Description of Non-conformance and Related Evidence:

The project has not provided clear and complete justifications with appropriate references for risk factors in Table 3, which affects the accuracy of the project's buffer withholding amount.

Risk factor d)
The proponent selects risk factor d) but provides no documentation or justification for the selection. The Risk Tool requires the proponent to compare the project activity to the most profitable alternative scenario as defined by scenarios generated in Step 1a of the VT0001 Additionally Tool. However, the proponent has failed to complete step 1a of the VT0001 and as such cannot complete the required analysis for the Risk Report until these alternative scenarios are created.

Risk factor g)
The proponent selects mitigation factor g) and a rating of "-2" which shall only be selected if the proponent is a non-profit organization. The proponent provides as justification the fact that Fondo Accion is a non-profit organization. However, Fondo Accion is not the proponent, as demonstrated in conversations with the Indigenous Council representatives and as listed in section 1.4 of the PD. Meanwhile, the proponent is identified in section 1.4 of the PD as the "Indigenous Reserves (Resguardos Indigenas) of Mutata." The proponent identifies this proponent as a non-profit organization however neither section 1.4 of the PD nor the justification provided in table 3 of the VCS Risk Report provides sufficient explanation and documentation regarding its legal status as a non-profit organization. Therefore there is insufficient justification provided to currently substantiate the use of mitigation factor g).

Lastly, the total risk score of "0" for Table 3 is incorrectly calculated given that VCS Errata and Clarification now clarifies that the total score for Table 3 may be less than zero http://www.v-c-s.org/sites/v-c-s.org/files/Errata%20and%20Clarifications%2C%20AFOLU%20Non-Permanence%20Risk%20Tool%2C%20v3.2_0.pdf. The VCS now requires that proponents include this clarification in their risk score calculation for Table 3.

As a result of the issues mentioned above the proponent has not provided sufficient explanation or documentation to substantiate its risk rating score for Table 3.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	**9 March 2015** BioREDD Mutata REDD+ Project Description v2.36.doc Mutata Non-Permanence Risk Tool v1.4.docx Opportunity Cost of Selective Logging v1.4.xlsx Financial Analysis - Mutata-Budget and Cashflow Jan30 EP edits v1.0.xlsx **Update, 16 March 2015** Mutata Non-Permanence Risk Tool v1.6.pdf Financial Analysis - Mutata-Budget and Cashflow v1.0.xlsx
Findings for Evaluation of Evidence:	The proponent has updated the approach to Table 3 and provided sufficient information to close this NCR. Details of conformance are provided below. <u>Risk factor d).</u> The proponent has developed new evidence that relies on the usage of risk factor f), therefore risk factor d) has been clearly indicated to be “not applicable”. <u>Risk factor f)</u> The proponent has amended their selection so that now they select risk factor f) (score -4) based on the assertion that the project activity is expected to be more than 50% more profitable than the most profitable alternative scenario (continuation of illegal logging). However the audit team has been unable to review the cashlow model, and upon inspection, the opportunity cost analysis does not contain any references or explanations that explain from where each key parameter in the study was obtained and why it is appropriate for the Mutatá project. For example, the discount rate, vol of timber extracted, and cost of extraction lack explanations (the list of example is not comprehensive). As such, the audit team cannot easily follow how the analysis was constructed.

	Risk Factor g) This risk factor is no longer being claimed and has been indicated as “not applicable”. A risk rating of “0” has been selected. Risk Factor h) This risk factor is justified by the proponent’s explanation that a legally binding agreement is in force throughout the crediting period. See NCR 24/15 for findings that fully justify the existence of a legally binding agreement. Because risk factor f) requires additional information this NCR remains OPEN. **Update, 16 March 2015** The proponent provided clarifications that allowed this NCR to be CLOSED. Risk factor f) The proponent has amended their selection so that now they select risk factor f) (score -4) based on the assertion that the project activity is expected to be more than 50% more profitable than the most profitable alternative scenario (continuation of illegal logging). The cashflow model was reviewed and deemed to be acceptable, please refer to the previous NCR on financial viability. The values for the opportunity cost analysis came from the timber study commissioned by BioREDD, which is an acceptable source for a challenging topic such as this. The score is adequately justified. However the evidence supporting the opportunity cost analysis could be more clearly referenced. Consultations with the proponent clarified that the source of the analysis came from the timber study commissioned by BioREDD (OBS 05/15). All pending issues have been adequately resolved and the proponent is justified in claiming a score of (-6) based on the VCS Errata that allows this table’s final score to be negative. Therefore this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	Refer to NCR 24/15 for supporting findings on risk factor h); OBS 05/15 was raised.

NCR#:	24/15
Standard & Requirement:	VCS Non-Permanence Risk Tool; Project Longevity, risk factor b)
Report Section:	Section 10.2
Description of Non-conformance and Related Evidence:	
The proponent fails to perform the required calculation for the Project Longevity risk factor selection in the Non-Permanence Risk Tool. The VCS requires the proponent to determine whether a legal agreement is or is not in place to continue the management practice. If an agreement is in place the risk rating = 24 – (project longevity/5). If no agreement is in place the risk rating = 30 – (project longevity/2). Since this calculation is in question the overall cashflow model of the project may be inaccurate as well. The audit team understands that there is not legal agreement to continue the management practice in the consejo. The audit team detected conflicting statements throughout the PD (sections 1.7) regarding the difference between the definition of the crediting period, and project longevity. The proponent must select option a) or b) for Table 4 of the Risk Tool and clearly define and justify the project longevity. Additionally the Risk Report does not provide a subtotal for the project longevity part of the risk assessment. As a result Table 4 of the Risk tool is incomplete.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	**9 March 2015** BioREDD Mutata REDD+ Project Description v2.36.doc Mutata Non-Permanence Risk Tool v1.4.docx **Update, 16 March 2015** Mutata Non-Permanence Risk Tool v1.5.pdf Aprobacion Plan Financiero Mutata.pdf **Update, 13 April 2015** Mutata Non-Permanence Risk Tool v1.9.pdf Financial Analysis_Mutata.xlsx
Findings for Evaluation of Evidence:	The proponent has successfully justified the project longevity score of 0 and that the project longevity is 60 years in the VCS Risk tool v1.4 but additional evidence was required to close the NCR. The proponent explains that under Law 70, which gives the consejos legal title to the land in the consejo and

