

CCB & VCS MONITORING REPORT TEMPLATE

This template is for the monitoring of projects that are validated under both the CCB Program and VCS Program. Projects only intending to complete CCB Program verification must use the *CCB Monitoring Report Template, v3.0*. Projects only intending to complete VCS Program verification must use the *VCS Monitoring Report Template, v4.3*.

Instructions for completing the monitoring report

FILE NAME: Use the following format for the file name of the completed document:

- For projects requesting CCB verification public comment period: CCB VCS MR ProjectID DRAFT DDMMYYYY-DDMMYYYY
- For projects requesting verification approval: CCB VCS MR ProjectID DDMMYYYY-DDMMYYYY

‘DDMMYYYY-DDMMYYYY’ should be the start and end dates of the monitoring period. If revised documents are submitted, add ‘_round#_track’ or ‘round#_clean’ to indicate the review round (1-3) and if it is clean or track changes version.

FILE TYPE: Submit the document as a non-editable PDF.

TITLE PAGE FORMATTING: This document may feature the monitoring report title and preparer’s logo using size 24, regular (non-italic) Century Gothic font. Fill in and complete each row of the table using size 10.5, black, regular (non-italic) Arial or Franklin Gothic Book font.

GENERAL FORMATTING: Complete all sections using size 10.5, black, regular (non-italic) Arial or Franklin Gothic Book font.

GENERAL INSTRUCTIONS: Instructions for completing each section of this template can be found under each section heading in grey italicized text. **Green** text at the end of section headings is reference to the corresponding sections of the *VCS Standard, v4.5*, and the *Climate, Community & Biodiversity Standards, v3.1*, unless otherwise noted. These section reference headings must not be removed from the final version of the document.

This template must be completed in accordance with both programs, and the preparer will need to refer to the relevant CCB Program and VCS Program documents and the applied methodology to complete the template.

Note: The instructions in this template are intended to serve as a guide and do not necessarily represent an exhaustive list of the information the preparer must provide under each section.

Where a section is not applicable, explain why the section is not applicable (i.e., do not delete the section from the final document and do not only write “not applicable”). Delete all instructions, including this introductory text, from the final document.

MONITORING REPORT TITLE

Logo (optional)

Project title	Belize Maya Forest REDD+ Project
Project ID	3960
Crediting period	10-December-2020 to 10-December-2060
Monitoring period	10 December 2020 – 9 December 2022
(CCB) GHG accounting period	10 December 2020 – 9 December 2022; 2-years total period
Original date of issue	<i>DD-Month-YYYY is the date the monitoring report was completed following the completion of the audit</i> TBD
Most recent date of issue	<i>DD-Month-YYYY is the date the monitoring report was most recently submitted</i> TBD
Version	<i>Version number of this document</i>
VCS Standard version	4.3
CCB Standards version	Version number of the CCB Standards used by the project
Project location	Belize, Orange Walk District
Project proponent(s)	The Nature Conservancy Roberto Pott, Carbon Specialist roberto.pott@tnc.org
Validation/verification body	TBD
History of CCB Status	CCB validation 2024
Gold Level criteria	Biodiversity Gold
Prepared by	Terra Global Capital

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1 SUMMARY OF PROJECT BENEFITS

1.1 Unique Project Benefits – To be completed

Outcome or Impact	Achievements during the Monitoring Period	Section Reference	Achievements during the Project Lifetime
1) Jaguar populations within the Belize Maya Forest remain stable or improve		2.2.3	
2) Protection of species of global concern (Baird's Tapir, Spider Monkey)		5.1.1	
3) Protection of unique aquatic systems (25 sacred pools of Cara Blanca)	Greater than 75% of recorded patrols in 2022 specifically targeted the Cara Blanca Pools or vicinity; no additional land clearing of private lands next to the pools occurred during the monitoring period.	2.1.7	Greater than 75% of recorded patrols in 2022 specifically targeted the Cara Blanca Pools or vicinity; no additional land clearing of private lands next to the pools occurred during the monitoring period.
4) Watershed protection for portions of 3 major rivers in Belize	Total forest area protected in each watershed XXX	2.1.8	Total forest area protected in each watershed XXX
5) Protection of trinational forest connectivity	Forest cover for trinational Selva Maya XXX	5.1.2	Forest cover for trinational Selva Maya XXX

1.2 Standardized Benefit Metrics – To be completed

Category	Metric	Achievements during Monitoring Period	Section Reference	Achievements during the Project Lifetime
GHG emission reductions & removals	Net estimated emission removals in the project area, measured against the without-project scenario	N/A	3	N/A
	Net estimated emission reductions in the project area, measured against the without-project scenario	xxx tCO ₂ e	3	xxx tCO ₂ e
Forest ¹ cover	For REDD ² projects: Number of hectares of reduced forest loss in the project area measured against the without-project scenario	78,180 ha	3	78,180 ha
	For ARR ³ projects: Number of hectares of forest cover increased in the project area measured against the without-project scenario	N/A	N/A	N/A
Improved land management	Number of hectares of existing production forest land in which IFM ⁴ practices have occurred as a result of the project's activities, measured against the without-project scenario	N/A	N/A	N/A
	Number of hectares of non-forest land in which improved land management has occurred as a result of the project's activities, measured against the without-project scenario	N/A	N/A	N/A
Training	Total number of community members who have improved skills and/or knowledge	45	4	45

¹ Land with woody vegetation that meets an internationally accepted definition (e.g., UNFCCC, FAO, or IPCC) of what constitutes a forest, which includes threshold parameters, such as minimum forest area, tree height and level of crown cover, and may include mature, secondary, degraded and wetland forests (*VCS Program Definitions*)

² Reduced emissions from deforestation and forest degradation (REDD) – Activities that reduce GHG emissions by slowing or stopping conversion of forests to non-forest land and/or reduce the degradation of forest land where forest biomass is lost (*VCS Program Definitions*)

³ Afforestation, reforestation and revegetation (ARR) – Activities that increase carbon stocks in woody biomass (and in some cases soils) by establishing, increasing and/or restoring vegetative cover through the planting, sowing and/or human-assisted natural regeneration of woody vegetation (*VCS Program Definitions*)

⁴ Improved forest management (IFM) – Activities that change forest management practices and increase carbon stock on forest lands managed for wood products such as saw timber, pulpwood, and fuelwood (*VCS Program Definitions*)

	resulting from training provided as part of project activities			
	Number of female community members who have improved skills and/or knowledge resulting from training provided as part of project activities of project activities	15	4	15
Employment	Total number of people employed in of project activities, ⁵ expressed as number of full-time employees ⁶	15	2.1.4	15
	Number of women employed in project activities, expressed as number of full-time employees	2	2.1.4	2
Livelihoods	Total number of people with improved livelihoods ⁷ or income generated as a result of project activities	13	4.2.2	13
	Number of women with improved livelihoods or income generated as a result of project activities	2	4.2.2	2
Health	Total number of people for whom health services were improved as a result of project activities, measured against the without-project scenario	0	N/A	N/A
	Number of women for whom health services were improved as a result of project activities, measured against the without-project scenario	0	N/A	N/A
Education	Total number of people for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario	0	4.2.2	0
	Number of women and girls for whom access to, or quality of, education was improved as a result of project activities,	0	4.2.2	0

⁵ Employed in project activities means people directly working on project activities in return for compensation (financial or otherwise), including employees, contracted workers, sub-contracted workers, and community members that are paid to carry out project-related work.

⁶ Full time equivalency is calculated as the total number of hours worked (by full-time, part-time, temporary and/or seasonal staff) divided by the average number of hours worked in full-time jobs within the country, region, or economic territory (adapted from UN System of National Accounts (1993) paragraphs 17.14[15.102]; [17.28])

⁷ Livelihoods are the capabilities, assets (including material and social resources) and activities required for a means of living (Krantz, Lasse, 2001. *The Sustainable Livelihood Approach to Poverty Reduction*. SIDA). Livelihood benefits may include benefits reported in the Employment metrics of this table.

	measured against the without-project scenario			
Water	Total number of people who experienced increased water quality and/or improved access to drinking water as a result of project activities, measured against the without-project scenario	N/A	N/A	N/A
	Number of women who experienced increased water quality and/or improved access to drinking water as a result of project activities, measured against the without-project scenario	N/A	N/A	N/A
Well-being	Total number of community members whose well-being ⁸ was improved as a result of project activities	N/A	N/A	N/A
	Number of women whose well-being was improved as a result of project activities	N/A	N/A	N/A
Biodiversity conservation	Change in the number of hectares significantly better managed by the project for biodiversity conservation, ⁹ measured against the without-project scenario	87,059 ha	N/A	87,059 ha
	Number of globally Critically Endangered or Endangered species ¹⁰ benefiting from reduced threats as a result of project activities, ¹¹ measured against the without-project scenario	4	5	4 species

2 PROJECT DETAILS

2.1 Summary Description of the Implementation Status of the Project

2.1.1 Summary Description of the Project (VCS, 2.1, 3.6; CCB, G1.2) - Done

⁸ Well-being is people's experience of the quality of their lives. Well-being benefits may include benefits reported in other metrics of this table (e.g. Training, Employment, Health, Education, Water, etc.), but could also include other benefits such as empowerment of community groups, strengthened legal rights to resources, conservation of access to areas of cultural significance, etc.

⁹ Biodiversity conservation in this context means areas where specific management measures are being implemented as a part of project activities with an objective of enhancing biodiversity conservation.

¹⁰ Per IUCN's Red List of Threatened Species

¹¹ In the absence of direct population or occupancy measures, measurement of reduced threats may be used as evidence of benefit

The Belize Maya Forest REDD+ Project is an avoided planned deforestation to agriculture project in the Orange Walk District of Belize. The Project covers 87,059 hectares and includes the parcels Yalbac and Laguna Seca that were being offered for sale to agricultural interests when they were being liquidated from two timber funds. The project is a grouped project, and the Yalbac and Laguna Seca are the first Project Activity Instance that have the possibility to expand to other areas. These parcels were purchased by The Nature Conservancy, and their protection was facilitated under an agreement with the government of Belize, preventing their conversion to agriculture. As part of the agreement with the government of Belize, a local non-profit organization, the Belize Maya Forest Trust was established, and the parcels were transferred to the trust for long-term protection and conservation of the land. The terms of the trust are irrevocable and will ensure the conservation of the first Project Activity Instance for an indefinite period of time. Therefore, the climate and ecosystem benefits will far outlive the crediting period. The Belize Maya Forest Trust will manage the parcels under a conservation action plan for on-going protection, preservation of biodiversity and to implement programs with neighboring communities.

If TNC had not purchased these parcels, they would have been sold off to agricultural interests that have and continue to convert lands around the Project Activity Instance for production of agricultural crops and grazing. The project will generate an estimated 736,688 tCO₂e average annual emission reductions for a total of 29,467,538 tCO₂e emission reductions over the 40-year crediting period. The total emission reductions generated during the monitoring period were **XXX**

2.1.2 Audit History (VCS, 4.1) - Done

Audit Type	Period	Program	VVB Name	Number of years
Validation	10 December 2020 – 9 December 2060	VSC-CCB	Earthood	40 years
Verification	10 December 2020 – 9 December 2022	VSC-CCB	To be defined	Two years

2.1.3 Sectoral Scope and Project Type (VCS, 3.2) - Done

Sectoral Scope	14: Agriculture, forestry, and other land use
AFOLU Project Category	Reduced Emissions from Deforestation and Degradation (REDD)
Project Activity Type	Avoided Planned Deforestation (APD)

2.1.4 Project Proponent (VCS, 3.7; CCB, G1.1) - Done

The Nature Conservancy is a global conservation organization dedicated to conserving the lands and waters on which all life depends.

Organization name	The Nature Conservancy
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Contact person	Roberto Pott
Title	Carbon Specialist
Address	The Nature Conservancy Unit # 14B Garden City Plaza Mountain View Boulevard Belmopan, Belize
Telephone	
Email	roberto.pott@tnc.org

2.1.5 Other Entities Involved in the Project – Done

The Belize Maya Forest Trust (BMFT) is a Belizean conservation non-profit organization and is responsible for the management of the Project Activity Instance. The organization was established in 2020 for the conservation and management of the Belize Maya Forest formerly known as the Yalbac and Laguna Seca lands. When BMFT is fully operational the staff is expected to be comprise of twelve and three program staff.

Organization name	Belize Maya Forest Trust
Role in the project	Project proponent
Contact person	Elma Kay
Title	Managing Director
Address	14B Garden City Plaza, Mountain View Blvd., Belmopan, Belize
Telephone	+501 610 3982
Email	ekay@bmft.org.bz

Terra Global acts as an implementing partner for the development and on-going management of the emission reductions generated under the project, supporting the registration, issuance and marketing of emission reductions.

Organization name	Terra Global Capital, USA
Role in the project	Developer

Contact person	Leslie L. Durschinger
Title	Founder, CEO
Address	325 27th Street, Unit 745 Oakland, CA 94612
Telephone	+1 415 215 5941
Email	info@terraglobalcapital.com http://www.terraglobalcapital.com

University of Belize Environmental Research Institute (UB ERI) provides specialized technical support for the field work to assess biodiversity, biomass, social and local administration support where needed for the verification.

Organization name	University of Belize Environmental Research Institute – UB ERI
Role in the project	Project Lead
Contact person	Jake Snaddon
Title	Director
Address	Price Centre Road, City of Belmopan
Telephone	501-822-2701 or 501-822-3680
Email	jsnaddon@ub.edu.bz

2.1.6 Project Start Date (VCS, 3.8) - Done

Project start date	10-December-2020
Justification	On December 10th, 2020, the ownership of the property changed from TFG, an independent Timberland Investment Management Organization, to the BMFT through the efforts of TNC purchasing two large parcels Laguna Seca and Yalbac, which are the first Project Activity Instance. From that date on, BMFT had the legal rights of the property and the objective to preserve the forest. If the property was acquired by the commercial agriculture farmers – as explained in section 3.1.4.1 – from that date on, they would have the rights to convert the forest to another land use and certainly they would do.

2.1.7 Benefits Assessment and Project Crediting Period (VCS, 3.9; CCB, G1.9) - Done

Crediting Period	The projects crediting period of 40 years, minimum number of years required by VCS.
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Start Date of First or Fixed Crediting Period	10 December 2020 – 9 December 2022
Total Number of Years of Crediting Period	40 years
CCB Benefits Assessment Period	40 years

2.1.8 Project Location (VCS, 3.11; CCB, G1.3) - Done

The Project Area is made up of the first Project Activity Instance that encompasses the properties of Yalbac and Laguna Seca, the first instance of a group project. The area of the VCS REDD+ project (VCS #1326), that makes part of the Laguna Seca property, has been removed from the Project Activity Instance, and after excluding the legally non-convertible area and the non-forest areas, the total area of the Project Activity Instance is 78,180 ha (Table 1).

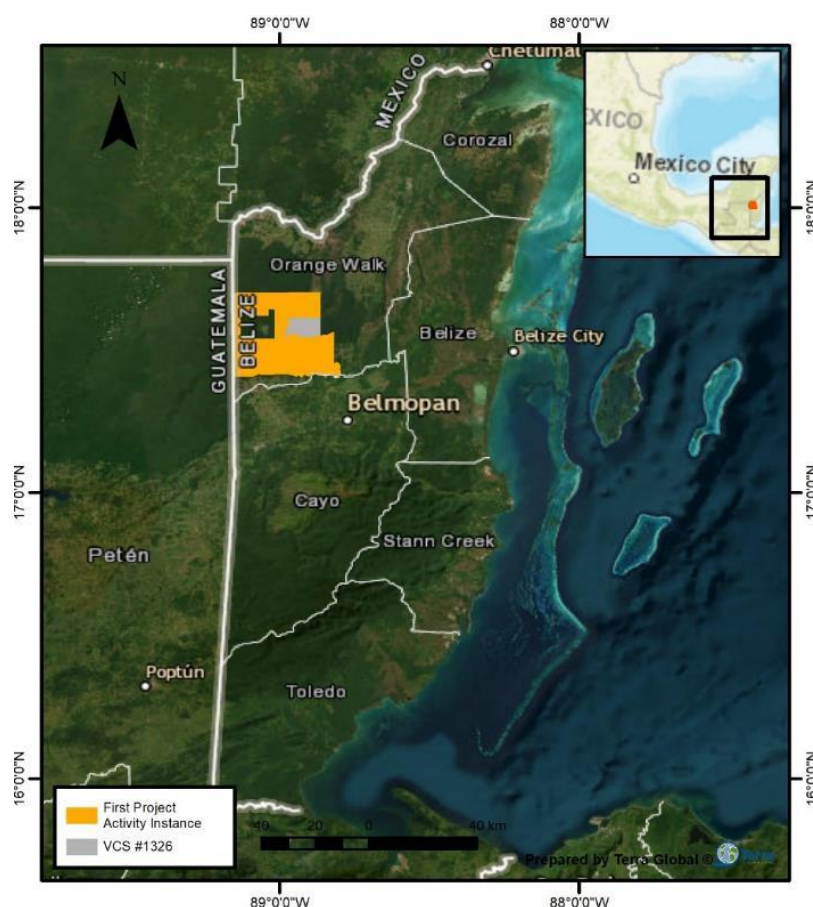
The Project Activity Instance is located in the Orange District, Belize, 47.5 km northwest of Belmopan, at the vertex coordinates 17°41'57.0" N 89°08'57.1" W, 17°42'07.6" N 88°51'40.8" W, 17°24'46.9" N 88°47'42.5" W and 17°24'12.4" N 89°08'59.5" W (Map 1). The project boundary encompasses 87,059 hectares of which 78,180 hectares are available and suitable for conversion to agricultural or ranching uses in the absence of revenues from a carbon program, including only land qualifying as forest for a minimum of 10 years prior to the project start date (Map 2). The property is owned by Belize Maya Forest Trust (BMFT), see section 2.5.5 for a complete detail.



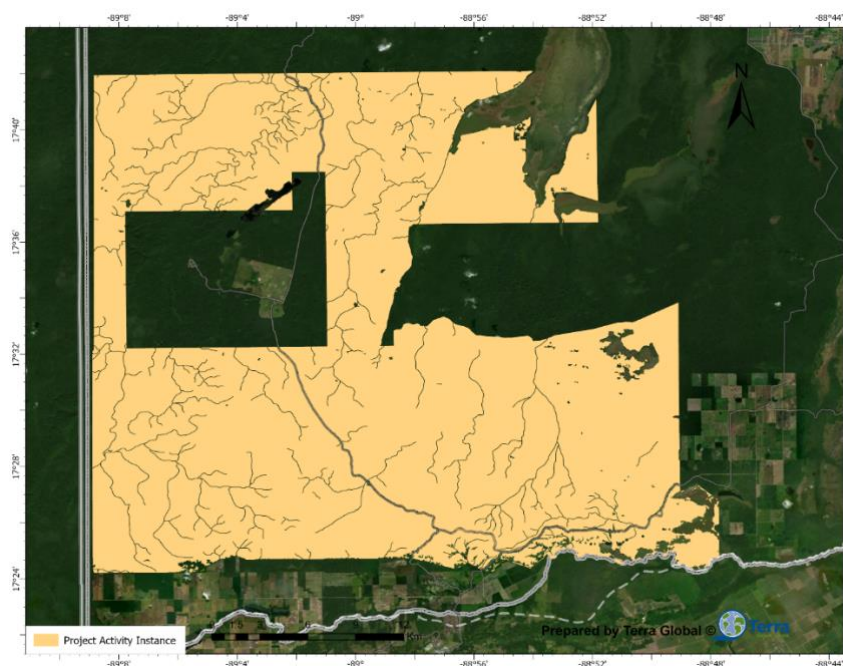
Photo 1. View of the closed forest of the Project Activity Instance

Table 1. Project Activity Instance Size (ha)

	Area (ha) with VCS project #1326	Area (ha) without VCS project #1326
Laguna Seca	42,147	33,715
Yalbac	53,344	53,344
Total	95,491	87,059
Legally non-convertible Area (excluded)		7,096
Non-Forest Area (excluded)		1,783
Total Eligible Area		78,180



Map 1. First Project Activity Instance Location



Map 2. Qualifying Areas of the First Project Activity Instance

2.1.9 Title and Reference of Methodology (VCS, 3.1) - Done

This project is designed for verification under the Verified Carbon Standard Version 4.5, AFOLU.

Requirements Version 4.5 and utilizing methodology VM0007 REDD Methodology Modules (<http://www.v-c-s.org/methodologies/redd-methodology-framework-redd-mf-v15>) for planned deforestation. In particular, the following methodology modules were used for this project:

Type (methodology, tool, module)	Reference ID (if applicable)	Title	Version
Methodology	VM0007	VCS Methodology VM0007: REDD Methodology Modules (REDD-MF)	1.7
Module	VMD0001	Estimation of carbon stocks in the above- and belowground biomass in live tree and non-tree pools (CP-AB),	1.1
Module	VMD0002	Estimation of carbon stocks in the dead-wood pool (CP-D),	1.1
Module	VMD0003	Estimation of carbon stocks in the litter pool (CP-L),	1.0
Module	VMD0004	Estimation of stocks in the soil organic carbon pool (CP-S),	1.0
Module	VMD0006	Estimation of baseline carbon stock changes and greenhouse gas emissions	1.3

Type (methodology, tool, module)	Reference ID (if applicable)	Title	Version
		from planned deforestation/forest degradation and planned wetland degradation (BL-PL),	
Module	VMD0009	Estimation of emissions from activity shifting for avoided planned deforestation/forest degradation and avoided planned wetland degradation (LK-ASP),	1.3
Module	VMD0011	Estimation of emissions from market-effects (LK-ME),	1.1
Module	VMD0013	Estimation of greenhouse gas emissions from biomass and peat burning (E-BPB)	1.2
Module	VMD0015	Methods for monitoring of greenhouse gas emissions and removals (M-REDD),	2.2
Module	VMD0016	Methods for Stratification of the Project Area (X-STR),	1.2
Module	VMD0017	Estimation of Uncertainty for REDD Project Activities (X-UNC),	2.2
		VCS AFOLU Non-Permanence Risk Tool (T-BAR)	4.2
Tool	VT0006	Tool for Calculating LULC Transitions and Deforestation Rates Using Incomplete Remote Sensing Images	1.0

2.1.10 Double Counting and Participation under Other GHG Programs (VCS, 3.23; CCB, G5.9) - Done

2.1.10.1 No Double Issuance

The project is not receiving or seeking credit for reductions and removals from a project activity under another GHG program, or any other form of community, social, or biodiversity unit or credit.

2.1.10.2 Registration in Other GHG Programs

The project is not registered or seeking registration under any other GHG programs.

2.1.10.3 Projects Rejected by Other GHG Programs

The project has not been rejected by any other GHG programs.

2.1.11 Double Claiming, Other Forms of Credit, and Scope 3 Emissions (VCS, 3.24)

2.1.11.1 No Double Claiming with Emissions Trading Programs or Binding Emission Limits - Done

Are project reductions and removals or project activities also included in an emissions trading program or binding emission limit?

☐ Yes ☒ No

Emissions reductions or removals generated by the project will not be used for compliance with an emissions trading program or to meet binding limits on GHG emissions. Belize currently does not have a national, legally binding limit on greenhouse gas emissions, and there is no compliance emissions trading program which accepts forestry emission reductions or removals.

2.1.11.2 No Double Claiming with Other Forms of Environmental Credit - Done

Has the project activity sought, received, or is planning to receive credit from another GHG-related environmental credit system?

☐ Yes ☒ No

No other environmental credit has been created by this project. The co-benefits of the project have been validated at project start by the Climate, Community, and Biodiversity Alliance using the Climate, Community and Biodiversity Standard (CCB) 3rd Edition. This monitoring report is also to be verified under the CCB 3rd Edition.

2.1.11.3 Supply Chain (Scope 3) Emissions - Done

Do the project activities affect the emissions footprint of any product(s) (goods or services) that are part of a supply chain?

☐ Yes ☒ No

Is the project proponent(s) or authorized representative a buyer or seller of the product(s) (goods or services) that are part of a supply chain?

☐ Yes ☒ No

Has the project proponent(s) or authorized representative posted a public statement on their website saying, "Carbon credits may be issued through Verified Carbon Standard project [project ID] for the greenhouse gas emission reductions or removals associated with [project proponent or authorized representative organization name(s)] [name of product(s) whose emissions footprint is changed by the project activities]."?

☐ Yes ☒ No

2.1.12 Sustainable Development Contributions (VCS, 3.17) - TBD

Table 2: Sustainable Development Contributions **TBD**

Row number	SDG target	SDG indicator	Net impact on SDG indicator	Current project contributions	Contributions over project lifetime
1)	5.5	5.5.2 Proportion of women in managerial positions.	Implemented activities to increase.	Women's inclusion in the project through decision making, training and employment.	
2)	5.5	Number of women who are expected to have improved skills and/or knowledge resulting from training.	Implemented activities to increase.	Women's inclusion in the project through decision making, training and employment.	
3)	8.5	Number of jobs provided by BMFT.	Implemented activities to increase.	The Belize Maya Forest REDD+ Project seeks to provide employment opportunities. Belize Maya Forest Trust is dedicated to providing jobs in conservation.	
4)	13.3	Number of trainings aim to improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.	Implemented activities to increase.	The Belize Maya Forest REDD+ Project educates community members on systemic and individual ways to implement adaptation, mitigation and will teach safe technology transfer for reducing deforestation and helping create resilient communities.	
5)	13.a	Number of Emission Reductions.	Implemented activities to increase.	The program will protect the forest avoiding the conversion to annual crops, preserving the wildlife and species in IUCN Red list.	
6)	15.	Number of hectares of conserved.	Implemented activities to increase.	The Belize Maya Forest REDD+ Project directly will reduce deforestation through avoiding the conversion to annual crops.	

Row number	SDG target	SDG indicator	Net impact on SDG indicator	Current project contributions	Contributions over project lifetime
7)	15.7	Number of poaching incidents reported.	Implemented activities to decrease.	Poaching, particularly illegal hunting will be mitigated, through a protection team of rangers who will continue being strengthened to be able to respond to mitigate threats to the reserve and biodiversity.	
8)	17.7	Any significant new partnerships will be described in each Monitoring Report.	Implemented activities to increase.	Implementation of the new management plan for Belize Maya Forest, which is inclusive of the Belize Maya Forest REDD+ Project will require partnerships between TNC, BMFT, the Government of Belize and other key neighbors and stakeholders.	

2.2 Project Implementation Status

2.2.1 Implementation Schedule (VCS, 3.2; CCB, G1.9) – BMT To complete

Date	Milestone(s) in the project's development and implementation
January 2021	Project start date and beginning Monitoring Period
June – August 2022	Social surveys were conducted to in the communities inside the Project Zone to identify the impacts that the project could cause.
June - November 2022	Biomass diagnosis of project area
June – August 2022	Biodiversity assessment and camera traps installed
	Project Socialization (to expand)
March 2024	Validation under VCS and CCB

2.2.2 Baseline Reassessment (VCS, 3.2.6, 3.2.7) - Done

The project did not undergo baseline reassessment during the monitoring period.

2.2.3 Methodology Deviations (VCS, 3.20) - Done

There are no methodology deviations at this time.

2.2.4 Minor Changes to Project Description (CCB Program Rules, 3.5.6) - Done

There are no minor changes to Project Description deviations at this time.

2.2.5 Project Description Deviations (VCS, 3.21; CCB Program Rules, 3.5.7 – 3.5.10) - Done

There are no Project Description deviations at this time.

2.2.6 Grouped Projects (VCS, 3.6; CCB, G1.13-G1.15, G4.1) - Done

This is a group of projects. However, there are no new instances being added during the monitoring period, and therefore no eligibility criteria are provided.

2.2.7 Risks to the Project (CCB, G1.10) Done

A comprehensive risk report has been conducted for this project per the VCS requirements, which evaluates the most pressing internal, external and natural risks to the project. This identified both natural and human induced risks (documented in the VCS AFOLU Non-Permanence Risk Tool). This project has very few risks that could impact project results, the most significant of which are fire, hurricanes, and illegal hunting.

Most fires around the Project Activity Instance are human induced, usually started for agricultural reasons or by hunters to attract grazing animals. Fire risk increases after hurricanes impact the area due to accumulated dry biomass. Because the Project Activity Instance is protected, it is unlikely that a fire will be started in the Project Activity Instance itself, but there is a risk that fires in surrounding farmland may encroach on the Project Activity Instance.

This risk has been mitigated by regular patrolling by BMFT, and some minor fires have encroached on the Project Activity Instance during this Monitoring Period. However, the area affected by fires was less than 5%, representing low risk to the project and the carbon stock. Regular patrolling and fire management capacity strengthening are being implemented by BMFT.

The risk of illegal hunting in the Project Activity Instance has been mitigated through outreach and collaboration with neighboring stakeholders. In addition, signs have been placed along vulnerable borders with neighboring stakeholders indicating the ownership of the land and points of entry. Field crews have been instructed to be alert and patrol for illegal activities, particularly near archaeological remains and to report any incidents or evidence of encroachment. Data has been maintained through patrols and analyzed regularly to determine the location of the vulnerable areas for illegal encroachment, for the purpose of concentrating patrols on these areas (Table 3). During the patrols the following activities were noticed in the project area and additional patrols will be concentrated in those areas.

