

# MONITORING REPORT WESTERN AMAZON REDD+ GROUPED PROJECT



Document prepared by Carbon Credits Consulting Brazil

info@carboncreditsconsulting.com

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<b>Project Proponent(s)</b>	Carbon Credits Consulting SRL Dr. Davide Rossi dr@carboncreditsconsulting.com, +55 67 99254-3491
<b>Prepared By</b>	Carbon Credits Consulting Brazil Technical team ca@carboncreditsconsulting.com
<b>Validation/Verification Body</b>	Rina Brasil Serviços Técnicos LTDA saopaulo.office@rina.org, +55 11 9330-0817
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<b>Monitoring Period of this Report</b>	01-Jan-2019 – 31-Jul-2022
<b>History of CCB Status</b>	Verification and first validation

<b>Gold Level Criteria</b>	Gold Level criteria <i>GL3. Exceptional Biodiversity Benefits</i> , meeting the CCB Standard vulnerability criterion for presenting critically endangered or threatened species (according to IUCN Red List).
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## 1 SUMMARY OF PROJECT BENEFITS

### 1.1 Unique Project Benefits

Outcome or Impact	Achievements during the Monitoring Period	Section Reference	Achievements during the Project Lifetime
<p>1) Climate Benefits: In the WARG Project, it is expected a benefit to mitigation of climate change due to the reduction of the emission of 3,548,472 tCO<sub>2</sub>eq in the first 10 years of the Project. This reduction is a result due to the avoidance of 6,188 ha of deforestation in the Project Areas in the next 10 years.</p>	<p>During the monitored period a total of 938,500.7 tCO<sub>2</sub>eq in emissions was avoided. This corresponds to and are of 1,432 ha of avoided deforestation in the project area. Therefore, the total project area of 59,959 ha of forest is being protected.</p>	3	Same as Monitoring Period
<p>2) Community Benefits: The expected communities' benefits will be focused on educational issues, with training actions and research support in the property areas. The training will be in the technical/professional scope, and research will be for data collection, information production and scientific dissemination of the properties participating in the project. Actions will also be taken to improve the communication infrastructure, with the objective of increasing people's access to knowledge. Actions that benefit communities have the potential to generate positive impacts on quality of life, resilience to adverse events and knowledge of local communities.</p>	<p>During the monitored period 47 people from the community were trained on fire fighting and first aid. Also, improvements in the communication are underway.</p>	4	Same as Monitoring Period
<p>3) Biodiversity Benefits: The WARG Project intends to generate benefits by maintaining and monitoring native forest cover of the Project Area, in parallel with habitats and local biodiversity conservation, including species with some level of threat according to IUCN Red List. It is intended to develop scientific research on fauna and flora in the Project Area and surroundings, to increase and improve the biodiversity database, improving the effectiveness of management project activities.</p>	<p>The WARG Project its benefitting the local biodiversity by protecting the forest, maintaining at this point 59,959 ha of protected forest. Fauna and flora studies were conducted with secondary information, and partnerships are being established for future in site monitoring.</p>	5	Same as Monitoring Period

## 1.2 Standardized Benefit Metrics

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	Not applicable		Not applicable
	Net estimated emission reductions in the project area, measured against the without-project scenario	938,500.7 tCO <sub>2</sub> eq	3	Same as Monitoring Period
Forest <sup>1</sup> cover	For REDD <sup>2</sup> projects: Number of hectares of reduced forest loss in the project area measured against the without-project scenario	1,432 ha	3	Same as Monitoring Period
	For ARR <sup>3</sup> projects: Number of hectares of forest cover increased in the project area measured against the without-project scenario	Not applicable		Not applicable
Improved land management	Number of hectares of existing production forest land in which IFM <sup>4</sup> practices have occurred as a result of the project's activities, measured against the without-project scenario	Not applicable		Not applicable
	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	Not applicable		Not applicable

<sup>1</sup> 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*)

<sup>2</sup> 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*)

<sup>3</sup> 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*)

<sup>4</sup> 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*)

Category	Metric	Achievements during Monitoring Period	Section Reference	Achievements during the Project Lifetime
Training	Total number of community members who have improved skills and/or knowledge resulting from training provided as part of project activities	47 people	4	Same as Monitoring Period
	Number of female community members who have improved skills and/or knowledge resulting from training provided as part of project activities of project activities	0 person	4	Same as Monitoring Period
Employment	Total number of people employed in of project activities, <sup>5</sup> expressed as number of full time employees <sup>6</sup>	1 person	2	Same as Monitoring Period
	Number of women employed in project activities, expressed as number of full time employees	Not applicable		Not applicable
Livelihoods	Total number of people with improved livelihoods <sup>7</sup> or income generated as a result of project activities	47 people	4	Same as Monitoring Period
	Number of women with improved livelihoods or income generated as a result of project activities	0 person	4	Same as Monitoring Period
Health	Total number of people for whom health services were improved as a result of project activities, measured against the without-project scenario	Not applicable		Not applicable
	Number of women for whom health services were improved as a result of project activities, measured against the without-project scenario	Not applicable		Not applicable

<sup>5</sup> 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.

<sup>6</sup> 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])

<sup>7</sup> 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.

Category	Metric	Achievements during Monitoring Period	Section Reference	Achievements during the Project Lifetime
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	47 people	4	Same as Monitoring Period
	Number of women and girls for whom access to, or quality of, education was improved as a result of project activities, measured against the without-project scenario	0 person	4	Same as Monitoring Period
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	Not applicable		Not applicable
	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	Not applicable		Not applicable
Well-being	Total number of community members whose well-being <sup>8</sup> was improved as a result of project activities	47 people	4	Same as Monitoring Period
	Number of women whose well-being was improved as a result of project activities	0 person	4	Same as Monitoring Period
Biodiversity conservation	Change in the number of hectares significantly better managed by the project for biodiversity conservation, <sup>9</sup> measured against the without-project scenario	Undetermined		Not applicable

<sup>8</sup> 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.

<sup>9</sup> 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.

Category	Metric	Achievements during Monitoring Period	Section Reference	Achievements during the Project Lifetime
	Number of globally Critically Endangered or Endangered species <sup>10</sup> benefiting from reduced threats as a result of project activities, <sup>11</sup> measured against the without-project scenario	Undetermined		Not applicable

<sup>10</sup> Per IUCN's Red List of Threatened Species

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

## 2 GENERAL

### 2.1 Project Description

#### 2.1.1 Implementation Description

The activities of WARG Project are under the responsibility of Carbon Credits Consulting, it started in 2019 with the first viability study and the signing of the contract between Carbon Credits Consulting and the landowners. The activities have been developed simultaneously, since the process of conception of the Project, and will be continued for the entire Project's duration.

The Western Amazon REDD+ Grouped Project main objective is to reduce deforestation and forest degradation rates in one of the most deforested areas in South America, preserving continuous forest patches that cover more than 50 thousand hectares within the Brazilian Amazon.

The main activities already implemented are related to the identification of regional drivers of deforestation, with monitoring with an unmanned aerial vehicle over at least one of the farms, hiring a specialized technical team for studies and monitoring of biodiversity, implementation of sustainable practices in the communities involved, and training of people. For the identification of regional deforestation vectors as well as the social characterization of the community, a diagnosis of population dynamics was conducted. This diagnosis also served as the basis for the delimitation activity, with the installation of information signs aiming to reduce illegal practices, such as logging and hunting, encouraging the development of sustainable activities.

The people training was initiated with the realization of courses to combat forest fires, in partnership with the Fire Brigade of the state of Acre. The project's actions are allowing the protection of the local ecosystem and the regeneration of degraded or cleared vegetation. Besides that, the fire occurrence is being monitored with a remote sensed system.

#### 2.1.2 Project Category and Activity Type

The sectoral scope of the project is 14: Agriculture, Forestry and Other Land Uses (AFOLU). The project category is Reducing Emissions from Deforestation and Forest Degradation (REDD). The Avoided Unplanned Deforestation methodology (AUD) is used. This is a grouped project.

#### 2.1.3 Project Proponent(s)

Organization name	Carbon Credits Consulting SRL
Contact person	Davide Rossi
Title	Founder & Head of Carbon Projects
Address	Via Antonio Zanolini 38/A, 40126, Bologna - Italy
Telephone	+55 67 99254-3491
Email	dr@carboncreditsconsulting.com



**2.1.4 Other Entities Involved in the Project**

Organization name	Harmonia Consultoria LTDA
Role in the project	CCB Consultancy
Contact person	Nícia Coutinho
Title	CEO & Founder
Address	Alameda Augusto Fernandes Queiros, 07 – Caranazal, ZIP 68040-650, Santarém/PA, Brazil
Telephone	+55 93 99159-8911
Email	nicia.hconsultoria@gmail.com

Organization name	Stoney do Nascimento Pinto (Independent professional)
Role in the project	Forest and Carbon Inventories
Contact person	MSc. Stoney do Nascimento Pinto
Title	Forest Engineer
Address	Av. Governador Edmundo Pinto, 1901, Rui Lino, ZIP 69919859, Rio Branco/AC, Brazil
Telephone	+55 68 99954-3544
Email	stoneynp@gmail.com

Organization name	Rogério Ribeiro Marinho (Independent professional)
Role in the project	Mentoring and Baseline Study
Contact person	Dr. Rogério Ribeiro Marinho
Title	Geographer
Address	Av. Rodrigo Otávio, Campus Universitário – Setor Norte, ZIP 690777000, Manaus/AM, Brazil
Telephone	+55 92 98118-6770
Email	rogeriorm22@gmail.com

**2.1.5 Project Start Date (G1.9)**

The WARG Project start date was set on January 1, 2019, as it represents the moment of the first contract signed to establish the partnership for a conservation initiative in the region.

**2.1.6 Project Crediting Period (G1.9)**

The WARG Project's crediting period start date is January 1, 2019. It will end on December 31, 2048.

**2.1.7 Project Location**

The WARG Project's zone is in the central-eastern portion of Acre state, bordered in its northern part by Amazonas state. The Project Zone is located between 8° S to 11° S latitudes and 66° W to 69° W longitudes, as shown in Figure 1. It includes 22 private properties grouped into 10 blocks, considering proximity between them as criteria. They are in 8 municipalities, 6 of which are in Acre (Sena Madureira, Porto Acre, Senador Guiomard, Capixaba, Bujari and Xapuri) and 2 in Amazonas (Lábrea and Boca do Acre).