	autonomous governance rights, decisions of the consejo General Assemblies are considered legally binding. As the General Assembly has voted to approve the PD and project implementation plan (REDD Plan), which describe maintenance of the project area carbon stocks for 30 years after the end of the crediting period, the assertion that the project longevity is 60 years is justified. However, the NCR remains open as the proponent has not demonstrated full conformance with 2.2.4 3) of the VCS AFOLU Non-permanence Risk Tool which requires that both management and financial plans be submitted to local government covering the full project longevity period. The REDD Plan/implementation plan does not qualify as a financial plan as it includes no details on funding for the years 31-60 of the project longevity. This financial plan for years 31-60 is also required to be submitted to local government and no evidence or supporting justification has been provided to show how this is in conformance with stated VCS requirement. As a result this nonconformance is still considered OPEN. **Update, 16 March 2015** The proponent has submitted Aprobacion Plan Financiero Mutata.pdf as evidence that management and financial plans have been submitted to local government to cover the full longevity period. The letter is from the Mutatá cabilido mayor which asserts that all plans have been approved for the full longevity period however the cashflow analysis for years 30-60 duplicates the costs from years 1-30 and does not show present a fully justified and articulated plan for the full duration of the project longevity period. The proponent has not presented sufficient evidence to meet the requirement of 2.2.4 3) of the VCS AFOLU Non-permanence Risk Tool, therefore this NCR is considered OPEN. **Update, 13 April 2015** The proponent has modified Table 4 item “b” and has downgraded the project longevity period to 30 years. This is done because although the communities have committed to a period of 60 years, that the approved financial plans are only valid for the first 30 years (crediting period). Therefore the longevity period has been changed to 30 years to comply with requirement 2.2.4(3) of the risk tool and the score has been revised to the following: 30-(30/2)=15. The audit team agrees that this change more accurately reflects the nature of the financial plans. Therefore the risk score of 15 is justified and has been updated throughout the new risk report. This NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	25/15
Standard & Requirement:	VCS Non-Permanence Risk Tool; Land Tenure and Resource Access/Impacts, Risk factor a),c), d)
Report Section:	Section 10.2

Description of Non-conformance and Related Evidence:	
The project has not provided clear and complete justifications with appropriate references for risk factors in Table 6, which affects the accuracy of the project's buffer withholding amount. Risk Factor a) The proponent selected risk factor a) and a score of "0". Although this selection is justified based on the audit team's appraisal of the PD and interviews with project stakeholders, the proponent has not provided a reference to the appropriate documentation or explanation that would help a reader understand the justification more completely as required by VCS Non-Permanence Risk Tool section 1.1.3. Risk Factor c) and d) The proponent selects a risk score of "0" for risk factor c) and d) and indicates a justification that it is "N.A" or not applicable because of "Clear property rights". Although the audit team found sufficient evidence that legal property rights are clearly assigned to the indigenous communities, the field audit revealed significant and ongoing occupation of land within the resguardos other settlers, many of them unsanctioned. The audit team understands from interviews during the field audit that the proponent would like to attempt to resolve this issue by removing these settlements amicably from the project area, however the justification provided in the VCS Non-Permanence Risk report lacks any mention or explanation of this complex topic and how the risk score is affected by these illegal settlements. Therefore insufficient justification has been provided to substantiate these risk scores as required by section 1.1.3 and section 2.3.1 (8) and (9) of the VCS Non-Permanence Risk Tool As a result of these issues the proponent has failed to provide sufficient justification to adequately substantiate its risk factor scores and therefore its total score for Table 6 (Land Tenure and Resource Access/Impacts).	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	**9 March 2015** ANNEX AO – [ACUERDOS CAMPESINOS.pdf; CAMPESINOS EN RESGUARDOS DE MUTATA_ENERO 2015.pdf; ENCUESTA TENENCIA DE TIERRA.pdf; JUSTIFICACION 2015.pdf] BioREDD Mutata REDD+ Project Description v2.36.doc **Update, 16 March 2015** BioREDD Mutata REDD+ Project Description v3.1.doc Mutata Non-Permanence Risk Tool v1.5.pdf NUEVA JUSTIFICACION (new document).pdf

	RELACION DE ACUERDOS FIRMADOS (new document).pdf
Findings for Evaluation of Evidence:	**9 March 2015** The proponent has made some errors in the resolution of this NCR therefore it is still OPEN. Risk factor a) and b). The proponent previously selected risk factor a) and now has selected risk factor b), citing an explanation about mangroves. No mangroves exist in the Mutatá consejos. The audit team believes that there has been an error but the onus is on the proponent to clarify and resolve this error. Previously the audit team had no issue with the selection of risk factor a), and simply asked the proponent to provide an explanation with appropriately referenced information. <u>Risk factor c)</u> The proponent has selected a risk factor score of "0" because disputes occupy less than 5% of the project area. However no evidence has been provided to substantiate this claim. <u>Risk factor d)</u> The proponent has elected a risk factor of 5 because it acknowledges that there are settler without land titles but demonstrates evidence that agreements have been reached to limit natural resource use. The proponent cites Annex "XX", however this Annex is incorrect. The proponent has provided clarification that it intended to reference Annex AO, which was already reviewed and commented on in NCR 04/15 and constitutes sufficient evidence to close this NCR. Please refer to findings in NCR 04/15. Risk factor f) has been selected with a value of -2 based on the fact that legally binding agreements are in place. This point was justified and resolved in NCR 24/15 because the crediting period is covered by this agreement. However, the proponent now includes added justification regarding mangroves, which do not occur in the project area and are not correct and shall be removed. **Update, 16 March 2015** <u>Risk factor a)</u> The proponent has fixed this justification and now factor b has been correct to no longer be applicable. This is an acceptable and accurate justification for only selecting risk factor a). <u>Risk factor b)</u> See previous comment <u>Risk factor c)</u>

	The proponent has provided Annex AO which contains two revised documents. (NUEVA JUSTIFICACION (new document).pdf; RELACION DE ACUERDOS FIRMADOS (new document).pdf). The proponent has not cited these documents in the risk report (**OBS 05/15**), however the audit team understood from phone interviews with the proponent that these documents were also intended to address this question. The evidence provided cites that 23 colonos have attained agreements with the indigenous communities over disputed territory in and around the official project area. The agreements total 1,585.7ha of land however these areas are technically not part of the VCS project area because they do no classify as forest, though they are within the legal boundaries of the resguardos. The disputed areas are just less than 5% of the project area (34,288 ha). In addition, the evidence provided demonstrates agreements to resolve these disputes. These issues have been described in more detail in NCR 04/15. The proponent has provided sufficient evidence to close any issues with risk factor c). <u>Risk factor f)</u> The proponent has corrected any errors that had been present in the justification of risk factor f), thereby closing this component of the NCR. All previously identified issues with the risk factors in table 6 have been adequately addressed by the evidence submitted, therefore this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	Refer to NCR 04/15 for resolution of risk factor c) and d). OBS 05/15 was raised as this NCR was being closed.