Table 3. Hunting activity in BMF 2021-2022

Waypoint Date	Activity	Action Taken	Animal Species	Comments	Day/Night Hunting	Evidence of hunting	Hunting techniques
Apr 30, 2022	Hunting	Documented			Day	Other	Firearms
Jan 21, 2022	Hunting	Documented	Great currasow	Camp fire and feathers of a red female Great Currasow documented near Yalbac creek	Night	Feathers	Firearms
Jan 21, 2022	Hunting	Destroyed	Gibnut	5 tapescos or hunting platforms were discovered	Night	Other	Other
Jan 21, 2022	Hunting	Destroyed	Gibnut	4 tapescos were found	Night	Other	Other
Jan 21, 2022	Hunting	Destroyed	Gibnut	A tapesco was found near the Yalbac creek	Night	Other	Other
Jan 21, 2022	Hunting	Destroyed	Gibnut	A tapesco was discovered near the Yalbac creek	Night	Other	Other
Jan 21, 2022	Hunting	Documented	Gibnut	Documented a tapesco	Night	Other	Other

Identified Risk	Potential impact of risk on climate, community and/or biodiversity benefits	Actions needed and designed to mitigate the risk
Illegal Hunting	Decreases in biodiversity and increases the threat of UICN species.	<ul style="list-style-type: none"> Conduct regular anti-poaching patrols including joint patrols and document using the Spatial Monitoring and Reporting Tool (SMART). Obtain support for consistent SMART training for rangers to improve SMART documentation. Develop awareness materials on the importance of maintaining stable predator-prey populations and initiatives to reduce the illegal wildlife trade.

Identified Risk	Potential impact of risk on climate, community and/or biodiversity benefits	Actions needed and designed to mitigate the risk
		<ul style="list-style-type: none"> Build wildlife protection and education into a BMFT Community Stewards Program.
Fires	Decrease in carbon stock.	<ul style="list-style-type: none"> Constant patrolling activities to detect wildfire incidents and receive information on wildfires from the nearby community. Increase awareness and knowledge of fire impact and fire management. Develop a fire alert system for key stakeholders based on monitoring of weather and fires. Build capacity for fire management and response within BMFT and key stakeholders.

2.2.8 Benefit Permanence (CCB, G1.11) - Done

The crediting period will last 40 years, but the benefits of the project will last long beyond that. The purchase of the Project Activity Instance at the beginning of this Monitoring Period, in addition to preventing conversion to agriculture, involved a combination of agreements that established the Belize Maya Forest Trust (BMFT) for long-term protection and conservation of the land. The terms of the trust are irrevocable and will ensure the conservation of the Project Activity Instance for an indefinite period of time. The climate and ecosystem benefits of the Project Activities will far outlive the crediting period. This act of the creation of the BMFT and the dedication to conservation is designed to maintain and enhance the climate, community, and biodiversity benefits far beyond the project lifetime.

2.3 Stakeholder Engagement & Safeguards

2.3.1 Stakeholder Identification (VCS, 3.18, 3.19; CCB, G1.5) - Done

The stakeholders have not changed since validation, and all of them were identified at verification.

The process to identify the stakeholders and assess their rights, interest and relevance to the project was based on a combination of using local knowledge, geographical information, and ground research. This stakeholder identification process was initiated in May 2021, as part of the participatory conservation action planning activities undertaken by the BMFT with the assistance of the University of Belize Environmental Research Institute (UB ERI). Although the BMF is a private reserve, to which only BMFT has legal rights, nine (9) stakeholder communities were identified in this process, as relevant to the project, based on two main criteria:

1. High impact or potential for high impact on the BMF through proximity and activities, such as illegal hunting, fishing and logging and poaching activities, as well as neighboring

deforestation and agriculture activities, that increase the risk of fire and pesticide and other sources of contamination in the BMF.

2. High direct benefit from the protection of the BMF, through ecosystem goods and services, particularly watershed/water provision services and biodiversity, that help to sustain their populations and livelihoods or provide recreation.

The interests of identified stakeholder communities and community groups in the project varied. Most communities and community groups have high to medium interest, based on the participation of the community leaders in the development of BMFT's conservation action plan.

Apart from communities, other stakeholder groups of the project, that were identified were from academia, non-government organizations, private sector and government ministries and departments. These stakeholders do not have rights per se in BMF as a reserve under private land tenure. However, they are important collaborators and enablers of BMFT's overall management of the reserve and/or can also negatively impact the conservation of the reserve, through their business practices. Hence these stakeholders are important to the success of the project.

The process to identify stakeholders will be constantly revised to ensure the effective participation of underrepresented groups.

2.3.2 Stakeholder Access to Project Documents (VCS, 3.18, 3.19; CCB, G3.1) - Done

Full project documentation, including project description documentation and monitoring reports were made accessible to communities and other stakeholders using various means. For communities that do not have reliable access to the internet except on cell phones, at least one hard copy was placed at a strategic point open during regular business hours, for example, the main entrance of BMF as well as other central locations such as the waterboard office or one of the communities' main grocery stores. All other stakeholders were provided full project documentation by sharing links of where the documentation can be accessed through email or WhatsApp groups. BMFT created WhatsApp groups with community stakeholders as WhatsApp has been proving an efficient communication channel, especially to share documentation with those who do not have email access. Public comment periods were held from October 10th, 2023, to November 9th, 2023, for the PD. Community members were notified of the public comment period and were encouraged to give feedback on the PD.

2.3.3 Dissemination of Summary Project Documents (VCS, 3.18, 3.19; CCB, G3.1) - Done

Summary project documentation was placed in hard copy at strategic locations in each village and shared with village council chairpersons, but in addition an electronic copy was shared with members of the village councilor that have access to internet via smart phones through a WhatsApp group. Village councilor members have then passed on summary documentation to other villagers. Summary documentation has been shared with all other stakeholders by providing links to summary documentation via email or WhatsApp groups. The summary project documentation has been made available in Spanish and English.

Related to the future dissemination of summary project documents, including this monitoring report, all project proponents have collaboratively provided input for this combined VCS/CCB first monitoring report. For the first VCS/CCB monitoring report, BMFT will support the distribution of the summary of the monitoring report to relevant stakeholders, including the relevant updates that will be made to the CCB monitoring plan for the project area.

BMFT will communicate information about the VCS/CCB monitoring report through a summary document that will be shared via email or WhatsApp to all relevant and interested project stakeholders, including communities. A hard copy of the monitoring report summary will also be distributed in communities. This stakeholder communication will include direct email or phone contact with Programme for Belize, Belize Forest Department, Ministry of Sustainable Development, REDD+ Coordinator, and UNFCCC Belize Focal Point and Designated National Authority. The summary report and any information regarding access to project documents online were distributed at strategic locations within the communities such as community grocery stores and the waterboard office to ensure that all stakeholders have access to the project documentation and can provide input during the comment period. A copy was also placed at the entrance gates for BMF. In addition, BMFT is in communication with all relevant stakeholders to present the VCS/CCB monitoring report, gather feedback and notify them of the 30-day comment period so that they may submit comments privately to the CCB via the website CCBstandards@v-c-s.org.

All relevant public comments submitted to the CCB during the public comment period will be addressed.

2.3.4 Informational Meetings with Stakeholders (VCS, 3.18, 3.19; CCB, G3.1) - Done

Informational meetings with communities and local stakeholders were publicized via email, text, and telephone calls. University of Belize Environmental Research Institute (UB ERI) was contracted as a neutral third party to assist in communication with communities. BMFT with the help of the UB ERI, also requested that village councils assist in selecting village representatives to attend informational meetings. Informational meetings were structured as in-person introductory sessions and participatory conservation action planning workshops for community representatives. For other stakeholders, informational meetings were structured as virtual informational sessions and virtual participatory conservation action planning workshops or focus group sessions. The sessions resulted in the development of activities included in the project implementation plan, which reflects the BMFT's conservation action plan. In addition, the UB ERI conducted community social surveys and focus group sessions.

2.3.5 Risks from the Project and No Net Harm (VCS, 3.18, 3.19) – BMFT - TBD

2.3.6 Community Costs, Risks, and Benefits (CCB, G3.2) - Done

The information about potential costs, risks and benefits to communities and other relevant information of the project has been discussed and provided to communities through the informational and participatory planning meetings held with community stakeholders as described in section 2.3.4. The information to communities focused on benefits as the Project Activity Instance is privately owned and therefore the project does not present any costs or risks to the stakeholder communities. Whilst the

previous private landowner of the reserve ran a logging operation that employed staff, those staff would have lost their jobs in logging if the area had been converted to large-scale, mechanized agriculture. Instead, through the project, BMFT has now contracted some of the staff from the previous company that employed BMF as rangers. Benefits discussed with communities included the development and implementation of community projects on restoration including regenerative agriculture, educational outreach in communities and training opportunities for community members in fire management and regenerative agriculture practices. As new information becomes available (for example through periodic review of the CAP) and as potential risks, benefits or costs are identified, that information will be communicated to stakeholders using the channels describes in sections 2.3.3 and 2.3.4.

Community costs, risks and benefits are detailed in section 4.1 describing the community impacts within the monitoring period. Section 4.1.2 outlines measures to mitigate any negative effects while section 4.1.3 demonstrates that there was a net-positive community wellbeing, demonstrating that the benefits, associated with the program, outweigh costs.

2.3.7 Information to Stakeholder on Verification Process (VCS, 3.18.6, 3.19; CCB, G3.3) - Done

Communities and other stakeholders are informed of the process for CCB verification through in person and telephone communication including reminders via text messages, telephone calls, and WhatsApp groups. A schematic design in both English and Spanish, simplifying the verification process, is disseminated to stakeholders through WhatsApp groups, emails and presented at in person sessions.

Communities and other stakeholders will be informed of the auditor's site visit using telephone calls, text messages, WhatsApp, email messages, or in person by BMFT's Community Coordinator. Auditors will be required to speak English and Spanish to facilitate the direct and independent communication and avoid potential miscommunication. To ensure that the meeting will happen, the project will facilitate venue and transportation if needed. Meetings will be scheduled weeks in advance and will respect any work-related, cultural or religious commitment (e.g., no meetings scheduled during worship time or holidays).

The Nature Conservancy and BMFT are engaged more fully in the sharing of information, specifically as it relates to verification processes. BMFT has informed the communities of the verification process and has shared information on what their participation will involve, and that they will be visited by a VVB at least a week before the visit. Other forms of informing the communities will involve posting any additional information at strategic central locations within the communities and using email, telephone, and informational posters. Community stakeholders are welcome to communicate directly to the VVB.

2.3.8 Site Visit Information and Opportunities to Communicate with Auditor (VCS, 3.18.6, 3.19; CCB, G3.3) - Done

Site visit information and opportunities to engage with the auditor will be mentioned to communities and other relevant stakeholders through in person meetings, phone calls, and WhatsApp messages. During those visits, BMFT also will inform communities and other relevant stakeholders about the monitoring report. BMFT also will post information regarding the monitoring report results and the verification site

visit by posting notices at strategic central locations within the communities such as community grocery stores and waterboard offices.

2.3.9 Stakeholder Consultation (VCS, 3.18; CCB, G3.4) **BMFT**

Ongoing consultation	<p>Communities, including community groups, and other stakeholders have influenced project design through participatory conservation action planning. Participants in the planning process were representatives selected by village councils and other stakeholder groups from the government, NGO and private sectors. This ensured the participation of all genders, different ages and vulnerable groups, while respecting community and organizational leadership. The planning process involved identifying key conservation targets in the BMF and threats to those targets. Assessment of the viability of the targets and the extent of the threats was then used to develop strategies for the improvement of the conservation targets or abatement of the threats to them. These strategies are captured in the project implementation plan. Both Spanish and English were used in meetings with community representatives to ensure broader participation. Evidence of the implementation of stakeholder consultations was made available to the VVB.</p> <p>During the implementation, stakeholders, workers, small farmers and local authorities were informed on the verification process.</p>
Date(s) of stakeholder consultation	DD-Month-YYYY
Communication of monitored results	Required reports (results) and summaries were shared during scheduled meetings with workers and small farmers, and spaces for open discussion were provided. These meetings occurred before the public comment period and VVB field visit.
Consultation records	The meetings included an explanation of the project activities, the results accomplished so far in the first monitoring period and an open space for questions and comments. Questions were answered verbally, and main feedback was written by the facilitators.
Stakeholder input	TBD

2.3.10 Continued Consultation and Adaptive Management (VCS, 3.18; CCB, G3.4) **BMFT To be completed**

Continued communication and consultation between the project proponents, communities and other stakeholders was ensured in two main ways: the hiring of a Community Outreach and Stewards Coordinator, whose responsibility is to stay in touch and liaise with community stakeholders on the project and any other BMF matters. The Community Outreach and Stewards Coordinator is also responsible for engaging stakeholders in a new conservation action planning process every 5 years. During the review of the conservation action plan, the results from the monitoring plan, as well as the feedback from stakeholders, will be incorporated to adapt the work plan and achieve further conservation results.

Apart from initial informational sessions prior to the CAP process and sessions for the CAP, there were additional community engagement sessions in the monitoring period that provided BMFT an opportunity to foster relationships with community members, share information and continue to strengthen communication and consultation channels. These additional sessions are documented in Table 4 below. These sessions provided a space for BMFT to share summaries that included information on BMFT's key objectives, strategies and anticipated impacts of its five-year conservation action plan. This gave communities the opportunity to gain insight into the impact the program will have on their community and to share their perspectives. Mahogany seedlings and t-shirts that illustrated the main conservation targets of BMFT's conservation action plan were also distributed to community members as a small token of gratitude for their time and support.

Table 4. Record of Community Engagement Sessions post Conservation Action Plan informational and planning sessions

Date of Visit	Purpose of Visit	Location of Visit
November 18 th , 2022	Orientation Visit (Introduction of Community Outreach and Stewards Coordinator)	Gallon Jug
		Yalbac
		Los Tambos
		Spanish Lookout
December 10 th , 2022	Project Document Summary, Grievance Mechanism Distribution and Review of UB-ERI Socioeconomic Survey Report	Blue Creek
		San Felipe
December 11 th , 2022	Project Document Summary, Grievance Mechanism Distribution and Review of UB-ERI Socioeconomic Survey Report	Sylvester Village
		Spanish Lookout
		La Gracia
		Buena Vista
		Yalbac
December 12 th , 2022	Project Document Summary, Grievance Mechanism	Valley of Peace

Date of Visit	Purpose of Visit	Location of Visit
	Distribution and Review of UB-ERI Socioeconomic Survey Report	
December 27 th , 2022	CAP Summary, T-Shirt and Mahogany Seedlings Distribution	Gallon Jug La Gracia Buena Vista Yalbac
December 28 th , 2022	CAP Summary, T-Shirt and Mahogany Seedlings Distribution	Spanish Lookout Los Tambos Valley of Peace Belmopan

Additionally, there were social assessments that were conducted in 2022 regarding communities that reside in the Project Zone and nearby neighboring communities. These assessments provided critical feedback and input to BMFT to shift the direction of the program to meet the needs of the communities more closely. UB-ERI and BMFT also visited communities to share and validate the data collected from the social surveys that UB-ERI had conducted and share summaries of the project document to introduce the carbon project to the communities as shown in *Table 4* above. During these social assessments, community members were asked to identify new and effective project activities and describe the risk of implementation for each.

Summary of comments received	Actions taken
<i>Provide a summary of each comment received in each row</i>	<i>Provide a summary of actions taken and any project design updates or justify why updates were not necessary or appropriate.</i>
...

2.3.11 Stakeholder Consultation Channels (CCB, G3.5) - Done

As described in section 2.3.9, the process for consultation with communities and other stakeholders was undertaken through informational/introductory sessions and participatory conservation action planning, in which communities were represented by their village council leadership and/or chosen representatives. Other stakeholders designated a representative to participate in the conservation action planning sessions. The table in section 2.3.9 documents all the meetings hosted, up to the completion of this document. *Table 5* below documents the number of participants by gender in the meetings/workshops/ focus group sessions described in section 2.3.9. In total, nine (9) communities, three (3) academic institutions, 13 government departments and/or ministries, 15 NGOs and eight (8) private companies were represented in the stakeholder consultations.

Table 5. Stakeholder's Meetings Held

Stakeholder category	No. of female participants	No. of male participants	Total
Community	7	57	64
Academia	5	4	9
Private Sector	3	9	12
NGO	9	18	27
Government	11	13	24
Total	35	101	136

In addition, the project is implementing a grievance mechanism, which will serve as another form to receive feedback from the stakeholders. A copy of the grievance mechanism was distributed to all communities as shown in *Table 5* above. For more information see section 2.3.14.

2.3.12 Stakeholder Participation in Decision-Making and Implementation (VCS, 3.18, 3.19; CCB, G3.6) - Done

The stakeholder consultation process, as described in sections 2.3.9, 2.3.10 and 2.3.11 led to effective participation in the decision-making, development and initial implementation of the project strategies. Participation of communities in participatory action planning was enabled by respecting the official channels of communication in each village, which consists of the elected village councils. Sessions were also organized for evenings or weekends to ensure participation. Initial information sessions were organized as open community meetings at which each community or community group chose 1-3 representatives, as desired, to participate in subsequent conservation action planning workshops for the Belize Maya Forest. Participatory conservation action planning sessions were all done in person and transportation and food was provided for all community/community group participants. The participation of women and youth was encouraged while respecting communities' decision on who would represent them. Often this decision was made based on who was willing to volunteer. The participatory action planning process will be conducted every five years to assess the previous plan and develop a new one.

2.3.13 Anti-Discrimination Assurance (VCS, 3.19; CCB, G3.7) - Done

The design of the project has been founded by anti-discrimination policies including BMFT's Code of Ethics. In addition, BMFT has been developing an Operations Manual that includes a Workplace Harassment Prevention and Reporting Policy as well as an Equal Employment Opportunity Policy. These policies provide guidance to ensure that everyone is treated with respect, fairness, and integrity, and to ensure a safe and inclusive work environment.

Furthermore, both the Country Program Director for TNC in Belize and the Managing Director for BMFT are women. These women have been involved in the design, implementation, and oversight of the project. With TNC's commitment to gender equality, using approaches to ensure gender integration and

mainstreaming, the project is incorporating gender perspectives into organizational, program and/or project policies, strategies, and functions to achieve gender equality and integrate gender equity.

Throughout the monitoring period, TNC also had in place an anti-discrimination policy that is now in effect in the project area. The policy upholds TNC's perspective on anti-discrimination principles and follows Belize Law, which prohibits discrimination based on gender, race, or religion. No complaints or grievances were received during this monitoring period about discrimination.

BMFT included women in the planning stages of the program; to ensure gender discrimination did not occur during this initial phase. Employment opportunities were primarily generated for patrols and monitoring during the monitoring period, and culturally, these are positions that are not often held by women. BMFT invited both men and women to apply in ranger job vacancy announcements even though culturally, these positions are more likely to attract men. BMFT is working to create a work culture and environment in which women will feel free and safe to apply for ranger positions and in which women would be treated equally, trained, equipped and supervised in the same manner as their male counterparts.

2.3.14 Grievances (VCS, 3.18.4; CCB, G3.8) **BMFT To complete**

It is important to note that BMF is privately owned; no community members live within the boundaries of the BMF, and members of stakeholder communities near the project do not have legal or customary rights to the land or resources within BMF. As such, BMFT's grievance response mechanism builds upon relationships with communities, that were established through the conservation action plan development process and provides community members an open-door option for friendly resolution of issues with BMFT staff. The grievance procedure for the project is being managed by the BMFT Community Outreach and Stewards Coordinator, whose job is to liaise and work with stakeholder communities and community groups. The grievance procedure and relevant contacts have been shared with members of the village councils and other stakeholders, along with the project summary. Additionally, reminders and notes have been included in other relevant outreach communications.

The following steps describe the grievance response mechanism (Figure 1**Error! Reference source not found.**):

Step 1: Lodging of Grievances

Grievances can be lodged directly or through a village council representative or community member with the Community Coordinator, who will visit communities regularly, or with the Head Ranger at any of the BMFT gates. Grievances can be lodged orally (in person or via telephone/ WhatsApp call), in which case the relevant staff will transcribe the claim into a grievance report. Grievances can also be submitted in writing via letter, email or text messages, that will be used as documentation of the grievance. All grievances lodged at the gate must be passed on to the Community Coordinator.

Step 2: Assessment of the Grievance

The Community Coordinator will inform the Managing Director of all grievances lodged as they are received and will work with the Managing Director to assess and categorize grievances based on urgency, severity and need to investigate further.

Step 3: Grievance Resolution

Grievances that can be easily addressed will be addressed within a week, but those that require further investigation and evidence will be addressed within a month to allow time for investigation. All evidence or information gathered during the investigation will be documented by BMFT. The BMFT will provide a letter to the aggrieved party documenting how it proposes to resolve the grievance. The aggrieved party must countersign the letter signaling that they agree to the proposal to resolve the grievance.

Step 4: Further Mediation or Extraordinary Measures to Grievance Resolution

If after discussing the proposed resolution to a grievance, the aggrieved party and BMFT cannot agree on the proposed resolution, BMFT will seek the assistance of third-party experts to mediate a solution to resolve the grievance. BMFT will document the mediation process and all parties will be required to countersign the proposed solution after mediation by third parties. Community grievances related to any violation of laws by BMFT staff, should they occur, can be directed to law enforcement by community members.

Feedback and Grievance Redress Procedure

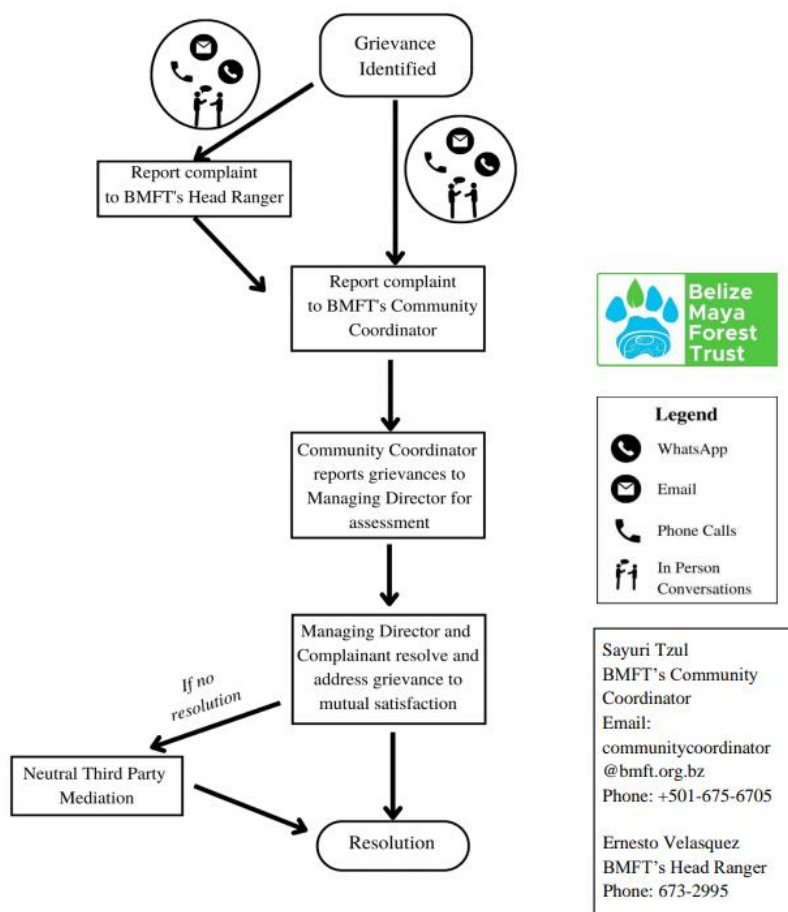


Figure 1. Grievance Procedure

Grievances received	Resolution and outcome
Summarize the grievance raised during the monitoring period.	Describe the steps taken to resolve the grievance including the outcomes of the resolution.
	...

2.3.15 Worker Training (VCS, 3.19; CCB, G3.9) - Done

All BMFT staff are assigned a supervisor, who is responsible both for their orientation as well as for identification of training needs. Ongoing staff training is an important part of BMFT operations. BMFT staff attended a total of 16 training sessions throughout the monitoring period, which are outlined in Table 6 below.

Table 6. Training Record for BMFT Staff

Name of Training	Dates	Number of BMFT Staff Attended
Wildland Fire Operations: The Fundamentals of Suppression, Prescribed Fire, Community Fire Management, Smoke Management and Fire Safety	May 22 nd - 23 rd , 2021	1
Basic Fire Management	Oct 16 th - 17 th , 2021	2
Introduction to Spatial Monitoring and Reporting Tool	Nov 30 th - Dec 3 rd , 2021	4
Basic Fire Management	Feb 12 th - 13 th , 2022	2
Basic Fire Management	Feb 28 th - Mar 3 rd , 2022	1
First Aid Training and CPR	Mar 14 th , 2022	4
Special Constable Training	Jun 20 th - Jul 1 st , 2022	3
An Introduction to Basic Wildland Fire Management Skills	Jul 9 th - 10 th , 2022	4
Spatial Monitoring and Reporting Tool Use	Jul 14 th - 15 th , 2022	6
Capacity Building of Forest Firefighters	Jul 19 th - 21 st , 2022	3
Tikal Summit of National Park Leaders	Oct 11 th - 13 th , 2022	1
Belize Forest and Wildlife Laws	Sept 16 th , 2022	6
Spatial Monitoring and Reporting Tool Administration	Oct 7 th , 2022	2
Introduction to Search and Rescue	Oct 11 th - 14 th , 2022	2
Exchange Visit on Silvopastoral Systems	Oct 23 rd - 25 th , 2022	1
Regional Park Ranger Exchange for the Selva Maya	Nov 7 th - 11 th , 2022	1

Name of Training	Dates	Number of BMFT Staff Attended
Fire Management Training	Nov 14 th – 18 th , 2022	2
First Aid, Navigation, Patrol and Checkpoint Training	Nov 21 st – 22 nd , 2022	3
Capacity Training in Avitourism and Tools for Observation of Birds	Nov 21 st – 25 th , 2022	1
Bird watching training for staff at Black Rock Lodge as part of staff retreat activities	December 12-16, 2022	10

BMFT's staff met as a team at a staff retreat hosted at Black Rock Lodge on December 12th to December 16th, 2022 in which the staff was able to spend time together, foster relationships and also participate in team building exercises and an introductory bird identification session.

Key areas for training for both BMFT staff and stakeholder communities/ community groups are understanding and documenting illegal wildlife trade and integrated fire management. In the upcoming monitoring cycles, communities will be able to benefit from trainings that will be targeted at building the capacity of community members manage their community landscape sustainably and in so doing, conserve the BMF. The process of training and outreach for stakeholder community/community groups was initiated through the conservation action planning process.

2.3.16 Community Employment Opportunities (VCS, 3.19.13; CCB, G3.10) - Done

All BMFT jobs are hired based on set job descriptions, desired skills and qualifications that are then advertised largely through social media – LinkedIn, WhatsApp and Facebook – and also by posting at grocery stores or water board offices in stakeholder communities. Facebook is very popular with members of the stakeholder communities/community groups. The preference is to hire from the local communities and particularly the Cayo District, due to physical access, if the applicants from these areas have the right skills, experience, and profile. However, for security reasons, particularly for rangers, it is important that the team is staffed with a mix of members from nearby communities and others from a broader geographic area range. This is to lower the risk of security breaches in the protected area.

BMFT showed their commitment to communities within, or adjacent to, the project zone by providing opportunities for employment, training, and other services. New employees were trained to maintain local skills and knowledge and encouraged to build local capacity through sharing of resources and skills with others. Local community members hired were trained by BMFT for patrolling and ranger stations, biodiversity monitoring and data collection as well as firefighting.

Communities were informed of employment opportunities through a variety of mechanisms, including official job postings placed at central locations in the communities. They were also made aware of any

job opportunities at community gatherings, regular meetings, and informal communications with community leaders via email or telephone. Women and other underrepresented groups are encouraged to apply for positions that they have skills for. All community members are invited to apply for open positions.

2.3.17 Occupational Safety Assessment (VCS, 3.19; CCB, G3.12) - Done

BMFT met all national standards for workplace safety. Employees were oriented on worker risks and response procedures during onboarding. The substantial risks to workers and mitigation measures are outlined in Table 7 below. BMFT staff can respond and administer first aid. Regular training for employees in first aid based on national standards is provided to BMFT staff. Procedures are being developed to respond to emergencies from the risks listed below.

Table 7. Risks to Worker Safety and Mitigation Strategies

Hazard	Safety strategy and equipment
Snake Bites	<ul style="list-style-type: none"> Staff can access a hospital within the hour from most of the usual field locations frequented during patrols or visits. Hospitals in Belize carry anti-venom, which is best administered in a hospital where severe allergic reactions can be managed. First aid training and first aid kits are placed in all common areas. Adequate boots and protective gear are provided to workers. Radios to contact in an emergency are provided to rangers. A minimum of two person crews are established to enhance worker safety and security. Helicopter evacuation is available, when necessary, from remote locations in the reserve.
Poachers	<ul style="list-style-type: none"> Radio is provided to inform of poaching events or sightings. Minimum two person crews are established to enhance worker safety when encountering dangerous situations.
Fire	<ul style="list-style-type: none"> Staff can access a hospital within an hour from most of the usual field locations frequented. Staff are trained in fire management techniques and fire behavior and response. First aid kits are provided in common areas. Radios to establish contact in an emergency medical attention are provided to rangers. Protective gear for extreme heat events is provided to workers.
Vehicle Accidents	<ul style="list-style-type: none"> Staff are trained in first aid and can reach the nearest hospital within the hour in most instances. Helicopter evacuation. First aid training and first aid kits are provided in common areas. Radios to establish contact in an emergency are provided to workers.
Machete Cuts	<ul style="list-style-type: none"> First aid training and first aid kits are provided in common areas. Radios to establish contact in an emergency are provided to all workers. A minimum of two person crews are established to enhance worker safety. Adequate boots are provided to rangers.
Chainsaw Cuts	<ul style="list-style-type: none"> Staff can access a hospital within the hour from most of the usual field locations frequented during patrols or visits. Helicopter evacuation is provided as required. First aid training and first aid kits are provided in common areas. Radios to establish contact in an emergency are provided to workers. Minimum two person crews.