The Project Zone, also corresponding to the Reference Region, encompasses some Conservation Units (UCs) within its boundaries, the largest being Chico Mendes RESEX in the southwest portion, Lago do Amapá and Igarapé São Francisco APAs to the center east, in the northeast portion the Arapixi RESEX and Iquiri FLONA, finally to the west are São Francisco and Macauã FLONAs and Cazumbá-Iracema RESEX.

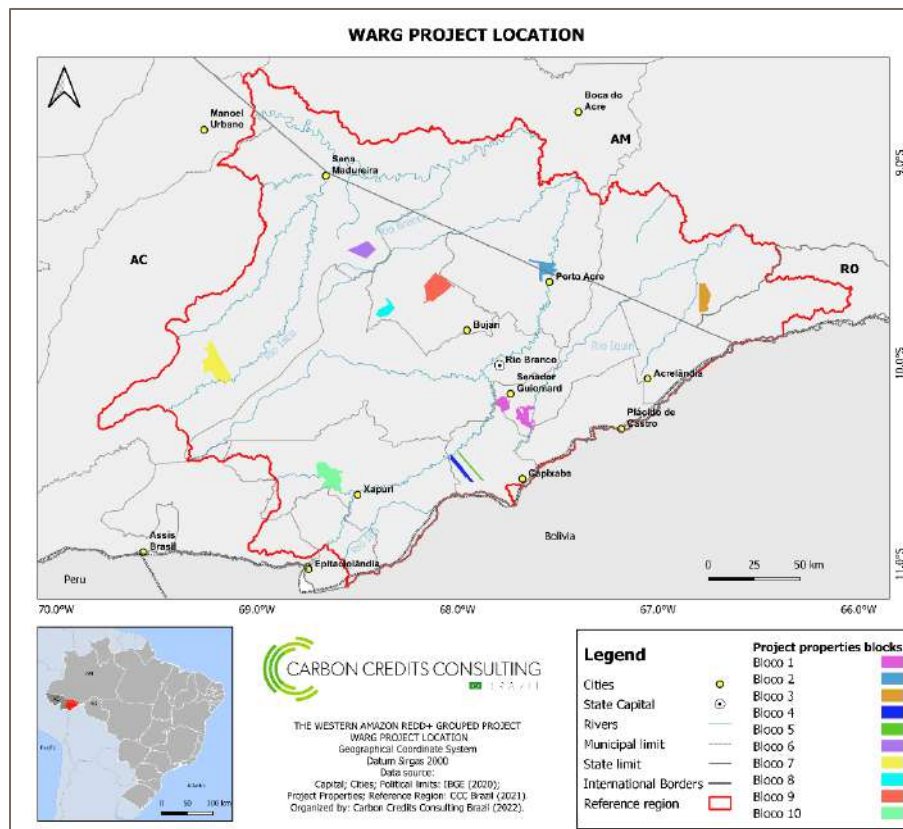


Figure 1: Project Location  
Source: Carbon Credits Consulting Brazil (2022).

**2.1.8 Title and Reference of Methodology**

Verified Carbon Standard (VCS) Approved Methodology VM0015 – Methodology for Avoided Unplanned Deforestation, version 1.1, from December 03, 2012.

### 2.1.9 Other Programs (G5.9)

Not applicable, the WARG Project activities are not included in an Emissions Trading Scheme or any other GHG allowance trading mechanism.

### 2.1.10 Sustainable Development

The promotion of sustainable development is one of the Projects' objectives. Ensuring that development must be based on a balance between social, economic, and environmental sustainability is an integral part of the 2030 Agenda for Sustainable Development, with its 17 global goals that guide development efforts. The REDD+ mechanism of this Project can directly contribute to the achievement of the following Sustainable Development Goals:

- 1) Poverty: The project seeks to implement social protection systems and measures to achieve substantial coverage of the poor and vulnerable.
- 2) Through the Population Dynamics Diagnosis, it will be possible to identify vulnerable nuclei within the communities and thus guarantee quick and effective actions in the fight against poverty.
- 3) Good Health and Well-Being: Good health is essential for sustainable development. Based on this, the fire monitoring activity and fire management course might reflect on the health and well-being of residents, since the reduction and control of fire outbreaks will improve air quality and consequently reflect on breathing problems reduction. In addition, the installation of internet antennas, together with the Population Dynamics Diagnosis, will guarantee universal access to information, enabling connection to education and integration programs related to health and well-being.
- 4) Quality education: Education is one of the most powerful and effective vehicles for sustainable development, and providing access to inclusive, quality education is one of the objects of the WARG Project. With the installation of internet antennas, it is going to be possible for residents to have access to educational digital content. The implementation of training courses is also guaranteeing the promotion of education, enabling a technical improvement that could open doors to the labor market.
- 5) Decent work and economic growth: The fundamental role of decent work for all in achieving sustainable development is an important objective of the WARG Project. With this, actions will be implemented that provide assistance to increase employment opportunities, such as: cooking courses, cutting and sewing, handicrafts, courses for handling agricultural machinery and handling livestock animals.
- 6) Climate action: The 2030 Agenda for Sustainable Development expresses the commitment to protect the planet from degradation and to take urgent action on climate change. These goals can be achieved with the integration of measures that stimulate environmental education, awareness and the mitigation and adaptation capacity. For this, a fire management course is being implemented, in addition to the implementation of fire brigades. We also consider that the very existence of the REDD+ project in the region is a climate contribution action.
- 7) Life on land: Protecting and sustainably using terrestrial ecosystems and combating land degradation and biodiversity loss are objectives implemented in the WARG Project. Activities related to social and biodiversity research will have the potential to bring relevant information about the way of life of local communities, as well as their relationship with nature. The involvement of

the population with these activities is expected, either directly with local students or indirectly through their results. With this, the community is expected to create greater bonds of identification with the land on which they live.

## 2.2 Project Implementation Status

### 2.2.1 Implementation Schedule (G1.9)

Table 1: Implementation schedule.

Scheduled Dates	Milestones in project development and implementation
(2019) 3 years before the first verification and validation	Beginning of the partnership agreement consolidation with landowners
	Baseline and credit generation potential determination
	Articulation with institutions for the development of possible partnerships
	Carbon stock estimate
	Conducting workshops on the properties
	Socioeconomic and Environmental Diagnosis
	Diagnosis of the region's fauna
	Schedule consolidation of the activities to be developed in the project
	Stakeholder consultation meetings
	Review and translation of the project description document
(2022) Year of First Verification and Validation	Selection and hiring of the credit validator/verifier registration platform
	Field audit follow-up
Following years from first verification and validation	Registration of Projects and Credits
	Development and monitoring of environmental and social actions management activities
	Monitoring deforestation and emissions
	Biodiversity Monitoring (Fauna and Flora)
	Credit verification (Selection and hiring of a verification body)
	Production of monitoring bulletins of the Verification Project; Field audit monitoring; Credit record
Leading the credit marketing process	

### 2.2.2 Methodology Deviations

No methodology deviations are reported.

### 2.2.3 Minor Changes to Project Description (Rules 3.5.6)

No minor changes to project description are reported.

### 2.2.4 Project Description Deviations (Rules 3.5.7 – 3.5.10)

No project description deviations are reported.

## 2.2.5 Grouped Projects

### 1) New Project Areas and Communities (G1.13)

Not applicable, no new areas were added to the project.

### 2) Removed Project Areas and Communities (G1.13)

Not applicable, no areas were removed from the project.

### 3) Eligibility Criteria for Grouped Projects (G1.14)

Not applicable, no new areas added to the project.

### 4) Scalability Limits for Grouped Projects (G1.15)

Not applicable, no new areas added to the project.

### 5) Risk Mitigation for Grouped Projects (G1.15)

Not applicable, no new areas added to the project.

### 6) Project Zone Map (G1.13)

Not applicable, no new areas added to the project.

### 7) Changes to Management (G4.1)

Not applicable, no changes to management structure.

## 2.2.6 Risks to the Project (G1.10)

The risks associated with the WARG project were assessed through the AFOLU Non-permanence Risk Report Calculation Tool, v4.0. The identified risks are summarized in Table 2.

Table 2: Summary of non-permanence risk of WARG project.

Risk Category	Rating
Internal Risk	0
External Risk	12%
Natural Risk	1%
Overall Risk Rating (a + b + c)	13%

## 2.2.7 Benefit Permanence (G1.11)

The activities developed by the WARG Project encourage the land sustainable use, allowing the protection of natural resources, ensuring social benefits and biodiversity preservation.

To make these benefits permanent, the Project proposes to maintain the continuity of already under development activities, as well as guarantee the execution of future actions, keeping the socioenvironmental benefits process active (Table 3).

Table 3: Benefit permanence.

Activity	Description
Legal Agreement and Management	The signed contractual agreement guarantees the community's commitment to environmental preservation. Agreements are made for 30 years and can be renewed. This adherence at the legal level promotes better properties management, which aims to reduce deforestation by reducing the fire risk and improving the relationship between conservation and land use.
Environmental monitoring	Permanent monitoring of deforestation and fires are important measures to contribute to the greenhouse gas emissions reduction and support the conscious use of natural resources, resulting in the mitigation of climate change, social conflicts, and the loss of biodiversity.
Population dynamics diagnosis	The population dynamics diagnosis represents a planning basis for the elaboration of project management strategies. The initial studies provide a better understanding of the community's social issues and how it relates to the environment.
Fire prevention	It aims to reduce the number of threats to fauna and flora due to fires. This strategy is expected to contribute to community empowerment in fire management, fire prevention, post-fire restoration and fire suppression.
Patrol and Surveillance	The project is improving and intensifying the patrolling efficiency through logistics' resource availability in the properties' areas, e.g., remote monitoring via drone use. In this way, it is possible to devise strategies that provide greater surveillance efficiency and strengthening of properties' security.
Communication	The installation of antennas for internet provision mitigates the community's vulnerability in terms of information access and digital inclusion. These conditions reflect on the education, health, economy, and well-being of the community.
Training and Qualifications	Training and qualifications building allow community members to be the main actors in the maintenance and protection of resources in the area where they live.
Land tenure regularization	Land tenure regularization represents an important tool to guarantee security to communities. Promoting social integration, access to public services and maintenance and defense of rights.