NCR#:	26/15
Standard & Requirement:	VCS Non-Permanence Risk Tool; Community Engagement, mitigation factor c)
Report Section:	Section 10.2
Description of Non-conformance and Related Evidence:	
The proponent has not provided clear and complete justifications with appropriate references for risk factors in Table 7, and the risk score appears to be incorrect and requires attention. These issues affect the accuracy of the project's buffer withholding amount. <u>Risk Factor b)</u> The proponent selected a score of "0" for risk factor b). The audit team inspected minutes of general assemblies for all communities in and around the project area who are part of the resguardos, and found sufficient and satisfactory evidence to support this risk rating. However, no mention of this documentation or reference to the consultation process has been provided in the justification for Risk Factor b) as required by section 1.1.3 of the VCS Non-permanence Risk Tool so as to clearly substantiate this rating. <u>Risk Factor c)</u>	

The proponent selects mitigation factor c) which provides a -5 mitigation score. This selection is justified based on the audit team's observation of the socioeconomic conditions of the communities and the intended project activities. However, the proponent has incorrectly calculated the subtotal as 0 when it should be -5 due to this mitigation score, therefore the final risk score for Table 7 is incorrect, which affects the accuracy of the overall risk score of the project. In sum, the proponent has not provided sufficient documentation to substantiate the risk score for Table 7 and the risk score for Table 7 is incorrect.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Mutata Non-Permanence Risk Tool v1.4.docx Informe Taller Plan REDD+ Mutatá.docx BR-PT-170 Asistencias Plan REDD+ Mutatá.pdf BIOREDD Informe Taller CMI Mutatafinal.pdf
Findings for Evaluation of Evidence:	The risk tool now contains clear references that support each risk factor selected. <u>Risk factor a)+b)</u>: Both are listed as "0", and annex AD is cited, which contains multiple pieces of documentation that support that all communities in the resguardos have been consulted and informed about the REDD project. These risk factors are now adequately referenced. <u>Risk factor c)</u>: The proponent has adequately incorporated the effect of the -5 risk factor selection into the table's overall risk score. The final risk score selection of -5 has been fully justified and this NCR is considered CLOSED.
NCR Status:	CLOSED.
Comments (optional):	N/A

NCR#:	27/15
Standard & Requirement:	VCS Non-Permanence Risk Tool 1.1.3; Natural Risks;
Report Section:	Section 10.2
Description of Non-conformance and Related Evidence:	
The proponent has provided no justification for the selection of risk factors for all natural risk categories (fire, pests and diseases, extreme weather, geological risk, and other natural hazards), across all risk components such as Significance, Likelihood, Score, and Mitigation measures. Therefore the risk analysis for Natural Risk in incomplete because it lacks explanation, documentation and evidence for these elements. Instead, only the combined score is reported by the proponent, which is an incorrect use of the risk analysis for Natural Risk. The proponent is required by Section 1.1.3 of the Risk Tool to provide documentation and sound justification for all risk factors selected in the Non-Permanence Risk Report. At this time the Natural Risk analysis is incomplete and the final risk score cannot be properly assessed by the audit team.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Mutata Non-Permanence Risk Tool v1.4.docx Riesgos Mutata.xlsx
Findings for Evaluation of Evidence:	The proponent has updated the PD and Non-Permanence Risk Report in section 3 to assess and justify all natural risks and risk factor selections. Each risk category has been clearly demonstrated and all relevant evidence has been clearly presented. The proponent uses the DesInventar online disaster tracking system which covers Colombia, Venezuela, Ecuador, Peru, and Bolivia. The DesInventar system is supported by the UN Office for Disaster Risk Reduction and the UN Development Programme have endorsed the system for tracking and recording disasters and the system is a valid resource for assessing natural risks in the project area. The system has files dating back to 1938 for some risk types. The proponent has appropriately submitted to the audit team the output of the analyses using Desinventar. Conformance is demonstrated and this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	28/15
Standard & Requirement:	VCS AFOLU Requirements 3.7.3 - VCS Non-Permanence Risk Tool Template use
Report Section:	Section 10.2
Description of Non-conformance and Related Evidence:	
The proponent has not used the official VCS Non-Permanence Risk Tool Template completely or properly as required by VCS 3.7.3, and by the instructions in the template itself. For instance, the proponent makes use of its own risk tables and not those provided by the VCS Non-Permanence Risk Report (Long-Form). Additionally the proponent has not completed Section 4.2 of the long-form template which requires the calculation of total VCUs. Alternatively, the proponent could make use of the Risk Report (Short-Form) if used in combination with the VCS Risk Report Calculation Tool. All these templates are available on the VCS website at http://www.v-c-s.org/program-documents. In all instances the proponent shall follow the instructions for and the pre-set tables provided in the official VCS templates.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Mutata Non-Permanence Risk Tool v1.4.docx
Findings for Evaluation of Evidence:	The proponent has corrected the risk report so that it is used in full (VCS “long-form”) and used correctly including the calculation of total VCUs. Conformance is demonstrated and this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	29/15
Standard & Requirement:	VCS Principle of Accuracy
Report Section:	Multiple Sections
Description of Non-conformance and Related Evidence:	

Multiple discrepancies were observed in the reporting of carbon stock values for the project. In the PD, Section 1.3.3, the total carbon stocks identified are 244.98tC/ha. Only this value is reported without identifying which land cover type (degraded forest or intact forest) this represents. Furthermore, the value in 1.3.3 does not correspond to any supporting documents. Values in supporting documents are contradictory. The VM0006 Accounting model v8.18 reports in the Parameters tab that the AGT stocks are 154.285tC/ha. This value does not correspond to the values reported in Table 9.3 in GeoEcoMap Task 8&9, the source of this value. Task 8&9 reports the "AGB mean" biomass as 137.848tC/ha in Table 9.3. Table 9.3 does not clarify whether the "AGB mean" values are for all aboveground carbon pools, or only for AGT. The 154tC/ha value does however correspond to Table 10.1 of GeoEcoMap Task 12 as do the other values reported in Annex V for other LULC classes.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc GeoEcoMap_task12_final_2.pdf VM0006 Accounting MUTATA v9.34.xlsm
Findings for Evaluation of Evidence:	The proponent has clarified that the 141.4tC/ha figure in Table 9.3 of task 8&9 was an error and was not updated information. Table 9.3 has been corrected. The proponent has subsequently updated Table 9.3 which is now in alignment with the value reported in the PD, in Table 10.1 of Task 12 and in the Accounting Model. The nonconformance is therefore CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	30/15
Standard & Requirement:	VCS Principle of Accuracy
Report Section:	Multiple sections
Description of Non-conformance and Related Evidence:	

The PD uses a system of supporting annexes which are internally referenced within the PD and are well organized. However, some crucial documents provided to the audit team including all supplemental monitoring materials and much of the supporting technical documentation developed by GeoEcoMap, as well as the non-permanence risk report, are not referenced in the PD and not included in the annex system. This creates a risk that these documents may be lost from future verifications or treated as unofficial documentation.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has now updated the system of Annexes such that the key technical documentation developed by GeoEcoMap, as well as the non-permanence risk report are clearly referenced in the PD and are recorded in the system of Annexes. Conformance is demonstrated and this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	31/15
Standard & Requirement:	VCS VM0006 Section 9.3.2, Section 9.3.9
Report Section:	7.3
Description of Non-conformance and Related Evidence:	
The MRV document, GeoEcoMap Task 14, which was not presented to the auditors during the original document review which accompanied the field audit, indicates that emissions factors and carbon stocks for all LULC classes and transitions will be measured once more prior to the first verification (to reduce the uncertainty discounts) and following this will not be updated for the rest of the crediting period. This is not in conformance with the VM0006 methodology. Specifically Section 9.3.2 stipulates that “carbon stock densities must be re-measured at least once before every baseline update using ground-based biomass inventories, as described in Section 8.1.4.4…[once new carbon stock densities are available] values for the emissions factors must be updated…”	