Hazard	Safety strategy and equipment
Lightning Strike	<ul style="list-style-type: none"> Protective gear is available to staff. Adequate boots are provided.
	<ul style="list-style-type: none"> Develop procedures for avoiding lightning strikes. Radios to establish contact in an emergency are provided to workers

2.4 Management Capacity

2.4.1 Required Technical Skills (VCS, 3.19; CCB, G4.2) - Done

Key technical skills required to implement the program successfully include experience in developing and implementing carbon development programs that positively impact social and biodiversity elements of critical forest ecosystems.

TNC, BMFT and TGC are able to bring a more technical lens to the program and participate in enhancing the program to provide increasing climate, community and biodiversity benefits in the area. TNC has an exceptional position in biodiversity conservation and stakeholder engagement and has shown success in program design, implementation, and management all over the world. TNC's focus on forest protection and biodiversity is a key technical contribution that enables the program to engage in exceptional conservation. BMFT staff have strong local species knowledge and ability to run anti-poaching programs. and work with leading researchers on wildlife monitoring. In addition, BMFT is leading the program in stakeholder engagement and social impacts, which are enabled by its strong institutional and financing mechanisms that provide support for the program.

Terra Global Capital contributes key technical skills in greenhouse gas quantification, carbon measurement and monitoring that help the program operate. Terra Global Capital and the Nature Conservancy work with the land manager, BMFT, in order to achieve and secure climate finance for conservation (Table 8).

Table 8. Technical Skills Delivered by Project Implementers and Partners

Core Program Component	BMFT	TNC	TGC
Program authorization, design oversight and financing	√√	√	
Program design and planning	√√	√	√
Overall program implementation management and partner coordination	√√	√	√
Protected area management	√√	√	
Community engagement and support for implementation of community program	√√	√	
Field data collection and on-going monitoring	√√	√	√
VCS/CCB program development and GHG quantification	√	√	√√

Design and oversight of program's institutional arrangements (fiscal, legal and contractual)	√		√√
Coordination with National REDD+ efforts and other government agencies	√√	√	
On-going management and REDD+ activities	√√	√	√

√√ = Technical Lead

√ = Technical Support

2.4.2 Management Team Experience (VCS, 3.19; CCB, G4.2) - Done

2.4.2.1 The Nature Conservancy

The Nature Conservancy is a global environmental nonprofit which began in 1951, when leading scientists, committed citizens and dedicated leaders came together with a shared vision to protect and care for nature. It is now one of the most effective and wide-reaching environmental organizations in the world. Their mission is to conserve the lands and waters on which all life depends. Today, as they take on the most complex environmental challenges, their diverse staff, partners and members impact conservation across more than 70 countries and territories. The Nature Conservancy is a global environmental organization, headquartered in Arlington, Virginia, United States. As of 2021 they work via affiliates or branches in 79 countries and territories.

Fabiano Godoy, Senior Technical Carbon Advisor

Mr. Godoy joined the Nature Conservancy in 2022, and is currently based in Virginia, USA, as *Sr. Advisor, Carbon Markets*. Before joining TNC, Mr. Godoy led the carbon finance technical team at Conservation International for 16 years. He was responsible for overseeing the design and implementation of carbon projects. He has vast experience with voluntary carbon certification, working on more than 15 VCS and CCBS validation and verification process around the globe, including Peru, Madagascar, Colombia, Kenya, Cambodia, and Fiji. He holds an M.S. Conservation Biology and Sustainable Development from the University of Maryland, and B.S. from Federal University of Parana.

Roberto Pott, Carbon Specialist

Roberto started his career in terrestrial ecology and helped to install Belize's first carbon project in 1995. He is trained in avian ecology, phenology research, sustainable timber harvest operation, land management, eco-tourism and infrastructural development for parks and ecotourism. He worked on assessing land use change in the Selva Maya using remote sensing tools. Roberto is experienced with marine protected area design, planning and management, artisanal fisheries management and coastal development policy and advocacy. He has coordinated regional coral reef conservation efforts and climate change impacts mitigation in coastal Belize through Healthy Reefs Initiative, Mesoamerican Reef Fund and the World Wildlife Fund. Roberto holds a Masters in Environmental Management and has worked in the field of terrestrial and marine resources management for over 15 years.

Julie Robinson, Director Belize Program

Julie oversees the Belize Program, which includes Carbon, Aquaculture and Fisheries programs. Recently, she worked to secure Belize's Blue Bond. Over the last twenty-five years, Julie has focused her work on marine research and conservation off the coast of Belize. Julie was integrally involved in negotiating the land deal that secured over 100,000 hectares for the Belize Maya Forest, and the soon to be largest carbon project in the Belize and possibly in the region. Julie joined the Nature Conservancy in 2006 and worked as the marine program manager, building research and management capacity of local partners. She has led multi-disciplinary planning and science teams and built partnerships across diverse sectors and disciplines including government, private sector and non-profit organizations. Julie considers the approach of inclusive consultation crucial for cultivating and building consensus amongst resource users and managers. Julie has a BSc in Biology from the University of South Florida.

2.4.2.2 Belize Maya Forest Trust

The Belize Maya Forest Trust (BMFT) is a registered and incorporated not for profit, limited liability company formed in December 2020 under the Companies Act, Chapter 250 of the substantive laws of Belize, Revised Edition 2011. In August 2021, BMFT was also registered as a non-governmental organization (NGO) under the NGOs Act, Chapter 315 of the substantive laws of Belize, Revised Edition 2011, as amended. The BMFT was established as the trustee, manager, and steward for the Belize Maya Forest (BMF), that is protected in perpetuity for the people and Government of Belize, as registered under the Trust Act, chapter 202 of the Substantive Laws of Belize, Revised Edition 2011, as amended. The 95,500 hectares of lowland tropical broadleaf forest and associated wetlands that comprise the BMF were previously privately-owned and at risk of conversion to large-scale, mechanized agriculture. The Nature Conservancy (TNC) and partners worked to safeguard this highly biodiverse area, that is home to all five cat species found in Belize, critically endangered Central American River turtle, endangered Baird's tapir, and many other species of local and global concern. The BMF also comprises of the main watershed in Belize for the Rio Hondo, a binational watershed shared with Mexico. Together with the neighboring Rio Bravo Conservation and Management area, the BMF consolidates 200,000 hectares of Belize's last remaining lowland forests and makes up 9% of the Belize's land territory. As the legal guardian and manager of the BMF, the BMFT has an already established protection program and is working with stakeholders from nine neighboring communities, academia, government, non-government, and private sectors to develop a conservation action plan, that will allow it to define and implement additional programs. The BMFT currently has a Board of Trustees comprised of local and international Directors, a Managing Director, a Community Outreach and Stewards Coordinator, and nine rangers. Its staff is expected to grow with the ongoing implementation of the BMF conservation action plan.

Elma Kay, Managing Director

Dr. Elma Kay is the first Managing Director of the Belize Maya Forest Trust, a non-governmental organization (NGO), entrusted with the stewardship and management of Belize's second largest private protected area, the Belize Maya Forest. Dr. Kay is also the co-founder of the University of Belize Environmental Research Institute, where she previously served for a decade as both Science Director (Terrestrial) and Administrative Director. Dr. Kay is a biologist who combines 20 years of experience in research, teaching, administration, policy formulation and conservation in Belize and the Latin

American/Caribbean region. As a leader and advocate for sound natural resources management in Belize, she has assisted the recent protection of more than a 100,000 hectares of the country's most threatened forests, in the Belize Maya Forest and Maya Forest Corridor. Dr. Kay has served in numerous regional and national councils, Boards and expert groups, that include the Regional Executive of the Mesoamerican Society for Biology and Conservation, the Belize National Climate Change Committee, the Belize National REDD+ Technical Expert Group, the Protected Areas Conservation Trust Advisory Council and Board of Trustees, the National Steering Committee for the Global Environment Facility's Small Grants Programme, and others. Dr. Kay continues to mentor undergraduate and graduate students, young professionals and community-based conservation groups, and currently serves as the Chairperson of the Maya Forest Corridor Trust, Chairperson of Belize's Scientific Authority for the Convention on the International Trade in Endangered Species of Wild Fauna and Flora, Member of the Steering Committee of the Belize Network of NGOs, Board Director of the Silk Grass Wildlife Preserve and Vice President of Friends for Conservation and Development, co-manager of Belize's single largest National Park.

Sayuri Tzul, Community Outreach and Stewards Coordinator

Sayuri Tzul currently serves as the Community Outreach and Stewards Coordinator responsible for maintaining a strong and positive relationship with BMFT stakeholder communities and implementing community projects and initiatives. She worked in wildlife conservation, inventory of epiphytes, communications, conservation education, and sustainable tourism. With a background of 10 years in conservation in Belize, she is currently pursuing a master's degree in Agrobusiness and sustainable markets at the University of CATIE, Costa Rica. Sayuri has developed educational materials on conservation education, implemented communication strategies, and established stewardship programs. Sayuri is committed to creating change and improving livelihoods through her work in conservation and sustainability.

2.4.2.3 Terra Global Capital

Terra Global is the global leader in forest and land-use carbon advisory and finance. Terra was founded in 2006 to provide governments, NGOs and private companies with support for market and payment-for performance-based approaches that benefit rural communities. As proven innovators, Terra provides both technical advisory in the measurement and commercialization of emissions reductions and carbon finance through our dedicated Terra Bella Investment Fund and separately managed investment vehicles. Terra has established itself as a valued partner to a global client base by supporting the sustainable management of natural resources and through the development of rural livelihoods.

Leslie L. Durschinger, Founder, CEO

Leveraging 20 years of experience and a proven track record in the financial services industry, Ms. Durschinger founded Terra Global Capital in 2006 to promote results-based approaches to sustainable landscape management through climate smart agricultural and reducing deforestation. Ms Durschinger is recognized as a pioneer and innovator in alignment of development values and financially viable approaches to sustainable landscape management. Terra is now the leader in forest and agriculture program development, GHG analytics and business model development, providing technical expertise

their global client base of governments, NGOs, and private companies in a collaborative and participatory manner. Under Durschinger's leadership Terra has structured risk mitigation instruments, trust funds and private equity funds to drive investment capital to sustainable agricultural production and forest management. Prior to Terra, Ms. Durschinger held senior management positions in the areas of derivatives trading, investment management, algorithmic trading, risk management, and securities lending. She the co-chair of the International Emission Trading Associations Natural Capital Solutions working group, and is a member of the Verified Carbon Standard (VCS) AFOLU Steering Committee, REDD+ Social & Environmental Standards Committee, VCS JNR Permanence Work Group, Coalition on Agricultural Greenhouse (C-AGG) Advisory Committee and W+ Standard Advisory Council. Ms. Durschinger and her family make small production olive oil on their farm in Mendocino County. Among her previous employers are JP Morgan, Merrill Lynch, Barclays Global Investors and Charles Schwab.

Erica Meta Smith, M.F., RPF, Managing Director

Ms. Smith, M.F., RPF. Forest Carbon Field Development Specialist, Joined Terra Global Capital in 2009. Ms. Smith provides technical forestry knowledge, on-ground carbon quantification expertise, and specializes in forest mensuration programs. She has firsthand knowledge of a forestry-based income the experience of depending on natural resources as a livelihood. Before working with Terra Global Capital Ms. Smith worked in forest policy and on forestry technical operations. She received her undergraduate degree in forestry and Master of Forestry from University of California-Berkeley in 2005 and 2007. Her master's work reviewed California Climate Action Registry's Forestry Protocols and implications of carbon markets in California. Ms. Smith is a Certified Ecologist through the Ecological Society of America and a Registered Professional Forester in the State of California. Ms. Smith has worked extensively in the REDD+ sector training communities and working with in-country experts for excellence in MRV across Africa and Asia.

David Montoya González, Director and Project Manager

Mr. Montoya has a widely experience in remote sensing and GIS. He holds a bachelor's degree in Forest Engineer from the National University of Colombia (UNAL) and a master's degree in remote sensing from Federal University of Rio Grande do Sul (UFRGS) – Brazil. Mr. Montoya has worked with multiple Colombian government entities, such as the national department of statistics (DANE), supporting the 3rd National Agricultural Census, the National University of Colombia in research projects in the Andean Region, and with indigenous communities analyzing the land cover changes and natural resources sustainability. In addition, Mr. Montoya has also professional experience closely related with Nature Based Solutions by managing REDD+ projects and developing GHG and LULC assessments in Colombia, Belize, Malawi, Myanmar, among other countries, under the international standard VSC and CCB.

Carolina Oleas, Director, Agronomy, Project Management, Rural Development

Mrs. Oleas provides technical agricultural knowledge, community development expertise, and specializes in participatory project management. She has firsthand field experience working with farmers in different countries of Latin America (Guatemala, Ecuador, Costa Rica, Bolivia, Haiti, El Salvador, others) building capacity with rural communities in sustainable development and climate-smart agricultural practices.

Before joining Terra, Mrs. Oleas worked on designing, managing, monitoring, and evaluating projects and programs to promote sustainable production and the application of agricultural adaptation and mitigation practices at the field level with farmers' organizations. She received her undergraduate degree in agricultural engineering from EARTH University in Costa Rica, and later received a Master's in International Agricultural Development from Texas A&M University.

2.4.3 Project Management Partnerships/Team Development (VCS, 3.19; CCB, G4.2) - Done

The Project Proponents have very strong capacity for implementation for project activities. The Program has been using short-term technical experts as needed to supplement the core team and bring specialized expertise. The Program herein has all the partnership needed to make this program successful and where new activities would require new technical or key expertise, the Program is able to source them.

2.4.4 Financial Health of Implementing Organization(s) (CCB, G4.3) - Done

The Nature Conservancy is a global leader in conservation and is involved in more than 70 countries and territories around the world. TNC's financial statements are available online and can be found at: <https://www.nature.org/en-us/about-us/who-we-are/accountability/annual-report/>. This Project Activity Instance, which has been purchased along the smaller "Laguna Seca Project" *VCS#1326), will share the on-going maintenance costs, which will be covered, in part, through the sale of VCU's. Between the large financial resources of TNC and the expected carbon revenue that this project which will generate that will, in part, be used to establish an endowment for BMFT to manage the project it will have the required financial support from its lifetime.

For this project, a detailed financial analysis was created to understand the financial stability and is presented in the Non-Permanence Risk Report.

2.4.5 Avoidance of Corruption and Other Unethical Behavior (VCS, 3.19; CCB, G4.3) - Done

All the formation documents and agreements that are put in place that support the Program include requirements that participants conduct the operations of the Program in an ethical manner and without corruption.

The BMFT has approved and implemented conflict of interest and anti-corruption policies, as well as a code of ethics for all staff and directors, that are aimed at ensuring that the BMFT is not involved in or complicit in any form of corruption. In addition, the BMFT, like all local organizations, is required to annually register with Belize's Financial Intelligence Unit, as part of compliance duties on anti-money laundering/combating the financing of terrorism through Belize's Money Laundering & Terrorism (Prevention) Act. BMFT is also audited by an external auditing firm, annually.

2.4.6 Commercially Sensitive Information (VCS, 3.5.2-3.5.4; CCB Program Rules, 3.5.13 – 3.5.14) - Done

The commercially sensitive information, which has been prepared and provided to the VVB, is listed in the **Error! Reference source not found.**

2.5 Legal Status and Property Rights

2.5.1 National and Local Laws (VCS, 3.1, 3.6, 3.7, 3.14, 3.18, 3.19; CCB, G5.6) - Done

Land in Belize is divided into two broad categories: National Lands, and Private Lands. The project is on parcels, which are considered private land. In Belize, the Land and Surveys Department, under the Ministry of Natural Resources and Agriculture has prime responsibility for all aspects of land tenure in Belize.

The department's primary functions are:

- Management and allocation of national lands
- Registration of land tenure
- Authentication of plans for all legal surveys
- Sub-division of lands
- Valuation of lands
- Land use planning
- Land information management

There are several laws in Belize that allows for the subdivision of forested lands and their conversion to agricultural lands. These primarily include, the Land Utilization Act, Chapter 188, revised Edition 2000, the Private Forest (Conservation) Act, Chapter 217 Revised Edition 2000, and the Forest Act Chapter 213, Revised Edition 2003 which are outlined in Table 9.

Table 9. Relevant Laws in Belize

Law ¹²	Functions
Land Utilization Act	The Land Utilization Act provides the primary authority for land use planning outside of cities and town. The Act provides general authority to regulate land use in order to protect watersheds, prevent soil erosion, control clearing of forest, and to regulate type of development permitted in designated areas. This is accomplished through the Land Subdivision and Land Utilization Authority (LUA) established under the Act which is required to approve the subdivision of any rural property for development purposes. Subdivision is covered under the Land Utilization Act, Chapter 188 of Belize ¹³ .

¹² <https://www.fao.org/faolex/country-profiles/general-profile/en/?iso3=BLZ>

¹³ <https://observatorioplanificacion.cepal.org/en/regulatory-frameworks/land-utilization-act-chapter-188-belize>

Law ¹²	Functions
Private Forest (Conservation Act) 2000	<p>Defines the process for private landowners to fell trees on their property¹⁴.</p> <p>Within this law, forest may be cleared following with approvals.</p> <p>Restriction on felling CAP.213. S.I. 16 of 1965:</p> <p>Notwithstanding anything contained in the Forests Act, no person shall fell, or cause to be fell, any tree on any land in Belize unless</p> <ul style="list-style-type: none"> • An application has been made to the Chief Forest Officer by the owner or by the person authorized by him to do the felling stating the type and location of forest and the minimum girth of any tree to be felled; and • A permit authorizing the felling has been obtained from the Chief Forest Officer: Provided that no such application or permission shall be necessary to fell trees under 0,6 meters girth measured at one foot above the buttresses during the clearance of land for agriculture but no tree so felled may be sold as timber without a permit from the Chief Forest Officer.
Forest Act Chapter 213 (revised 2000)	States that this Act applied to private land, and thus lays out the process for gaining approval for forest clearing with is specified the implementing Forest Rules, Forest License Delegation of Power.
Forest Rules	The 43 rules are divided into 8 Parts: General (I); Forest Licenses and Permits to Exploit Forest Produce (II); Control of squatting, Building, Cultivation, Grazing, Hunting in Forest Reserves - Control of Fire in Forest Reserves and National Land (III); Transport of Timber by Water (IV); Transport of Timber by Road (V); Forest Roads (VI); Trees and Other Plants - The Felling or Removal of Which is Prohibited (VII); Penalties (VIII). (completed by 5 Schedules)
Forest Licenses Delegation of Powers Order	The Chief Forest Officer is authorized by this Order to approve or disapprove applications for forest licenses and to issue such licenses or forest permits in respect of such applications subject to the conditions set out in the Schedule to this Order. The Chief Forest Officer may authorize in writing any Divisional Forest Officer or other officer of a standing not under the status of Forest Officer to approve or disapprove applications for forest licenses or forest permits subject to the conditions in the said Schedule.

2.5.2 Relevant Laws and Regulations Related to Worker's Rights (VCS, 3.18, 3.19; CCB, G3.11) - Done

BMFT complied with the laws that protect the rights of their employees. During onboarding, new employees are oriented on their rights as workers and the laws protecting employees from sexual harassment. In every district, there are Labor Department representatives to provide support to workers and ensure their rights are protected. As required by law, all employees are registered with the Social

¹⁴ <http://extwprlegs1.fao.org/docs/pdf/blz33249.pdf>

Security Board (SSB), which has a national program that provides benefits for sickness, disability, and retirement/pension. The SSB provides an online portal, which allows access to workers to know the status of their SSB account. Although not required by law, BMFT also provided a private plan for health and life insurance for employees.

As illustrated in Table 10 below, is a list and brief description of all relevant labor laws in Belize.

Table 10. Relevant Labor Laws in Belize

Statute	Relevance and Compliance
Labor Act and Labor (Subsidiary Laws) Chapter 297 of 2011 (Revised)	Addresses labor laws and regulations. Compliance with this law ensures that the project proponent and all other entities involved in project design and implementation are not involved in or complicit in any form of discrimination or sexual harassment with respect to the project.
Social Security Act, Chapter 55 and Subsidiary Laws	Social Security is social insurance that replaces part of your income from work when you become sick, pregnant or disabled. It also replaces part of your income when you retire or die leaving survivors. It provides social insurance for you and your family. It ensures that employers take injured insured for medical care and facilitate investigation for accidents
Protection Against Sexual Harassment Act and Protection Against Sexual Harassment Commencement Act Order	Compliance for this law ensures that BMFT provides protection against sexual harassment for employees and for the communities through awareness and training to employees on the laws that govern them.
Trade Unions Act, Trade Unions Regulations Trade Unions and Employers Organizations	Addresses the rights of workers to organize. Compliance involves informing workers of their right to unionize outlined in worker's agreements.
International Labor Organization Conventions	Belize is a signatory to many of the International Labor Organization's conventions ¹⁵ . Those conventions are addressed in Belize labor laws. The ILO Conventions Act commits Belize to following the ILO conventions.
Equal Pay Act, Chapter 302:01	This act seeks to ensure that employers pay equal pay for equal work without discrimination between male and female employees.

2.5.3 Human Rights (VCS, 3.19) Done

Project activities were implemented on the First Project Activity Instance which is private land, no LPs, LCs or customary right holders' rights were involved in the transaction.

2.5.4 Indigenous Peoples and Cultural Heritage (VCS, 3.18, 3.19) Done

¹⁵ See ILO web site at www.ilo.org

The Project Activity Instance is not in IP territory and no heritage will be affected by project activities implemented during monitoring period.

2.5.5 Recognition of Property Rights (VCS, 3.7, 3.18, 3.19; CCB, G5.1) Done

The Forestland Group (TFG) group purchased this property in 2008, and it was sold to TNC in December 2020. TFG owned the property in fee simple and it was transferred to BMFT under the same condition. Fee simple ownership in Belize represents absolute ownership of real property.

Copies of the current land titles for the BMF are available for review by the auditors of the project. Legal rights to the Laguna Seca and Yalbac properties in Belize include all potential development and use rights, with the exception of mineral extraction.

Disputes over rights to territories and resources	N/A
Respect for property rights	The Project Activity Instance is private property and will not encroach on private property, community property, or government property as the property is legally defined with the Government of Belize. As no property rights are affected by the project activities, no ongoing measures are implemented to protect and preserve the property rights of stakeholders, IPs, LCs, and customary rights holders.

2.5.6 Benefit Sharing Mechanism (VCS, 3.18, 3.19) Done

The project is implemented on private land, there will not be impacts on communities' property rights.

2.5.7 Free, Prior, and Informed Consent (VCS, 3.18, 3.19; CCB, G5.2) Done

Consent	Project activities for this monitoring period were implemented on private land (First Project Activity Instance). This land was purchased from a single owner, no LPs, LCs or customary right holder rights were involved, thus no FPIC consent process was conducted.
Outcome of FPIC	<p>The Project Activity Instance is privately held and designated for a carbon project in partnership with the Government of Belize. The property has not been associated with any Maya communal land claims. There are no current land disputes regarding the Project Activity Instance and no communities are settled in or have user rights over resources from the project area; therefore, there is no need for consent.</p> <p>The BMFT has explicit and uncontested legal tenure and rights over the land. Through an agreement with the Government of Belize, the BMFT has the rights to benefit from income generating activities including carbon finance, and TNC, has the right to market the carbon credits available from the project. Therefore, the project will not encroach uninvited on private property, community property, or government property. There are no community rights</p>

[REDACTED] or indigenous rights over the land or carbon, but BMFT still maintain awareness campaigns about the carbon project.

2.5.8 Property Right Protection (VCS, 3.18, 3.19; CCB, G5.3) – Done

A review of the Conservation Actin Plan and the implementation plan will demonstrate that there are not activities that would involve any removal or relocation of property rights holders. The project has not and will not involve the resettlement of any communities or households, since there are no communities living in the Project Activity Instance. Furthermore, the project goals involve maintaining and improving the livelihoods of communities that currently live near the Project Activity Instance. Resettlement is not a component of the project design. None of the project activities require relocation, either voluntary or involuntary, of landholders from their lands or territories.

During the first monitoring period of this project, the project document developers verified by direct observation that the Project Activity Instance did not have human inhabitants and that no involuntary migration occurred due to project activities. It was further observed that the Project did not involve any form of relocation or inward migration of any populations.

2.5.9 Identification of Illegal Activity (VCS, 3.19, CCB, G5.4) - Done

The illegal activities that could impact the project results relate to illegal hunting and associated negligent use of fire or arson. The project reduces this risk through project activities that include regular patrols to address the illegal activities in the Project Activity Instance. This includes facilitating discussions and coordinating across neighbors to regularly monitor and patrol to mitigate the activities. Signs will be placed along vulnerable borders with neighboring stakeholders indicating the ownership of the land and points of entry. Field crews will be instructed to be alert and patrol for illegal activities, particularly near archaeological remains and to report any incidents or evidence. Data will be maintained through patrols and analyzed regularly to determine where the vulnerable areas for illegal activities are found. The concentration of patrols will then be directed to these areas.

2.5.10 Ongoing Disputes (VCS, 3.18, 3.19; CCB, G5.5) - Done

There are no on-going disputes of property rights in the Project Activity Instance, thus there is no activity that could prejudice the outcome.

3 CLIMATE

3.1 Monitoring GHG Emission Reductions and Removals

3.1.1 Data and Parameters Available at Validation (VCS, 3.16)

Only Parameters that are used in this project are included in this section.