## 2.3 Stakeholder Engagement

### 2.3.1 Stakeholder Access to Project Documents (G3.1)

The WARG Project has some forms of communication with involved parties, aiming to guarantee access to non-sensitive documents, and all other information that are parties' collective interest, through printed, in-person and virtual means, as described below.

**Printed:** a printed version of each document, such as the monitoring report, validation and verification report, and the summary, is available for consultation by stakeholders at each blocks' main headquarters, and will be updated whenever necessary.

**Online:** the documents are available online on Verra Registry and on Carbon Credits Consulting's official website. News and updates are published by the company through social media.

**Orally:** information and news will also be transmitted orally in meetings between the company's technicians together with landowners and communities involved.

### 2.3.2 Dissemination of Summary Project Documents (G3.1)

Documents related to WARG Project are available online on the Verra Registry and Carbon Credits Consulting's websites. Printed bulletins at each blocks' main offices for communities' consultation. All information and news are being reported orally in annual meetings on the properties between the technical team, stakeholders, and communities.

### 2.3.3 Informational Meetings with Stakeholders (G3.1)

In 2021, participatory workshops were held with the communities of the WARG Project. The meetings occurred in Seringal Santo Antônio, Fazenda MAC Esperança, Fazenda Santa Paula and Fazenda Nictheroy in August of 2021, Seringal Fonte 2, Seringal Fonte 3, Seringal Palmares, Seringal Santo Elias 1014, and Seringal Santo Elias – 1016 on October of 2021, and Fazenda Soberana and Fazenda Floresta in December of 2021. With appropriate language and use of expository panels, the information, objectives, execution stages and the survey of local demands were presented.

In 2022 official meetings were held with the communities in some of the properties to monitor the activities and to update the community about the project and future activities. The properties visited were Fazenda Nictheroy, Seringal Santo Antônio, Fazenda Soberana, Fazenda Castanhal, Fazenda MAC Esperança and Fazenda Uberaba, during the month of May of 2022. Besides the monitoring meetings, the community was also informed about the project status during the trainings and during visits by the local team. Institutional stakeholders were updated about the project during presential meetings held in 2022, and a list with the summary of those appointments is available to the auditing.

For the next phases, follow-up meetings with the Stakeholders will continue. These meetings will be held whenever necessary for decision-making in relation to the activities that are and/or will be developed, either virtual or in person.

#### **2.3.4 Community Costs, Risks, and Benefits (G3.2)**

Relevant information related to potential communities' costs, risks and benefits were analyzed through a participatory and transparent process with communities. All pertinent information regarding validation and verification is being provided in a timely manner prior to any important decision being taken.

The WARG Project management team provides full transparency to this process through consultations with community representatives. The joint work between the community and the team is based on participatory and convenient communication, always through means established according to the profile of the community (telephone contact, face-to-face meetings, e-mail, etc.).

The objective is not only to hold informational meetings, but also to carry out joint construction activities that encourage the community to commit to the project and its activities, understanding its' potentialities, risks, and costs.

#### **2.3.5 Information to Stakeholder on Verification Process (G3.3)**

The communities participating in the WARG Project were informed about the validation and verification through face-to-face meetings and/or telephone calls. Other forms of communication will also be adopted, if possible and necessary.

Likewise, virtual channels are being used with other interested parties, such as social media and the CCC's official website, where information about the public consultation, the validation and verification process and the certification approval is made available.

#### **2.3.6 Site Visit Information and Opportunities to Communicate with Auditor (G3.3)**

The VVB site visit were informed to communities and other interested parties prior to the event, through the locally responsible technician.

During this period, Carbon Credits Consulting will send a team to prepare local communities and stakeholders for the audit. Thus, the community and other interested parties will have the opportunity to speak freely with the auditor.

#### **2.3.7 Stakeholder Consultation (G3.4)**

A prior analysis of all potential project stakeholders was carried out, considering all communities and other stakeholders. The entire design of the project was conceived based on the profile of the communities and the characteristics and cultures of the region. A detailed and in-depth analysis of traditional communities and other stakeholders is being carried out.

#### **2.3.8 Continued Consultation and Adaptive Management (G3.4)**

The plan for maintaining ongoing communication with communities includes:

- a communication channel that addresses possible PQRSD (questions, complains, grievances, suggestions, accusations, in Portuguese Perguntas, Queixas, Reclamações, Sugestões e Denúncias) (see Section 2.3.13).
- qualification building and training activities, as part of the strategic line's implementation and project activities (see Section 2.3.14).



- dissemination of project information (see Section 2.3.2).
- other project-related events, such as consultation processes (see Section 2.3.3).

### **2.3.9 Stakeholder Consultation Channels (G3.5)**

The WARG Project's activities were defined and are being implemented considering the socioeconomic diagnosis carried out in the communities.

Communication and discussion access on the activities' progress will continue throughout the Project's duration. Suggestion boxes for feedback and grievances were also implemented at the properties' headquarters.

### **2.3.10 Stakeholder Participation in Decision-Making and Implementation (G3.6)**

For the elaboration of the proposed activities, the community's demands were considered.

Landowners participated in the WARG Project's decision-making process through a face-to-face meeting, with the authorization of their parties to implement the activities.

### **2.3.11 Anti-Discrimination Assurance (G3.7)**

Carbon Credits Consulting has a solid human rights and social responsibility policy based on its "Code of Ethics and Conduct", which aims to guide and direct the attitude of all its employees.

The company is committed to the safety, health, and life of its employees. And it repudiates any discrimination based on race, color, nationality, age, religion, sexual orientation, physical or mental disability. In addition to not allowing moral or sexual harassment within its work environments, whether with its employees and partners.

### **2.3.12 Grievances (G3.8)**

A person was hired as responsible for the WARG Project local support. In-person demands are being forwarded to this person, who forwards them to the company's administrative headquarters, which will define the necessary referrals. The community have free access to CCC Brazil's technicians through digital means, telephone and face-to-face visits whenever they are carried out.

The CCC Brazil team is always available to assist communities in resolving conflicts, receiving feedback, and redressing complaints. Suggestion boxes were implemented in each blocks' main offices, so that the community can express themselves, anonymously or not, with comments, criticisms, or suggestions about the WARG Project.

Information boards for contacting Carbon Credits Consulting Brazil were also implemented, distributed at the properties participating in the WARG Project so that communities have free access to solve their doubts and make suggestions directly. Public comments can be made on CCC website, and an e-mail contact for the project was shared with the community.

### **2.3.13 Worker Training (G3.9)**

As the communities' qualification is important for the WARG Project and the conduction of activities in the long term. Among the various activities planned to be carried out on the properties, one already

implemented is the fire management course, which is related to the effective local communities' participation in the joint planning and implementation of controlled fires.

#### **2.3.14 Community Employment Opportunities (G3.10)**

The project has the prospect of generating employment and income through the implementation and development of some activities, such as communication and fire brigade technical assistance, in addition to gender inclusion courses, like cooking, sewing, gardening, and handicrafts. There will be no ethnic, gender, sexuality, or religious practices distinction in the selections for future vacancies, considering the demands offered in the socioeconomic diagnosis and the interest of people in their respective work activities. At this time, one person was employed for the project and act as the local representant of CCC.

#### **2.3.15 Relevant Laws and Regulations Related to Worker's Rights (G3.11)**

All CCC Brazil employees, as well as workers of WARG Project and service providers, are legally hired in compliance with Brazilian labor law. Also, international agreements ratified by Brazil and issues related to worker well-being are respected.

The relevant work legislation is contained in the Brazilian Constitution, Chapter II-Social Rights, Articles 7- 11 address labor and social rights, such as: minimum wage, normal working hours, guidance on vacation and weekly leave, guidance on maternity and paternity leave, recognition of collective negotiation with employers, prohibition of discrimination, among others.

In addition to the Constitution, there are two additional decrees related to Brazilian labor laws:

Decree-Law No. 5,452, May 1st, 1943, the so-called Consolidate of Working Laws - CLT (Consolidação das Leis do Trabalho) that provides clarification on hourly, daily, weekly and monthly work hours, employment of minors and women, establishes a minimum wage, establishes worker safety and safe working environments, defines penalties for non-compliance by employers, and establishes a judicial work-related process for addressing all worker related issues.

Law No. 5,889, June 8th, 1973: provides regulation norms to the rural work. This is a complimentary law to the aforementioned 1943 decree because prior to 1973, rural workers did not have the same rights as urban workers. In 1973, this law was established to specify the equality between urban and rural workers, along with compensation for overtime.

There are also several regulation norms from the Ministry of Labor applied to health safety conditions in the labor site, called NRs and described in the project description.

#### **2.3.16 Occupational Safety Assessment (G3.12)**

To reduce the risk associated with each activity, the project proponent will hold meetings prior to the activity development in which, in addition to discussing technical issues, existing risks and measures to mitigate them are explored. In addition to training and qualifications, all personnel involved will receive individual and collective protective equipment.

It is important to emphasize that the property's residents/employees have employment contracts backed by the Brazilian labor legislation in force, the Consolidation of Labor Laws (CLT), which together with Regulatory Norms, aims to ensure that the exercise of labor functions is carried out as free as possible from unwanted occurrences and accidents.

The measures proposed to minimize the risks are designed so that they are aligned with the cultural practices of the community, so that these security measures are easily accepted and complied with by the communities involved.

## 2.4 Management Capacity

### 2.4.1 Required Technical Skills (G4.2)

The technical team that will participate in the Project's implementation and development is a multidisciplinary team, with the knowledge, experience and skills listed below:

- Carbon projects' implementation and management.
- Deforestation monitoring.
- Forest inventory.
- Research, conservation and management of biodiversity and ecosystem services.
- Skills in community management, environmental education, and conflict resolution.
- Land use planning and local development.

### 2.4.2 Management Team Experience (G4.2)

Table 4 presents the project management team composition.

Table 4: CCC Project management team.

