PROJECT DESIGN DOCUMENT

ZERO2NATURE - PREFOR

Version 1.0

PROJETO PONTAROLO - PREFOR

Scope	scope_17
Project Title	PROJETO PONTAROLO - PREFOR
Project Proponent(s)	FREDERICO PONTAROLO
Host Country	BRAZIL
Other Involved Countries	
Ex-Ante Annual Average Negative Emissions Reduction	32,223

Goals & Description of Project Activity

The story of this project begins in the Brazilian state of Paraná with Frederico Pontarolo, an adventurous farmer, who left his home with "a bag and a gourd", as Brazilian people use to say. With him he brought his wife and seven children to find their place in the northern state of Maranhão. Frederico first instructed his eldest son Adam to "find a house to rent located on the same block as the school, so that the kids don't have to cross the street." Frederico, who during the invasion by bandits of his newly acquired lands warned, shotgun in hand: "this land has an owner!" And so it has! Since 1980 Frederico fights "tooth and nail" to preserve one of the largest private forests left in Maranhão. However, the story of Mr. Pontarolo begins well before, way back in 1542, in Padova, northern Italy, where Tommaso, son of Francesco Calegari was famous for making shoes and always carried an awl, which is the instrument used to pierce holes in leather. When somebody asked about him, his acquaintances would say: "Ah! Quello del Puntaruolo!"

Puntarolo means awl in Italian. Therefore, the symbol of the project is a cobbler in the shade of a tree. A mixed tribute to Tommaso and Frederico who, each in their own way conscientiously chose a life to live.

Frederico's farm is located on the penultimate longitudinal line of the Amazon region. With great difficulty he managed to keep over 6000 hectares of rainforest completely intact. And difficulty is the reality of the Amazon. Transportation is tough, distances are long, all sorts of tropical diseases are present and mosquitoes never give a break. Besides all natural factors, one must also consider the difficulty to preserve this important biome against the fierce exploitation of its riches. As a rule, human actions are devastating the Amazon regardless of the delicate and complex equilibrium of the forest, as if all the exuberance made it invulnerable.

In terms of the Amazon region, the following data is relevant:
-The Amazon River represents about 18% of all available fresh water on the planet;
-The mouth of the Amazon is so vast, that the island of Marajó, located at the river's exit to the ocean, is roughly the size of Switzerland;
-The muddy waters of the Amazon River produce a visible trail penetrating hundreds of miles into the Atlantic Ocean;
-Hundreds of millions of years ago, there was a single "protocontinent" known as Pangaea, which covered half of the Earth. During the Triassic Age, Pangaea divided into two continents: the northern part known as Laurasia and the southern part as Gondwana. About 90 million years ago, Gondwana split creating the continents of Africa, South America, Australia and Antarctica. This occurrence created the Indian peninsula and forced the South American mass to slide westward, reaching the Nazca plate. The collision between the two tectonic plates pushed the western coast of South America on top of the Nazca plate, forming the Andes Mountains.

Consequently, the newly formed mountain ridge extending from the southern tip of Chile to the northern tip of Colombia dramatically changed the weather pattern and the river system of South America.
Before the advent of the Andes, the Amazon River used to flow into the Pacific Ocean and there was no connection with the Atlantic. Following the rise of the Andes, the water route to the Pacific was blocked and during millions of years, the Amazon River became an inland sea, covering the center of the continent. Finally, during the Pleistocene Age, rising waters broke through the eastern barrier overflowing into the Atlantic, creating the largest river system of our planet. As a result, the soil of the former inland sea became a huge basin of sediments, compounded of rich and fertile plains supporting an incredible abundance of unique fauna and flora. Time has advanced and so has the negative impact of mankind on this very special region of our world. It is now up to us to stop further degradation and help restore the biome, by setting examples, making a difference and turning the world into a better place to live in. Frederico has already started and is showing us the way.