Data Unit / Parameter:	$\Delta C_{BSL,planned}$
Data unit:	tCO ₂ e
Description:	Net greenhouse gas emissions in the baseline from planned deforestation.
Source of data:	Calculated based on equations in Section 3.2.4
Value applied:	40,159,299
Justification of choice of data or description of measurement methods and procedures applied:	Per methodology found in BL-PL, VMD0006
Purpose of Data:	Calculation of baseline emissions.
Comment:	No comments

Data Unit / Parameter:	Project Forest Cover Benchmark Map
Data unit:	ha
Description:	Map showing the location of forest land within the Project Activity Instance at the beginning of the project crediting period.
Source of data:	Remote sensing in combination with GPS data collected during ground-reference.
Value applied:	See map graphic in Section 3.1.2
Justification of choice of data or description of measurement methods and procedures applied:	The accuracy and the classification process are described in Section Error! Reference source not found. The overall accuracy for the classification of forest/non-forest in the Project Activity Instance at the beginning of the crediting period is 90%.
Purpose of Data:	Calculation of baseline emissions.
Comment:	The forest does not contain more than 1ne forest type. The Module X-STR was not used for stratification

Data Unit / Parameter:	$A_{planned,i}$
Data unit:	ha

Description:	Total area of planned deforestation over the fixed baseline period for stratum <i>i</i>
Source of data:	Remote sensing and Proxy Parcels
Value applied:	78,180
Justification of choice of data or description of measurement methods and procedures applied:	Available forest for legal conversion to agriculture and pasture land based on the agent class of deforestation.
Purpose of Data:	Calculation of baseline emissions.
Comment:	No comments

Data Unit / Parameter:	$L-D_i$
Data unit:	%
Description:	Likelihood of deforestation in strata <i>i</i>
Source of data:	Proxy Parcels
Value applied:	1
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006. For all areas not both under Government control and zoned for deforestation, $L-D_i$ must be equal to 1
Purpose of Data:	Used to calculate the annual area of deforestation for baseline emissions.
Comment:	No comments

Data Unit / Parameter:	$C_{AB_tree,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Carbon stock in aboveground biomass in trees in the baseline in stratum <i>i</i> . Includes both aboveground biomass and sapling aboveground biomass.
Source of data:	Based on data measured in the field. Calculated based on equations in section 3.2.4
Value applied:	226.50

Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	No comments

Data Unit / Parameter:	$C_{AB_tree,post,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Post-deforestation carbon stock in aboveground tree biomass in stratum i
Source of data:	IPCC GPG 2006
Value applied:	10
Justification of choice of data or description of measurement methods and procedures applied:	<p>Required by VMD0006.</p> <p>Value of 10 was applied based on the steepness of slopes, where land on steep slopes (8,524 ha) were expected to be converted from forests to grasslands (14.1 tCO_{2e} ha⁻¹) and land on gentle slopes (71,439 ha) were to be converted from forests to annual cropland (9.5 tCO_{2e} ha⁻¹). A value of 10 was determined via:</p> $\frac{14.1 \times 8,524 + 9.5 \times 71,439}{79,962.6} = 10.0$
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	No comments

Data Unit / Parameter:	$\Delta C_{AB_tree,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Baseline Carbon Stock change in aboveground tree biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	216.50
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.

methods and procedures applied:	
Purpose of data:	Used to calculate the baseline carbon stock change
Comment:	No comments

Data Unit / Parameter:	$C_{BB_tree,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Baseline carbon stock change in belowground tree biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	64.3
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	No comments

Data Unit / Parameter:	$C_{BB_tree,post,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Post deforestation carbon stock in belowground tree biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	0
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	No comments

Data Unit / Parameter:	$\Delta C_{BB_tree,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Baseline carbon stock change in belowground tree biomass in stratum <i>i</i>
Source of data:	Based on data measured in the field
Value applied:	64.3
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of data:	Used to calculate the baseline carbon stock change
Comment:	No comments

Data Unit / Parameter:	$C_{AB_nontree,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Carbon stock in aboveground non-tree vegetation in the baseline in stratum <i>i</i>
Source of data:	Based on data measured in the field
Value applied:	0.66
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	No comments

Data Unit / Parameter:	$C_{AB_nontree,post,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Post-deforestation carbon stock in aboveground non-tree vegetation in stratum <i>i</i>
Source of data:	Based on data measured in the field
Value applied:	0

Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of data:	Used to calculate the baseline carbon stock change
Comment:	No comments

Data Unit / Parameter:	$\Delta C_{AB_nontree,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Baseline carbon stock change in aboveground non-tree biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	0.66
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$C_{BB_nontree,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Baseline carbon stock change in belowground non-tree biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	0.19
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change

Comment:	N/A
-----------------	-----

Data Unit / Parameter:	$C_{BB_nontree,post,i}$
Data unit:	$t\ CO_2-e\ ha^{-1}$
Description:	Post deforestation carbon stock change in belowground non-tree biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	0
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$\Delta C_{BB_nontree,i}$
Data unit:	$t\ CO_2-e\ ha^{-1}$
Description:	Baseline carbon stock change in belowground non-tree biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	0.19
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$C_{DW,bsl,i}$
Data unit:	$t\ CO_2-e\ ha^{-1}$
Description:	Forest carbon stock in deadwood biomass in stratum i

Source of data:	Based on data measured in the field
Value applied:	Conservatively omitted
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$C_{DWpost,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Post-deforestation carbon stock in deadwood biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	Conservatively omitted
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$\Delta C_{DW,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Baseline carbon stock change in deadwood biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	Conservatively omitted.
Justification of choice of data or description of measurement	Required by VMD0006.

methods and procedures applied:	
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$C_{LI,bsl,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Forest carbon stock in litter in stratum i
Source of data:	Based on data measured in the field
Value applied:	1.22
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$\Delta C_{LI,post,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Post deforestation carbon stock in deadwood biomass in stratum i
Source of data:	Based on data measured in the field
Value applied:	0
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$\Delta C_{LI,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Baseline carbon stock change in litter in stratum i
Source of data:	Based on data measured in the field
Value applied:	1.22
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$C_{SOC,bsl,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Forest carbon stock in soil organic carbon in stratum i
Source of data:	Based on data measured in the field. See calculations in 3.2.1
Value applied:	505.8
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$C_{SOC,post,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Post deforestation carbon stock in soil organic carbon in stratum i
Source of data:	Based on data measured in the field. See calculations in 3.2.1
Value applied:	293.36

Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$\Delta C_{SOC,i}$
Data unit:	t CO ₂ -e ha ⁻¹
Description:	Carbon stock change in soil organic carbon in stratum i
Source of data:	Based on data measured in the field. See calculations in 3.2.1
Value applied:	212.44
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$C_{BSL,i,t}$
Data unit:	tCO ₂ e ha ⁻¹
Description:	Carbon stock in all pools in the baseline in stratum I at time t
Source of data:	Estimates based on calculations described in Section 3.2 of this report
Value applied:	Annual values provided in Section 3.2
Justification of choice of data or description of measurement methods and procedures applied:	Per methodology for planned deforestation, Module VMD0006 (BL-PL)
Purpose of Data:	Calculation of baseline emissions.

Comment:	N/A
Data Unit / Parameter:	$E_{\text{BiomassBurn},i,t}$
Data unit:	tCO ₂ e
Description:	Non-CO ₂ emissions due to biomass burning in stratum <i>i</i> in year <i>t</i>
Source of data:	Calculated based on equations in Section 3.2.1.4.
Value applied:	1,687,340
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006. Calculated based on VMD0013, <i>Estimation of GHG emissions from Biomass and peat Burning</i> (E-BPB)
Purpose of Data:	Used to calculate the baseline greenhouse gas emissions
Comment:	N/A

Data Unit / Parameter:	CF
Data unit:	t C t d.m. ⁻¹
Description:	Carbon fraction of dry matter in t C t ⁻¹ d.m.
Source of data:	Values from the literature (e.g. IPCC 2006 INV GLs AFOLU Chapter 4 Table 4.3) shall be used if available, otherwise default value of 0.47 t C t ⁻¹ d.m. can be used
Value applied:	0.47
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0001. Based on published value (IPCC 2006).
Purpose of Data:	Calculation of baseline emissions.
Comment:	N/A

Data Unit / Parameter:	fj(X,Y)
Data unit:	t d.m. tree ⁻¹

Description:	Allometric equation for species j linking measured tree variable(s) to aboveground biomass of living trees, expressed as $t \text{ d.m. tree}^{-1}$
Source of data:	(Pearson, 2005) (Cho et al. 2013) (Brown et al. 2001)
Value applied:	All allometric equations are depicted in Section 3.2.1
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0001.
Purpose of Data:	Calculation of baseline emissions.
Comment:	N/A

Data Unit / Parameter:	$D_{\text{planned},i,t}$
Data unit:	$\% \text{ year}^{-1}$
Description:	Projected annual proportion of land that will be deforested in stratum i at year t
Source of data:	Remote sensing and Proxy Parcels
Value applied:	5.23 $\%/ \text{year}$
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006, based on Proxy Parcels analysis
Purpose of Data:	Used to calculate the annual area of deforestation for baseline emissions.
Comment:	D_{planned} was adjusted to a non-linear rate of deforestation

Data Unit / Parameter:	$AA_{\text{planned},i,t}$
Data unit:	Ha
Description:	Annual area of baseline planned deforestation for stratum i at time t
Source of data:	Proxy Parcels analysis.

Value applied:	4,185 ha
Justification of choice of data or description of measurement methods and procedures applied:	Calculations based on Module VMD0006
Purpose of Data:	Calculation of baseline emissions.
Comment:	A value of 4,185 was applied for 19 years. On the 20th year (in 2040), a value of 448. was applied, representing the final area of planned deforestation left.

Data Unit / Parameter:	$A_{planned,i}$
Data unit:	Ha
Description:	Total area of planned deforestation over the entire project lifetime for stratum i
Source of data:	Remote Sensing
Value applied:	78,180 hectares
Justification of choice of data or description of measurement methods and procedures applied:	Calculations based on Module VMD0006 Entire Project Activity Instance was expected to be deforested. The value applied represents the entire Project Activity Instance (87,059 hectares), minus the area legally excluded (7,096 hectares)
Purpose of Data:	Calculation of baseline emissions.
Comment:	N/A

Data Unit / Parameter:	$A_{planned, gentle}$
Data unit:	Ha
Description:	Area of land within the project boundary representing gentle slopes
Source of data:	Remote Sensing

Value applied:	71,439 hectares, or 89.34% Project Activity Instance
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006 to calculate post-deforestation carbon stock in aboveground tree biomass in stratum i.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$A_{\text{planned,steep}}$
Data unit:	Ha
Description:	Area of land within the project boundary representing steep slopes
Source of data:	Remote Sensing
Value applied:	8,524 hectares, or 10.66% of Project Activity Instance
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0006 to calculate post-deforestation carbon stock in aboveground tree biomass in stratum i.
Purpose of Data:	Used to calculate the baseline carbon stock change
Comment:	N/A

Data Unit / Parameter:	$A_{\text{Enh,PL,i,t}}$
Data unit:	Ha
Description:	Project Activity Instance in stratum i in which carbon stocks are accumulating but that would have undergone planned deforestation in the baseline scenario at time t; ha
Source of data:	Based on proxy parcels analysis
Value applied:	

	A value of 4,185 was applied for 19 years. On the 20 th year (in 2040), a value of 448. was applied, representing the final area of planned deforestation left.
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0015 M-RED equation 25.
Purpose of Data:	Calculation of project emissions.
Comment:	N/A

Data Unit / Parameter:	$C_{P,i,t}$
Data unit:	tCO ₂ e
Description:	Carbon stock in all pools in the project case in stratum i at time t; t CO ₂ -e
Source of data:	Remote sensing and inventory data.
Value applied:	Calculated parameter. See equations in Section 3.2
Justification of choice of data or description of measurement methods and procedures applied:	Required by VMD0015 M-RED equation 25.
Purpose of Data:	Calculation of project emissions.
Comment:	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event.

Data Unit / Parameter:	GHG _{BSL-E,i,t}
Data unit:	tCO ₂ e ha ⁻¹
Description:	GHG emissions as a result of deforestation activities within the project boundary in stratum i in year t

Source of data:	Calculated based on equations in Section 3.2
Value applied:	Annual values provided in Section 3.2
Justification of choice of data or description of measurement methods and procedures applied:	Per methodology for planned deforestation, BMD0006 BL-PL
Purpose of Data:	Calculation of baseline emissions.
Comment:	Nitrogen fertilizer use and fossil fuel use are conservatively excluded pools in the baseline and project. This parameter only includes biomass burning.

Data Unit / Parameter:	$B_{i,t}$
Data unit:	Tonnes d.m. ha ⁻¹
Description:	Average aboveground biomass stock before burning stratum i , year t
Source of data:	Field Inventory
Value applied:	132.5
Justification of choice of data or description of measurement methods and procedures applied:	<p>Field methods. Calculations follow BL-PL, CP-AB, and E-BPB.</p> <p>This value is calculated by first taking the sum of the following (tCO_{2e} ha⁻¹):</p> <ul style="list-style-type: none"> • Biomass to be burned, or all trees with DBH <25cm and aboveground sapling biomass(226.50) • Aboveground non-tree biomass (0.66) • Aboveground litter biomass (1.22) • [Sum total of 228.38] <p>Then applying equation 2 of the VMD0013 methodology (E-BPB), where this sum total is multiplied by the inverse ratio of molecular weight of CO₂ to carbon (12/44) and the inverse ratio of carbon fraction of biomass (1/0.47).</p>
Purpose of Data:	Calculation of baseline emissions.
Comment:	All trees with a DBH less than 25cm were expected to be burned. The value here reflects the average aboveground biomass expected to be burned for stratum i in year t .

Data Unit / Parameter:	GWPg
Data unit:	tCO2e
Description:	Global warming potential for non-CO2 greenhouse gasses 2
Source of data:	IPCC: Chapter 2, Changes in Atmospheric Constituents and in Radiative Forcing
Value applied:	310 for nitrous oxide and 21 for methane
Justification of choice of data or description of measurement methods and procedures applied:	Methodology instructions.
Purpose of Data:	Calculation of baseline emissions.
Comment:	N/A

Data Unit / Parameter:	COMFi
Data unit:	unitless
Description:	Combustion factor for stratum i (unitless)
Source of data:	Default values in Table 2.6 of IPCC, 2006 (Appendix 2)
Value applied:	0.5
Justification of choice of data or description of measurement methods and procedures applied:	The combustion factor measures the proportion of fuel that is combusted. This varies as a function of (1) size and (2) architecture of fuel load. Default values must be updated whenever new guidelines are produced by the IPCC.
Purpose of Data:	Calculation of baseline emissions.
Comment:	N/A

Data Unit / Parameter:	G g,i
Data unit:	Kg t-1 d.m. burnt
Description:	Emission factor for stratum i for gas g
Source of data:	Defaults found in Volume 4, Chapter 2, of the IPCC 2006 Inventory Guidelines in table 2.5 (Appendix 2)
Value applied:	6.8 for CH4 and 0.2 for N2O
Justification of choice of data or description of measurement methods and procedures applied:	Defaults can be found in Volume 4, Chapter 2, of the IPCC 2006 Inventory Guidelines in table 2.5 (see Appendix 2: emission factors for various types of burning for CH4 and N2O). Default values must be updated whenever new guidelines are produced by the IPCC
Purpose of Data:	Calculation of baseline emissions.
Comment:	N/A

Data Unit / Parameter:	g
Data unit:	unitless
Description:	List of greenhouse gases included in analysis
Source of data:	Methodology
Value applied:	CH4 and N2O
Justification of choice of data or description of measurement methods and procedures applied:	As indicated in methodology.
Purpose of Data:	Calculation of baseline emissions.
Comment:	N/A

Data Unit / Parameter:	R
Data unit:	t root d.m. t-1 t-1 shoot d.m.
Description:	Root to shoot ratio appropriate to species or forest type/biome; note that as defined here, root to shoot ratio is applied as belowground biomass per unit area: aboveground biomass per unit area (not on a per-stem basis)
Source of data:	Based on root:shoot ratios found in IPCCGPG, Table 4.4 (Ratio of Below-ground biomass to above-ground biomass (R)).
Value applied:	IF AGB >= 125 MG DM ha-1, 0.2845. If AGB < 125 MG DM ha-1, 0.284
Justification of choice of data or description of measurement methods and procedures applied:	Root:shoot ratio was calculated using: Domain: Tropical Ecological Zone: Tropical Moist Continent: North and South America If corresponding aboveground biomass was greater than or equal to 125 MG DM ha-1, a ratio of 0.2845 was used. If corresponding aboveground biomass was less than 125 MG DM ha-1, a value of 0.284 was used.
Purpose of Data:	Calculation of project emissions.
Comment:	N/A

Data Unit / Parameter:	D,tree
Data unit:	g/cm3
Description:	Density of dry wood for each species present within the project boundary
Source of data:	Data extracted from the IPCC Good practice Guidance for Land Use, Land-Use Change and Forestry
Value applied:	See database of tree measurements.
Justification of choice of data or description of measurement methods and procedures applied:	Used to determine carbon quantity within each individual tree measured.
Purpose of Data:	Calculation of baseline emissions.

Comment:	N/A
Data Unit / Parameter:	Ht,tree,i,
Data unit:	meters
Description:	Height of the tree from the ground based on measurements with a clinometer or other device. See monitoring plan for field methods.
Source of data:	Field measurements
Value applied:	Unique for each measured tree.
Justification of choice of data or description of measurement methods and procedures applied:	See field methods section of monitoring plan. Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event.
Purpose of Data:	Calculation of baseline emissions.
Comment:	This variable is collected, but not necessary for allometric equation used. This variable is used to validate the allometric equation.

Data Unit / Parameter:	DBH,tree,i,
Data unit:	Cm
Description:	Diameter at breast height, defined as 1.3 meters above the ground of each measured tree.
Source of data:	Field measurements
Value applied:	Unique for each individual tree.
Justification of choice of data or description of measurement methods and procedures applied:	Required by methodology. See field methods section of monitoring plan. Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event.
Purpose of Data:	Calculation of baseline emissions.
Comment:	N/A

Data Unit / Parameter:	CWP100
Data unit:	tCO ₂ e ha ⁻¹
Description:	Net greenhouse gas emissions in the baseline from planned deforestation in stratum i in year
Source of data:	Calculations refer to field-based data and project plan outlined in this report
Value applied:	zero.
Justification of choice of data or description of measurement methods and procedures applied:	Per methodology for planned deforestation
Purpose of Data:	Calculation of baseline emissions.
Comment:	N/A

Data Unit / Parameter:	$\Delta C_{\text{pools,Dif,u,i,t}}$
Data unit:	tCO ₂ e ha ⁻¹
Description:	Net carbon stock changes in all pools in the project case in land use u in stratum i at time t; t CO ₂ -e ha ⁻¹
Source of data:	Remote sensing and inventory data.
Value applied:	Defined within this report
Justification of choice of data or description of measurement methods and procedures applied:	See Section 3.2 of this report for calculations of this metric.
Purpose of Data:	Calculation of project emissions
Comment:	N/A

Data Unit / Parameter:	Species List
Data unit:	Unitless (Species)
Description:	List of detected species known to occur, or do currently reside, within the Project Activity Instance.
Source of data:	Observations by trained observers.
Value applied:	N/A
Justification of choice of data or description of measurement methods and procedures applied:	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event.
Purpose of Data:	Used to determine biodiversity impacts.
Comment:	N/A

Data Unit / Parameter:	FLU,AG
Data unit:	Unitless
Description:	Relative stock change factors for different management activities on cropland for long-term cultivated tropical wet soils
Source of data:	IPCC Good Practice Guide for Land Use, Land-Use Change and Forestry, Chapter 3: LUCF Sector Good Practice Guidance, Table 3.3.4
Value applied:	0.58
Justification of choice of data or description of measurement methods and procedures applied:	As per module VMD0004, Estimation of stocks in the soil organic pool (CP-S). Applicability states "Ex ante determination that stocks are greater in the baseline than in the project scenario can be made on the basis of IPCC 2006GL Relative Stock Change Factors, if the average combined stock change factor for the baseline is less than or equal to 1.
Purpose of Data:	Used to determine Soil organic carbon baseline emissions
Comment:	N/A

Data Unit / Parameter:	FLU,GR
Data unit:	Unitless
Description:	Relative stock change factors for different management activities on cropland for long-term cultivated tropical wet soils
Source of data:	IPCC Good Practice Guide for Land Use, Land-Use Change and Forestry, Chapter 3: LUCF Sector Good Practice Guidance, table 3.4.10
Value applied:	1
Justification of choice of data or description of measurement methods and procedures applied:	As per module VMD0004, Estimation of stocks in the soil organic pool (CP-S). Applicability states, "Ex ante determination that stocks are greater in the baseline than in the project scenario can be made on the basis of IPCC 2006GL Relative Stock Change Factors, if the average combined stock change factor for the baseline is less than or equal to 1.
Purpose of Data:	Used to determine Soil organic carbon baseline emissions
Comment:	N/A

Data Unit / Parameter:	N _{2O} _{direct-N,i,t}
Data unit:	tCO ₂ e
Description:	Direct N _{2O} emissions because of nitrogen application on the alternative land use in stratum i within the Project Activity Instance in year t (tCO ₂ e).
Source of data:	N/A
Value applied:	0; conservatively omitted.
Justification of choice of data or description of measurement methods and procedures applied:	Based on Module BL-PL
Purpose of Data:	Calculate baseline emissions
Comment:	N/A

Data Unit / Parameter:	$t(p)$
Data unit:	[-]
Description:	Representative time point for a specific composited LULC map p [year]
Source of data:	Calculated year from imagery
Value applied:	N/A
Justification of choice of data or description of measurement methods and procedures applied:	Required for VT0006. Use the origin dates of images used. The LULC map assembles pixels that were acquired at different times, an average of the dates weighed according to the number of pixels associated with that date is a logical way of calculating a conservation representative time point.
Purpose of Data:	To estimate a representative time point for LULC maps that were prepared from multiple images corresponding to a range of time periods
Comment:	N/A

Data Unit / Parameter:	$tr_{LULC1 \rightarrow LULC2}(p1 \rightarrow p2)$
Data unit:	[-]
Description:	LULC change rate for transition from LULC class 1 to LULC class 2 [ha / year-1].
Source of data:	Calculated rate from Eq. 2 in VT0006
Value applied:	N/A
Justification of choice of data or description of measurement methods and procedures applied:	Required for VT0006. The transition of LULC class from one time to another time is used as the basis for estimating the historical rate of deforestation
Purpose of Data:	To estimate the rate of deforestation between two periods.
Comment:	N/A

Data Unit / Parameter:	$\overline{\text{tr}_{LULC1 \rightarrow LULC2}(P)}$
Data unit:	[-]
Description:	Mean LULC rate for transition from LULC class 1 to LULC class 2 in time period P [-]
Source of data:	Calculated rate from Eq. 3 in VT0006
Value applied:	N/A
Justification of choice of data or description of measurement methods and procedures applied:	Required for VT0006. The transition of LULC class from one time to another time is used as the basis for estimating the historical rate of deforestation.
Purpose of Data:	To estimate the rate of deforestation between two periods.
Comment:	N/A

3.1.2 Data and Parameters Monitored (VCS, 3.16) to be reviewed

Data / Parameter	ADefPA,i,u,t
Data unit	ha
Description	Area of recorded deforestation within the Project Activity Instance that is converted to land use u in year t.
Source of data	Remote sensing imagery.
Description of measurement methods and procedures to be applied	<i>Specify the measurement methods and procedures, any standards or protocols to be followed, and the person/entity responsible for the measurement. Include any relevant information regarding the accuracy of the measurements (e.g., accuracy associated with meter equipment or laboratory tests). See Section Error! Reference source not found. for further details.</i>
Frequency of monitoring/recording	Must be monitored at least every 5 years, or if verification occurs on a frequency less than every 5 years.
Value monitored	<i>Provide an estimated value for the data/parameter</i>
Monitoring equipment	<i>Identify equipment used to monitor the data/parameter including type, accuracy class, and serial number of equipment, as appropriate.</i>
QA/QC procedures to be applied	<i>Describe the quality assurance and quality control (QA/QC) procedures to be applied, including the calibration procedures where applicable.</i>

Purpose of the data	Calculation of project emissions
Calculation method	<i>Where relevant, provide the calculation method, including any equations, used to establish the data/parameter.</i>
Comments	Ex-ante, an estimation of deforestation was made in the with-project case.

Data / Parameter	EBiomassBurn,i,t
Data unit	tCO ₂ e
Description	Non-CO ₂ emissions due to biomass burning in stratum <i>i</i> in year <i>t</i>
Source of data	Calculated based on equations in Section 3.2
Description of measurement methods and procedures to be applied	Required by VMD0006. Calculated based on VMD0013, <i>Estimation of GHG emissions from Biomass and peat Burning (E-BPB)</i>
Frequency of monitoring/recording	Biomass burning estimates are determined ex-ante, and potential emissions are avoided. Thus, this parameter is not monitored, but estimated based on monitored aboveground biomass information.
Value monitored	Determined ex-ante
Monitoring equipment	N/A
QA/QC procedures to be applied	N/A
Purpose of the data	Baseline emissions
Calculation method	Calculated based on VMD0013, <i>Estimation of GHG emissions from Biomass and peat Burning (E-BPB)</i>
Comments	Required by VMD0006.

Data / Parameter	Bi,t
Data unit	Tonnes d.m. Ha-1
Description	Average aboveground biomass stock before burning stratum <i>i</i> , year <i>t</i>
Source of data	Field Inventory
Description of measurement methods and procedures to be applied	
Frequency of monitoring/recording	Biomass burning estimates are determined ex-ante, and potential emissions are avoided. Thus, this parameter is not

	monitored, but estimated based on monitored aboveground biomass information.
Value monitored	132.5
Monitoring equipment	N/A
QA/QC procedures to be applied	Quality control of E-BPB application applied.
Purpose of the data	Calculation of baseline emissions.
Calculation method	<p>This value is calculated by first taking the sum of the following (tCO_{2e} ha⁻¹):</p> <ul style="list-style-type: none"> • Biomass to be burned, or all trees with DBH <25cm and aboveground sapling biomass (226.50) • Aboveground non-tree biomass (0.66) • Aboveground litter biomass (1.22) • [Sum total of 228.38] <p>Calculations from VMD0013 methodology (E-BPB), were used to determine biomass burning estimates.</p>
Comments	All trees with a DBH less than 45cm was expected to be burned. The value here reflects the average aboveground biomass expected to be burned for stratum <i>i</i> in year <i>t</i> .

Data / Parameter	$\Delta C_{pools, Def, u, i, t}$
Data unit	tCO _{2e} ha ⁻¹
Description	Net carbon stock changes in all pools in the project case in land use <i>u</i> in stratum <i>i</i> at time <i>t</i>
Source of data	Remote sensing and inventory data.
Description of measurement methods and procedures to be applied	Methods, procedures, and protocols to determine this parameter can be found in section Error! Reference source not found. Error! Reference source not found.
Frequency of monitoring/recording	Available at every monitoring event.
Value monitored	Monitored estimates provided in Error! Reference source not found.
Monitoring equipment	<p>For field data collection: DBH tape, compass, clinometer, GPS, metric measuring tables, cloth bags for non-tree/litter biomass collection, spring scale, rangefinder.</p> <p>For soil carbon quantification: see procedures regarding the Walkley-Black colorimetric method (FAO, 2019).</p>
QA/QC procedures to be applied	Electronic datafiles were compared with scanned field sheets to ensure correct data entry. Application of Verra

	methodologies checked internally at Terra Global Capital by multiple individuals.
Purpose of the data	Calculation of project emissions
Calculation method	Formula and parameters provided in Error! Reference source not found. Error! Reference source not found..
Comments	N/A

Data / Parameter	GHGP-E,i,t
Data unit	tCO2e
Description	Greenhouse gas emissions resulting from deforestation activities within the Project Activity Instance in the project case in stratum i in year t; tCO2e
Source of data	Remote Sensing
Description of measurement methods and procedures to be applied	Deforestation activities were represented by estimated biomass burning alone, following methodology provided in module VMD0013: Estimation of GHG emissions from biomass and peat burning (E-BPB).
Frequency of monitoring/recording	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event.
Value monitored	Calculated parameter. See equations in Section 3.2
Monitoring equipment	N/A
QA/QC procedures to be applied	Calculations went through multiple rounds of review to ensure proper scenario decisions and calculation accuracy.
Purpose of the data	Calculation of project emissions.
Calculation method	Calculated parameter. See equations in Section Error! Reference source not found. Error! Reference source not found.
Comments	N/A

Data / Parameter	$\Delta C_{pools,Def,u,i,t}$
Data unit	tCO2e ha-1
Description	Net carbon stock changes in all pools in the project case in land use u in stratum i at time t
Source of data	Remote sensing and inventory data.
Description of measurement methods and procedures to be applied	Individual carbon pools related to this parameter have unique and detailed quantification methods. Please refer to Section Error! Reference source not found. for more details.

Frequency of monitoring/recording	Available upon monitoring
Value monitored	Ex ante estimations provided in Section 3.2
Monitoring equipment	Each carbon pool requires unique and extensive equipment to complete estimates incorporated in this parameter. Please see notes related to individual carbon pools found in this section of the report.
QA/QC procedures to be applied	Calculations reviewed by multiple Terra Global Capital members to ensure accuracy.
Purpose of the data	Calculation of project emissions
Calculation method	Formula and parameters provided in Section 3.2
Comments	N/A

Data / Parameter	$\Delta CP, Enh, i, t$
Data unit	tCO ₂ e
Description	Net carbon stock change resulting from forest growth and sequestration during the project in areas projected to be deforested in the baseline in stratum i at time t
Source of data	Remote Sensing and inventory data
Description of measurement methods and procedures to be applied	<i>Specify the measurement methods and procedures, any standards or protocols to be followed, and the person/entity responsible for the measurement. Include any relevant information regarding the accuracy of the measurements (e.g., accuracy associated with meter equipment or laboratory tests). To be completed via remote sensing.</i>
Frequency of monitoring/recording	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event.
Value monitored	Available at monitoring
Monitoring equipment	<i>Identify equipment used to monitor the data/parameter including type, accuracy class, and serial number of equipment, as appropriate.</i> N/A
QA/QC procedures to be applied	<i>Describe the quality assurance and quality control (QA/QC) procedures to be applied, including the calibration procedures where applicable.</i> N/A
Purpose of the data	Calculation of project emissions.
Calculation method	<i>Where relevant, provide the calculation method, including any equations, used to establish the data/parameter.</i> N/A

Comments	<i>Provide any additional comments</i>
Data / Parameter	CP,i,t
Data unit	tCO ₂ e
Description	Carbon stock in all pools in the project case in stratum i at time t; t CO ₂ -e
Source of data	Remote sensing and inventory data.
Description of measurement methods and procedures to be applied	Individual carbon pools related to this parameter have unique and detailed quantification methods. Please refer to Section Error! Reference source not found. for more details.
Frequency of monitoring/recording	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event.
Value monitored	Available at monitoring
Monitoring equipment	Each carbon pool requires unique and extensive equipment to complete estimates incorporated in this parameter. Please see notes related to individual carbon pools found in this section of the report.
QA/QC procedures to be applied	Calculations reviewed by multiple Terra Global Capital members to ensure accuracy.
Purpose of the data	Calculation of project emissions.
Calculation method	Calculated using methodology provided by VM0007 REDD+ Methodology Framework (REDD+MF), v1.6. Please refer to Section Error! Reference source not found. for more details.
Comments	N/A
Data / Parameter	CAB_tree,i
Data unit	t CO ₂ -e ha ⁻¹
Description	Carbon stock in aboveground biomass in trees in the baseline in stratum i
Source of data	Based on data measured in the field. Calculated based on equations in section 3.2.4
Description of measurement methods and procedures to be applied	For procedures applied, please see Section Error! Reference source not found. Error! Reference source not found.
Frequency of monitoring/recording	Measurement collected upon every monitoring event.
Value monitored	226.5
Monitoring equipment	DBH collected at a height of 1.3 meters using DBH measuring tape. Tree and crown height determined using a clinometer

	with readings taken at a 45-degree angle and corrected for the height of the researcher.
QA/QC procedures to be applied	Care was taken matching scanned field datasheets to electronic spreadsheet copies. Common names were converted to species names post-field work.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	Allometric equations were applied based on descriptions found in Section Error! Reference source not found. Error! Reference source not found..
Comments	Required by VMD0006.