Name	Role	Description
Davide Rossi	CCC Italy Founder & Managing Director	Doctor in Veterinary Medicine, PhD in Epidemiology and Control of Zoonosis. Experience in Project Management in Developing Countries (Latin America and Africa). Experience in Forest Management (Brazil)
Ângela Maria Klein Hentz	Project Analyst	Doctor in Forestry with emphasis on Forest Management. Experience in forest measurement; Forest Inventory; climate change and carbon quantification; geostatistical analyses.
Cristiano Alves	Project Analyst	Geography Bachelor from Universidade Federal do Amazonas - UFAM. Experience in geoprocessing, land use mapping, georeferencing, experience with riverside communities and family farming.
Emanoel Mustafa	Project Analyst	Geography Bachelor, with specializations and a master's degree in Geography. Experience in geoprocessing, mapping, and land tenure.
Nayara Diniz	Project Assistant	Geography Bachelor and Master in Geosciences from UFAM. Experience in geoprocessing, land use mapping, mapping.
Felipe Góes de Moraes	Project Assistant	Forest Engineer and Master in Forest Science from UNESP. Experience in native forest inventories and field navigation; ecological restoration projects' implementation; geoprocessing and analysis of geographic data.
Vanessa de Almeida Stamberg	Project Assistant	Forest Engineer from UFPR. Experience in rural extension, communication and environmental education, Agroforestry Systems projects, forest conservation and agroecology.

**2.4.3 Project Management Partnerships/Team Development (G4.2)**

Not applicable.

**2.4.4 Financial Health of Implementing Organization(s) (G4.3)**

Carbon Credits Consulting is a company specialized in the development of projects with a high environmental, social and biodiversity impact with the objective of eliminating greenhouse gas emissions.

The company's main activity is based on the development of afforestation (ARR) and conservation of natural forests (REDD+) projects that generate Certified Carbon Credits recognized by UNFCCC.

Documents supporting the company's financial health are considered commercially sensitive information and were shared with the audit team on a confidential basis.

**2.4.5 Avoidance of Corruption and Other Unethical Behavior (G4.3)**

Carbon Credits Consulting Brazil has a Code of Ethics and Conduct that aims to guarantee actions based on the highest principles and values, not tolerating bribes or acts of corruption of any kind or under any circumstances by its employees, agents, consultants, licensees, suppliers or representatives.

**2.4.6 Commercially Sensitive Information (Rules 3.5.13 – 3.5.14)**

No commercially sensitive information is presented in this version of the document.

**2.5 Legal Status and Property Rights****2.5.1 Recognition of Property Rights (G5.1)**

Considering that the WARG Project's Area involves private properties (rural properties), the recognition of the property right of the participating properties occurs through supporting documentation, defined by the National Institute of Colonization and Agrarian Reform (INCRA), in the terms of the agrarian legislation in effect.

The Project landowners have the following land documentation listed: CCIR (Document Issued by INCRA, which proves the registration of the rural property); Certificate of Registration of the property (Issued by the Rural Property Registry Office); Certificate of Entire Title (Linked to the registration, it is a descriptive of the land's history, from its first acquisition to the last movement/modification carried out); Georeferencing of the areas with a cartographic file of the property's official delimitation.

**2.5.2 Free, Prior and Informed Consent (G5.2)**

The WARG Project is developed within private properties as established in Section 2.5.1, duly delineated by the documentation submitted, therefore, there is no overlap with community property or public areas.

No property rights are affected, no population relocation or important activities that reflect the way of life of these people, their culture, or of surrounding populations.

There is no restitution or compensation of parts affected by the Project, considering the contractual clauses agreed upon in a legal document between Carbon Credits Consulting and the Project areas' landowners.

### **2.5.3 Property Right Protection (G5.3)**

The WARG Project Area is entirely located within private properties, with no overlapping or boundary conflicts with protected areas, therefore, there is no removal of Indigenous Peoples from Indigenous Lands and/or traditional populations living in Protected Areas, nor direct negative impacts anticipated on their way of life, culture, or traditions.

### **2.5.4 Identification of Illegal Activity (G5.4)**

Mitigation measures for private lands invasion by illegal squatters, within the properties participating in the WARG Project, involve the identification by satellite imaging of the invaded areas, together with the creation of a team to monitor this activity with the property employees/landowners who will personally visit the invaded areas in case where there is no risk to the personal safety of those involved.

We intend to strengthen the employees/landowners' engagement in this activity with the establishment of an immediate communication line through messaging technologies or phone calls with the Project management team, on the proponent part, and the property's internal team, for the definition of the specific strategy to be taken in each situation.

### **2.5.5 Ongoing Disputes (G5.5)**

One of the Project's properties needs to have its boundary validated by the National Institute for Colonization and Agrarian Reform (INCRA), since there is some overlapping with a neighbor property. This is the case of Seringal Santo Elias 1016.

The landowner gathered documentation proving its ownership, but there is still the need to make an official arrangement with the neighbor landowner about both properties correct boundary. This process requires an official georeferencing of the property by surveyors, and it is an activity proposed in the project.

### **2.5.6 National and Local Laws (G5.6)**

One of the WARG Project's planned activities currently under implementation is the installation of equipment for communication (such as internet), including a communication tower in Fazenda Santo Antonio, Fazenda Soberana and Fazenda Floresta. For those activities, it will be respected the regulations presented in the General Law of towers (Federal Law No. 13,116 of 2015), which establishes the general rules for the implantation and sharing of the telecommunications infrastructure in Brazil.

Project activities related to fire monitoring and fire management are being developed considering the regulation presented in the National Policy for Integrated Fire Management, which is currently under approval process as a law. This proposed law (Federal Law project No. 11,276 of 2018) was approved by the House of Representatives in October 2021 and provides for the regulation of fire usage as a practice for preventing and fighting fires in natural areas.

Activities concerning fauna monitoring are regimented by the Federal Law No. 11,794 of 2008, which establishes the rules and procedures for scientific research with animals. Also, Federal Law No. 9,605 of February 12 of 1998 supports the activities of the Project so that irregularities do not occur.

In Chapter V of this Law are presented the “Crimes against the Environment”, and in Section II are presented the “Crimes against Fauna”, with the resolution of fines and penalties for damages caused to certain types of native vegetation in Brazilian territory, for activities without permissions from the competent environmental agencies. Also, Chapter V prescribes fines and penalties for crimes committed against wild animals, without the necessary permissions from the competent environmental agencies, and against domestic animals.

At the State level, the Acre State Law No. 3,757 of June 13 of 2021 determines regulation for crimes against wild and domestic fauna and prescribes penalties to individuals that endanger the health or physical integrity of animals. Other Environmental protection measures are presented in Acre State Law No. 1,117 of January 26 of 1994, which regulates the Acre state Environmental Policy.

Lastly, it is important to note that all properties in the Project are also regulated by Federal Law No. 12.651 from May 28 of 2012, known as the Brazilian Forest Code. This law regulates the use of private properties in Brazil and specifies two main conservation measures for private properties in Brazil, the Permanent Preservation Areas (APP) and Legal Reserves (RL).

In this Law, it was determined that each property in the Brazilian territory should be registered in a system known as CAR (Cadastro Ambiental Rural). During the registry in CAR, each landowner is prompted to join a program known as PRA (Programa de Regularização Ambiental - Environmental Regularization Program), which will guide the restoration of areas such as APPs and RL. Those landowners are exempt from fines and administrative process if they join the program.

### 3 CLIMATE

#### 3.1 Monitoring GHG Emission Reductions and Removals

##### 3.1.1 Data and Parameters Available at Validation

Data / Parameter	$C_{tot}$
Data unit	tCO <sub>2</sub> e ha <sup>-1</sup>
Description	Average carbon stock per hectare in all carbon pools in the forest class used in the baseline scenario
Source of data	Calculated by allometric equations, conversion factors, and field-measured data
Value applied	569.50 tCO <sub>2</sub> e ha <sup>-1</sup>
Justification of choice of data or description of measurement methods and procedures applied	The biomass estimates above and below the ground were made using forest inventory data and allometric equations applied in the Project’s area state (Salimon et al., 2011)
Purpose of data	Determination of baseline scenario Calculation of baseline emissions Calculation of project emissions Calculation of leakage
Comments	Supplementary information in the attached documents

Data / Parameter	DBH
Data unit	cm
Description	Diameter at breast height (130 cm) for each tree with DBH equal to or greater than 10 cm in each plot of the forest inventory
Source of data	Measured in the field by Mikuin Consultoria
Value applied	See worksheet with field data
Justification of choice of data or description of measurement methods and procedures applied	Requirement demanded by Methodology VCS VM0015. Forest inventory data collected in 2021 in multiple plots across the Project Area
Purpose of data	Determination of baseline scenario Calculation of baseline emissions

	Calculation of project emissions Calculation of leakage
Comments	Main variable for the carbon stock estimation of the WARG Project

Data / Parameter	$AGB = 42.69 - 12.800*(DBH) + 1.242*(DBH^2)$
Data unit	Kg (weight)
Description	Equation to convert DBH to biomass for each tree
Source of data	Brown et al. (1998)
Value applied	$AGB = 42.69 - 12.800*(DBH) + 1.242*(DBH^2)$
Justification of choice of data or description of measurement methods and procedures applied	Equation developed for forests with forest-like characteristics in the reference region
Purpose of data	Determination of baseline scenario ( <i>for AFOLU projects only</i> ) Calculation of baseline emissions Calculation of project emissions Calculation of leakage
Comments	-

Data / Parameter	CF
Data unit	t
Description	Carbon contained in dry biomass
Source of data	Brown et al. (1998)
Value applied	0.485
Justification of choice of data or description of measurement methods and procedures applied	Value found in scientific literature
Purpose of data	Determination of baseline scenario Calculation of baseline emissions Calculation of project emissions Calculation of leakage
Comments	-

Data / Parameter	Root Shoot Ratio (R)
Data unit	Dimensionless
Description	Ratio of the weight of the roots to the weight of the top of the tree. Used for below ground tree biomass estimation.
Source of data	Table 4.4 in IPCC GL AFOLU, modified by GOFC-GOLD, 2008
Value applied	0.24
Justification of choice of data or description of measurement methods and procedures applied	Standard values of root to shoot ratios published by VM0015
Purpose of data	Determination of baseline scenario Calculation of baseline emissions Calculation of project emissions Calculation of leakage
Comments	-

Data / Parameter	$EF_{DW}$
Data unit	Dimensionless
Description	Dead aboveground biomass (DW) expansion factor
Source of data	Nogueira et al. (2008)
Value applied	0.137
Justification of choice of data or description of measurement methods and procedures applied	Value found in scientific literature study conducted in Amazon region in similar conditions to Project Area.
Purpose of data	Determination of baseline scenario Calculation of baseline <i>emissions</i> Calculation of project emissions Calculation of leakage
Comments	-