Section 9.3.9 also indicates that "Baseline updates must follow the procedures in Section 8". In this section a list of exceptions to the procedures of Section 8 are described. Selecting to not re-measure carbon stocks and update emissions factors is not among these exceptions. The methodology is unambiguous that carbon stocks and emissions factors shall be updated at each baseline update and that these shall be updated using ground based plots.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	GeoEcoMap_Task14_031215.pdf
Findings for Evaluation of Evidence:	The proponent has requested a methodology deviation which has been accepted by the audit team. The audit team approves the methodology deviation. The deviation simply replaces a requirement of the approved VCS VM0006 methodology with the also VCS approved VT0005 tool which is a better reflection of the state of the art of technology for remote forest measurement. Several peer reviewed publications have demonstrated that LiDAR measurements can be more accurate that ground based inventories and have necessarily much higher sampling intensities. As a result the audit team considers the deviation to more accurate than the alternative. In addition, the audit team sees no reason why ground based inventories would be necessary at future baseline updates to create a new allometric model as the forest type is the same at both time points. The nonconformance is closed.
NCR Status:	CLOSED
Comments (optional):	N/A

VCS & CCB Forward Action Requests (FARs)

The VCS has recently adopted FARs as a system for identifying areas of likely or possible nonconformance in future audits. For example, areas of project implementation proposed at validation that may lead to non-conformances at a future verification. FARs serve to flag these issues for future VVBs as well as to help projects identify improvements that can be made to project implementation prior to these issues manifesting as nonconformances.

FAR#:	01/15
Standard & Requirement:	VCS Additionality Requirements
Report Section:	Relevant for future verification
Description of potential future Non-conformance and Related Evidence:	
The project plans to scale up project activities including productive agricultural activities that already exist in the project area. Future VVBs are reminded to verify that project activities witness at a future verification are attributable to the REDD project rather than a different development project or a pre-existing land use practice.	
Corrective Actions:	Organization may implement corrective actions to demonstrate that the risk of a future non-conformance has been resolved with the requirement(s) referenced above.
Timeline for Conformance:	Prior to Verification
Evidence Provided by Organization (Optional):	PENDING
Findings for Evaluation of Evidence (Optional:	PENDING
FAR Status:	OPEN
Comments (Optional):	N/A

FAR#:	02/15
Standard & Requirement:	CCB 3rd Ed G1.10
Report Section:	Section 4.3 - Relevant for future verification
Description of potential future Non-conformance and Related Evidence:	

The proponent identifies various human-induced risks and associated mitigation strategies related to the project's climate, community and biodiversity benefits as described in section 2.3 of the PD. The mitigation measures presented therein are satisfactory, however due to the aspirational nature of many project activities such as trainings and capacity building regarding income generation activities, specific risk mitigation measures on human-induced risks to climate and community benefits have not been clearly articulated yet at validation. For example, the proponent states that "Project activities work with local stake holders on improved planting and processing techniques for foodstuffs ,which will help locals adapt to changing climate and social conditions.", but no detail is provided on the exact measures that will be taken. This is largely the result of pending discussions and plans with communities and implementing partners. Future verifiers are reminded to review the detail and appropriateness of mitigation measures related to human-induced risk once project activities have been more concretely defined with the communities.	
Corrective Actions:	Organization may implement corrective actions to demonstrate that the risk of a future non-conformance has been resolved with the requirement(s) referenced above.
Timeline for Conformance:	Prior to Verification
Evidence Provided by Organization (Optional):	PENDING
Findings for Evaluation of Evidence (Optional:	PENDING
FAR Status:	OPEN
Comments (Optional):	N/A

FAR#:	03/15
Standard & Requirement:	CCB 3rd Ed G3.9
Report Section:	Section 4.6 - Relevant for future verification
Description of potential future Non-conformance and Related Evidence:	
Not all training materials relevant for employment within the proposed project activities were presented at validation due to the forward – looking nature of validation. Many project activities such as income generating activities and more robust land use monitoring have only been planned for but full implementation depends on funding and work plans designed for the first phase of the project. Therefore specific training materials and schedules for all proposed project activities such as productive activities, and forest protection, etc. have yet to be developed, although the need for these trainings and materials have been identified in the PD 2.6.1. A forward action request has been requested for future verifiers to review training materials available at verification for all relevant project activities that are active at verification.	
Corrective Actions:	Organization may implement corrective actions to demonstrate that the risk of a future non-conformance has been resolved with the requirement(s) referenced above.

Timeline for Conformance:	Prior to Verification
Evidence Provided by Organization (Optional):	PENDING
Findings for Evaluation of Evidence (Optional:	PENDING
FAR Status:	OPEN
Comments (Optional):	N/A

FAR#:	04/15
Standard & Requirement:	CCB 3rd Ed G3.12 –Occupational Risks
Report Section:	Section 4.6 - Relevant for future verification
Description of potential future Non-conformance and Related Evidence:	
Not all training materials relevant for employment within the proposed project activities were presented at validation due to the forward – looking nature of validation. Many project activities such as income generating activities and more robust land use monitoring have only been planned for but full implementation depends on funding and work plans designed for the first phase of the project. Therefore specific training materials and schedules for all proposed project activities such as productive activities, and forest protection, etc. have yet to be developed, although the need for these trainings and materials have been identified in the PD 2.6.1. A forward action request has been requested for future verifiers to review training materials available at verification for all relevant project activities that are active at verification.	
Corrective Actions:	Organization may implement corrective actions to demonstrate that the risk of a future non-conformance has been resolved with the requirement(s) referenced above.
Timeline for Conformance:	Prior to Verification
Evidence Provided by Organization (Optional):	PENDING
Findings for Evaluation of Evidence (Optional:	PENDING
FAR Status:	OPEN
Comments (Optional):	Generated during the closure of NCR 36/15

CCB Standards-specific Nonconformity Reports (NCRs)

NCR#:	32/15
Standard & Requirement:	CCB Standards 3rd Edition, multiple requirements
Report Section:	Multiple Sections
Description of Non-conformance and Related Evidence:	
The PD's for all eight projects describe in great detail the roles that Fondo Accion will play as a Project Liaison. This is used to demonstrate conformance with several CCB indicators including: G4.2—key technical and managerial skills of the management team G4.3—financial health of implementing organization G3.8—grievance mechanism G3.9—worker training G3.10—equal opportunity employment G3.11—compliance with laws and regulations relevant to workers G3.12—occupational hazards and risk minimization GL2.6—description of benefit sharing mechanism Fondo Accion is only guaranteed to participate in the project through March 2015 so cannot be relied upon to demonstrate conformance with these indicators in the absence of an extension of this participation.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	Clarification in email from CCBA on 25 February 2015 BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The nonconformance is closed based on new standard clarification by the CCBA received by the audit team. The CCBA has confirmed that in this case the clear intention to have Fondo Accion play these roles and the robust and documented paper trail substantiating this intention, related roles and responsibilities, and other information, is sufficient to close the NCR. This is sufficient for validation, however for verification it shall be demonstrated that Fondo Accion is fully involved and actually fulfilling

	the requisite functions to demonstrate conformance with these CCB indicators. The non-conformance is therefore considered closed.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	33/15
Standard & Requirement:	CCB 3rd Ed. G1.4 +G1.7
Report Section:	3.2

Description of Non-conformance and Related Evidence:

Some issues were identified with the maps and explanations related to the creation of required maps that prevent the audit team from clearly understanding conformance with G1.4 and G1.7.