Data / Parameter	CAB_tree,post,i
Data unit	t CO ₂ -e ha ⁻¹
Description	Post-deforestation carbon stock in aboveground tree biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	Values that were applied were taken from the IPCC GPG. See 'calculation method' below for details.
Frequency of monitoring/recording	Measurement collected upon every monitoring event.
Value monitored	14.1 for grassland and 9.5 for agriculture
Monitoring equipment	Values taken from IPCC GPG estimates.
QA/QC procedures to be applied	Calculations checked for quality control.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	Value of 10 was applied based on the steepness of slopes, where land on steep slopes (8,524 ha) were expected to be converted from forests to grasslands (14.1 TCO _{2e} ha ⁻¹) and land on gentle slopes (71,438.6 ha) were to be converted from forests to annual cropland (9.5 TCO _{2e} ha ⁻¹). A value of 10 was determined via: $\frac{14.1 \times 8,524 + 9.5 \times 71,438.6}{79,962.6} = 10.0$
Comments	Required by VMD0006.

Data / Parameter	ΔCAB_tree,i
Data unit	t CO ₂ -e ha ⁻¹

Description	Baseline Carbon Stock change in aboveground tree biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	The value of 202.36 applied here was taken from biomass estimates of all trees less than 45 cm DBH. All trees greater than 45 cm DBH were expected to be used non-commercially. As a result, VMD0011 Estimation of emissions from market-effects (LK-ME) does not apply. Trees greater than 45 cm DBH were also not credited in the long-term wood products pool, conservatively.
Frequency of monitoring/recording	Measurement collected upon every monitoring event.
Value monitored	216.50
Monitoring equipment	<i>Identify equipment used to monitor the data/parameter including type, accuracy class, and serial number of equipment, as appropriate.</i> DBH tape, Clinometer
QA/QC procedures to be applied	Calculations checked internally for quality control.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For procedures applied, please see Section Error! Reference source not found. Error! Reference source not found..
Comments	Required by VMD0006.

Data / Parameter	CBB_tree,i
Data unit	t CO ₂ -e ha ⁻¹
Description	Baseline carbon stock change in belowground tree biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	Table 4.4 from the IPCC Good Practices Guide was used to determine root-to-shoot ratios for tropical moist forests of North and South America. If aboveground biomass of a particular tree was found to represent >125 tC Ha ⁻¹ , a ratio of 0.2845 was used, and if ≤ 125 tC Ha ⁻¹ , a ratio of 0.284 was used.
Frequency of monitoring/recording	Estimates created with every aboveground biomass monitoring event.
Value monitored	64.3
Monitoring equipment	Values based upon IPCC GPG root-to-shoot ratios and estimated aboveground biomass estimates.

QA/QC procedures to be applied	Data sheets and electronic datafiles related to aboveground biomass carefully matched to ensure consistency. Calculations checked to ensure quality.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found.
Comments	Required by VMD0006.

Data / Parameter	CBB_tree,post,i
Data unit	t CO ₂ -e ha ⁻¹
Description	Post deforestation carbon stock in belowground tree biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	N/A
Frequency of monitoring/recording	N/A
Value monitored	0
Monitoring equipment	N/A
QA/QC procedures to be applied	N/A
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	N/A
Comments	Required by VMD0006.

Data / Parameter	$\Delta CBB_{tree,i}$
Data unit	t CO ₂ -e ha ⁻¹
Description	Baseline carbon stock change in belowground tree biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	N/A
Frequency of monitoring/recording	Value determined at every monitoring event.
Value monitored	64.3
Monitoring equipment	N/A

QA/QC procedures to be applied	Calculations reviewed by multiple Terra Global Capital team members.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found..
Comments	Required by VMD0006.

Data / Parameter	CAB_nontree,i,
Data unit	t CO ₂ -e ha ⁻¹
Description	Carbon stock in aboveground non-tree vegetation in the baseline in stratum <i>i</i>
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	Woody non-tree plants such as shrubs/bushes were considered non-tree if they do not have the potential to reach a height of 2 meters and/or a DBH of 5 cm. Collection was completed within 1m diameter subplots by clipping all the plants down to the mineral soil and placing them in a gunnysack. Biomass material was then dried and weighed to estimate biomass. For details on the calculations, please see Error! Reference source not found. Error! Reference source not found..
Frequency of monitoring/recording	Completed at every monitoring event.
Value monitored	0.66
Monitoring equipment	Field wet weight was determined with the use of a spring scale of 1,000g with an attached hook. Final biomass completed within a laboratory setting.
QA/QC procedures to be applied	Data sheets and electronic datafiles related to aboveground biomass carefully matched to ensure consistency. Calculations checked to ensure quality.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found..
Comments	Required by VMD0006.

Data / Parameter	CAB_nontree,post,i,
Data unit	t CO ₂ -e ha ⁻¹
Description	Post-deforestation carbon stock in aboveground non-tree vegetation in stratum <i>i</i>

Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	Post deforestation non-tree vegetation assumed to be zero and expected to be burned. No measurement methods were applied to reach this estimate.
Frequency of monitoring/recording	<i>Specify measurement and recording frequency</i> <i>Reassessed at every monitoring event.</i>
Value monitored	0
Monitoring equipment	N/A
QA/QC procedures to be applied	N/A
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	N/A
Comments	Required by VMD0006.

Data / Parameter	$\Delta CAB_{nontree,i}$
Data unit	t CO ₂ -e ha ⁻¹
Description	Baseline carbon stock change in aboveground non-tree biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	N/A
Frequency of monitoring/recording	To be determined at every monitoring event.
Value monitored	0.66
Monitoring equipment	N/A
QA/QC procedures to be applied	Data sheets and electronic datafiles related to aboveground biomass carefully matched to ensure consistency. Calculations checked to ensure quality.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found..
Comments	Required by VMD0006.

Data / Parameter	$CBB_{nontree,i}$
Data unit	t CO ₂ -e ha ⁻¹
Description	Baseline carbon stock change in belowground non-tree biomass in stratum i

Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	Table 4.4 from the IPCC Good Practices Guide was used to determine root-to-shoot ratios for tropical moist forests of North and South America. If aboveground non-tree biomass was found to represent >125 tC Ha-1, a ratio of 0.2845 was used, and if <= 125 tC Ha-1, a ratio of 0.284 was used.
Frequency of monitoring/recording	Collected at each monitoring event.
Value monitored	0.19
Monitoring equipment	Values based upon IPCC GPG root-to-shoot ratios and estimated aboveground biomass estimates.
QA/QC procedures to be applied	Data sheets and electronic datafiles related to aboveground biomass carefully matched to ensure consistency. Calculations checked to ensure quality.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found.
Comments	Required by VMD0006.

Data / Parameter	CBB_nontree,post,i
Data unit	t CO2-e ha-1
Description	Post deforestation carbon stock change in belowground non-tree biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	No measurement methods applied. Assumed to be zero.
Frequency of monitoring/recording	N/A
Value monitored	0
Monitoring equipment	N/A
QA/QC procedures to be applied	N/A
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	N/A
Comments	Required by VMD0006.

Data / Parameter	$\Delta CBB_nontree,i$
Data unit	t CO2-e ha ⁻¹

Description	Baseline carbon stock change in belowground non-tree biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	N/A
Frequency of monitoring/recording	Available at every monitoring event.
Value monitored	0.19
Monitoring equipment	N/A
QA/QC procedures to be applied	Data sheets and electronic datafiles related to aboveground biomass carefully matched to ensure consistency. Calculations checked to ensure quality.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found..
Comments	Required by VMD0006.

Data / Parameter	CDW,bsl,i
Data unit	t CO ₂ -e ha ⁻¹
Description	Forest carbon stock in litter in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	All downed deadwood with a DBH >5cm was measured on two 25m transects (50m total) for length and diameter, and where relevant the diameter of hollowed portions of the log. Density class determined via in-field observations/decisions. For standing deadwood, DBH and height of all trees >5cm DBH in the entire plot were recorded.
Frequency of monitoring/recording	Recorded at every monitoring event.
Value monitored	Conservatively Excluded
Monitoring equipment	Transect tape, DBH tape, clinometer
QA/QC procedures to be applied	Data sheets and electronic datafiles related to aboveground biomass carefully matched to ensure consistency. Calculations checked to ensure quality.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found.. However, this

	pool was conservatively excluded from calculations due to high uncertainty of estimates.
Comments	Required by VMD0006.

Data / Parameter	ΔCDW_i
Data unit	t CO ₂ -e ha ⁻¹
Description	Baseline carbon stock change in deadwood biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	If not conservatively excluded, post-deforestation deadwood would be considered zero. No measurement methods would be applied.
Frequency of monitoring/recording	Available at every monitoring event.
Value monitored	Conservatively Excluded
Monitoring equipment	N/A
QA/QC procedures to be applied	N/A
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	N/A
Comments	Required by VMD0006.

Data / Parameter	CDW _{post,i}
Data unit	t CO ₂ -e ha ⁻¹
Description	Post-deforestation carbon stock in deadwood biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	N/A; calculated parameter
Frequency of monitoring/recording	Available at every monitoring event.
Value monitored	Conservatively Excluded
Monitoring equipment	N/A; calculated parameter
QA/QC procedures to be applied	Calculations checked for quality assurance.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found. However, this

	pool was conservatively excluded from calculations due to high uncertainty of estimates.
Comments	Required by VMD0006.

Data / Parameter	$\Delta \text{CLI}_{\text{post},i}$
Data unit	t CO ₂ -e ha ⁻¹
Description	Post deforestation carbon stock in deadwood biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	All litter biomass was expected to be removed and burned due to deforestation activities. Thus, this parameter was assumed to be zero post-deforestation.
Frequency of monitoring/recording	N/A
Value monitored	0
Monitoring equipment	N/A; determined <i>ex-ante</i>
QA/QC procedures to be applied	N/A
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	N/A
Comments	Required by VMD0006.

Data / Parameter	CLI _{bsl,i}
Data unit	t CO ₂ -e ha ⁻¹
Description	Forest carbon stock in litter in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	Litter collection was completed within 1m diameter subplots by clipping all the plants down to the mineral soil and placing them in a gunnysack. Biomass material was then dried and weighed to estimate biomass. For details on the calculations, please see Error! Reference source not found. Error! Reference source not found..
Frequency of monitoring/recording	Available upon monitoring.
Value monitored	1.22
Monitoring equipment	Field wet weight was determined with the use of a spring scale of 1,000g with an attached hook. Final biomass competed within a laboratory setting.

QA/QC procedures to be applied	Data sheets and electronic datafiles related to aboveground biomass carefully matched to ensure consistency. Calculations checked to ensure quality.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found..
Comments	Required by VMD0006.

Data / Parameter	ΔCLI_i
Data unit	t CO ₂ -e ha ⁻¹
Description	Baseline carbon stock change in litter in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	N/A; calculated variable
Frequency of monitoring/recording	Available at completion of every monitoring event
Value monitored	1.22
Monitoring equipment	N/A; Calculated variable
QA/QC procedures to be applied	Calculations checked for quality assurance.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found..
Comments	Required by VMD0006.

Data / Parameter	$\Delta CLI_{post,i}$
Data unit	t CO ₂ -e ha ⁻¹
Description	Post deforestation carbon stock in deadwood biomass in stratum i
Source of data	Based on data measured in the field
Description of measurement methods and procedures to be applied	Assumed to be zero post-deforestation. No measurements or procedures were applied.
Frequency of monitoring/recording	Available at each monitoring event
Value monitored	0

Monitoring equipment	N/A
QA/QC procedures to be applied	N/A
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	N/A
Comments	Required by VMD0006.

Data / Parameter	CSOC,bsl,i
Data unit	t CO ₂ -e ha ⁻¹
Description	Forest carbon stock in soil organic carbon in stratum i
Source of data	Based on data measured in the field. See calculations in Section 3.2.1
Description of measurement methods and procedures to be applied	<p>Three mineral soil samples were taken within random positions within each plot, representing exactly 100 cm³ volume.</p> <p>Samples were taken from a depth of 1-10cm, 10-20cm, and 20-30cm and are mixed within one bag per subsample point.</p> <p>%OC was determined by the Environmental Research Institute of the University of Belize via the Walkley-Black Standard operating procedure for soil organic carbon colorimetric method (Global Soil Partnership, 2019).</p>
Frequency of monitoring/recording	Estimates collected at every monitoring event.
Value monitored	505.8
Monitoring equipment	<p>For field: Clean shovel, soil tubes, scale</p> <p>For lab: Deionized water (EC < 1.5*10⁻³dS m⁻¹, Potassium Dichromate (10% (0.34 M)), Sucrose Standard (4 mg C/ml).</p>
QA/QC procedures to be applied	Raw data sheets were compared with electronic copies to ensure consistency. Estimated % organic matter was compared against local peer-reviewed studies to ensure accuracy.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	<p>See information displayed in Error! Reference source not found. Error! Reference source not found.</p> <p>Calculations were based on VMD0006, Estimation of baseline carbon stock changes and greenhouse gas emissions from planned deforestation/forest degradation and planned wetland degradation (BL-PL), v1.3. For more information, please refer to Section Error! Reference source not found. Error! Reference source not found., and the Walkley Black methodology (Global Soil Partnership, 2019) for more information.</p>

Comments	Required by VMD0006.
Data / Parameter	CSOC,post,i
Data unit	t CO ₂ -e ha ⁻¹
Description	Post deforestation carbon stock in soil organic carbon in stratum i
Source of data	Based on data measured in the field. See calculations in 3.2.1
Description of measurement methods and procedures to be applied	Parameter was determined using methodology outlined in VMD0004: Estimation of stocks in soil organic pool (CP-S).
Frequency of monitoring/recording	Estimated ex-ante
Value monitored	293.36
Monitoring equipment	N/A
QA/QC procedures to be applied	N/A
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	For more information, please refer to Error! Reference source not found. or to VMD0004: Estimation of stocks in soil organic pool (CP-S)
Comments	Required by VMD0006.

Data / Parameter	ΔCSOC,i
Data unit	t CO ₂ -e ha ⁻¹
Description	Carbon stock change in soil organic carbon in stratum i
Source of data	Based on data measured in the field. See calculations in Section Error! Reference source not found.
Description of measurement methods and procedures to be applied	Calculated parameter using the VMD0004: Estimation of stock sin soil organic pool (CP-S)
Frequency of monitoring/recording	Available upon monitoring
Value monitored	212.44
Monitoring equipment	N/A
QA/QC procedures to be applied	Raw data sheets were compared with electronic copies to ensure consistency. Estimated % organic matter was compared against local peer-reviewed studies to ensure accuracy.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	Calculated parameter using the VMD0004: Estimation of stock sin soil organic pool (CP-S)

Comments	Required by VMD0006.
Data / Parameter	Asp
Data unit	ha
Description	Area of sample plots in ha
Source of data	Recording and archiving of number and size of sample plots
Description of measurement methods and procedures to be applied	See Section Error! Reference source not found. for further information.
Frequency of monitoring/recording	Verification plan calls for re-inventory no less frequently than every 5 years,
Value monitored	0.0625, total of 61 plots
Monitoring equipment	<i>Identify equipment used to monitor the data/parameter including type, accuracy class, and serial number of equipment, as appropriate.</i>
QA/QC procedures to be applied	QA/QC is completed by third-party verification audits.
Purpose of the data	Calculation of the baseline carbon stock change
Calculation method	See Section Error! Reference source not found. for further information.
Comments	Required by VMD0006.

Data / Parameter	Ht,tree,i,
Data unit	meters
Description	Height of the tree from the ground based on measurements with a clinometer or other device. See monitoring plan for field methods.
Source of data	Field measurements
Description of measurement methods and procedures to be applied	Height recorded with either a range finder or an internal clinometer within a compass. Clinometer readings were completed by looking over the top of the open compass pointing at the top of the tree to be measured. The field researcher then walked away from the tree parallel to the slope, keeping the top of the tree visible. Once the field crew leader is standing at a point where the clinometer reads 45 degrees from the top of the tree, the distance to the tree is recorded. Height of the tree is determined by using triangulation with the inclusion of the field researcher's height.

Frequency of monitoring/recording	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event.
Value monitored	Unique for each measured tree.
Monitoring equipment	Rangefinder, clinometer, transect tape
QA/QC procedures to be applied	Field work was completed with a team of researchers, including a field crew leader, forester assistants, and community workers. It is the field crew leader's responsibility to QAQC field recordings. Raw datafiles and electronic copies were compared carefully to ensure quality control.
Purpose of the data	Calculation of baseline emissions.
Calculation method	Final value determined by measuring the distance between the clinometer wielding field worker, plus their standing height (typically recorded as 1.6m)
Comments	This variable is collected, but not necessary for allometric equation used. This variable is used to validate the allometric equation.

Data / Parameter	DBH,tree,i,
Data unit	cm
Description	Diameter at breast height, defined as 1.3 meters above the ground of each measured tree.
Source of data	Field measurements
Description of measurement methods and procedures to be applied	Values are determined by standard protocols, where the diameter is taken 1.3 meters from the ground. Where the tree is on a slope, DBH is measured from the uphill side. Where the tree is leaning, DBH is taken perpendicular to the tree stem, according to the tree's natural angle. If the tree is forked, DBH is taken just below the fork point. If the tree is forked 1 meter or lower, each trunk is treated as a separate tree. If trees are not 5 cm DBH, they are considered saplings. If the tree has buttresses above 1.3m, DBH is taken above the buttress where the tree takes a cylindrical form.
Frequency of monitoring/recording	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event,
Value monitored	Unique for each individual tree.
Monitoring equipment	DBH tape

QA/QC procedures to be applied	Field work was completed with a team of researchers, including a field crew leader, forester assistants, and community workers. It is the field crew leader's responsibility to QAQC field recordings. Raw datafiles and electronic copies were compared carefully to ensure quality control.
Purpose of the data	Calculation of baseline emissions.
Calculation method	N/A; raw measurement
Comments	Required by methodology

Data / Parameter	Species List
Data unit	Species
Description	List of detected species known to occur, or do currently reside, within the Project Activity Instance.
Source of data	Observations by trained observers.
Description of measurement methods and procedures to be applied	Species common names or scientific names were recorded in the field by local experts.
Frequency of monitoring/recording	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event.
Value monitored	N/A
Monitoring equipment	N/A
QA/QC procedures to be applied	Identification done by local specialists.
Purpose of the data	Used to determine biodiversity impacts.
Calculation method	N/A
Comments	

Data / Parameter	Δ CWPS-REDD
Data unit	tCO ₂ e
Description	Net GHG emissions in REDD project scenario to year t
Source of data	Field based measurements
Description of measurement methods and procedures to be applied	Parameter is estimated using methods and modules related to VM0007; REDD+ Methodology Framework (REDD+MF), v1.6.
Frequency of monitoring/recording	Collected at every monitoring event.
Value monitored	Available at monitoring

Monitoring equipment	All monitoring equipment mentioned in this Section of the report will contribute to the final value of this parameter.
QA/QC procedures to be applied	Carbon pool estimates comprising this parameter have individual QA/QC protocols in place to ensure accuracy. Internal review of carbon quantification models was completed to ensure methodologies reported in VM0007 were correctly calculated.
Purpose of the data	Calculation of project emissions
Calculation method	For more information, please refer to Error! Reference source not found. Error! Reference source not found.
Comments	Based on methodology found in M-REDD

Data / Parameter	<i>Project Forest Cover Monitoring Map</i>
Data unit	N/A
Description	Map showing the location of forest land within the Project Activity Instance at the beginning of each monitoring period. If within the Project Activity Instance some forest land is cleared, the benchmark map must show the deforested areas at each monitoring event
Source of data	Remote sensing in combination with GPS data collected during ground truthing
Description of measurement methods and procedures to be applied	<i>Specify the measurement methods and procedures, any standards or protocols to be followed, and the person/entity responsible for the measurement. Include any relevant information regarding the accuracy of the measurements (e.g., accuracy associated with meter equipment or laboratory tests).</i>
Frequency of monitoring/recording	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event
Value monitored	Available at monitoring
Monitoring equipment	<i>Identify equipment used to monitor the data/parameter including type, accuracy class, and serial number of equipment, as appropriate.</i>
QA/QC procedures to be applied	The minimum map accuracy must be 90% for the classification of forest/non-forest in the remote sensing imagery. If the classification accuracy is less than 90% then the map is not acceptable for further analysis. More remote sensing data and ground truthing data will be needed to produce a product that reaches the 90% minimum mapping accuracy.
Purpose of the data	<i>Indicate one of the following:</i>

	<ul style="list-style-type: none"> • Calculation of baseline emissions. • Calculation of project emissions. • Calculation of leakage.
Calculation method	Where relevant, provide the calculation method, including any equations, used to establish the data/parameter.
Comments	Based on methodology found in M-REDD. Where forest land contains more than one forest class, the map must be stratified into forest classes using Module X-STR.

Data / Parameter	$A_{DefPA,i,u,t}$
Data unit	ha
Description	Area of recorded deforestation in the Project Activity Instance in stratum i converted to land use u in year t
Source of data	Remote sensing imagery
Description of measurement methods and procedures to be applied	Specify the measurement methods and procedures, any standards or protocols to be followed, and the person/entity responsible for the measurement. Include any relevant information regarding the accuracy of the measurements (e.g., accuracy associated with meter equipment or laboratory tests).
Frequency of monitoring/recording	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event
Value monitored	Available at monitoring
Monitoring equipment	Identify equipment used to monitor the data/parameter including type, accuracy class, and serial number of equipment, as appropriate.
QA/QC procedures to be applied	Describe the quality assurance and quality control (QA/QC) procedures to be applied, including the calibration procedures where applicable.
Purpose of the data	Indicate one of the following: <ul style="list-style-type: none"> • Calculation of baseline emissions. • Calculation of project emissions. • Calculation of leakage.
Calculation method	Where relevant, provide the calculation method, including any equations, used to establish the data/parameter.
Comments	Based on methodology found in M-REDD. It is assumed that zero deforestation will occur within the project boundaries. This parameter was set to zero as clear infrastructure, hiring and policies are in place to prevent deforestation.

Data / Parameter	$ADistPA,q,i,t$
Data unit	ha
Description	Area impacted by natural disturbance in the project stratum i converted to natural disturbance stratum q in year t ; ha
Source of data	Remote Sensing imagery combined with ground verification or GPS coordinates
Description of measurement methods and procedures to be applied	<i>Specify the measurement methods and procedures, any standards or protocols to be followed, and the person/entity responsible for the measurement. Include any relevant information regarding the accuracy of the measurements (e.g., accuracy associated with meter equipment or laboratory tests).</i>
Frequency of monitoring/recording	Must be monitored at least every 5 years or if verification occurs on a frequency of less than every 5 years examination must occur prior to any verification event
Value monitored	Available at monitoring
Monitoring equipment	<i>Identify equipment used to monitor the data/parameter including type, accuracy class, and serial number of equipment, as appropriate.</i>
QA/QC procedures to be applied	Minimum monitoring unit shall be equal to a minimum of 11 Landsat pixels or one hectare.
Purpose of the data	<i>Indicate one of the following:</i> <ul style="list-style-type: none"> <i>Calculation of baseline emissions.</i> <i>Calculation of project emissions.</i> <i>Calculation of leakage.</i>
Calculation method	<i>Where relevant, provide the calculation method, including any equations, used to establish the data/parameter.</i>
Comments	Based on methodology found in M-REDD. For <i>Ex ante</i> estimations of emissions from natural disturbances were set to zero.

3.1.3 Monitoring Plan (VCS, 3.16, 3.20)

The monitoring plan for the project has been designed. As part of this plan, the main studies were conducted by a third party for verification (as shown in Figure 2) to gather biomass data that contribute to the impact indicators of the project.

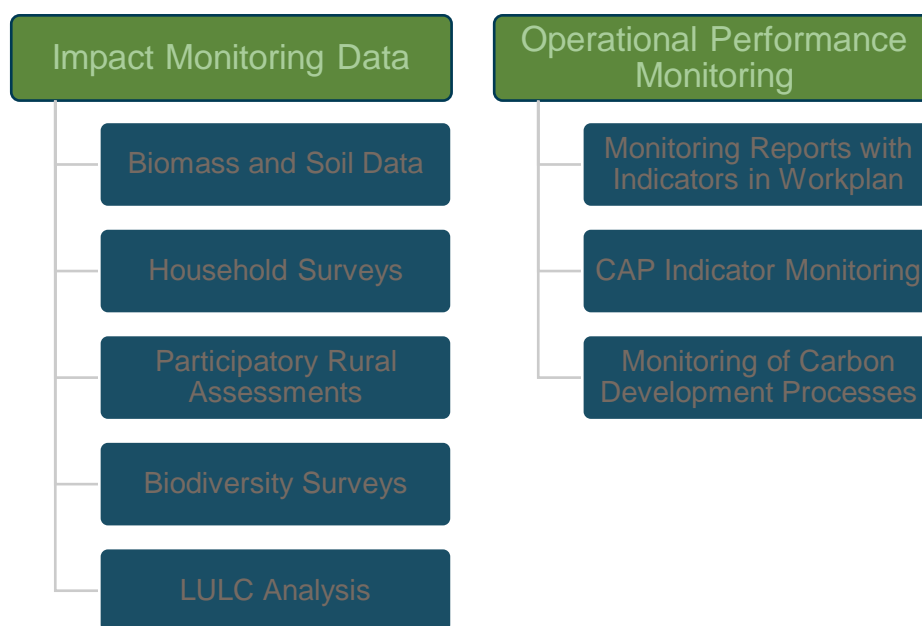


Figure 2. Operational and Impact monitoring reports required as part of the project's monitoring plan.

3.1.3.1 Updating of Strata

During the monitoring period, there were no unexpected disturbances (e.g. due to fire, pests, storms, or disease outbreaks), affecting various parts of an originally homogeneous stratum. Although there were hurricanes and tropical storms that reduced the biomass in the forest, these events were not significant enough to justify a unique stratum as the damage was not uniform. In addition, there were no unplanned forest management activities that affect the existing stratification.

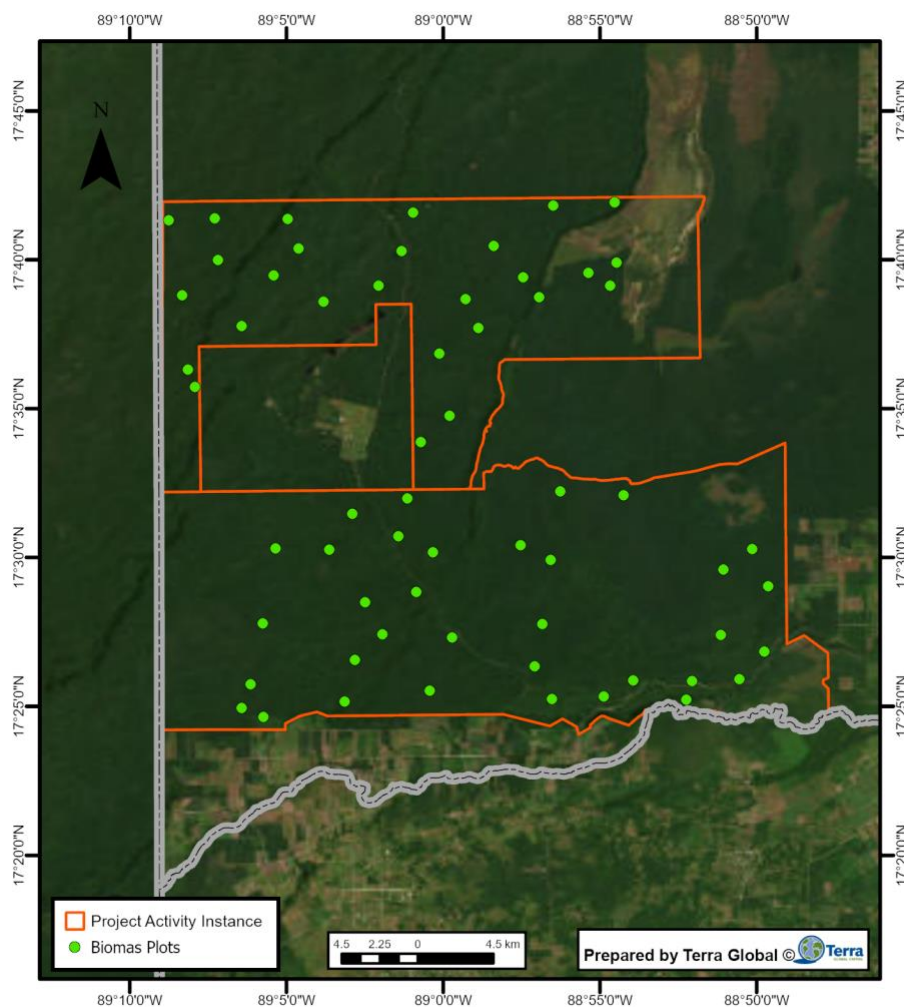
The need for stratification was assessed using Verra module VMD0016: Methods for Stratification of the Project Area (X-STR). This methodology gives insights into both pre-stratification methods (determinants of stratification prior to inventory) and unidentified stratification methods (determination of discrete clusters of plots unidentified prior to inventory). The methodology states "At the project start and whenever biomass stocks are re-measured (i.e., at least every 10 years), the project proponent must demonstrate after inventory that within the project area there are no unidentified (i.e., not previously stratified) discrete clusters of sample plots/points representing >10% of samples in the project area that consistently differ (i.e., each sample plot/point estimate) from the overall project mean by $\pm 20\%$."