Data / Parameter	44/12
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Data unit	tCO <sub>2</sub> e
Description	Carbon mass conversion factor for mass of CO <sub>2</sub> e
Source of data	Scientific literature: 2006 IPCC Guidelines for National Greenhouse Gas Inventories Volume 4 AFOLU
Value applied	44/12
Justification of choice of data or description of measurement methods and procedures applied	Standard IPCC value
Purpose of data	Determination of baseline scenario ( <i>for AFOLU projects only</i> ) Calculation of baseline emissions Calculation of project emissions Calculation of leakage
Comments	-

### 3.1.2 Data and Parameters Monitored

Data / Parameter	ABSLPA <sub>ict,t</sub>
Data unit	Hectare (ha)
Description	Areas of forest cover converted into non-forest cover areas within the Project area of the WARG Project
Source of data	Calculated by means of remote sensing imagery
Description of measurement methods and procedures to be applied	Monitoring of forest cover in the Project area will be performed through satellite imagery analysis. When PRODES system data is not available, monitoring of forest cover will be by automatic classification and visual interpretation of images
Frequency of monitoring/recording	Annual
Value applied	Table 8
Monitoring equipment	Remote sensing images of digital processing software, geographic information system
QA/QC procedures to be applied	Images with special resolution of 30 m or more will be used in the mapping and the minimum mapping unit is 1 ha. The minimum accuracy of use classification map and ground cover is 80%. The accuracy assessment of the data used in this report was 98%.
Purpose of data	Calculation of project emissions
Calculation method	If unplanned deforestation areas are detected, the Forest Cover BenchMark Map will be updated by map algebra
Comments	PRODES Digital Project: <a href="http://www.dpi.inpe.br/prodesdigital/prodes.php">http://www.dpi.inpe.br/prodesdigital/prodes.php</a> More information on quality assurance and control available at: Câmara et al. 2006. Methodology for the calculation of the annual rate of deforestation in the Legal Amazon

Data / Parameter	ABSLLK <sub>ict,t</sub>
Data unit	Hectare (ha)
Description	Areas of forest cover converted into non-forest cover areas within the leakage belt of the WARG Project
Source of data	Calculated by means of remote sensing imagery
Description of measurement methods and procedures to be applied	Monitoring of forest cover in the leakage belt will be performed through satellite imagery analysis. When PRODES system data are not available, monitoring of forest cover will be by automatic classification and visual interpretation of images
Frequency of monitoring/recording	Annual
Value applied	Table 10
Monitoring equipment	Remote sensing images of digital processing program, geographic information system
QA/QC procedures to be applied	Images with special resolution of 30 m or more will be used in the mapping and the minimum mapping unit is 1 ha. The minimum accuracy of use classification map and ground cover is 80%
Purpose of data	Calculation of leakage
Calculation method	If unplanned deforestation areas are detected, the Forest Cover BenchMark Map will be updated by map algebra
Comments	PRODES Digital Project: <a href="http://www.dpi.inpe.br/prodesdigital/prodes.php">http://www.dpi.inpe.br/prodesdigital/prodes.php</a> More information on quality assurance and control available at: Câmara et al. 2006. Methodology for the calculation of the annual rate of deforestation in the Legal Amazon



Data / Parameter	APDPA <sub>le,t</sub>
Data unit	Hectare (ha)
Description	Survey and mapping of areas of forest cover converted into non-forest cover areas due to the construction of forest management infrastructures
Source of data	Remote sensing images, technical maps, and field maps to monitor the construction of roads, trails, and yards for sustainable forest management activities
Description of measurement methods and procedures to be applied	The monitoring of forest cover areas in the area of sustainable forest management will be done by satellite imagery analysis, road construction maps, forest trails and yards, and field verification. The Forest Cover Benchmark Map will be updated by map algebra in case of planned deforestation. The verification processes will report the reduction in carbon stock in the Project area
Frequency of monitoring/recording	During the management year of each UPA
Value applied	Table 8
Monitoring equipment	Post-exploratory reports, and geographic information system
QA/QC procedures to be applied	The mapping of deforestation areas planned for the implementation of Sustainable Forest Management infrastructures will be carried out through high resolution images and field check
Purpose of data	Calculation of project emissions
Calculation method	If unplanned deforestation areas are detected, the Forest Cover BenchMark Map will be updated by map algebra
Comments	-

Data / Parameter	$\Delta CabBSLLK_t$
Data unit	tCO <sub>2</sub> e
Description	Changes in total carbon stock in the leakage belt area
Source of data	Calculated
Description of measurement methods and procedures to be applied	Calculations will be made according to VM0015 and reported in Table 30.c of Methodology VM0015.
Frequency of monitoring/recording	To be determined depending on the activity
Value applied	Table 10
Monitoring equipment	To be determined depending on the activity
QA/QC procedures to be applied	To be determined depending on the activity
Purpose of data	Calculation of <i>leakage</i>
Calculation method	To be determined depending on the activity
Comments	-

### 3.1.3 Monitoring Plan

The WARG Project monitoring plan covers three components: climate, community, and biodiversity. At this first verification period, deforestation in the project area and leakage belt was monitored. CCC Brazil coordinated the monitoring process during the first monitoring period. The climate aspects were monitored directly by the CCC Brazil's team.

## TASK 1: Monitoring of Carbon Stock Changes and GHG Emissions for Periodical Verifications

### 1.1 Monitoring of actual carbon stock changes and GHG emissions within the Project Area

#### a) Technical description of the monitoring tasks

In the Project Area, the monitoring of carbon stock changes and GHG emissions was carried out through analysis of avoided unplanned deforestation. CCC Brazil developed actions to monitor REDD+

activities, aimed to avoid unplanned deforestation by verifying areas of forest cover by satellite images and field patrols in the Project Area.

**b) Data collected**

Table 5: Data collected for monitoring carbon stock changes and GHG emissions for periodic verification in the WARG Project.

Data/Parameter	Description	Unit	Source	Frequency
$C_{tot_{icl}}$	Average carbon stock of all accounted carbon pools in forest class <i>icl</i>	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated according to allometric equations and data measured in the field	Collected in periods of up to 10 years
$APDPA_{icl,t}$	Areas of planned deforestation in forest class <i>icl</i> at year <i>t</i> in the Project Area	Hectare (ha)	Calculated through remote sensing images, technical maps and data, field information and post exploratory of management	Annual
$\Delta CPLdPA_t$	Total decrease in carbon stock due to planned logging activities at year <i>t</i> in the Project Area	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated	Annual
$ACPA_{icl,t}$	Annual area within the Project Area affected by catastrophic events in category <i>icl</i> in year <i>t</i>	Hectare (ha)	Calculated through remote sensing images	Whenever a catastrophic event occurs
$AUFPA_{icl,t}$	Areas affected by forest fires in class <i>icl</i> in which carbon stock recovery occurs in year <i>t</i>	Hectare (ha)	Calculated through remote sensing images	Whenever a forest fire event occurs
$\Delta CUFdPA_t$	Total decrease in carbon stock due to unplanned forest fires at year <i>t</i> in the Project Area	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated	Whenever a forest fire event occurs
$\Delta CUCdPA_t$	Total decrease in carbon stock due to catastrophic events in year <i>t</i> in the Project Area	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated	Whenever a catastrophic event occurs
$\Delta CUDdPA_t$	Total of current change in carbon stock due to deforestation planned and not avoided in year <i>t</i> in the Project Area	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated	Annual
$\Delta CPSPA_t$	Total project carbon stock change within the Project Area in year <i>t</i>	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated	Annual

**c) Overview of data collection procedures**

The Project used data processed by PRODES as a basis for deforestation monitoring, and the main activities developed for data collection and processing were:

- Selection of optical satellite images with less cloud cover and date of collection of images near the dry season in the Amazon and appropriate radiometric quality.
- Georeferencing of satellite imagery with scale 1: 100,000 topographic maps or NASA images in ortho-rectified MrSID format.
- Production of a spectral mixing model to estimate the percentage of vegetation, soil and shade components for each image pixel.
- Use of segmentation technique determining in the satellite image the spatially adjacent regions (segments) with similar spectral characteristics.
- Classification of the segments to identify forest classes, non-forest vegetation and deforestation.

**d) Quality control and quality assurance procedures**

To validate the information obtained from PRODES, the deforestation occurrence was checked against other data source. The checking process was done using high resolution satellite imagery, using the best available source at each event. We sorted random points and checked PRODES with the selected high-resolution image and calculated a confusion matrix and an accuracy indicator by Kappa index. The minimum classification accuracy for use and ground cover is 80%. In this monitoring report the accuracy found was 98%, as presented in the Appendix 1 – Additional Information.

**e) Data archiving**

CCC Brazil stores the original digital data (raster) and processed (vectors) of satellite images, coordinates, technical maps, photos, and field archives, visit reports, and others. Maps with installed infrastructure, satellite images, annual deforestation reports, spreadsheets, forest inventory reports, and parcel monitoring reports will be made available to VVB at each verification event.

**f) Organization and responsibilities of the parties involved in all the above**

These activities were the responsibility of Carbon Credits Consulting Brazil.

**1.1.1 Monitoring of Project Implementation**

Implementation of REDD+ activities are monitored through physical-financial timelines, performance and quality monitoring reports, forest cover maps, meeting reports, land invasion police reports and other actions to control illegal deforestation, and other relevant documents.

**1.1.2 Monitoring of Land-Use and Land-Cover change within the Project Area**

The planned and unplanned deforestation monitoring were developed by mapping the forest coverage of the Project Area, data provided annually by PRODES, using satellite images with spatial resolution of 30 meters. Subsequently the mapping was validated from the assessment of accuracy with high resolution images.

Data on deforestation events was compared to the baseline scenario. The emission reduction values for the monitored period were based on the comparison between the expected deforestation and the actual deforestation.

**1.1.3 Monitoring of carbon stock changes and non-CO<sub>2</sub> emissions from forest fires**

It is hoped that the ex ante estimate of carbon stock for forest class will not change during the baseline period. However, Methodology VM0015 requests monitoring of carbon stock in the Project Area subject to relevant decrease in the Project scenario, in accordance with the ex ante evaluation due to controlled deforestation and planned management activities, or areas subject to unplanned and significant decrease of carbon stock in the Project scenario. The total change in carbon stock due to unavoidable unplanned deforestation in the Project Area will be calculated and if there is a significant reduction in the

carbon stock due to forestry activities, this reduction will be presented in the verification processes using Table 29 of the Approved Methodology VM0015 version 1.1.