1. Section 1.2.4 provides Figure 5, which shows the spatial extent of the project zone, and explains that the project zone is comprised of all the Embera-Katió resguardos. However Figure 5 shows four (4) polygons, two large and two small, yet the explanation in 1.2.4 does not sufficiently explain the basis for delimiting the project zone. Interviews with the project proponents explained that the legal limits of the resguardos mark the boundaries of the REDD+ project activities. However **NCR 03/15** found ambiguities with the official boundaries and sizes of resguardos, meanwhile Section 1.2.4 does not help to clearly understand whether the boundaries of the Project Zone were derived directly from the legal resolutions cited in section 1.3.5 of the PD. In fact there is no explanation in section 1.2.4 that helps to understand how the physical limits of the project zone were drawn or what sources were used or consulted to represent them in the map in section 1.2.4. Therefore it is difficult for the audit team to understand how the physical boundaries were drawn, and whether all the polygons of the project zone are supposed to be related to the legal resolutions cited in 1.3.5 of the PD. As a result the basis for defining the Project Zone cannot yet be easily understood (G1.4 and G1.7).

2. No maps in section 1.2.4 show the location of all the communities in the resguardos that will be participating in or affected by the project activities. For example, the audit team visited the largest community, Jaikerasavi, and also Chontadural and Cañaduzales – none of these appear in the maps provided.

3. G1.7 requests that one map be provided that demonstrates the project area, project zone, HCVs, and other areas defined in CL3, CM3, and B3.

4. In addition, the audit team understood from the field audit that many colonos live within the resguardos, some were grandfathered in, and others occupy the land illegally. The community leaders interviewed by the audit team stated their intention to work with these

settlers and negotiate relocation arrangements, yet none of this social dynamic is explained or represented in the project maps. No justification or explanation has been provided to clarify this situation. These issues qualify as a nonconformance against G1.7 because not all stakeholders have been sufficiently represented in the project maps, or they have not been justified as adequate omissions from project maps.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	**9 March 2015** BioREDD Mutata REDD+ Project Description v2.36.doc ANNEX AO – [ACUERDOS CAMPESINOS.pdf; CAMPESINOS EN RESGUARDOS DE MUTATA_ENERO 2015.pdf; ENCUESTA TENENCIA DE TIERRA.pdf; JUSTIFICACION 2015.pdf] **Update, 13 April 2015** BioREDD Mutata REDD+ Project Description v3.12.doc
Findings for Evaluation of Evidence:	**9 March 2015** The audit team reviewed evidence provided by the proponent to address the question of map boundaries and the rationale for delimiting the project zone and other related maps requested by the CCB Standards. There are some clarifications required before this topic can be fully resolved. 1. The proponent has updated the description of 1.2.4 of the PD that says that there were differences in the legal boundary of the resguardo as represented by the IGAC maps vs the INCODER resolutions, which caused the BioREDD team to reconstruct the project boundaries in accordance with descriptions of the boundaries as listed in the INCODER resolutions. The proponent has expressed clearly that the legal limits of the resguardos constitute the project zone, so this issue has been sufficiently indicated. This issue is CLOSED because NCR 03/15 addresses and resolves the question of how the legal limits of the resguardo were established and represented in the project documentation. 2. The audit team inspected Figure 5 and Figure 6 in the PD, but can only detect the names of resguardos (Jaikerasavi, Chontadural), but the location of the communities listed in the original findings are not evident. Additional clarification is requested to close this component of the NCR, therefore it is still considered OPEN.

	3. The proponent has updated section 1.3.8.6 of the PD by adding Figure 11, a map showing the HCV areas for biodiversity, which is a subset of the legal limits of the resguardos. This map is sufficient for addressing the fact that previously such a map had not been included in the PD. This component of the NCR is CLOSED. 4. The proponent has updated the PD in section 2.7.2 to clearly state that although colono settlements do appear in the project zone that they are not in significant concentrations and have not been officially censed. Sufficient evidence has already been presented that the proponent has entered into agreements with these settlers and is working through a legal process to resolve any land use disputes. The findings in NCR 04/15 address these issues in more detail and are sufficient for explaining how this component has been resolved. The proponent has presented sufficient explanations to better understand how colonos have been part of the stakeholder consultation process, therefore this aspect of the NCR is CLOSED. Until point 2 above is resolved this NCR is still OPEN. **Update, 13 April 2015** Figures 5 and 6 of the PD now shows the locations of the villages visited during the field visit, which includes Jaikerasavi, the largest of the communities. This NCR is therefore CLOSED because to the best of the audit team's knowledge all relevant communities are shown in project maps.
NCR Status:	CLOSED
Comments (optional):	See NCR 03/15 and NCR 04/15 for further explanations. **Update, 24 April 2015** The audit team noticed during the closure of this NCR that Figure 6 represented an earlier value of the extent of the VCS project area, which did not match the rest of the project documentation. This was not a material error given that all the carbon accounting was based on the updated figure, rather it was a typographical error that had not been corrected when the current project area was finalized in latter 2014. The proponent submitted a revised version of the PD on 24 April 2015 such that Figure 6 now shows the correct and updated project area figure of 34,288 a. Project description BioREDD Mutata REDD+ Project Description v3.13.doc (24, April 2015) is the final version.

NCR#:	34/15
Standard & Requirement:	CCB 3rd Ed. G1.5 and G1.6
Report Section:	3.3

Description of Non-conformance and Related Evidence:	
The field audit of the Mututá project revealed a possible inconsistency between the PD's stakeholder and agent of deforestation analysis and identification process and the information gathered in the field. More specifically, conversations with Embera community leaders and direct observations in the field revealed the ongoing presence of illegal colono settlements within the project zone. Community members explained that some colono settlements, though illegal, predated the resguardos and were grandfathered into the resguardos, while others settled in after their creation. In either case, these stakeholders have had a clear role in forest degradation and deforestation within the project zone. Whether they are included in the project area is not clear based on the information provided in the PD. Sections 1.3, 2.7, and 4.5.3.1 together give an adequate description of the communities, their governance structure, and general baseline land uses and relevant actors, however the PD gives no significant explanation regarding the existence and relevance of these colono settlements as related to the REDD+ project and its activities or whether they are or are not relevant to overall project design. This contrasts with the stated aspirational goals cited by Embera community members during the audit to eventually negotiate the relocation of these colono settlements somewhere outside of the reserve. As a result, there is conflicting evidence as to whether the proponent's stakeholder analysis and identification is complete, therefore full conformance with G1.5 and G1.6 is ambiguous.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	refer to NCR 04/15 and 33/15
Findings for Evaluation of Evidence:	This NCR has been resolved via the findings in NCR 04/15 and 33/15. Please refer to them for additional details. The proponent has sufficiently acknowledged the existence of, and explained the processes for how the issue of colono settlements is being handled. Therefore this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	Refer to NCR 04/15 and 33/15 and their subsequent closure.