Prior to inventory, a potential stratification where hurricane-affected plots would be separated from non-hurricane-affected plots was identified, as hurricane-affected plots could potentially contain >20% lower biomass estimates than non-hurricane affected plots. Based on module X-STR, if each hurricane-affected plot consistently contained biomass estimates > 20% lower than the overall plot average, a new stratum must be delineated. However, upon the collection of biomass inventory, it was discovered that hurricane-affected plots were not each consistently >20% lower than the overall biomass average, and thus hurricane-related strata delineation was not necessary.

Though many plots were estimated to contain >20% less biomass than the overall plot average, no discrete clusters of sample plots – representing >10% of plots in the project area – were discovered upon inventory. Thus, it was determined that no further strata delineations were necessary within this monitoring period.

3.1.3.2 Biomass Plots

The 61 permanent sampling plots were monitored in the second monitoring period. The map and the list below show the location of the biomass plots measured.



Map 3. Biomass Plot Location

Table 11. Locations of re-measured forestry plots used to determine aboveground biomass (in UTM 16 N Zone Q)

PLOT ID	Plot X Coordinates	Plot X Coordinates
1	284161	1952877
2	285651	1939662
3	276688	1928247
4	297616	1954149
5	292337	1953281
6	281231	1936518
7	293185	1931810
8	273738	1946707
9	278253	1953552
10	293705	1927168
11	303468	1935069
12	285497	1954992
13	272368	1957041
14	301277	1927052
15	305717	1929973
16	292740	1929180
17	275144	1954538
18	281073	1951920
19	288083	1944755
20	293238	1952035
21	304303	1928292
22	286121	1933848
23	297553	1957902
24	273097	1952406
25	273372	1947773
26	276430	1950434
27	286188	1957359
28	294099	1957733
29	305984	1934035
30	288107	1931034
31	298308	1928248
32	282545	1938733
33	296040	1953529
34	292041	1936682
35	293696	1935749

PLOT ID	Plot X Coordinates	Plot X Coordinates
36	286814	1927752
37	290690	1955277
38	297259	1952734
39	286446	1943129
40	282606	1929672
41	276171	1926792
42	289770	1950174
43	289068	1951994
44	305108	1936318
45	278170	1936659
46	279678	1955237
47	287552	1948611
48	303274	1931012
49	296610	1927282
50	274999	1957148
51	297854	1939715
52	284145	1931243
53	294307	1940021
54	287061	1936317
55	281971	1927114
56	301611	1928170
57	277426	1932005
58	279093	1957044
59	283190	1933255
60	277367	1926217
61	285139	1937321

Allometric equations and other parameters described in Section 3.1 of the PD were followed. These included measuring aboveground biomass of trees and palms.

Biomass inventories follow a standard operation procedure (SOP) that keeps measurement consistency between field crews and throughout the years of the project. Carbon Pools included in the sampling include:

- Aboveground Live Tree biomass, where trees are greater than or equal to 5cm DBH
- Aboveground Sapling tree biomass, where trees are less than 5cm DBH
- Aboveground Standing Deadwood greater than or equal to 5 cm DBH
- Lying deadwood with a diameter greater than 5 cm
- Non-woody living biomass
- Litter
- Soil organic carbon

The full SOP is available to the VVB.

Carbon stocks are monitored at each verification event. Monitoring of carbon stocks follows procedures outlined in the biomass SOP, where 25x25m monitoring plots are established in order to quantify carbon stocks across strata. A brief summary of the SOP can be found below:

- Live trees with a DBH greater than or equal to 5cm are monitored by determining the species and measuring, height, DBH, crown height, and crown form.
- Saplings are monitored by (i) randomly placing three, 1m radius subplots within each plot, (ii) collecting DBH measurements of all saplings within each subplot, and (iii) counting the total number of saplings within the entire plot.
- Standing deadwood is monitored by collecting the DBH, height, and decomposition class (a number between 1-4) of all samples within the plot.
- Lying deadwood is monitored by using a transect intercept method, where two transects running in the north-south direction are placed 5 meters away from the east and west boundaries of the plot. Where a deadwood sample intersects with these transects, the diameter of the downed deadwood is measured half-way along the length of the sample (if the sample crosses both lines, the sample is only recorded once).
- Non-woody and litter biomass are collected in a similar manner, where (i) 0.5 m radius subplots are established, (ii) non-woody/litter biomass are removed, (iii) wet weights are collected, and (iii) a 100g wet-weight non-woody/litter sample is brought back to the lab to be oven-dried to collect a dry weight.
- Soil organic carbon samples are taken from the center of each subplot, where (i) a small hole (at least 30cm depth) is dug with a clean shovel, (ii) soil sample tubes are used to collect soil samples of 1-10cm, 10-20cm, and 20-30cm depth, (iii) samples are homogenized within one bag, where significant roots are removed from the sample and the % rocks present within the soil are recorded. These samples are then brought back to the lab for bulk density and SOC analysis.

More detailed information can be found in the biomass SOP, and carbon calculations related to each pool can be found in Section 3.2.

3.1.3.3 Plot Measurement Best Practices

Plot measurement best practices were followed to have quality field data. In addition, the Biomass SOP includes QA/QC procedures in the field as well as during the data consolidation process.

3.1.3.4 Field Records

Field records of biomass plots, biodiversity surveys and social surveys were scanned for safekeeping. Field data were transcribed from hard copy into spreadsheets for analysis. Entries on field sheets were done in English and as clearly and legibly as possible avoiding the use of abbreviations or codes unless those codes are clearly delineated on the field sheet. GPS locations, pictures, observer information, date and time, and field conditions were recorded and archived as a component of the field records.

3.1.3.5 Remote Sensing

A forest/non-forest map of the Project Activity Instance was created for the end of the monitoring period to detect any forest loss or to identify new strata (due to unforeseen forest change dynamics). A complete description of the data and methods used to conduct the remote sensing analysis, including the accuracy, can be found in section 3.2.

3.1.3.6 Community Benefits

Community Benefits were monitored and are described in section 4.3.

3.1.3.7 Biodiversity Benefits

Wildlife was observed during the monitoring period following the procedures in section 5.3.

3.1.4 Dissemination of Monitoring Plan and Results (VCS, 3.18; CCB, CL4.2) TBD

3.2 Quantification of GHG Emission Reductions and Removals

3.2.1 Baseline Emissions (VCS, 3.15)

Baseline biomass carbon stocks consisted of the following pools: (1)(a) Aboveground and (b) belowground biomass for live trees (both trees and saplings), (2) Aboveground and belowground non-tree biomass (understory herbaceous biomass), (3) litter biomass, and (4) soil organic carbon (SOC). Although collected in the field, the deadwood biomass uncertainty was found to be significantly higher than 15% at the 95% confidence interval and was thus conservatively excluded (determined via module X-UNC, VMD0017). The calculations of carbon stock for dead wood pool were made available to the validator.

Biomass inventories closely follow the Standard Operating Procedure (SOP), and measurements were conducted by the forestry experts at ERI. The SOP is an official document that will be used to verify that the same measurement techniques will be conducted over time in a replicable manner and includes quality assurance. The biomass plots will be revisited and remeasured in the future, so that carbon increases or decreases will be measured. One stratum was identified in the project area and biomass plot locations were randomly selected within the single strata. The CDM A/R Methodological Tool "Calculation of the number of sample plots for measurements within CDM A/R project activities" Version 2.1.0 or later may be used to identify the number of plots. Sixty-one plots were measured at Validation.

1a) Aboveground live tree biomass

Biomass (MG DM ha⁻¹) for live trees was determined using either a local-specific allometric equation where DBH > 10 cm (Cho, 2013), section 4.4.3, the pan-tropical moist forest biomass model where 5cm < DBH < 10cm (Chave, et al., 2005), or a palm species-specific allometric equation. A list of the allometric equations used, case by case, is provided in the Table 12 (Cho, 2013).

Table 12. Allometric Equations for Aboveground Biomass Calculations

Life Form	Species	Implementation Specifics	Allometric Equations for Biomass (kg)	Source
Palms	<i>Chrysophylla staurocantha</i>	All palms of this species	$AGB_T = 0.182 + 0.498H_T + 0.049H_T^2$	(Brown et al. 2001)
	<i>Attalea cohune</i>	All palms of this species	$AGB_T = 10.856 + 176.76H_T - 6.898H_T^2$	(Brown et al. 2001)

	<i>Sabal mauritiiformis</i>	All palms of this species	$AGB_T = 24.559 + 4.921H_T - 1.017H_T^2$	(Brown et al. 2001)
	<i>Euterpe precatoria</i>	All palms of this species	$AGB_T = 6.666 + 12.826H_T^{0.5} \ln H_T$	(Brown et al. 2001)
Cecropia	<i>Cecropia spp.</i>	All palms of this species	$AGB_T = 12.764 + 0.2588DBH^{2.0515}$	(Pearson et al. 2005)
Non-palms	All non-palm species	Where 5cm>DBH>10cm and height was recorded	$AGB_T = 0.0509 \times \rho DBH^2 H_T$	(Chave, et al., 2005)
Non-palms	All non-palm species	Where 5cm>DBH>10cm, and height was not recorded	$AGB_T = \rho \times \exp(-1.499 + 2.148 \ln(DBH) + 0.207(\ln(DBH^2 - 0.0281 \ln(DBH^3)))$	(Chave, et al., 2005)
Non-palms	All non-palm species	Where 5cm>DBH>10cm and height was recorded	$AGB_T = \frac{\rho \times \exp(-9.480 + 0.975 \ln(DBH^2 H_S))}{1 - (0.723CFI - 0.091)}$	(Cho, 2013)
Non-palms	All non-palm species	Where 5cm>DBH>10cm, and height was not recorded	$AGB_T = \frac{\rho \times \exp(-8.367 + 2.26 \ln(DBH))}{1 - (0.723CFI - 0.091)}$	(Cho, 2013)

Where:

AGB_T = Total aboveground biomass (kg of dry matter)

H_T = Total tree height (m)

H_S = Stem height (m)

DBH = Diameter at Breast Height (cm)

CFI = Dawkins crown form index (crown form / 5)

ρ = Wood density (g/cm³)

Aboveground biomass estimates were converted from [kg] to [MG DM Ha⁻¹], then from [MG DM Ha⁻¹] to [tC Ha⁻¹] using a biomass to carbon fraction of 0.47. The molecular weight conversion of C to CO₂ (44/12) was used to convert to carbon dioxide equivalents (CO_{2e}).

It is a common practice in the region to harvest all trees above 25cm DBH before converting the forest to agriculture or pastureland (salvage logging). The project assumed that in the baseline scenario the landowner would apply for the Salvage Permit, and therefore conservatively excluded the biomass stored in the long-lived wood products resulted from the salvage logging from the aboveground tree biomass pool. The carbon quantification model assumes that the biomass stored on those trees were reduced by wood waste fraction of 0.532 (Cho, 2013) and further reduced by 0.84 the fraction that would be stored in long-lived products (5 to 100y) (Cho, 2013).

Aboveground biomass for saplings was estimated by first sampling DBH values for a set of saplings per plot within stratum i. Aboveground biomass within sampled saplings (AGBs) was then estimated by applying the following allometric equation extracted from table 3 of (Sampaio & Silva, 2005) for tropical saplings with a DBH range of 1-29 cm. Although the original equation was developed for trees/saplings with a DBH of 1-29 cm, it was applied to saplings with a DBH of less than 5 cm:

$$AGB_S = 0.1357 * DBH^{2.413}$$

Where:

AGB_S = Aboveground biomass for each individual sapling subsampled in each plot within stratum I (kg)

DBH = Diameter at Breast Height for each individual sapling subsampled in each plot within stratum i (cm)

AGBs values for each individual tree within a plot were averaged and multiplied by the count of the number of saplings found in the plot.

Ex ante post-deforestation long-term aboveground carbon stock was estimated to be 14.1 tCO₂e ha⁻¹ for rangeland and 9.5 tCO₂e for cropland based on IPCC GPG (IPCCC GPG, 2006). A weighted average based on the suitable areas for the two land uses was applied resulting in 10 tCO₂/ha.

1b) Belowground live tree biomass

Belowground live tree biomass (consisting of live tree and sapling pools) was estimated using root-to-shoot ratios indicated in the CP-AB methodology. Table 4.4 from the IPCC Good Practices Guide was used to determine root-to-shoot ratios for tropical moist forests of North and South America. If aboveground biomass of a particular tree was found to represent >125 tC Ha⁻¹, a ratio of 0.2845 was used, and if ≤ 125 tC Ha⁻¹, a ratio of 0.284 was used.

2) Aboveground and belowground non-tree biomass

Non-tree biomass consisted of understory herbaceous matter. Understory biomass was determined by collecting all understory material within three 0.5-meter radius subplots within each sampling plot. This material was collected in the field (where wet weights were determined, in grams), dried and reweighed (to determine water content (%)) and dry matter biomass, in grams). Similar to belowground live tree biomass, BG non-tree biomass estimates were determined using Table 4.4 from the IPCC Good Practices Guide.

Ex-ante post deforestation non-tree biomass was considered zero Litter.

Litter carbon was estimated using similar methods to non-tree biomass. Litter was collected within three 0.5-meter radius subplots within each sampling plot and dried in the lab to estimate biomass (MG dry matter ha⁻¹).

Ex-ante post deforestation litter biomass was considered zero.

3) Soil Organic Carbon

Soil organic carbon was estimated using VMD0004 version 1, *Estimation of stocks in the soil organic pool* (CP-S). To use this method, three soil samples were collected from each plot. Soil samples were processed by recording the bulk density (g cm⁻³) and calculating percent organic carbon (%OC) from each sample. %OC was determined in lab via the Walkley-Black Standard operating procedure for soil organic carbon colorimetric method (Global Soil Partnership, 2019). For this project, bulk density of soil was determined to be 0.85 g cm⁻³ with an average organic matter of 6.02%. For a %OM comparison of this project to peer reviewed literature, see Table 13 below.

Table 13. Comparison of soil carbon values for this project and other peer-reviewed literature sources

Source	Average reported %OC	Reported Standard Deviation	Reported Mg C ha ⁻¹
Project Estimates	6.02	3.77	137.95
(Delgado-Carranza, Bautista-Zuniga, Calvo-Irabien, Aguilar-Duarte, & Martinez-Tellez, 2007)	14.02	7.09	NA
(Segura-Castruita, Sanchez-Guzman, Ortiz-Solorio, & Gutierrez-Castorena, 2004)	NA	NA	206.2
(Rojas-Garcia, Santoyo-Gomez, Gonzalez-Montiel, Velazquez-Rodriguez, & Pulido-Ponce, 2017)	11.5	6.0	NA

The ex-ante estimation of pre-deforestation stocks of soil organic carbon were calculated via equation 1 VMD0004 (CP-S) v1.0:

$$C_{SOC,sp,i} = C_{SOCsample,sp,i} \times BD_{sample,sp,i} \times Dep_{sample,sp,i} \times 100$$

Where:

$C_{SOC,sp,i}$ = Carbon stock in soil organic carbon for sample plot sp , stratum i ; t C ha⁻¹

$C_{SOCsample,sp,i}$ = Soil organic carbon of the sample in sample plot sp , stratum i ; determined in the laboratory in g C/100g soil (fine fraction <2mm) using the Walkley-Black colorimetric method

$BD_{sample,sp,i}$ = Bulk density of fine (<2mm) fraction of mineral soil in sample plot sp , stratum i ; determined in the laboratory in g fine fraction cm⁻³ total sample volume

$Dep_{sample,sp,i}$ = Depth to which soil sample is collected in sample plot sp in stratum i ; cm

Ex ante estimations of post-deforestation stocks of soil organic carbon depended on the selection of three relative stock change factors (F_{LU} , F_{MG} , and F_I), determined using Table 3.3.4 of the IPCC Good Practices Guide (IPCCC GPG, 2006). For F_{LU} , a value representing long-term cultivated usage for tropical wet forests (0.58). For F_{MG} , a value representing full till for tropical wet forest was applied (1.0). For F_I , a value representing medium inputs for tropical dry/wet forests was applied (1.0). *Ex ante* estimations for post-deforestation stocks of soil organic carbon were calculated via equation 3 VMD0004 (CP-S) v1.0:

$$C_{SOC,PD-BSL,i,t} = C_{SOCi,t=0} \times F_{LU} \times F_{MG} \times F_I$$

Where:

$C_{SOC,PD-BSL,i,t}$ = Mean post-deforestation stock in soil organic carbon in post deforestation baseline stratum i ; t CO_{2e} ha⁻¹

$C_{SOCi,t=0}$ = Mean carbon stock in soil organic carbon for stratum i , at time $t=0$; t CO_{2e} ha⁻¹

F_{LU} = Land use factor after conversion; dimensionless

F_{MG} = Management factor after conversion; dimensionless

F_I = Input factor before or after conversion; dimensionless.

Finally, the baseline carbon stock change in soil organic carbon in stratum i $\Delta C_{SOC,i,BSL}$ was calculated via equation 12 VMD0006 (BL-PL) v1.3:

$$\Delta C_{SOC,i,BSL} = C_{SOC,BSL,i} - C_{SOC,PD-BSL,i}$$

Where:

$\Delta C_{SOC,i,BSL}$ = Baseline carbon stock change in soil organic carbon in stratum i (tCO_{2e} Ha⁻¹)

$C_{SOC,BSL,i}$ = Forest carbon stock in soil organic carbon in stratum i (tCO_{2e} Ha⁻¹)

$C_{SOC,PD-BSL,i}$ = Post deforestation carbon stock in soil organic carbon in stratum i (tCO_{2e} Ha⁻¹)

The total carbon stock and uncertainty per carbon pool can be found in Table 14.

Table 14. Carbon stocks per carbon pool

Carbon Pool	Carbon stock (tCO ₂ /ha)	Uncertainty (%)	Included /Excluded	Post-def carbon stock (tCO ₂ /ha)	Emission Factor (tCO ₂ /ha)
Above ground biomass	226.5	9.3%	Included	10	216.5
Below ground Biomass	64.3	9.3%	Included	0	64.3
Above ground non-tree Biomass	0.66	8.6%	Included	0	0.66
Below ground non-tree biomass	0.19	8.6%	Included	0	0.19
Soil Organic Carbon	505.8	9.8%	Included	293.4	212.4

Litter	1.22	7.6%	Included	0	1.22
Deadwood Biomass	Conservatively excluded				

3.2.2 Project Emissions (VCS, 3.15)

Methods relating to project emissions were completed using the module VMD0015 – Methods for monitoring of GHG emissions and removals within REDD and CIW projects (M-REDD). This module is used to monitor ex-post greenhouse gas emissions and removals of greenhouse gasses due to REDD project activities, with the goal of calculating the net greenhouse gas emissions from REDD project scenarios to year t ($\Delta C_{WPS-REDD}$). This parameter was calculated via equation 1 VMD0015 (M-REDD) v2.2:

$$\Delta C_{WPS-REDD} = \sum_{t=1}^{t*} \sum_{i=1}^M (\Delta C_{P,DeflA,i,t} + \Delta C_{P,Degli,t} + \Delta C_{P,DistPA,i,t} + GHIP-E,i,t - \Delta C_{P,Enh,i,t})$$

Where:

$\Delta C_{WPS-REDD}$ = Net GHG emissions in REDD project scenario to year t, (tCO₂e)

$\Delta C_{P,DeflA,i,t}$ = Net carbon stock change resulting from deforestation within the Project Activity Instance in stratum i in year t, (tCO₂e)

$\Delta C_{P,Deg,i,t}$ = Net carbon stock change resulting from degradation within the Project Activity Instance in stratum i in year t, (tCO₂e)

$\Delta C_{P,DistPA,i,t}$ = Net carbon stock change resulting from natural disturbance in the Project Activity Instance in stratum i in year t (tCO₂e)

$GHGP-E,i,t$ = Greenhouse gas emissions resulting from deforestation/degradation activities within the Project Activity Instance in stratum i in year t (tCO₂e)

$\Delta C_{P,Enh,i,t}$ = Net carbon stock change, resulting from forest growth and sequestration during the project, in areas projected to be forested in the baseline within stratum i in year t (tCO₂e)

The M-REDD module provides all methods and calculations to monitor ex-post GHG emissions and removals due to avoided deforestation and forest degradation, and carbon stock enhancement that has been induced as a result of REDD project implementation within the Project Activity Instance and leakage.

The monitoring focused on the following emissions.

Monitoring Deforestation (M-REDD)

Emissions resulting from any deforestation occurring within the Project Activity Instance ($\Delta C_{P,Def,i,t}$) were monitored.

The method described in section xxx for detecting and mapping deforestation using remotely sensed data was used for all crediting. The net change in carbon stocks as a result of deforestation is equal to the

area deforested multiplied by the emission per unit area, calculated using equations 3 and 4 VMD0015 (M-REDD) v2.2.

$$\Delta C_{P,DefPA,i,t} = \sum_{u=1}^U (A_{DefPA,u,i,t} \times \Delta C_{pools,P,Def,u,i,t})$$

Monitoring areas undergoing natural disturbance (M-REDD)

3.2.3 Leakage Emissions (VCS, 2.5, 3.2, 3.6, 3.15, 4.3)

Leakage was determined by following the methodology described in module “VMD0009 – Estimation of emissions from activity shifting for avoiding planned deforestation/forest degradation and avoiding planned wetland degradation (LK-ASP).” This module was used to estimate GHG emissions caused by market leakage of avoided planned deforestation/degradation projects ($\Delta CLK-AS,planned$), which was calculated via:

3.2.4 GHG Emission Reductions and Carbon Dioxide Removals (VCS, 3.15, 4.1)

State the non-permanence risk rating (%)	
Has the non-permanence risk report been attached as either an appendix or a separate document?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
For ARR and IFM projects with harvesting, state, in tCO ₂ e, the Long-term Average (LTA).	
Has the LTA been updated based on monitored data, if applicable?	<input type="checkbox"/> Yes <input type="checkbox"/> No <i>If no, provide justification.</i>
State, in tCO ₂ e, the expected total GHG benefit to date.	
If a loss occurred (including a loss event or reversal), state the amount of tCO ₂ e lost:	

Vintage period	Baseline emissions (tCO ₂ e)	Project emissions (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Buffer pool allocation (tCO ₂ e)	Reductions VCU (tCO ₂ e)	Removals VCU (tCO ₂ e)	Estimated total VCU issuance
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10 December 2020 to 9 December 2021	1,082,928	-	(177,600)	(108,639)	1,082,928	-	796,688
10 December 2021 to 9 December 2022	1,150,689	-	(188,713)	(115,437)	1,150,689	-	846,539
TOTAL	2,233,616	-	(366,313)	(224,076)	2,233,616	-	1,643,227
Annual Average	1,116,808	-	(183,157)	(112,038)	1,116,808	-	821,613

Vintage period	Ex-ante estimated reductions/ Removals (tCO ₂ e)	Achieved reductions/ Removals (tCO ₂ e)	Percent difference	Explanation for the difference
10 December 2020 to 9 December 2021	1,082,928	1,082,928	0%	The ex-ante and ex-post calculations were performed with the same field data and satellite imagery.
10 December 2021 to 9 December 2022	1,150,689	1,150,689	0%	The ex-ante and ex-post calculations were performed with the same field data and satellite imagery.
Total	2,233,616	2,233,616		

3.3 Optional Criterion: Climate Change Adaptation Benefits

3.3.1 Activities and/or processes implemented for Adaptation (CCB, GL1.3)

4 COMMUNITY

4.1 Net Positive Community Impacts

4.1.1 Community Impacts (CCB, CM2.1) - Done

The communities around Project Activity Instance have been impacted by project activities. Barriers and risks that may prevent benefits from reaching these more marginalized households or vulnerable groups are managed by gathering critical data, such as access to resources in the Project Activity Instance. Terra Global and UB ERI have identified low income and low educational attainment households through a social survey conducted in June of 2022. Through this analysis, we can determine the well-being impacts on these groups more fully and mitigate any negative impacts that occur.

Indicator 1: Climate Smart Farming Practices in BMF Communities

Community Group	Members from the stakeholder communities as well as agricultural communities within adjoining districts
Impact	In collaboration with national partners, increased knowledge sharing and transfer, innovation, and support for sustainable livelihoods, the

	<p>capacity of farmer's knowledge will be targeted in peer-to-peer exchanges, which will allow farmers to share their knowledge with their peers. Proposed activities include farmers exchange and training programs would be developed to promote the use of climate-smart agriculture practices and regenerative agriculture. Model regenerative/climate smart agriculture farms will be identified, or their development assisted during the project.</p> <p>During the first monitoring period, surveys were conducted that identified the gaps in agricultural training and helped inform the needs for training in climate smart farming practices. The following activities were completed. Of farmers surveyed 27% practiced agroforestry; 9% utilize irrigation systems; and 46% use fertilizers. Farmers were mostly trained by the agricultural department of the Government of Belize but this is based on funding, so the frequency of training activities is low. During the next monitoring period, starting in 2023, training activities will commence through the establishment of 3-4 demonstration regenerative agriculture plots.</p>
Type of Benefit/Cost/Risk	The impact was predicted, direct and benefit to these mentioned communities.
Change in Well-being	<p>Well-being indicator 2.1 income levels, variability over time, distribution within society; 4.2 educational level, skills; 1.4 soil, water, rangeland, quality are met with this metric. Please see a comprehensive list of well-being indicators in Section 4.1.3.</p> <p>With an emphasis on reducing the use of pesticides and adoption of regenerative agriculture practices, this indicator contributes to an improvement of natural capital, financial capital and human capital.</p>

Indicator 2: Maintain ecosystems and carbon stock of BMF

Community Group	Members from stakeholder communities and national partners
Impact	<p>The participation in joint patrols and trainings to support the improvement of surveillance and monitoring in BMF and by extension the Selva Maya Landscape in Belize. For this monitoring period, patrols on the property commenced in mid-2021. However, in 2022, these were documented in the Spatial and Monitoring Reporting Tool (SMART). A total of 69 patrols were completed in 2022 and recorded in SMART. These patrols cleared areas around the boundaries of the project area and monitored the types of human activity occurring within the project area boundary. This will also promote information sharing on the illegal activities within the BMF with relevant national partners to support maintenance of predator and prey populations as well as their biological corridors. Proposed activities include training</p>

	<p>community members to support the conservation of resources within the BMF, to preserve the BMF and the HCV sites.</p> <p>During the first monitoring cycle the Conservation Action Plan (CAP) was completed, and 16 preliminary training sessions of staff were conducted to support implementation was completed. The surveillance teams were receiving training on how to identify evidence of human activity at Cara Blanca Pools. The BMFT Community Stewards Program was not yet implemented, and the water quality testing did not begin of select Cara Blanca Pools. During the next project cycle activities outlined in the CAP will be implemented and monitored.</p>
Type of Benefit/Cost/Risk	The impact was predicted, direct and benefit to these mentioned communities.
Change in Well-being	<p>Well-being indicator 4.2 Educational level, skills and 1.5 biodiversity are met with this metric. Please see a comprehensive list of well-being indicators in Section 4.1.3.</p> <p>The capacity building of the project would increase the educational level and monitoring capabilities of the rangers by increasing their knowledge of the species in the BMF and their understanding of the interactions between predator and prey populations. Contributing to the improvement of human capital and natural capital.</p>

Indicator 3: Fire management system in BMF

Community Group	Members from the stakeholder communities and other nearby conservation initiatives/partners
Impact	<p>Belize Maya Forest rangers, local community members and other conservation partners are to be engaged in collaborative fire management activities including dissemination of existing fire threat and weather monitoring tools to determine red flag days for fire; development of fire management SOPs, mapping areas for tactical fire intervention, opening of fire lines and controlled burns, collaboration with neighbors and partners on burn plans and fire safety to prevent escaped fires. Rangers (field crews) will be provided training and equipment (helmets, gloves, protective clothing) to protect from heat related events when managing fire. Capacity building in fire management would reduce the instances of damage to property and loss of resources in the forest areas. This addresses the forest's health (ecological functions of connectivity, high biodiversity, productivity, nutrient cycling, and healthy reproduction) in BMF. During the first monitoring cycle fire management training of the enforcement staff</p>

	began and the fire management plan which provided heat points analysis and outlined fire management actions for the next monitoring cycle was drafted. There were no fire management training activities and/or capacity building sessions with the community members, however during the next project cycle community focused, fire management activities will be implemented in 2023.
Type of Benefit/Cost/Risk	The impact was predicted, direct and benefit to these mentioned communities.
Change in Well-being	<p>Well-being indicator 1.4 Soil, water, rangeland, quality and 1.5 Biodiversity are met with this metric. Please see a comprehensive list of well-being indicators in Section 4.1.3</p> <p>By promoting fire management in the Project Activity Instance, it will reduce the loss of forest and biodiversity due to wildfires in the drought season contributing to improvement of natural capital.</p>

4.1.2 Negative Community Impact Mitigation (VCS, 3.19; CCB, CM2.2)

The Belize Maya Forest REDD+ Project seeks to transition communities nearby from unsustainable natural resource use to sustainable systems. No negative community impacts were observed. A comprehensive description of possible mitigation approaches is described in the following table.