#### 1.1.4 Monitoring of impacts of natural disturbances and other catastrophic events

Reducing carbon stock and increasing GHG emissions caused by natural disturbances or catastrophic events are being controlled by monitoring the forest cover by satellite using the same methods applied for monitoring the forest cover in the Project Area.

The multiplication of the forest loss mapped area by forest carbon stock average was used to estimate the emissions caused by natural disturbances or catastrophic events. During this monitoring period no significant decrease in the carbon stock due to natural disturbances or catastrophic events were identified.

### 1.2 Monitoring of Leakage

#### a) Technical description of the monitoring tasks

The WARG Project included two monitoring activities for leakage sources:

- i. Monitoring the reduction in carbon stocks and/or increase in GHG emissions correlated with leakage prevention measures if project proponents implement activities such as tree planting, agricultural intensification, fertilization, forage production and/or other measures of improvement in agricultural areas and pastures. In case these activities implied a reduction in carbon stocks and/or an increase in GHG emissions in the Leakage Management Areas, these carbon stock changes and/or GHG emissions would be calculated by CCC Brazil. Therefore, they were not accounted.
- ii. Monitoring of forest cover in the Leakage Belt through satellite imagery was conducted by CCC Brazil.

#### b) Data collected

Table 6: Data collected for leakage monitoring for the WARG Project.

Data/Parameter	Description	Unit	Source	Frequency
$\Delta CLPMLK_t$	Reduction of carbon stock due to measures to prevent leakage	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated	Annual
$EgLK_t$	Emissions resulted from animals on pastures in Leakage Management Area in year <i>t</i>	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated	Annual
$ELPMLK_t$	Total annual increase of GHG emissions derived from measures to prevent leakage in year <i>t</i>	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated	Annual
$\Delta CabBSLLK_t$	Total change in carbon stock in the Leakage Belt area	Tons of carbon dioxide equivalent (tCO <sub>2-e</sub> )	Calculated	Annual

**c) Overview of data collection procedures**

Monitoring of carbon stock changes and GHG emissions associated to leakage prevention activities:

To validate the monitoring of carbon stock changes due to the activities implemented in the Leakage Management Areas, the main activities carried out by the Project for data collection and processing are:

- List of leakage prevention activities.
- Production of map showing the intervention areas and type of intervention.
- Recognition of areas where leakage prevention activities have an impact on the carbon stock.
- Non-forest classes existing in these areas in the baseline case were identified.
- The carbon stocks in the identified classes were measured or there will be use of a conservative estimation of literature.
- Carbon stock changes in the Leakage Management Areas under the project scenario were reported using Table 30b of VM0015.
- Calculation of net changes in carbon stock caused by leakage prevention measures during the fixed period of the baseline and crediting period of the Project.
- The results of the calculations were reported by Table 30c of approved Methodology VM0015.

Monitoring of carbon stock decrease and increase in GHG emissions due to activity displacement leakage:

**Monitoring of carbon stock changes**

The processes used to monitor deforestation in the Leakage Belt are the same for the Project Area (item 1.1.2 above).

**Monitoring of increases in GHG emissions**

Emissions due to forest fires were not computed at the baseline.

**d) Quality control and quality assurance procedures**

Monitoring of carbon stock changes and GHG emissions associated to leakage prevention activities:

To be determined according to the activity, if implemented.

Monitoring of carbon stock decrease and increase in GHG emissions due to activity displacement leakage:

The procedures for quality control and quality assurance were carried out with the same methods used to monitor deforestation in the Project Area (section 1.1).

**e) Data archiving**

The original reports and field maps are stored by CCC Brazil, as well as all the original digital data (raster) and processed (vectors) of satellite images, coordinates, technical maps, photos, and field cards. Maps with installed infrastructure, satellite images and annual deforestation reports will be made available to the verification body at each verification event.

**f) Organization and responsibilities of the parties involved in all the above**

These activities were the responsibility of Carbon Credits Consulting Brazil.

**1.2.1 Monitoring of carbon stock changes and GHG emissions associated to leakage prevention activities**

It is not expected that there will be a decrease in the carbon stock due to the activities developed in Leakage Management Areas, since no agrarian improvement or management of pasture areas capable of altering the carbon stock and increasing GHG emissions when compared to the baseline scenario has plans to be implemented. However, should such activities prove necessary, the ex ante changes in carbon stock and GHG emissions associated with these activities will be estimated in accordance with step 8 of the Approved Methodology VM0015. If the results are relevant, they will be monitored and the data made available to the verifiers at each verification event using Tables 30b, 30c, 31, 32 and 33 of Methodology VM0015 version 1.1.

**1.2.2 Monitoring of carbon stock decrease and increase in GHG emissions due to activity displacement leakage**

Activity data for the Leakage Belt area will be produced using the same methods applied to monitoring deforestation in the Project Area (item 1.2 above). If there is a deforestation event larger than expected for the baseline scenario during the monitoring process and it is recognized in the Leakage Belt and deforestation is attributed to deforestation agents in the Project Area, the losses in the carbon stock will be accounted for and reported using Tables 22c and 21c of the Approved Methodology VM0015 version 1.1.

**1.2.3 Total ex post estimated leakage**

The results will be demonstrated to the verifiers at each verification event using Table 35 of the Approved Methodology VM0015 version 1.1.

**1.3 Ex post net anthropogenic GHG emission reductions**

**a) Technical description of the monitoring tasks**

In the verification procedures, the results will be depicted using Table 36 of approved Methodology VM0015 version 1.1 along with spatial data (deforestation maps, when available).

**b) Data to be collected**

Table 7: Data to be collected to monitor net ex post GHG reductions for the WARG Project.

Data/Parameter	Description	Unit	Source	Frequency
$\Delta\text{REDD}_t$	Liquid reduction anthropogenic emissions of GHG related to AUD activities of the Project in year $t$	Tons of carbon dioxide equivalent ( $\text{tCO}_{2-e}$ )	Calculated	Annual
$\text{VCU}_t$	Number of Verified Carbon Units (VCUs) to be available for commercialization in year $t$	Tons of carbon dioxide equivalent ( $\text{tCO}_{2-e}$ )	Calculated	Annual

**c) Brief description of data collection procedures**

The calculation of the number of Verified Carbon Units (VCUs) to be produced by the WARG REDD+ Project activities in year  $t$  will be done using Equations 19 and 20 of Methodology VM0015 version 1.1.

**d) Quality control and quality assurance procedures**

All tasks and tools listed in part 2 of the Approved Methodology VM0015 will be used to ensure that the data are suitable for the verification process and the number of Verified Carbon Units is reliable.

**e) Data archiving**

CCC Brazil will keep all WARG Project data and reports stored in digital files throughout the Project's duration. All documents related to the WARG Project monitoring will be gathered in paper and/or digital files and made available to the verifiers at each verification event.

**f) Organization and responsibilities of the parties involved in all the above**

These activities are the responsibility of Carbon Credits Consulting Brazil.

**3.1.4 Dissemination of Monitoring Plan and Results (CL4.2)**

The climate monitoring plan and the results of each monitoring period are made available and disseminated to the community through the project's internet page (under CCC website) and on Verra platform. Summaries of the climate monitoring and verification results are also being disseminated through workshops and open events. Digital files of the community monitoring will be transparently made available to community members, institutions, and authorities upon request. Printed version of the monitoring report is available at each property.

**3.2 Quantification of GHG Emission Reductions and Removals**

**3.2.1 Baseline Emissions**

The total emissions in the baseline scenario for the WARG project in the years of 2019, 2020 and 2021 are presented in Table 8. The total baseline emissions for this monitored period is 858,958.19  $\text{tCO}_{2e}$ .

Table 8: Baseline carbon stock change in the project area (Table 21b of VM0015).

Carbon stock changes per initial forest class $icl$		Total carbon stock change of initial forest class in the project area		Carbon stock changes per post-deforestation zone $z$		Total carbon stock change of post-deforestation zones in the project area		Total net carbon stock change of the project area	
ID $_{icl}$ >	1	$\Delta$ CBSLPA $_{icl}$	$\Delta$ CBSLPA $_i$	ID $_{iz}$ >	1	$\Delta$ CBSLPA $_z$	$\Delta$ CBSLPA $_z$	$\Delta$ CBSLP $_A$	$\Delta$ CBSLPA
Name >	Forest	annual	cumulative	Name >	Zone 1	annual	cumulative	annual	cumulative
Project Year $t$	tCO $_2$ -e	tCO $_2$ -e	tCO $_2$ -e	Project Year $t$	tCO $_2$ -e	tCO $_2$ -e	tCO $_2$ -e	tCO $_2$ -e	tCO $_2$ -e
2019	273,604.8	273,604.8	273,604.8	2019	2,832.13	2,832.13	2,832.13	270,772.63	270,772.63
2020	290,045.3	290,045.3	563,650.0	2020	5,731.55	5,731.55	8,563.69	284,313.70	555,086.33
2021	312,631.3	312,631.3	876,281.3	2021	8,759.43	8,759.43	17,323.11	303,871.86	858,958.19

### 3.2.2 Project Emissions

#### Emissions due to planned deforestation

No emissions associated to planned deforestation were developed in the Project area during the monitored period, from January 1<sup>st</sup> of 2019 to December 31<sup>th</sup> of 2021.

#### Emissions due to planned logging activities

No emissions associated to planned logging activities were developed in the Project area during the monitored period, from January 1<sup>st</sup> of 2019 to December 31<sup>th</sup> of 2021.

#### Emissions due to planned fuel-wood and charcoal activities

No emissions associated to planned fuel-wood and charcoal activities were developed in the Project area during the monitored period, from January 1<sup>st</sup> of 2019 to December 31<sup>th</sup> of 2021.

#### Removals due to carbon stock increase of planned activities

Carbon stock increase due to planned activities in the project area was not considered.

#### Total ex post carbon stock decrease in the Project area

No carbon stock decrease associated to Project activities has occurred in the Project area during the monitored period, from January 1<sup>st</sup> of 2019 to December 31<sup>th</sup> of 2021.

#### Emissions due to unavoidable unplanned deforestation

No emissions due to unavoidable unplanned deforestation were observed in the Project area during the monitored period, from January 1<sup>st</sup> of 2019 to December 31<sup>th</sup> of 2021.