NCR#:	35/15
Standard & Requirement:	CCB 3rd Ed. G1.9 – Project Lifetime
Report Section:	3.7
Description of Non-conformance and Related Evidence:	

Section 1.7.1 explains the project lifetime is divided into a Phase 1 in which project activities are planned and with initial implementation, and Phase 2 in which implementation of project activities continues. However the proponent has not explicitly created its explanation of the project lifetime as it is defined in G1.9 of the CCB Standards. The 'project lifetime' is defined in footnote 24 of the CCB Standards 3rd Edition as the time period over which project activities are implemented. The description provided in 1.7.1 of the PD does not specify whether the project activities are envisioned to match the crediting period or whether they go beyond. Section 1.7.2 indicates that there is a period in which the activities extend into the "longevity period". It does not clearly state an explanation in terms of the "project lifetime" used in the CCB Standards. Section 1.7.5 says that the crediting period and the implementation schedule are the same yet section 1.7.2 states that there is a phase from year 30-60, while the crediting period is only 30 years. This results in a confusing and inconsistent explanation and relationship between the crediting period, and what is intended to be described as the project lifetime. Section 2.2.3 of the PD states that the crediting period is 30 years and the "longevity period" is 60 years. Neither the VCS nor the CCB Standards use the term "longevity period". The project lifetime can be different from the project crediting period, but the proponent has not explicitly mentioned whether it is or is not different from the crediting period or how the "longevity period" relates to the term official CCB term "project lifetime".	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc **Update 13 April 2015** BioREDD Mutata REDD+ Project Description v3.12.doc
Findings for Evaluation of Evidence:	The proponent has corrected any inconsistencies that may have caused confusion between the terms "crediting period", "project longevity", and "project lifetime". Section 1.7.1, 1.7.2, and 1.7.5 clearly differentiate between the terminology applied to years 1-30 and 31-60. These corrections have adequately addressed the NCR and it is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	**Update 13 April 2015** The proponent has changed the project longevity period to 30 years based on changes made to the VCS Risk Report and the calculation of project longevity. The proponent adequately updated section 1.7 of the PD to reflect this change.

NCR#:	36/15
Standard & Requirement:	CCB 3rd Ed. G1.10
Report Section:	4.3
Description of Non-conformance and Related Evidence:	
The proponent has provided an incomplete description of risks posed to the climate benefits to be delivered by the project as requested by indicator G1.10. In section 2.3.1 of the PD the proponent presents a narrative on "Climate Risk" and identifies ways in which the communities involved in the project are adapted to natural risk posed by climate change. However this aspect of the narrative does not clearly address how these potential risks posed by climate change are related to the climate benefits of the project or whether or not any mitigation measures are possible. For example, the proponent mostly describes how settlement patterns and structures adopted by the communities help them adapt to climate change risks, however how these attributes affect the climate benefits of the project is not clearly explained, and in light of this observation no associated mitigation measures have been presented. This constitutes a non-conformance against G1.10 because the proponent has not presented a complete analysis of the risks to climate benefits of the project. The audit team acknowledges that section 2.3.1 of the PD also contains a description related to natural risks as covered in the VCS Risk tool and identified only geological and extreme weather as significant risks, however no further or adequate explanation is given on these points in either 2.3.1 or in section 2.3.4 of the PD. The audit team also acknowledged that the 2.3.1 contains a narrative on human-induced risks and their relationship to the project's climate benefits. This aspect of the narrative is satisfactory and is not in question. In sum, the proponent's analysis related to risks to climate benefits is incomplete as it does not sufficiently identify or relate natural risks to the project's climate benefits.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has clarified section 2.3.1 of the PD in a manner sufficient to close the NCR. The proponent has provided updated text in the PD to further explicate the natural and human induced risks to the climate benefits of the project. The proponent has specifically supplemented the additional analysis of the natural risks with a deeper explanation of the data sources for the natural risks which includes the DesInventar system.

	The proponent uses the DesInventar online disaster tracking system which covers Colombia, Venezuela, Ecuador, Peru, and Bolivia. The DesInventar system is supported by the UN Office for Disaster Risk Reduction and the UN Development Programme have endorsed the system for tracking and recording disasters and the system is a valid resource for assessing natural risks in the project area. The system has files dating back to 1938 for some risk types. The proponent has appropriately submitted to the audit team the output of the analyses using Desinventar. The nonconformance is closed, however an observation is raised (OBS 06/15).
NCR Status:	CLOSED
Comments (optional):	Also refer to NCR 27/15 concerning the application of the VCS risk tool; OBS 06/15 was raised when this NCR was closed.

NCR#:	37/15
Standard & Requirement:	CCB Standards B1.2
Report Section:	4.4
Description of Non-conformance and Related Evidence:	
In section 1.3.8 of the PD the proponent states that "The project area, at greater than 80,000 hectares, more than meets the generally accepted threshold of 50,000 ha considered necessary for this HCV (Annex AL)." as a basis for assessing HCV 2. However the project area is listed at 33,797ha. This creates an inconsistency within the PD concerning the size of the project area and this HCV criterion. This potentially affects how the proponent assesses HCV 2, but no explanation has been given as to whether the proponent's analysis is affected or not by the 50,000ha size guideline for defining "landscape level".	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has made clear corrections to the PD in section 1.3.8.5 to address and close this NCR. The correction states that the scale of the project precludes it from including the landscape level HCV. This explanation is sufficient for closing the NCR because the proponent has provided a clear rationale for defining when the landscape scale HCV is applicable. In this case the threshold set is greater than the project area and therefore this HCV category was deemed not applicable, therefore this NCR is

	considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	38/15
Standard & Requirement:	CCB Standards 3rd Edition G3.12
Report Section:	4.6
Description of Non-conformance and Related Evidence:	
G3.12 requires the proponent to "assess occupations that might arise through implementation of the project and pose a risk to worker safety" and to describe related mitigation measures. The PD's only generally describe Fondo Accion's risk management plan. The PD's do not provide a risk assessment of likely future occupations identifying risks and mitigation measures. While future occupations are not all known, some are, including rangers/forest guards, which is a risky occupation and is not evaluated. Additionally, as it is unclear whether many workers, for example forest guards, will be employed by Fondo Accion or by the proponents, the relevance of Fondo's risk management plan is not clear.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has submitted a comprehensive assessment of possible risk to employees of the project and updated section 3.1.1 of the PD in a manner that is sufficient to close this NCR. Specifically, the proponent has provided the document "Riesgos.doc" that identifies a wide range of activities ranging from carbon and biodiversity monitoring, to participation in agricultural production linked to the project activities. This document demonstrates a reasonable assessment of the possible risks posed by environmental and occupational hazards associated with a wide range of plausible activities related to project implementation. The PD was updated to reference the new occupational risk assessment and also its relationship to Law 1562 of 2012 regarding worker health.