Potential Negative Community Impact	BMFT Mitigation Activity
Increased negative perception of conservation programs restricting subsistence income	<ul style="list-style-type: none"> Awareness programs include building knowledge on ecosystem benefits to conservation activities Training on income generating opportunities Educational scholarships, targeted to include women, will be provided to community members to increase accessibility to income generating opportunities. Access to microgrants and temporary contracts, targeted at including women, will aid community members in attaining subsistence income and/or to implement regenerative agricultural practices to aid in improving their livelihoods.
Negative perception regarding access to areas of high conservation value (HCVs) within project site	<ul style="list-style-type: none"> Eliminating access to the site to reduce illegal activities is necessary. To address concerns on lack of access by communities, BMFT will consult with community members to build their awareness on the impact of the removal of forest resources and work overtime to assist visitation for educational and outreach purposes.
Negative views on converting from traditional agriculture to climate smart agriculture	<ul style="list-style-type: none"> Assist in the development of model farms and/demonstration plots to promote the benefits of climate smart agriculture. Assist the creation or enhancement of value chain partnerships.

4.1.3 Net Positive Community Well-Being (VCS 3.19; CCB, CM2.3, GL1.4) Done

The impact to communities is expected to be positive. Well-being indicators demonstrate how communities' well-being is impacted positively through Program activities based on the results of impact indicators. *Table 15. Well-being indicators considered and link to project's impact indicators.* was adopted from the Sustainable Rural Livelihood (SRL) Framework from *A Framework for Research on Sustainability Indicators for Agriculture and Rural Livelihoods* by Phil Woodhouse, David Howlett and Dan Rigby (Phil Woodhouse, February 2000) and used to demonstrate the significant benefits this project have produced for the local communities. By determining how many communities or households gained access to biodiversity, roads, electricity and water, educational attainment, employment, and higher incomes, we observe an overall positive trend in the well-being indicators being impacted by Project Activities.

The project's community impact indicators are mapped to the Community Well-being Indicators described in the table below and are used to determine the overall well-being impacts on the communities in the Project Activity Instance. By focusing on well-being as defined as natural, physical, human, financial and social capital, we can determine the positive well-being impacts derived from the implementation of Project activities.

Table 15. Well-being indicators considered and link to project's impact indicators.

#	Component of Human Well-being	#	Indicators of Human Well-Being	Map to Community Impact Indicators
1	Natural capital:	1.1	Access to land, water, grazing.	N/A
		1.2	Ownership of herds, trees	N/A
		1.3	Productivity (per unit of land, per unit of water, per unit of inputs)	N/A
		1.4	Soil, water, rangeland, quality	N/A
		1.5	Biodiversity	N/A
2	Financial capital	2.1	Income levels, variability over time, distribution within society	n/a
		2.2	Financial savings, access to credit	N/A
		2.3	Debt levels	N/A
3	Physical capital	3.1	Access to roads, electricity, piped water	Indicator 2, Indicator 4
		3.2	Ownership/access to productive equipment (oxen, tractor, irrigation pump etc.)	Indicator 3
		3.3	Housing quality	Indicator 3
4	Human capital	4.1	Total labor	N/A
		4.2	Educational level, skills	Indicator 2, Indicator 4
		4.3	Health levels	N/A

#	Component of Human Well-being	#	Indicators of Human Well-Being	Map to Community Impact Indicators
5	Social capital	5.1	Membership of organizations	N/A
		5.2	Support from kin, friends	N/A
		5.3	Accountability of elected representation	N/A

Source: (Phil Woodhouse, February 2000)

4.1.4 Protection of High Conservation Values (CCB, CM2.4) - Done

There are sites of special cultural, ecological, economic, religious, and/or spiritual significance present on the Laguna Seca parcel of BMF. These sites include:

- Qualm Hill, the seasonal headquarters of the British Honduras Company and
- Kaxil Uinic, the settlement of Caste War refugees/chiclero camp.

Both of these sites were subject to excavations during the 2015 Chan Chich Archaeological Project. There are also various ancient Mayan sites that have been located, and previous forest management plans and licenses specify that activities near these sites must be regulated in the event they are encountered during implementation.

While there are numerous archaeological sites within the Yalbac parcel of the BMF, the most researched zone is on the southern edge of the Yalbac property. However, Hoyuk and Kaxil vinic are two identified sites that are just south of the boundary with Gallon Jug. San Jose and Mundiejo are two sites in the northeastern portion of the Yalbac (near the border of Laguna Seca). There are likely many more remains undiscovered in the region (Boomsma T. , 2013).

Ancient Mayan sites (plazas, ruins, cenotes, causeways) are very common throughout the area. Historically, looting of Mayan archaeological sites was common. The patrols carried out as a project activity prevent illegal activities and maintain existing high-quality habitats and cultural sites (Terra Global, 2021). Significant conservation areas near the Project Activity Instance include the Rio Bravo Conservation Area, which makes part of the Mesoamerican Biological Corridor, and is considered a Biodiversity Hotspot.

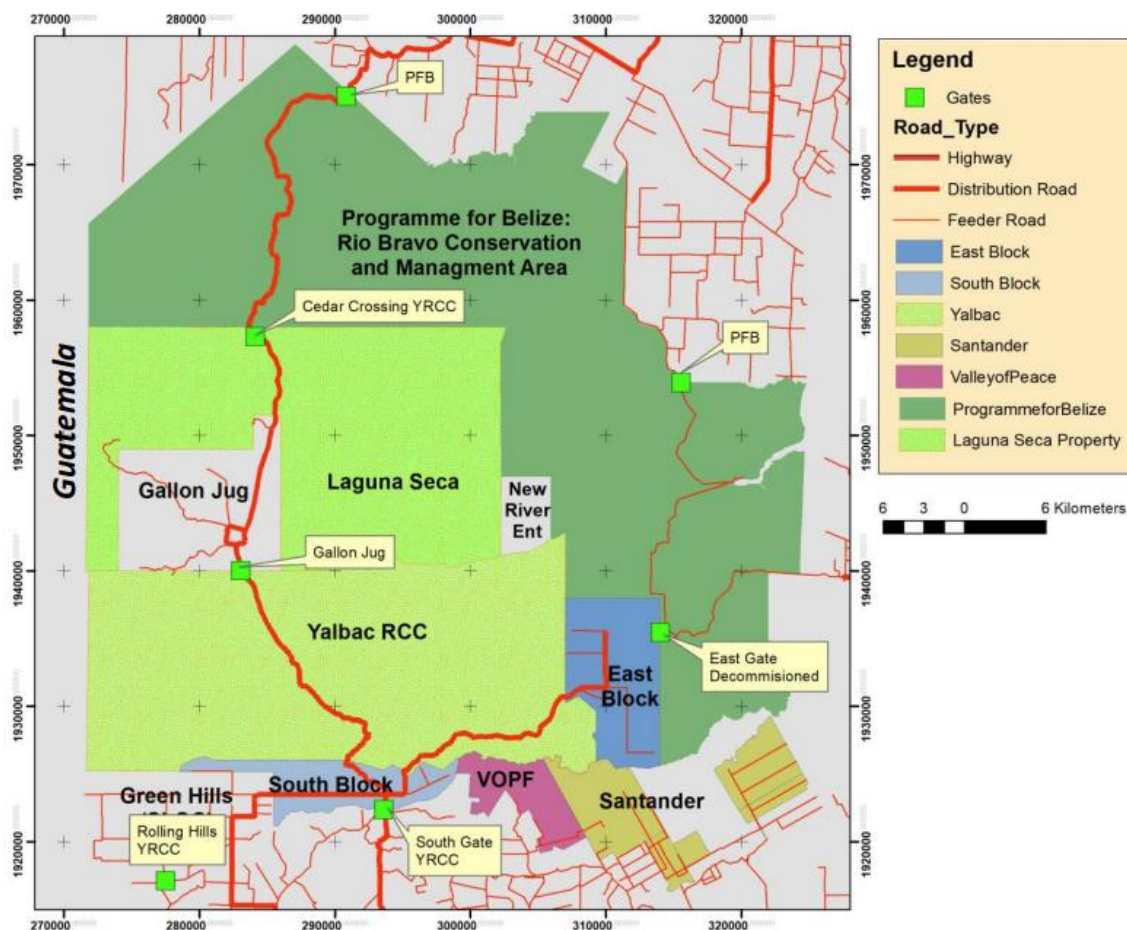
4.2 Other Stakeholder Impacts

4.2.1 Mitigation of Negative Impacts on Other Stakeholders (VCS, 3.18, 3.19; CCB, CM3.2) - Done

BMFT is acquainted with the managers of neighboring private lands, including Gallon Jug farm, Valley of Peace Farms Ltd., Rio Bravo Conservation and Management Area and the Spanish Lookout Community, and is in communication with them, usually by phone and WhatsApp to discuss any issues they may have due to BMFT's activities.

4.2.2 Net Impacts on Other Stakeholders (VCS, 3.18, 3.19; CCB, CM3.3) - Done

The land use activities in the Project Activity Instance will not have a negative impact on the neighboring stakeholders. The project activities will seek to protect the natural resources, including improving watershed quality, biodiversity of tree, plant and animal species, and decrease in illegal activities such as hunting, poaching and timber harvesting, which ultimately provides benefits to neighboring stakeholders and communities (Boomsma, 2019). Map 4: Yalbac and Laguna Seca and Surrounding Landholdings, Access Roads, and Gates, shows the neighboring stakeholders and how the transportation of timber from Laguna Seca could impact these areas.



Map 4: Yalbac and Laguna Seca and Surrounding Landholdings, Access Roads, and Gates

4.3 Community Impact Monitoring

4.3.1 Community Monitoring Plan (CCB, CM4.1, CM4.2, GL1.4, GL2.2, GL2.3, GL2.5) - Done

Community monitoring is described in the Monitoring Plan, which follows adaptive management. The Monitoring Plan was created in parallel with the PD and was disseminated with the PD, in both languages, English and Spanish.

Meetings to present the monitoring plan to the communities involved were held along with the dissemination of the VCS/CCB Project Document. Community members were asked to comment on the monitoring plan and the summary of the PD. In addition, the Monitoring Plan will be made publicly available on the internet.

The monitoring data and reports from operational data were combined to complete the VCS/CCB Monitoring Report. This document was made available to stakeholders and communities following the dissemination process listed in Section 2.3.3. The report will be freely available on the public website www.verra.org.

4.3.2 Monitoring Plan Dissemination (CCB, CM4.3) - Done

All partners in the BMF REDD+ Project work collaboratively on the dissemination of the combined VCS/CCB Monitoring Report. BMFT will distribute the summary of the Monitoring Report and relevant sections of the CCB Monitoring Plan. Participants will be provided with information on the results of Monitoring Reports in the local language and will have the opportunity to solicit feedback.

BMFT will document key information shared during dissemination and notify the communities of the 30-day public comment period and the Verra link for posting public comments. BMFT will also inform communities that they can submit comments privately to the CCB via the website or email. Comments will be gathered during the meetings or submitted directly to the CCB via their website. BMFT will prepare reports with relevant information from the community meetings. All relevant public comments submitted to the CCB during the public comment period will be addressed by the partners. This monitoring plan (and any future updates) will be reviewed by the partners and disseminated to communities and other stakeholders following procedures like the process used for dissemination of VCS+CCB Monitoring Reports.

4.4 Optional Criterion: Exceptional Community Benefits - Done

This project is not seeking exceptional Community Benefits

4.4.1 Short-term and Long-term Community Benefits (CCB, GL2.2)

This section is not applicable.

4.4.2 Marginalized and/or Vulnerable Community Groups (CCB, GL2.4)

This section is not applicable.

4.4.3 Net Impacts on Women (CCB, GL2.5)

This section is not applicable.

4.4.4 Benefit Sharing Mechanisms (CCB, GL2.6)

This section is not applicable.

4.4.5 Governance and Implementation Structures (CCB, GL2.8)

This section is not applicable.

4.4.6 Smallholders/Community Members Capacity Development (CCB, GL2.9)

This section is not applicable.

5 BIODIVERSITY

5.1 Net Positive Biodiversity Impacts

5.1.1 Biodiversity Changes (VCS, 3.19; CCB, B2.1) Done

The project generated net positive impacts on biodiversity within the project activity instance. The project maintained or enhanced high conservation values present in the project zone that are of importance in conserving biodiversity. The biodiversity indicators that were monitored were: 1) Maintain Forest health (ecological functions of connectivity, high biodiversity, productivity, nutrient cycling, and healthy reproduction) in the larger BMF landscape, stabilized predator-prey populations within the BMF, and 2) Reduced contamination in aquatic ecosystems of the BMF and surrounding landscape, particularly the Cara Blanca Pools and Black Creek/Labouring Creek (Belize River).

Indicators of population trends for each HCV were considered a combination of forest health and stabilized predator-prey populations within the BMF as suggested by detections during biodiversity surveys. Maintenance of these species is considered achieved when the habitat is protected, and the species are still detected using the site. The three trigger species, all HCV species as well, are considered highly detectable by tracks/scat, calls, or visibility in the forest. The project is considered effective as these populations continue to be detected by monitoring.

Change in Biodiversity	Forest health (ecological functions of connectivity, high biodiversity, productivity, nutrient cycling, and healthy reproduction) in the larger BMF landscape maintained.
Monitored Change	It is expected to be complete preservation of existing mature forest habitat relative to the baseline scenario of converting the entire Project Activity Instance to corn and beans crops.
Justification of Change	At the time the property was protected, it was on track to be sold for conversion to annual crops and grazing, which would have resulted in large-scale deforestation of the area and loss of habitat for endangered and non-endangered species. The expected revenues from REDD+ gave conservation organizations the financial means to purchase the Project Activity Instance and protect it in perpetuity.

Change in Biodiversity	Stabilized predator-prey populations within the BMF.
Monitored Change	The presence of wildlife species that are commonly hunted are used as a proxy for the effectiveness of anti-poaching activities. These species include Wild cats, Peccary, Pacas, Currasow and Crested Guan. Patrols and arrests related to poaching and other illegal activities occur in the Project Activity Instance.
Justification of Change	Patrol data and anti-poaching information serve as an indicator that there is active monitoring in the Project Activity Instance. The presence of species listed above in the Project Activity Instance were indicators that the anti-poaching activities have been effective. Regular patrols ensured that the number of incidences of undetected poaching decreased and indicated that over time absolute poaching was reduced.

Change in Biodiversity	Reduced contamination in aquatic ecosystems of the BMF and surrounding landscape, particularly the Cara Blanca Pools and Black Creek/Labouring Creek (Belize River).
Monitored Change	Key waterways for people and agriculture will be targeted for improvement through protection and restoration.
Justification of Change	The number of acres maintained or restored adjacent to creeks and pools, diversity of water insects and changes in physical and chemical parameters in select pools such as turbidity and pH serve as indicators to measure the reduction of contamination of the aquatic ecosystems.

5.1.2 Mitigation Actions (VCS, 3.19; CCB, B2.3)

This program is expected to have a positive effect on biodiversity in the Project Activity Instance and its surroundings beyond the life of the project. During the Monitoring Period, no logging took place in the Project Activity Instance, and there were no observed negative impacts to biodiversity. Monitoring efforts have also been implemented to ensure that the project activities result in positive impacts to biodiversity. A total of 69 patrols have been carried out on a routine basis to reduce instances of biodiversity loss.

These patrols covered 2705.98 km throughout the project area and monitored the sightings of flora and fauna species and accounted for 482-man hours of activity (Appendix 2).

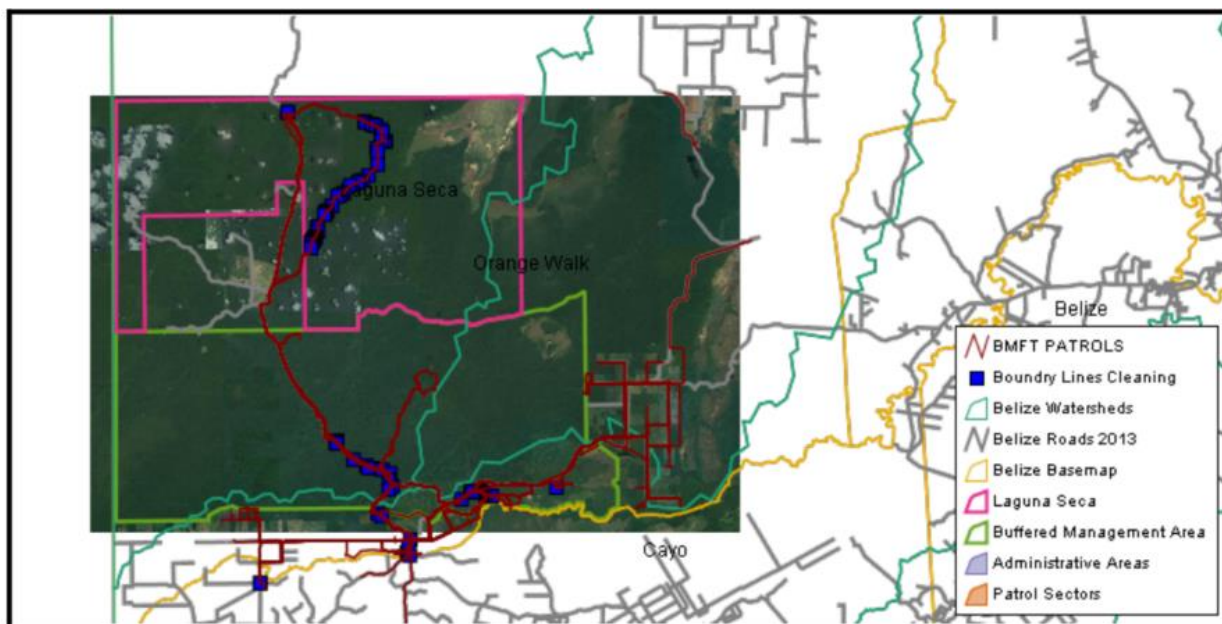


Figure 3: Patrols in BMF 2021-2022

As defined in the Project Document, the Project Activity Instance itself is an area of High Conservation Value, the removal of the threat to clearing for agriculture significantly enhances the biodiversity in the Project Activity Instance and Project Zone. Regarding the precautionary principle, the program would expect a nearly 100% loss in biodiversity in the without-project scenario. Therefore, the main objective of the program is to protect the forest.

The three most critical threats to biodiversity in Belize Maya Forest are hunting, pesticide contamination and sedimentation, and deforestation/clearing of riparian buffers.

Actions to mitigate these threats fall into three strategic conservation objectives, that are listed within BMFT's conservation action plan and relate to the project's activities:

1. By 2023 prevent wildfire incidence in the broadleaf forests of the BMF and by 2025 improve fire use in the surrounding landscape.
2. Maintain stable predator-prey populations within the BMF.
3. By 2027 reduce contamination in aquatic ecosystems of the BMF and surrounding landscape, particularly the Cara Blanca Pools and Black/Creek/Labouring Creek (Belize River)
4. A more detailed set of BMFT's conservation goals and mitigation measures that relate to this project and that correspond to the above mentioned three objectives, is presented below in Table 16.

Table 16. Conservation Goals and Mitigation Measures

Potential negative impact	Conservation objective	Mitigation Measure
Hunting	Build awareness, knowledge, and capacity on effects of illegal wildlife trade on prey- predator populations	<ul style="list-style-type: none"> • Conduct regular anti-poaching patrols including joint patrols and document using the Spatial Monitoring and Reporting Tool (SMART) • Obtain support for consistent SMART training for rangers to improve SMART documentation • Develop awareness materials on the importance of maintaining stable predator-prey populations and initiatives to reduce the illegal wildlife trade • Build wildlife protection and education into a BMFT Community Stewards Program
Hunting	Increase programmatic synergies with local, national, and regional stakeholders to reduce illegal wildlife trade	<ul style="list-style-type: none"> • Maintain information flow through regular communication with all relevant partners • Participate in joint trainings with partners
Forest fire	Increase awareness and knowledge of fire impact and fire management	<ul style="list-style-type: none"> • Determine key target audiences • Develop new and/or repurpose existing awareness and outreach materials • Develop and implement a dissemination strategy
Forest fire	Develop a fire alert system for key stakeholders based on monitoring of weather and fires	<ul style="list-style-type: none"> • Identify/add stakeholders and preferred medium for communication • Use existing fire threat models and weather monitoring to determine red flag days • Collaborate with neighbors on permitting system, burn plans, safety for agricultural fires
Forest fire	Build capacity for fire management and response within BMFT and key stakeholders	<ul style="list-style-type: none"> • Within BMF, map areas for tactical fire intervention • Purchase fire response equipment for BMFT • Organize key training for BMFT Rangers and key stakeholders • Build fire education and management into a BMFT Community Stewards Program
Contamination in aquatic ecosystems	Maintain and restore the forests adjacent to the Cara Blanca Pools	<ul style="list-style-type: none"> • Meet with landowners adjacent to the Cara Blanca Pools to discuss adequate buffers to the pools through sustainable development practices or maintaining forested lands
Contamination in aquatic ecosystems	Improve climate smart farming practices in BMF communities through knowledge sharing and transfer, innovation, and support for sustainable livelihoods	<ul style="list-style-type: none"> • Collaborate with partners to identify regenerative agriculture programs on best practices • Organize farmer-farmer knowledge and practice exchanges • Support the maintenance and/or development of model farms in stakeholder communities

Potential negative impact	Conservation objective	Mitigation Measure
Contamination in aquatic ecosystems	Facilitate livelihood opportunities around industries that do not use pesticides	<ul style="list-style-type: none"> Involve women in sustainable income generation from non-pesticide intensive trades

5.1.3 Net Positive Biodiversity Impacts (CCB, B2.2, GL1.4) To complete table

In the absence of this Project, the forests of the Project Activity Instance would have been cleared for the production of agricultural crops and grazing. The clearing of these forests would have eliminated the habitat for nearly all of the terrestrial animals residing in the Project Activity Instance and severely decrease the habitat within the project zone, including those that are considered to be at-risk by the IUCN. This action would have had adverse impacts on local biodiversity and would have eliminated corridors allowing species to travel between different sites across the Selva Maya, resulting in a reduced genetic interchange between surrounding protected areas. The loss of native vegetation and local fauna would have severely degraded the value of riparian corridors within the property and impacted the nutrient composition of the soils, as well as increased erosion and run-off. The Project Activity Instance is part of the Selva Maya and is the largest continuous expanse of tropical rainforest in the Americas after the Amazon (Olivet & Asquith, 2004), connecting the Maya Biosphere reserve with the Rio Bravo Conservation and Management Area. The Project site resides within the Mesoamerican Biological Corridor (Meerman & Sabido, 2001) and is part of a Conservation International Biodiversity Hotspot (Olivet & Asquith, 2004). The Project Activity Instance is also included within a Key Biodiversity Area (Meerman, Establishing a Baseline to Monitor Species and Key Biodiversity Areas in Belize., 2007).

Conserving the Project Activity Instance had overwhelming positive biodiversity benefits, on and off-site. Preserving this undisturbed habitat also allowed for species to migrate north and access other habitats as they adapt to a changing climate.



Photo 2. Many sightings of Baird's tapir (*Tapirus bairdii*) an IUCN Endangered species within the Project Activity

Species and habitat	<i>Demonstrate that the project will not adversely impact habitats for rare, threatened, or endangered species.</i>
...	...

5.1.4 High Conservation Values Protected (CCB, B2.4)

The entire Project Activity Instance constitutes a high conservation value due to the vulnerable species that utilize the entire Project Activity Instance as a habitat.

The purpose of the Project is to enhance and protect the forest resources that would be eliminated in the absence of the project. Therefore, HCV areas will not be negatively affected by the Project. Project Activity Instance is a critical ecosystem for endangered species. These areas of environmental, biological, and/or rare ecosystem significance are expected to proliferate during the Project lifetime and beyond its end. Communities have agreed to support conservation, monitoring, and surveying the protected area which will ensure that they won't be negatively impacted.

Moreover, the greater Belize Maya Forest is home to various wildlife species including species of concern which are considered Endangered, Vulnerable or Near Threatened according to IUCN (see Table 17). Endangered and Vulnerable species are those species threatened with global extinction while Near Threatened are species that are close to the threatened thresholds, especially where ongoing conservation measures are lacking.

Table 17. Species of Concern Present in the Greater BMF

Common Name	Scientific Name	IUCN Status	Observed in Project Activity Instance
Baird's Tapir	<i>Tapirus bairdii</i>	Endangered	Yes: UB ERI survey; Virginia Tech survey
Geoffroy's Spider Monkey	<i>Ateles geoffroyi</i>	Endangered	Yes: past biodiversity surveys like Miller
Yucatan Black Howler Monkey	<i>Alouatta pigra</i>	Endangered	Yes: past biodiversity surveys like Miller
Great Curassow	<i>Crax rubra</i>	Vulnerable	Yes: UB ERI survey; Virginia Tech survey
White-Lipped Peccary	<i>Tayassu pecari</i>	Vulnerable	Yes: UB ERI survey; Virginia Tech survey
Great Tinamou	<i>Tinamus major</i>	Near Threatened	Yes: UB ERI survey
Ocellated Turkey	<i>Meleagris ocellata</i>	Near Threatened	Yes: UB ERI survey; Virginia Tech survey

Common Name	Scientific Name	IUCN Status	Observed in Project Activity Instance
Jaguar	<i>Panthera onca</i>	Near Threatened	Yes: UB ERI survey; Virginia Tech survey
Margay	<i>Leopardus wiedii</i>	Near Threatened	Yes: Virginia Tech survey

Although there are some differences, many of these species share similar habitat preferences and are affected by similar threats. The primary threat is habitat loss for all of these species but there are other threats that could potentially affect their presence and population size within the Project Activity Instance, should it become unprotected.

5.1.5 Species Used (VCS, 3.19; CCB, B2.5, 2.6) Done

No species are planned to be used by this project.

Species introduced	Classification	Justification for use	Adverse effects and mitigation
NONE	N/A	N/A	There were no species planted in this project

5.1.6 Invasive Species (VCS, 3.19; CCB, B2.5) Done

This project supports the protection of native forests. Any replanting would be of native species that are not invasive.

Existing invasive species	Mitigation measures to prevent spread or continued existence of invasive species
NONE	N/A

5.1.7 GMO Exclusion (CCB, B2.7) Done

No genetically modified organisms were included in this Project design or activities during the monitoring period including that no genetically modified trees were planted.

5.1.8 Inputs Justification (VCS, 3.19; CCB, B2.8) Done

Name	None
Justification of Use	N/A
Adverse Effect	There were no inputs used in this project.

5.2 Offsite Biodiversity Impacts

5.2.1 Negative Offsite Biodiversity Impacts (CCB, B3.1) and Mitigation Actions (CCB, B3.2) Done

The Project did not anticipate any offsite negative biodiversity impacts. Offsite impacts were expected to be positive since larger habitat and forest areas will improve the long-term viability of populations offsite through connectivity of off-site habitats on surrounding conservation lands. Since no negative impacts were identified, there is no need to design mitigation actions.

Negative Offsite Impact	Mitigation Measure(s)
NONE	N/A

5.2.2 Net Offsite Biodiversity Benefits (VCS, 3.19; CCB, B3.3) Done

The Project Activity Instance connects the Maya Biosphere Reserve with the Rio Bravo Conservation and Management Area, creating continuous forest cover across a biodiverse natural area, which is trinational. Outside of the Project Zone, monocultures of annual crops have very low biodiversity and little wildlife presence at all. In the without-project scenario, the Project Activity Instance would have had similar conditions to areas outside of the Project Zone. This demonstrates that the net effects of the project on biodiversity are positive.

The Project Activity Instance resides within the Mesoamerican Biological Corridor (Meerman & Sabido, 2001), allowing species to travel between different sites across the Selva Maya, allowing genetic interchange, and supporting high levels of species richness, many of which fall within the category of Vulnerable and above in the IUCN Red List of Endangered Species. Conserving the Project Activity Instance has overwhelming positive biodiversity benefits, on and off-site.

5.3 Biodiversity Impact Monitoring

5.3.1 Biodiversity Monitoring Plan (CCB, B4.1, B4.2, GL1.4, GL3.4) Done

Biodiversity monitoring is described in the Monitoring Plan. The Monitoring Plan was created in parallel with this PD and was disseminated with the PD, in both languages, English and Spanish.

Biodiversity monitoring is divided between impact and operational indicators. Data to report on impact was collected through a Biodiversity Assessment which gathered data on the presence of wildlife species (birds, mammals), especially of IUCN important ones, mainly with the use of camera traps and bird surveys. Biodiversity surveys took place during two time periods and were conducted to gather data during the wintering season in late February and migratory season in early April. A total of 20 points were established in the lower and upper BMF on existing roads (old logging roads), which were surveyed from February 22nd-25th, 2022 and from April 5th-8th, 2022. Five points were surveyed each day to be able to complete all 20 points in each survey period due to the need for replication of survey of points and the set period to survey all points.

5.3.1.1 Results for Bird species

A total of 143 species of birds were found in the projects area. The species *Crax rubra* is classified as vulnerable on the IUCN list (Table 42). Camera trap rates were also reported for bird species observed with camera traps in the Project Activity Instance. This data can provide species detection, as well as provide a general observation of population levels (Table 18).