#### Emissions due to forest fires and catastrophic events



No emissions forest fires or catastrophic events were observed in the Project area during the monitored period, from January 1<sup>st</sup> of 2019 to December 31<sup>th</sup> of 2021.

### Ex post estimated net carbon stock change in the Project area

Total ex post estimated carbon stock change in Project area under the Project scenario during the monitored period, from January 1<sup>st</sup> of 2019 to December 31<sup>th</sup> of 2021, is presented in Table 9.

Table 9: Total ex post actual net carbon stock changes and emissions of non-CO2 gasses in the project area (Table 29 of VM0015).

Project Year t	Total ex post carbon stock decrease due to planned activities		Total ex post carbon stock increase due to planned activities		Total ex post carbon stock decrease due to unavoided unplanned deforestation		Total ex post net carbon stock change	
	annual	cumulative	annual	cumulative	annual	cumulative	annual	cumulative
	$\Delta\text{CPAdPA}_t$	$\Delta\text{CPAdPA}$	$\Delta\text{CPAiPA}_t$	$\Delta\text{CPAiPA}$	$\Delta\text{CUDdPA}_t$	$\Delta\text{CUDdPA}$	$\Delta\text{CPSPA}_t$	$\Delta\text{CPSPA}$
	tCO <sub>2</sub> e	tCO <sub>2</sub> e	tCO <sub>2</sub> e	tCO <sub>2</sub> e	tCO <sub>2</sub> e	tCO <sub>2</sub> e	tCO <sub>2</sub> e	tCO <sub>2</sub> e
2019	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2020	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2021	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### 3.2.3 Leakage

Leakage was monitored due to the risk of displacement activity. Leakage due to displacement activity was monitored by mapping forest change cover in the leakage belt, applying the same methods as in the Project Area. Any deforestation above the baseline in the leakage belt area will be considered activity displacement leakage, as defined by VM0015.

#### Total ex post estimated leakage

Ex post total net carbon stock changes in the leakage belt due to displacement of activity in this monitoring period is presented in Table 10. Leakage was considered zero, since the ex post monitored was lower than the ex ante assessment.

Table 10: Total net ex ante and ex post baseline carbon stock change in the leakage belt (Table 35 of VM0035).

Project Year t	Total ex ante net carbon stock change of the leakage belt area		Total ex post net actual carbon stock change of the leakage belt area		Total ex post Leakage	
	$\Delta\text{CBSLLK}_t$	$\Delta\text{CBSLLK}$	$\Delta\text{CBSLLK}_t$	$\Delta\text{CBSLLK}$	$\Delta\text{CBSLLK}_t$	$\Delta\text{CBSLLK}$
	annual	cumulative	annual	cumulative	annual	cumulative
	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e
2019	1,191,867.4	1,191,867.4	794,092.5	794,092.5	0	0
2020	1,184,556.8	2,376,424.2	742,756.9	1,536,849.4	0	0

2021	1,213,076.6	3,589,500.8	1,053,436.9	2,590,286.3	0	0
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### 3.2.4 Net GHG Emission Reductions and Removals

The net anthropogenic GHG emissions reductions, calculated from equations 19, 20 and 21 of VM0015, are presented in Table 11. The risk factor applied to calculate the VCS Buffer Credit was 13%, as presented in the Non-permanence Risk Report.

Table 11: Ex post estimated net anthropogenic GHG emission reductions ( $\Delta$ REDD<sub>t</sub>) and Verified Carbon Units (VCU<sub>t</sub>).

Project Year t	Baseline carbon stock changes		Ex post project carbon stock changes		Ex post net anthropogenic GHG emission reductions		Ex post VCUs tradable		Ex post buffer credits	
	annual	cumulative	annual	cumulative	annual	cumulative	annual	cumulative	annual	cumulative
	$\Delta$ CBSLP A <sub>t</sub>	$\Delta$ CBSLP A	$\Delta$ CPSP A <sub>t</sub>	$\Delta$ CPSPA	$\Delta$ REDD <sub>t</sub>	$\Delta$ REDD	VCU <sub>t</sub>	VCU	VCB <sub>t</sub>	VCB
	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e	tCO <sub>2</sub> -e
2019	270,772.6	270,772.6	0.0	0.0	270,772.6	270,772.6	235,572.2	235,572.2	35,200.4	35,200.4
2020	284,313.7	555,086.3	0.0	0.0	284,313.7	555,086.3	247,352.9	482,925.1	36,960.8	72,161.2
2021	303,871.9	858,958.2	0.0	0.0	303,871.9	858,958.2	264,368.5	747,293.6	39,503.3	111,664.6

### 3.3 Optional Criterion: Climate Change Adaptation Benefits

Not applicable.

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

Not applicable.

## 4 COMMUNITY

### 4.1 Net Positive Community Impacts

#### 4.1.1 Community Impacts (CM2.1)

Community Group	Community living in the WARG Project properties.
Impact	Access to information about REDD+ from the workshops developed during the Socioeconomic Diagnosis
Type of Benefit/Cost/Risk	The project aims to share knowledge and build changes in the ideas about nature over time. For this, we will use folders, notes, notices, and direct contact channels with the communities. This is a direct impact since the information access strategies will not have intermediaries. It will be carried out by the project proponent directly with the communities. The impact is beneficial because, with information circulating locally, people can feel ownership of the project, be updated, and contribute to its continuity.
Change in Well-being	Changes and improvements in the perception of living place and local nature can help to make better use of the land.

Community Group	Community living in the WARG Project properties.
Impact	The gain of knowledge through training to mitigate the negative impacts of fire.
Type of Benefit/Cost/Risk	The impact is real because fires threaten the Project Area every year, in addition to harming the health of local populations and biodiversity. The impact is direct because the communities will be directly involved with the training. The impact is beneficial as it will build a culture of resilience in the face of adverse events such as fires.
Change in Well-being	Gaining knowledge through planned training can help mitigate the negative impacts of fire.

Community Group	Community living in the WARG Project properties.
Impact	Improved communication via internet access
Type of Benefit/Cost/Risk	The impact is real because before there was no communication structure to reach all community members. There is now internet infrastructure present on the farm. The impact is direct because the internet access occurs directly to the community, without intermediation. The impact is beneficial because they will have access to information provided, they will be able to access news and online course, and communication with the project management team will be facilitated.

Change in Well-being	This type of direct improvement positively affects people's perception, as they will have opportunities to access information that they did not have before.
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#### 4.1.2 Negative Community Impact Mitigation (CM2.2)

No negative impact mitigation activities were developed, as no negative impact were recorded as result of the project activities.

#### 4.1.3 Net Positive Community Well-Being (CM2.3, GL1.4)

The field activities developed by the technical team in this first period of 2022 were focused on completing the socioeconomic and environmental diagnosis, planning for the start of project activities, and the execution of the first training planned in the project's activity plan, with this last activity having a direct impact on the community, which will be presented as the project initial results.

- Establishment of community trust in the project.
- Access to information on REDD+ from the workshops developed during the Socioeconomic Diagnosis meetings.
- Gaining knowledge through training to mitigate the negative impacts of fire.
- Mapping the fire path to the project area.
- 45 participants trained during the informational workshops on the REDD+ project and the effects of climate change.
- 61 participants interviewed for the elaboration of the diagnosis.
- 59,959.3 ha of areas monitored for fire occurrences.
- 33 families informed about the project in Fazenda Soberana.
- 15 families have internet access through the project.

#### 4.1.4 Protection of High Conservation Values (CM2.4)

There are no records of high conservation value for the project community, therefore, there is no record of negative impacts for this item.

### 4.2 Other Stakeholder Impacts

#### 4.2.1 Mitigation of Negative Impacts on Other Stakeholders (CM3.2)

No negative impact mitigation activities were developed for other stakeholders, as no risk for negative impacts was recorded.

#### 4.2.2 Net Impacts on Other Stakeholders (CM3.3)

In this initial period, as the project is still in the implementation process, it has not yet been possible to achieve positive impacts for other stakeholders.

### 4.3 Community Impact Monitoring

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

The monitoring of the social aspects of the communities included the regular assessment of the project's impacts on the communities, which will be carried out to identify the positive and negative points that the project may have. The direct effects will be measured with information reported by project beneficiaries to Carbon Credits Consulting (the project proponent). Indirect effects will be assessed through interviews with stakeholders and the community.

A basic interview script will be created to collect information that will be applied to the direct beneficiaries of the WARG project. This stage includes people who have been hired by the project, participants in local workshops and courses, and people who support other activities. Social information will be monitored using participatory methodologies.

In this context, the process of elaborating the socioeconomic diagnosis was the first step for the socioeconomic characterization of the communities. Several community meetings were held to carry out rapid participatory diagnosis workshops, including also interviews with residents of the properties, and field visits (results periodic report). In these events, the objectives of the project were presented and discussed, focusing on the importance of forest preservation and the development of projects as this one for improvements in social well-being of the community involved.

This process resulted in 33 direct project beneficiaries trained on climate change and REDD+ projects, being able to contribute to the construction of the project's activity plan. The process also resulted in direct contact with 94 families who, by filling in socioeconomic questionnaires, contributed to the spatial characterization of the area of direct influence of the project.

For the development of training activity about fighting forest fires, a partnership was carried out between the fire department and Carbon Credits Consulting. The execution of this action was based on training involving various procedures for responding to emergencies related to forest fires, using firefighting techniques, methods to limit the spread of fires, general safety procedures, and first aid procedures in cases of an emergency. A total of 7 courses were taught, involving a total of 47 community members in the properties: Fazenda Nictheroy/Santa Paula, Faz. Santo Antônio, Faz. Soberana, Faz. Espigão/Castanhal, Faz. Uberaba, Faz. Floresta and Mac Esperança. Details are presented in the semestral activity report.

To measure the results, the evaluation was carried out based on face-to-face interviews with the participants of the courses, and the main perceptions identified and reported were:

- 100% of the beneficiaries were positive about the initiative, evaluating the activity development as "good and important".
- Beneficiaries indicated that the knowledge of new firefighting technologies was of fundamental value.
- The importance of learning first aid techniques was the main differential listed by the participants.
- The training by the project was characterized as an "Innovation" to expands the knowledge network of its residents and prepares them for other future job opportunities and better income gains.
- Access to information was classified as a differential for the current reality of beneficiaries.
- The training directed to the use of equipment was considered important for the continuity of the practices passed on during the course.
- There was a greater awareness on the part of the beneficiaries regarding the protection of preserved areas by fighting fires, with the dissemination of information to neighboring communities being indicated as a subsequent activity.
- From a personal point of view, the beneficiaries felt valued and encouraged to learn and train themselves more and more, in search of more professional attributes, which will result in an increase in individual professional status, differentiating them in the job market.