	As a result this NCR is considered CLOSED, however FAR 04/15has been issued so that compliance with this assessment is determined at verification.
NCR Status:	CLOSED.
Comments (optional):	NCR 38/15 was closed but FAR 04/15 was issued.

NCR#:	39/15
Standard & Requirement:	CCB Standards Third Edition G3.8
Report Section:	4.7
Description of Non-conformance and Related Evidence:	
The grievance process as described in the PD does not identify an effective "neutral third party" for mediating grievances in "stage two" of the grievance mechanism. The PD notes "Secondly, Grievances that cannot be resolved by the above-mentioned internal procedures will be referred to a Mediation Body. These cases would be considered Grave Conflicts that require a response from the President and Legal Representative of the Governing Board of the Community Council, and representative from Fondo Acción. For such conflicts, a response will be provided within 45 calendar days. The Assignments Manual produced within the first three months of the project will contain more detailed procedures for listening to the conflicting parties and establishing a Mediation Body." All of the entities or individuals identified to form the third party (consejo President, Legal Representative, Governing Board, and Fondo Accion representative) are involved in the project and are not third parties. This approach also does not provide for an effective mediation body for resolving conflicts between multiple consejos participating in the project, or between a consejo and an implementing partner.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc Guia Mecanismo de Quejas y Reclamos Mutata (v2).docx
Findings for Evaluation of Evidence:	The proponent has updated the PD in section 2.75 which is sufficient for closing the NCR. The updated section proponent has provided a Grievance Process document in response to the NCR. The project now has identified the Camara de Comerecio de Medellin, the Defensoria del Pueblo and/or the Organizaciones Regionales Indigenas, identified as the Mediation Bodies as entities which can play the role of a third party for mediation when conflict resolution within a consejo fails. This selection is appropriate based on interviews with communities during the field audits. Communities often suggested these institutions as appropriate for this role. This third party can be used for mediation within a consejo,

	between consejos, or between the consejo and an implementing partner such as Fondo Accion. These same institutions can be used for arbitration in the case that the mediation step is unsuccessful. The grievance process is in conformance with the CCB Standards 3rd Edition and is considered CLOSED
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	40/15
Standard & Requirement:	CCB Standards 3rd Edition, G3.7
Report Section:	4.7
Description of Non-conformance and Related Evidence:	
The PD does not appear to describe measures needed and taken to ensure the proponent and implementing groups are not involved in harassment or discrimination.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	Annex AS - Framework Agreement Mutatá 2C.doc BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has revised the PD Section 2.7.1 to explicitly acknowledge this CCB requirement and identifies measures in Annex AI to ensure that the project proponent (the consejo) and other entities involved in project implementation such as BioREDD+ and Fondo Accion, are not involved in harassment or discrimination. Annex AI, the framework implementation agreement between Fondo Accion and the consejos requires as a condition in Section 8 of the agreement that there is no harassment or discrimination of any kind. Implementation of this condition will be assessed at future verifications. The NCR is closed.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	41/15
Standard & Requirement:	CCB Standards 3rd Ed: G5.1
Report Section:	5.7
Description of Non-conformance and Related Evidence:	
The audit team identified stakeholders within the project zone who have illegal claims on lands within the project zone. The audit team confirmed indigenous tenure with INCODER the relevant governmental authority, however it detected that there are colono settlements in the project zone, many of which obtained land through illegal purchases and who still reside in the project zone. This reality is not fully reflected or discussed in the PD therefore a nonconformance was issued on this topic.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	Refer to cited evidence referenced in NCR 04/15, 32/15
Findings for Evaluation of Evidence:	This NCR was closed by addressing NCR 04/15, and 32/15. Refer to the findings for evaluation of evidence in NCR 04/15 and NCR 32/15 for the justification for the closure of this NCR.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	42/15
Standard & Requirement:	CCB Standards 3rd Ed. G5.3 + G5.5
Report Section:	5.7
Description of Non-conformance and Related Evidence:	

There is insufficient clarity provided in the PD regarding the community's desire to ultimately remove illegal colono settlers from the resguardo. During the field visit the community members helped identify the fact that over 30 illegal colono settlements are located in the resguardo and that a top priority is to ultimately reclaim these territories. The audit team understands that these colonos do not have legal tenure, however the implications of this coupled with the developing REDD project activities and the community's desire to reclaim full ownership of the entire resguardo have not been fully explained.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has modified section 1.2.1 and 2.7.2 to clearly state the proponent's position regarding these stakeholders. The findings issued in NCR 04/15 and NCR 32/15 provided the evidence and related auditor findings that justify this NCR being CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	43/15
Standard & Requirement:	CCB Standards 3rd Edition, G5.4
Report Section:	Section 5.8
Description of Non-conformance and Related Evidence:	
G5.4 requires the identification of any illegal activities occurring in the project zone and evaluation of their impact on CCB benefits. The proponent has successfully evaluated illegal logging as the major illegal activity. However, the PD does not evaluate coca production which is considered very likely to occur in some project zones based on community interviews.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation

Evidence Provided by Organization:	Annex AT - 1.Coca Plantation Survey (2012).pdf 2.UNODC (Sep 2103).pdf BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has now acknowledged in Section 3.8 of the PD, "Illegal activities and project benefits" that there are some sparse coca plantations in the project area and zone. The proponent also asserts that the amount of coca production has been decreasing over time. The proponent cites the UNODC reports (Annex AT) on coca production in Colombia (2012 report) to substantiate this. The audit team sees no evidence that project benefits would be derived from illegal activities. To the contrary, the project activities will provide alternative agricultural opportunities to illegal activities and should serve to help reduce reliance on coca production. In fact, USAID, which has funded the project development, has been active in the region promoting alternatives to coca production for some years. This aspect of the NCR is closed. The audit team reviewed the most recent UNODC report on coca production in Colombia (2013 Coca Cultivation Survey, UNODC). The report confirms that coca production dropped steadily in Colombia from about 2005 until 2011 and since that time period has remained stable at a low level. The report maps areas of coca production in the Colombian Pacific and shows that the project area is primarily an area with minimal activity. The proponent has provided an additional summary of UNODC (UN Office of Drug Control) data collected specifically in the consejos participating in the BioREDD+ program from 2008-2012 (just prior to the project start date). This data also demonstrates a downward trend in coca production in the BioREDD+ consejos. In 2012, the total area observed of coca production in the Mutata project was approximately 12 hectares. The audit team considers this amount of coca production to be immaterial. The proponent has both acknowledged this illegal activity and demonstrated that it is immaterial using what the audit team believes is the best available data—reports from the United Nations, therefore this NCR is considered CLOSED.
NCR Status:	CLOSED
Comments (optional):	N/A

NCR#:	44 /15
Standard & Requirement:	CCB Standards 3rd Ed. CM3.1 + CM 3.2
Report Section:	8.2