Table 18. List of Bird Species Found in the BMF

Common name	Scientific Name	Family	IUCN category	Endemic (Yes/No)
Rufous-tailed Hummingbird	<i>Amazilia tzacatl</i>	Trochilidae	LC	No
White-fronted Parrot	<i>Amazona albifrons</i>	Psittacidae	LC	No
Red-lored Parrot	<i>Amazona autumnalis</i>	Psittacidae	LC	No
Mealy Parrot	<i>Amazona farinosa</i>	Psittacidae	NT	No
Yellow-billed Cacique	<i>Amblycercus holosericeus</i>	Icteridae	LC	No
Russet-naped Wood Rail	<i>Aramides albiventris</i>	Rallidae	LC	No
Green-backed Sparrow	<i>Arremonops chloronotus</i>	Passerellidae	LC	No
Bright-rumped Attila	<i>Attila spadiceus</i>	Tyrannidae	LC	No
Cattle Egret	<i>Bubulcus ibis</i>	Ardeidae	LC	No
Great Black Hawk	<i>Buteogallus urubitinga</i>	Accipitridae	LC	No
Pale-billed Woodpecker	<i>Campephilus guatemalensis</i>	Picidae	LC	No
Black-faced Grosbeak	<i>Caryothraustes polioaster</i>	Carnidalidae	LC	No
Chestnut-colored Woodpecker	<i>Celeus castaneus</i>	Picidae	LC	No
Red-capped Manakin	<i>Ceratopipra mentalis</i>	Pipridae	LC	No
Dusky Antbird	<i>Cercamocroides tyrannina</i>	Thamnophilidae	LC	No
Vaux's Swift	<i>Chaetura vauxi</i>	Apodidae	LC	No
White-bellied Emerald	<i>Chlorestes candida</i>	Trochilidae	LC	No
Blue Ground Dove	<i>Claravis pretiosa</i>	Columbidae	LC	No
Golden-olive Woodpecker	<i>Colaptes rubiginosus</i>	Picidae	LC	No
Eastern Wood-Pewee	<i>Contopus virens</i>	Tyrannidae	LC	No
Great Curassow	<i>Crax rubra</i>	Cracidae	VU	No
Slaty-breasted Tinamou	<i>Crypturellus boucardi</i>	Tinamidae	LC	No
Little Tinamou	<i>Crypturellus soui</i>	Tinamidae	LC	No
Paca	<i>Cuniculus paca</i>	Cuniculidae	LC	No
Red-legged Honeycreeper	<i>Cyanerpes cyaneus</i>	Thraupidae	LC	No
Blue-black Grosbeak	<i>Cyanocopsa cyanoides</i>	Cardinalidae	LC	No
Blue Bunting	<i>Cyanocopsa parellina</i>	Cardinalidae	LC	No
Tawny-winged Woodcreeper	<i>Dendrocincla anabatina</i>	Furnariidae	LC	No

Common name	Scientific Name	Family	IUCN category	Endemic (Yes/No)
Ruddy Woodcreeper	<i>Dendrocincla homochroa</i>	Furnariidae	LC	No
Northern Barred-Woodcreeper	<i>Dendrocolaptes sanctithomae</i>	Furnariidae	LC	No
Pheasant Cuckoo	<i>Dromococcyx phasianellus</i>	Cuculidae	LC	No
Smoky-brown Woodpecker	<i>Dryobates fumigatus</i>	Cuculidae	LC	No
Lineated Woodpecker	<i>Dryocopus lineatus</i>	Picidae	LC	No
Gray Catbird	<i>Dumetella carolinensis</i>	Mimidae	LC	No
Yellow-bellied Flycatcher	<i>Empidonax flaviventris</i>	Tyrannidae	LC	No
Gray-headed Tanager	<i>Eucometis penicillata</i>	Thraupidae	LC	No
Olive-backed Euphonia	<i>Euphonia gouldi</i>	Fringillidae	LC	No
Yellow-throated Euphonia	<i>Euphonia hirundinacea</i>	Fringillidae	LC	No
Olive-throated Parakeet	<i>Eupsittula nana</i>	Psittacidae	NT	No
Mayan Antthrush	<i>Formicarius moniliger</i>	Formicariidae	LC	No
Rufous-tailed Jacamar	<i>Galbula ruficauda</i>	Galbulidae	LC	No
Kentucky Warbler	<i>Geothlypis formosa</i>	Parulidae	LC	No
Ruddy Quail-Dove	<i>Geotrygon montana</i>	columbidae	LC	No
Wedge-billed Woodcreeper	<i>Glyphorhynchus spirurus</i>	Furnariidae	LC	No
Gray-throated Chat	<i>Granatellus sallaei</i>	Parulidae	LC	No
Red-throated Ant-Tanager	<i>Habia fuscicauda</i>	Cardinalidae	LC	No
Red-crowned Ant-Tanager	<i>Habia rubica</i>	Cardinalidae	LC	No
Double-toothed Kite	<i>Harpagus bidentatus</i>	Accipitridae	LC	No
White-breasted Wood-wren	<i>Henicorhina leucosticta</i>	Troglodytidae	LC	No
Laughing Falcon	<i>Herpetotheres cachinnans</i>	Falconidae	LC	No
Wood Thrush	<i>Hylocichla mustelina</i>	Turdidae	LC	No
Tody Motmot	<i>Hylomanes momotula</i>	Momotidae	LC	No
Yellow-breasted Chat	<i>Icteria virens</i>	Icteridae	LC	No
Baltimore Oriole	<i>Icterus galbula</i>	Icteridae	LC	No
Black-cowled Oriole	<i>Icterus prosthemelas</i>	Icteridae	LC	No
Black-throated Shrike-Tanager	<i>Lanio aurantius</i>	Thraupidae	LC	No
Tennessee Warbler	<i>leiothlypis peregrina</i>	Parulidae	LC	No
Ocelot	<i>Leopardus pardalis</i>	Felidae	LC	No
Margay	<i>Leopardus wiedii</i>	Felidae	NT	No
Gray-headed Kite	<i>Leptodon cayanensis</i>	Accipitridae	LC	No
Sepia-capped Flycatcher	<i>Leptopogon amaurocephalus</i>	Tyrannidae	LC	No
Gray-headed Dove	<i>Leptotila plumbeiceps</i>	columbidae	LC	No

Common name	Scientific Name	Family	IUCN category	Endemic (Yes/No)
White-tipped Dove	<i>Leptotila verreauxi</i>	columbidae	LC	No
White-whiskered Puffbird	<i>Malacoptila panamensis</i>	Bucconidae	LC	No
White-collared Manakin	<i>Manacus candei</i>	Pipridae	LC	No
Boat-billed Flycatcher	<i>Megarynchus pitangua</i>	Tyrannidae	LC	No
Black-cheeked Woodpecker	<i>Melanerpes pucherani</i>	Picidae	LC	No
Ocellated Turkey	<i>Meleagris ocellata</i>	Phasianidae	NT	No
Barred Forest-Falcon	<i>Micrastur ruficollis</i>	Falconidae	LC	No
Collared Forest-Falcon	<i>Micrastur semitorquatus</i>	Falconidae	LC	No
Dot-winged Antwren	<i>Microrhopias quixensis</i>	Thamnophilidae	LC	No
Black-and-white Warbler	<i>Mniotilta varia</i>	Parulidae	LC	No
Lesson's Motmot	<i>Momotus lessonii</i>	Momotidae	LC	No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	Tyrannidae	LC	No
Dusky-capped Flycatcher	<i>Myiarchus tuberculifer</i>	Tyrannidae	LC	No
Yucatan Flycatcher	<i>Myiarchus yucatanensis</i>	Tyrannidae	LC	No
Sulphur-rumped Flycatcher	<i>Myiobius sulphureipygius</i>	Tityridae	LC	No
Sulphur-bellied Flycatcher	<i>Myiodynastes luteiventris</i>	Tyrannidae	LC	No
Social Flycatcher	<i>Myiozetetes similis</i>	Tyrannidae	LC	No
Unknown bird spp.	N/A	N/A	N/A	N/A
Common Pauraque	<i>Nyctidromus albicollis</i>	Caprimulgidae	LC	No
Spotted Wood-Quail	<i>Odontophorus guttatus</i>	Odontophoridae	LC	No
Northern Bentbill	<i>Oncostoma cinereigulare</i>	Tyrannidae	LC	No
Yellow-bellied Tyrannulet	<i>Ornithion semiflavum</i>	Tyrannidae	LC	No
Plain Chachalaca	<i>Ortalis vetula</i>	Cracidae	LC	No
Gray-collared Becard	<i>Pachyramphus major</i>	Tyrannidae	LC	No
Lesser Greenlet	<i>Pachysylvia decurtata</i>	Vireonidae	LC	No
Wedge-tailed Sabrewing	<i>Pampa curvipennis</i>	Trochilidae	LC	No
Lesser Swallow-Tailed Swift	<i>Panyptila cayennensis</i>	Apodidae	LC	No
Red-billed Pigeon	<i>Patagioenas flavirostris</i>	columbidae	LC	No
Short-billed Pigeon	<i>Patagioenas nigrirostris</i>	columbidae	LC	No
Scaled Pigeon	<i>Patagioenas speciose</i>	columbidae	LC	No
Crested Guan	<i>Penelope purpurascens</i>	Cracidae	LC	No
Long-billed Hermit	<i>Phaethornis longirostris</i>	Trochilidae	LC	No
Stripe-throated Hermit	<i>Phaethornis striigularis</i>	Trochilidae	LC	No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	Cardinalidae	LC	No
Spot-breasted Wren	<i>Pheugopedius maculipectus</i>	Troglodytidae	LC	No

Common name	Scientific Name	Family	IUCN category	Endemic (Yes/No)
Gray-crowned Warbler	<i>Phylloscopus tephrocephalus</i>	Phylloscopidae	LC	No
Squirrel Cuckoo	<i>Piaya cayana</i>	Cuculidae	LC	No
White-crowned Parrot	<i>Pionus senilis</i>	Psittacidae	LC	No
Rose-throated Tanager	<i>Piranga roseogularis</i>	Cardinalidae	LC	No
Summer Tanager	<i>Piranga rubra</i>	Cardinalidae	LC	No
Stub-tailed Spadebill	<i>Platyrhynchus cancrominus</i>	Tyrannidae	LC	No
Slate-headed Tody-Flycatcher	<i>Poecilotriccus sylvia</i>	Tyrannidae	LC	No
White-browed Gnatcatcher	<i>Polioptila bilineata</i>	Polioptilidae	LC	No
Gray-breasted Martin	<i>Progne chalybea</i>	Hirundinidae	LC	No
Purple Martin	<i>Progne subis</i>	Hirundinidae	LC	No
Brown Jay	<i>Psilorhinus morio</i>	Corvidae	LC	No
Collared Aracari	<i>Pteroglossus torquatus</i>	Ramphastidae	LC	No
Brown-hooded Parrot	<i>Pyrilia haematotis</i>	Psittacidae	LC	No
Keel-billed Toucan	<i>Ramphastos sulfuratus</i>	Ramphastidae	LC	No
Long-billed Gnatwren	<i>Ramphocaenus melanurus</i>	Polioptilidae	LC	No
Eye-ringed Flatbill	<i>Rhynchocyclus brevirostris</i>	Tyrannidae	LC	No
Rufous Mourner	<i>Rhytipterna holerythra</i>	Tyrannidae	LC	No
Roadside Hawk	<i>Rupornis magnirostris</i>	Accipitridae	LC	No
Black-headed Saltator	<i>Saltator atriceps</i>	Thraupidae	LC	No
Northern Schiffornis	<i>Schiffornis veraepacis</i>	Tityridae	LC	No
Scaly-throated Leaf-tosser	<i>Sclerurus guatemalensis</i>	Furnariidae	LC	No
Ovenbird	<i>Seiurus aurocapilla</i>	Parulidae	LC	No
Hooded Warbler	<i>Setophaga citrina</i>	Parulidae	LC	No
Magnolia Warbler	<i>Setophaga magnolia</i>	Parulidae	LC	No
Chestnut-sided Warbler	<i>Setophaga pensylvanica</i>	Parulidae	LC	No
American Redstart	<i>Setophaga ruticilla</i>	Parulidae	LC	No
Black-throated Green Warbler	<i>Setophaga virens</i>	Parulidae	LC	No
Olivaceous Woodcreeper	<i>Sittasomus griseicapillus</i>	Furnariidae	LC	No
Ruddy-tailed Flycatcher	<i>Terentotriccus erythrurus</i>	Tyrannidae	LC	No
Russet Antshrike	<i>Thamnistes anabatinus</i>	Thamnophilidae	LC	No
Barred Antshrike	<i>Thamnophilus doliatus</i>	Thamnophilidae	LC	No
Yellow-winged Tanager	<i>Thraupis abbas</i>	Thraupidae	LC	No
Great Tinamou	<i>Tinamus major</i>	Tinamidae	NT	No
Masked Tityra	<i>Tityra semifasciata</i>	Tityridae	LC	No

Common name	Scientific Name	Family	IUCN category	Endemic (Yes/No)
Yellow-olive Flycatcher	<i>Tolmomyias sulphureus</i>	Tyrannidae	LC	No
Gartered Trogon	<i>Trogon caligatus</i>	Trogonidae	LC	No
Slaty-tailed Trogon	<i>Trogon massena</i>	Trogonidae	LC	No
Black-headed Trogon	<i>Trogon melanocephalus</i>	Trogonidae	LC	No
Tawny-crowned Greenlet	<i>Hylophilus ochraceiceps</i>	Vireonidae	LC	No
Clay-colored Thrush	<i>Turdus grayi</i>	Turdidae	LC	No
White-bellied Wren	<i>Uropsila leucogastra</i>	Troglodytidae	LC	No
Yellow-throated Vireo	<i>Vireo flavifrons</i>	Vireonidae	LC	No
Yellow-green Vireo	<i>Vireo flavoviridis</i>	Vireonidae	LC	No
White-eyed Vireo	<i>Vireo griseus</i>	Vireonidae	LC	No
Red-eyed Vireo	<i>Vireo olivaceus</i>	Vireonidae	LC	No
Green Shrike-Vireo	<i>Vireolanius pulchellus</i>	Vireonidae	LC	No
Plain Xenops	<i>Xenops minutus</i>	Furnariidae	LC	No
Strong-billed Woodcreeper	<i>Xiphocolaptes promeropirhynchus</i>	Dendrocolaptidae	LC	No
Ivory-billed Woodcreeper	<i>Xiphorhynchus flavigaster</i>	Furnariidae	LC	No

Camera trap rates were also reported for bird species observed with camera traps in the Project Activity Instance. This data can provide species detection, as well as provide a general observation of population levels (Table 19).

Table 19. List of Trap Rates for Bird Species in Project Activity Instance

Common Name	Scientific Name	IUCN Status	Trap Rate
Cattle Egret	<i>Bubulcus ibis</i>	Least Concern	0.14
Clay-colored Thrush	<i>Turdus grayi</i>	Least Concern	0.29
Common Pauraque	<i>Nyctidromus albigollis</i>	Least Concern	2.46
Crested Guan	<i>Penelope purpurascens</i>	Least Concern	0.58
Gray-headed Dove	<i>Leptotila plumbeiceps</i>	Least Concern	4.35
Great Black Hawk	<i>Buteogallus urubitinga</i>	Least Concern	0.14
Great Curassow	<i>Crax rubra</i>	Vulnerable	45.51
Great Tinamou	<i>Tinamus major</i>	Near Threatened	3.19
Ocellated Turkey	<i>Meleagris ocellata</i>	Near Threatened	39.28
Plain Chachalaca	<i>Ortalis vetula</i>	Least Concern	0.43
Ruddy Quail-Dove	<i>Geotrygon montana</i>	Least Concern	0.87

Common Name	Scientific Name	IUCN Status	Trap Rate
Rufous-tailed Hummingbird	<i>Amazilia tzacatl</i>	Least Concern	0.14
Russet-naped Wood Rail	<i>Aramides albiventris</i>	Least Concern	0.14
Unknown bird spp.	N/A	N/A	0.14
Wood Thrush	<i>Hylocichla mustelina</i>	Near Threatened	0.14

5.3.1.2 Results for Mammal Species

A total of 35 species of mammals were found in the Project Activity Instance. Six of the species found in the Project Activity Instance are classified as endangered (EN) and vulnerable (VU) in the IUCN list. The EN species are *Alouatta pigra*, *Ateles geoffroyi*, *Lutra longicaudis* and *Tapirus bairdii*. The VU species are *Spilogale putorius* and *Tayassu pecari* (Table 20).

Table 20. List of Mammal Species Found in the BMF

Common name	Scientific Name	Family	IUCN category	Endemic (Yes/No)
Yucatan Black Howler Monkey	<i>Alouatta pigra</i>	Atelidae	EN	No
Geoffroy's Spider Monkey	<i>Ateles geoffroyi</i>	Atelidae	EN	No
Bat spp.	<i>Bat spp.</i>	N/A	N/A	N/A
Coyote	<i>Canis latrans</i>	Canidae	LC	No
Striped Hog Nose Skunk	<i>Conepatus semistriatus</i>	Mephitidae	LC	No
Agouti	<i>Dasyprocta punctata</i>	Dasyproctidae	LC	No
Nine-banded Armadillo	<i>Dasypus novemcinctus</i>	Dasypodidae	LC	No
Common Opossum	<i>Didelphis marsupialis</i>	Didelphidae	LC	No
Tayra	<i>Eira barbara</i>	Mustelidae	LC	No
Greater Grison	<i>Galictis vittata</i>	Mustelidae	LC	No
Southern River Otter	<i>Lutra longicaudis</i>	Mustelidae	EN	No
Red Brocket Deer	<i>Mazama americana</i>	Cervidae	DD	No
Mouse spp.	<i>Mouse spp.</i>	N/A	N/A	N/A
Unknown mammal spp.	N/A	N/A	N/A	N/A
Coatimundi	<i>Nasua narica</i>	Procyonidae	LC	No
Long-tailed Weasel	<i>Neogale frenata</i>	Mustelidae	LC	No
White-tailed Deer	<i>Odocoileus virginianus</i>	Cervidae	LC	No
Opossum spp.	<i>Opossum spp.</i>	N/A	N/A	N/A
Jaguar	<i>Panthera onca</i>	Felidae	NT	No
Collared Peccary	<i>Pecari tajacu</i>	Tayassuidae	LC	No
Four Eyed Opossum	<i>Philander opossum</i>	Didelphidae	LC	No

Common name	Scientific Name	Family	IUCN category	Endemic (Yes/No)
Blue-gray Gnatcatcher	<i>Polioptila caerulea</i>	Procyonidae	LC	No
Northern Raccoon	<i>Procyon lotor</i>	Procyonidae	LC	No
Puma	<i>Puma concolor</i>	Felidae	LC	No
Jaguarundi	<i>Puma yagouaroundi</i>	Felidae	LC	No
Raccoon spp.	<i>Raccoon spp.</i>	N/A	N/A	N/A
Yucatan Squirrel	<i>Sciurus yucatanensis</i>	Sciuridae	LC	No
Skunk spp.	<i>Skunk spp.</i>	N/A	N/A	N/A
Spotted Skunk	<i>Spilogale putorius</i>	Mephitidae	VU	No
Northern Tamandua	<i>Tamandua mexicana</i>	Myrmecophagidae	LC	No
Baird's Tapir	<i>Tapirus bairdii</i>	Tapiridae	EN	No
White-lipped Peccary	<i>Tayassu pecari</i>	Tayassuidae	VU	No
Grey Fox	<i>Urocyon cinereoargenteus</i>	Canidae	LC	No

Camera trap rates were also reported for mammal species observed with camera traps in the Project Activity Instance. This data can provide species detection, as well as provide a general observation of population levels (Table 21).

Table 21. List of Trap Rates for Mammal Species in Project Activity Instance

Common Name	Scientific Name	IUCN Status	Trap Rate
Agouti	<i>Dasyprocta punctata</i>	Least Concern	3.91
Baird's tapir	<i>Tapirus bairdii</i>	Endangered	5.80
Bat spp.	<i>Bat spp.</i>	N/A	0.14
Coatimundi	<i>Nasua narica</i>	Least Concern	1.01
Collared peccary	<i>Pecari tajacu</i>	Least Concern	0.58
Common opossum	<i>Didelphis marsupialis</i>	Least Concern	1.59
Coyote	<i>Canis latrans</i>	Least Concern	0.87
Grey fox	<i>Urocyon cinereoargenteus</i>	Least Concern	16.52
Jaguar	<i>Panthera onca</i>	Near Threatened	2.90
Mouse spp.	<i>Mouse spp.</i>	N/A	0.43
Ocelot	<i>Leopardus pardalis</i>	Least Concern	10.00
Opossum spp.	<i>Opossum spp.</i>	N/A	0.14
Paca	<i>Cuniculus paca</i>	Least Concern	0.87
Puma	<i>Puma concolor</i>	Least Concern	10.14
Raccoon spp.	<i>Raccoon spp.</i>	N/A	0.29

Common Name	Scientific Name	IUCN Status	Trap Rate
Red brocket deer	<i>Mazama americana</i>	Data Deficient	2.61
Tayra	<i>Eira barbara</i>	Least Concern	0.29
Unknown mammal spp.	N/A	N/A	0.14
White-lipped peccary	<i>Tayassu pecari</i>	Vulnerable	0.14
White-tailed deer	<i>Odocoileus virginianus</i>	Least Concern	3.62
Yucatan squirrel	<i>Sciurus yucatanensis</i>	Least Concern	0.14

5.3.2 Biodiversity Monitoring Plan Dissemination (CCB, B4.3) - Done

The Monitoring Plan was created in parallel with the PD and was disseminated with the PD, in both languages, English and Spanish.

This monitoring plan sensitized the communities and community members were asked to comment on the monitoring plan, along with the summarized PD. A public comment period of 30 days was opened on the CCB website. In addition, the Monitoring Plan was made publicly available on the internet.

In the future monitoring data and implementation activities will be in the combined VCS/CCB Monitoring Report. This document was available to stakeholders and communities following the dissemination process. The report will be freely available on the public website www.terra.org.

5.4 Optional Criterion: Exceptional Biodiversity Benefits - Done

The Project Activity Instance is a large private property within the regional Selva Maya. The Selva Maya is the largest continuous expanse of tropical rainforest in the Americas after the Amazon (Olivet & Asquith, 2004). It connects the Maya Biosphere Reserve with the Rio Bravo Conservation and Management Area. The Project site resides within the Mesoamerican Biological Corridor (Miller, Chang, & Johnson, 2001), and is part of a Conservation International Biodiversity Hotspot (Olivet & Asquith, 2004). The Project Activity Instance is also identified as a portion of a Key Biodiversity Area in Belize (Meerman J. , 2007), based on populations of multiple trigger species. The Project supports the effort of Belize to achieve the Aichi Target 5: habitat loss halved or reduced. The project helps limit the net rate of land use change for prioritized natural ecosystems/areas.

Gold Level is achieved by virtue of the significant biodiversity resources conserved on the property including habitat for multiple IUCN listed species and most notably IUCN Endangered Baird's Tapir (*Tapirus bairdii*), Geoffrey's spider monkey (*Ateles geoffroyi*), and Yucatan black howler monkey (*Alouatta pigra*), as well as numerous IUCN Vulnerable and Near-Threatened species.

5.4.1 Trigger Species Population Trends (CCB, GL3.2, GL3.3) - Done

Population trends are not fully understood for the Project Activity Instance, as the area is densely forested. However, populations of these species have occurred at the site for many years (Miller & Miller,

2001). Based on habitat requirements of these species, a complete loss of these populations was expected in the baseline scenario since there is almost no overlap between the species of animals associated with mature forest habitats and agricultural plantations. Conserving and protecting the forest should maintain the HCVs. Patrols to prevent illegal hunting and maintaining existing high-quality habitat should result in maintenance of HCVs. Indicators of population trends for each trigger species were considered a combination of habitat availability and presence as indicated by detections during surveys. Maintenance of these species was considered achieved when the habitat was protected, and the species were still detected within the site.

Trigger Species	Baird's Tapir (<i>Tapirus Bairdii</i>)
With-project Scenario	With the project, the forest habitat for Baird's Tapir will be completely preserved within the Project Activity Instance (Kelly & Nipko, 2022). As a result, Baird's tapir population numbers are expected to stay stable over time.
Trigger Species	White-lipped Peccary (<i>Tayassu pecari</i>)
With-project Scenario	With the project, the forest habitat for White-lipped Peccary will be completely preserved within the Project Activity Instance (Kelly & Nipko, 2022). As a result, White-lipped Peccary population numbers are expected to stay stable over time.
Trigger Species	Great Curassow (<i>Crax rubra</i>)
With-project Scenario	With the project, the forest habitat for great curassow will be completely preserved within the Project Activity Instance (Kelly & Nipko, 2022). As a result, Great Curassow population numbers are expected to stay stable over time.

APPENDIX 1: NEW PROJECT AREAS AND STAKEHOLDERS

Stakeholder	Rights, interest, and overall relevance to the project	Demonstrate how they meet the eligibility criteria (G1.14)	Demonstrate how their inclusion does not violate the scalability limits (G1.15)
<i>Identify communities and any community groups within them, any cross-cutting community groups, and list other stakeholders</i>			

APPENDIX 2: PROJECT RISKS TABLE

	Identified risk(s)	Potential impact of risk on stakeholders, ecosystem health, and biodiversity	Mitigation or preventative measure(s) taken
Impacts on biodiversity and ecosystems			
Soil degradation and soil erosion			
Water consumption and stress			
.....			
[Additional risk identified]			
.....			

APPENDIX 3: COMMERCIALY SENSITIVE INFORMATION

Section	Information	Justification

APPENDIX 4: SPECIES IDENTIFIED DURING PATROLS

Table 22. Flora Observed in the Project Activity Instance During Patrols

Waypoint ID	Observation Type	Plant Species
9	Flora	Nargusta
8	Flora	Cukuno Boy
7	Flora	My Lady
5	Flora	My Lady
5	Flora	My Lady
28	Flora	Hardwood Trees
28	Flora	Hardwood Trees
27	Flora	Chicoloro
26	Flora	Hardwood Trees
25	Flora	Hardwood Trees
23	Flora	Hardwood Trees
20	Flora	Nargusta
20	Flora	Black Poison Wood
20	Flora	Black Poison Wood
16	Flora	Black Poison Wood
16	Flora	Nargusta
16	Flora	Hardwood Trees
14	Flora	Black Cabbage Bark
14	Flora	Hardwood Trees
13	Flora	Provision
12	Flora	Hardwood Trees
11	Flora	Warie Wood
6	Flora	Sapodilla
4	Flora	Sapodilla
7	Flora	Other
6	Flora	Sapodilla
4	Flora	Mohagany

Table 23. Fauna Observed in the Project Activity Instance During Patrols

Waypoint ID	Waypoint Time	Observation Type	Animal Species	Behaviour	Number of Animals	Comments
6	9:46:49 AM	Fauna	White-lipped peccary	Feeding		
5	8:21:29 AM	Fauna	Collared peccary	Feeding	1	At gallon jug gate
7	10:11:13 AM	Fauna	Collared peccary	Feeding	13	seen about 15 meters from the road
23	12:30:02 PM	Fauna	Other	Resting	1	
3	5:42:40 PM	Fauna	Great currasow	Walking	2	
7	12:46:32 PM	Fauna	Crested guan	Perched	2	
11	10:14:18 PM	Fauna	Great currasow	Walking	21	
3	5:49:28 PM	Fauna	Great currasow	Perched	10	
8	10:59:21 AM	Fauna	Tapir	Walking	1	
4	10:06:03 AM	Fauna	Tapir	Walking	1	
3	9:41:38 AM	Fauna	Quash	Walking	35	
2	9:31:36 AM	Fauna	Bush rabbit	Feeding	1	Feeding ground
26	12:43:09 PM	Fauna	White-lipped peccary	Feeding	15	
18	11:54:07 AM	Fauna	Crested guan	Other		
16	11:45:17 AM	Fauna	Spider monkey	Swimming	2	Spider monkeys

Waypoint ID	Waypoint Time	Observation Type	Animal Species	Behaviour	Number of Animals	Comments
15	11:40:58 AM	Fauna	Morelets crocodile	Swimming	2	
14	11:31:05 AM	Fauna	Bush rabbit	Feeding		Brush rabbit
12	11:23:15 AM	Fauna	Armadillo	Walking		Armadillo walking
11	11:21:34 AM	Fauna	Great currasow	Walking	2	Carrasow 1male 1 female
10	11:20:15 AM	Fauna	Spider monkey	Feeding	2	Spider monkey
9	11:18:28 AM	Fauna	Tapir	Walking		Tapir
8	11:16:41 AM	Fauna	White-lipped peccary	Feeding		White lipped peccary
7	11:13:29 AM	Fauna	Gibnut	Feeding		Gibnut feeding
4	11:02:06 AM	Fauna	Collared peccary	Feeding		
14	12:04:37 PM	Fauna	Great currasow	Walking	1	Seen limping looked injured
11	10:23:04 AM	Fauna	White-tailed deer	Feeding	2	2 male white tail deer
14	4:25:14 PM	Fauna	Collared peccary	Feeding	15	Wild pig's with young one's
3	8:48:57 AM	Fauna	Collared peccary	Walking	8	About 8 pecary seen on busby junction
5	8:52:42 AM	Fauna	Other	Walking	1	Lagger head turtle

Waypoint ID	Waypoint Time	Observation Type	Animal Species	Behaviour	Number of Animals	Comments
						crossing road
4	8:43:49 AM	Fauna	Great curassow	Walking	4	3 female curassow 1 male