#### **4.3.2 Monitoring Plan Dissemination (CM4.3)**

The community monitoring plan and the results of each monitoring period are made available and disseminated to the community through the project's internet page (under CCC website) and on Verra platform. Summaries of the community monitoring and results are also being disseminated through workshops and open events. Digital files of the community monitoring will be transparently made available to community members, institutions, and authorities upon request. Printed version of the monitoring report (with the monitoring plan) is available at each property.

#### **4.4 Optional Criterion: Exceptional Community Benefits**

Not applicable.

##### **4.4.1 Short-term and Long-term Community Benefits (GL2.2)**

Not applicable.

##### **4.4.2 Marginalized and/or Vulnerable Community Groups (GL2.4)**

Not applicable.

##### **4.4.3 Net Impacts on Women (GL2.5)**

Not applicable.

##### **4.4.4 Benefit Sharing Mechanisms (GL2.6)**

Not applicable.

##### **4.4.5 Governance and Implementation Structures (GL2.8)**

Not applicable.

##### **4.4.6 Smallholders/Community Members Capacity Development (GL2.9)**

Not applicable.

### **5 BIODIVERSITY**

#### **5.1 Net Positive Biodiversity Impacts**

##### **5.1.1 Biodiversity Changes (B2.1)**

The WARG Project contributes with positive impacts to biodiversity by the reduction of deforestation and forest degradation in the region. The protection of the forest provides benefits to local flora and fauna, as well as to the well-being of local communities.

Without the project the most likely scenario would have been the continued unplanned deforestation of the Amazon Forest, resulting in forest cover loss, reduction of available habitat for local species, and probably a reduction on species diversity and species abundance. With the project in place and the conservation of forest cover, positive impacts can be assumed, such as the maintenance of water cycles, maintenance of soil quality by nutrient cycling, provision of food and shelter for wildlife, and providing habitat for many species of fauna and flora.

Change in Biodiversity	Protected area
Monitored Change	At the time of current Monitoring Report, all the protected areas proposed by the project (Project Area), corresponding of 59,959.3 ha, have been maintained. No deforestation, neither fires, nor floods, nor other climatic events have compromised the forest in those areas.
Justification of Change	Analysis of remote sensed data (PRODES) from the monitored period provided evidence of the maintenance of forest cover in the project area.

### 5.1.2 Mitigation Actions (B2.3)

No negative impact mitigation activities were developed, as no negative impact to the biodiversity were recorded as result of the project activities.

### 5.1.3 Net Positive Biodiversity Impacts (B2.2, GL1.4)

Net positive impacts on biodiversity have been demonstrated for this monitoring plan over time through periodic monitoring and reporting of biodiversity indicators, such as the maintenance of forest cover. As described in the PD, the most practiced activities in the baseline scenario are logging and cattle-ranching. Both processes can lead to complete forest clearing (deforestation for pasture opening) or forest degradation (timber extraction). It is very common to use fire in these activities to reduce woody debris and facilitate mechanized operations in pasture or crop. Fire is also used to renew the pasture when grass-fields loose productivity along the years. In the area, a total of 1,432 ha was expected to have been deforested during the monitored period, and by the project activities, the forest is still present and maintaining its ecological functions. Therefore, we can assume positive impacts in the biodiversity by protecting the forest.

A technical team of specialists was hired to carry out the fauna studies in the project area. A diagnosis of existing animal species is already being carried out, as well as the implementation of monitoring cameras in the forest, to identify which populations occur. These studies will help define species conservation activities that may be implemented in the future, bringing a positive impact on biodiversity.

### 5.1.4 High Conservation Values Protected (B2.4)

No high conservation values were negatively affected by the WARG Project during the monitored period. This can be demonstrated by the fact that the project area is being preserved and no deforestation occurred in the period, as observed by remote sensed data from PRODES.

### 5.1.5 Invasive Species (B2.5)

None of the Project's activities introduce invasive species.

### 5.1.6 Impacts of Non-native Species (B2.6)

Not applicable.

### 5.1.7 GMO Exclusion (B2.7)

No GMOs will not be used for its purpose to generate carbon credits in the WARG Project.

### 5.1.8 Inputs Justification (B2.8)

Not applicable. No fertilizers, chemical pesticides, biological control agents and other harmful inputs were used by the WARG Project, since it is aimed at promoting biodiversity conservation under complete natural conditions.

## 5.2 Offsite Biodiversity Impacts

### 5.2.1 Negative Offsite Biodiversity Impacts (B3.1) and Mitigation Actions (B3.2)

There were no negative offsite biodiversity impacts due to the Project activities. The conservation of the forest will bring benefits to the biodiversity, not only in the project area but in the close proximities since the preserved forest could also act as corridors.

Besides that, the activities involving training and education with the community are a form of mitigation measures, since it will reduce human risks to biodiversity, such as fire, illegal hunting, and others.

### 5.2.2 Net Offsite Biodiversity Benefits (B3.3)

Not applicable since no negative offsite biodiversity impacts were observed.

## 5.3 Biodiversity Impact Monitoring

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

Variable to be Monitored	Explanation	Unit	Frequency	Procedure	Result in the monitored period
Deforested x protected area	Deforestation and forest degradation and their impacts on biodiversity will be assessed through satellite imagery analysis	ha	Annually	Satellite imagery analysis	59,959.3 ha of forest are being protected and no deforestation was observed in the monitored period.
Number of fire spots recorded	Fires are responsible to destruction of biodiversity in the Project Area and its borders	Number	Annually	Satellite imagery analysis and field cruising	No fire occurred inside the Project Area during the monitored period.

### 5.3.2 Biodiversity Monitoring Plan Dissemination (B4.3)

The biodiversity monitoring plan and the results of each monitoring period are made available and disseminated in the project's web page (under CCC website) and on Verra platform. Summaries of the biodiversity monitoring and results are also being disseminated through workshops and open events. Digital files of the biodiversity monitoring will be transparently made available to community members, institutions, and authorities upon request. Printed version of the monitoring report (with the monitoring plan) is available at each property.

## 5.4 Optional Criterion: Exceptional Biodiversity Benefits

At this point the main exceptional benefit to biodiversity provided by the Western Amazon REDD+ Grouped Project was the conservation of 59,959 hectares of dense tropical rainforest considered mostly of extremely high priority in the Amazon Biome according to Brazilian Government.



**5.4.1 Trigger Species Population Trends (GL3.3)**

At this point a few actions were taken to protect the forest where the trigger species population live, such as demarcation of the areas and fire monitoring. During the monitored period, the 59,959.3 ha of forest in the project area was protected and no deforestation was observed. Results specific to each specie will be provided in the next monitored periods.

**6 ADDITIONAL PROJECT IMPLEMENTATION INFORMATION**

Not applicable.

**7 ADDITIONAL PROJECT IMPACT INFORMATION**

Not applicable.

## APPENDICIES

### Appendix 1: Additional Information

#### Accuracy Assessment

As accuracy assessment was performed to evaluate the PRODES data used to calculate project and leakage emissions. The assessment was done using high resolution images from Planet constellation, using the plugin Planet Explorer for QGIS. Planet daily images have a resolution of 3 meters. A total of 71 random points were sorted in QGIS, using the AcATaMa plugin, as shown in the Figure 2. The overall accuracy was 0.98, and the details by class are presented in the confusion matrix on Table 12.

Table 12: Confusion matrix of the monitoring period

		Reference						
Classification		Forest	Water	Non-Forest	Deforestation	Cloud	Total	User accuracy
	Forest	29	0	0	1	0	30	96%
	Water	2	3	0	0	0	5	60%
	Non-Forest	3	0	1	0	0	4	25%
	Deforestation	0	0	0	30	0	30	100%
	Cloud	2	0	0	0	0	2	0%
	Total	36	3	1	31	0	71	-
	Producer accuracy %	80%	100%	100%	96%	-	-	-

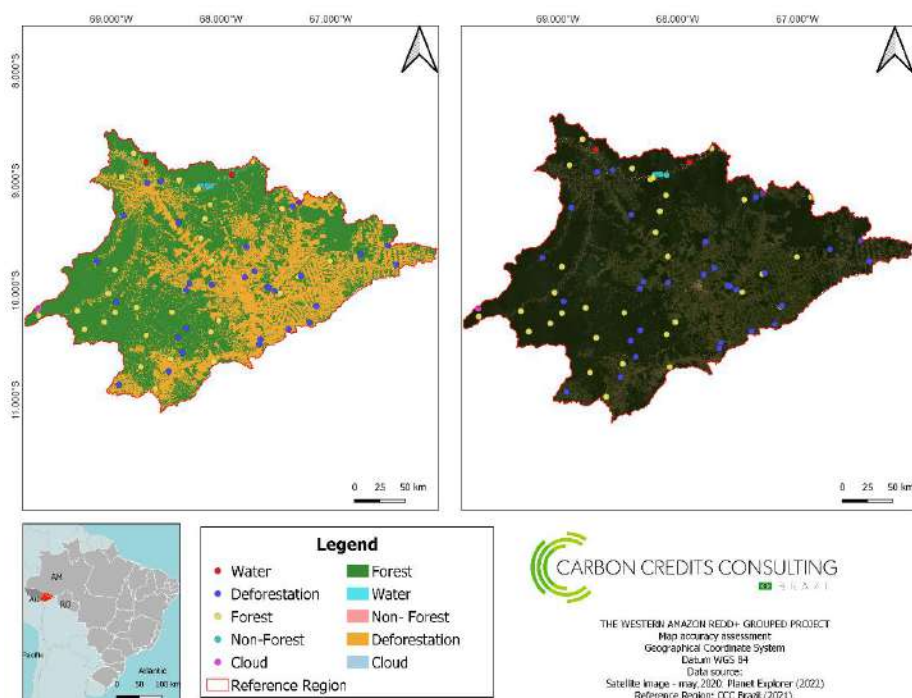


Figure 2: PRODES 2021 accuracy assessment.