Description of Non-conformance and Related Evidence:	
Section 6.2 of the PD evaluates potential negative offsite stakeholder impacts however an important reference (Annex D) needed to understand how this analysis was conducted is missing and could not be reviewed by the audit team reviewing the Mutatá project. Although the proponents have identified the primary potential negative impacts are from leakage impacting resources in surrounding consejos and community lands outside the resguardos participating in the project, loss of access to commodities from logging trucks (which deliver commodities as well) visiting the region less, and loss of revenue for corteros. The audit team cannot fully assess this assertion without access to Annex D referenced in PD section 6.2	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has updated PD section 6.2 which adequately resolves this NCR. The updated description clearly relates the project activities to the indicator and explains that the offsite stakeholder impacts are expected to be negligible since the impacts of the project activities occur within the resguardos with potentially positive impacts felt as value-added activities from the project are implemented. The audit team agrees with this assessment because project activities are designed for conservation and income generation for the legal residents of the resguardos. Therefore this NCR is considered CLOSED.
NCR Status:	CLOSED.
Comments (optional):	N/A

NCR#:	45/15
Standard & Requirement:	CCB Standards 3rd Edition, B2.2
Report Section:	Section 9.2
Description of Non-conformance and Related Evidence:	

One of the major productive activities described in some of the PDs, and for which communities have expressed significant enthusiasm, is the commercialization of fisheries. The relevant PDs do not evaluate the biodiversity risks of increased fishing pressure in the assessment of net positive biodiversity impacts of the project.	
Corrective Action Request:	Organization shall implement corrective actions to demonstrate conformance with the requirement(s) referenced above. Note: Effective corrective actions focus on addressing the specific occurrence described in evidence above, as well as the root cause to eliminate and prevent recurrence of the non-conformance.
Timeline for Conformance:	Prior to Validation
Evidence Provided by Organization:	BioREDD Mutata REDD+ Project Description v2.36.doc
Findings for Evaluation of Evidence:	The proponent has updated the PD in Section 7.1.1 with the assertion that the project will only support fishing activities which promote sustainable fishing practices and which maintain fish stocks for the long term. The BioREDD+ program has demonstrated that it has the technical ability to provide guidance to Colombian fisherman in other project areas to help ensure sustainability in the process of commercialization of fisheries. The promotional activities around sustainable fisheries are sufficient for validation to demonstrate that the project is likely to have a neutral to minimal impact on fisheries. In combination with the unequivocal positive impacts on terrestrial biodiversity from forest conservation this is sufficient for validation to demonstrate likely net positive biodiversity impacts. Future audit teams will assess the implementation of sustainable fishing activities at future verification events.
NCR Status:	CLOSED
Comments (optional):	N/A

Observations:

OBS 01/15	Reference Standard & Requirement: VCS Standard 3.18.1, VCS Project Description Template, VCS Non-Permanence Risk Tool Template
Description of findings leading to observation: The title of the project differs between the PD and the Non-Permanence Risk Report. The PD states the title as: “BioREDD+ Mutatá REDD+ Project”, while the Non-Permanence Risk Report (Annex AF) “NPR MUTATA REV 3.pdf” lists the title as “Non-Permanence Risk Report Mutata Redd+ Project”.	
Observation: If the proponent plans to hand in the VCS Risk Report as a stand-alone document to the VCS registry it may encounter a delay with the	

registry administrator due to an inconsistency in the project title name. The proponent should correct any discrepancies between these documents to avoid possible delays in processing its registration with the VCS Registry.

OBS 02/15	Reference Standard & Requirement: VCS AFOLU Requirements 3.1.4, VCS Project Description Template,
Description of findings leading to observation: Section 1.4 of the PD titled "Project Proponents" contains a substantial description of Fondo Acción's role and responsibility, however it is not the project proponent.	
Observation: Fondo Acción's role and responsibilities should be removed from section 1.4 and moved to section 1.5 (Implementation Partners) in order to avoid confusion with the roles of the project proponents.	

OBS 03/15	Reference Standard & Requirement: VCS Standard 3.8.1, VCS Registration and Issuance Process 4.2.1
Description of findings leading to observation: Section 1.7 of the PD, which refers to the project crediting period simply states that "the crediting period is 30 years". Section 1.7.1 of the PD adds no further clarity to this point in terms of exact date ranges.	
Observation: Although neither the joint VCS/CCB template nor the VCS program documents explicitly state that the crediting period must be expressed in a specific and formatted date range, such as mm/dd/yr – mm/dd/yr, the proponent should utilize a specific date range because not doing so may introduce delays at the time the project is registered with the VCS registry, and to avoid possible errors during registration.	

OBS 04/15	Reference Standard & Requirement: VCS Standard 3.18.2; VCS Principle of Transparency;
Description of findings leading to observation: Section 1.3.3 of the PD presents the weighted average values of carbon pools in the project area, however it has become a more common practice in REDD projects to clearly disclose and report emissions factors by LULC class due to their importance in emissions reductions calculations. However, the proponent has in fact presented these emissions factors in Table 30 of Section 5.3.4 of the PD, but not exactly as such in section 1.3.3.	
Observation: The proponent should report carbon stocks in section 1.3.3 of the PD by LULC class in order to increase the accessibility of this information to a reader.	

OBS 05/15	Reference Standard & Requirement: VCS Non-Permanence Risk Tool 1.1.3
Description of findings leading to observation: The proponent's justifications for its risk ratings in its VCS Non-Permanence risk report have been substantiated in either the project description or the supporting annexes, however explicit references as to what sources or sections in the PD a reader might refer to more fully understand the justification are not provided in the risk factor tables or in the risk report for several risk factors.	
Observation: Each risk factor should have a clear and unambiguous reference to supporting evidence.	

OBS 06/15	Reference Standard & Requirement: CCB 3rd Ed G1.10
Description of findings leading to observation: The proponent updated section 2.3.1 of the PD "BioREDD Mutata REDD+ Project Description v2.36.doc" which strengthened the existing explanation by adding reference to the proponent's updated natural disaster analysis, which has been well documented. The proponent has demonstrated a satisfactory level of conformance with G1.10 however, the description in 2.3.1 of the PD still contains references to how communities are adapted to potential risks posed by climate change without clearly relating how these community adaptation are related to the project's climate benefits, which are listed as avoiding deforestation and degradation.	
Observation: The proponent should clearly explain how community adaptations to climate change are related to avoided deforestation and degradation or else remove it from this section of the PD to avoid confusion.	

OBS 07/15	Reference Standard & Requirement: VCS Non-Permanence Risk Tool v3.2, 1.1.3
Description of findings leading to observation: The proponent references data generated by the United States Geological Survey (USGS) in its justification for its Geologic Risk assessment, which is part of its Non-Permanence Risk Analysis as provided in the Non-Permanence Risk Report v1.9. The link provided is no longer valid (http://earthquake.usgs.gov/earthquakes/world/colombia/seismicity.php), however the audit team was able to navigate to the appropriate site and confirm the proponent's assertion.	
Observation: The proponent should update all hyperlinks that provide project justifications for its assumptions. Hyperlinks often become invalid so the proponent should consider referencing sources that have been stored off-line and included as part of the project documents.	