The main objective of the PONTAROLO PROJECT, is the monitored preservation of 6,262.60 ha. of Amazon forest. The Amazon has 6.9 million km2, covering nine countries: Brazil, Bolivia, Colombia, Venezuela, Ecuador, Peru, Guyana, Suriname and French Guyana. From this total, 4.2 million km2 or 61%, are in Brazil. The Amazon is home to half of all terrestrial species on the planet. The region has more than five thousand species of trees, in excess of three hundred kinds of mammals, over thirteen hundred types of birds and a countless number of insect species, reaching far over the millions. There are twenty-three thousand miles of inland waters, home to over three thousand species of fish.
Around 220,000 Indigenous people live in the Brazilian Amazon, divided into one hundred and eighty ethnic groups. Besides the Brazilian indigenous population, the Amazon is home to around 20 million people. Amongst them are the riparian people, maroons (African refugees that escaped slavery and formed independent settlements) and forest extractivists.
The Amazon possesses the largest watershed on the planet that has the capacity to influence the global climate. This information alone should be more than enough to ensure the monitored preservation of this corner of the Earth. Yet, the Amazon unfortunately remains

abandoned to its own fate.

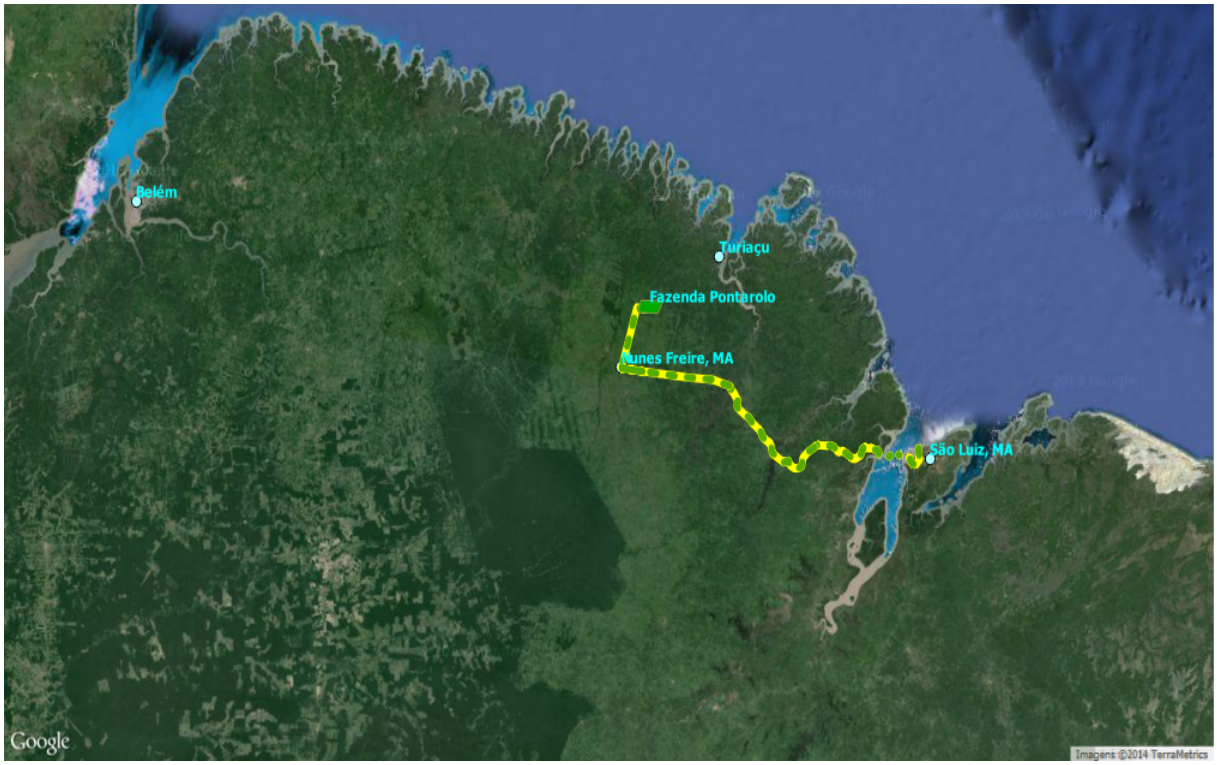
Between the date of the Portuguese discovery of Brazil and 1970, deforestation of the Amazon forest represented only 1%. Over the last 40 years, there has been a detected deforestation of 17%. Paired with deforestation is the exponential increase of water and air pollution in addition to unregulated hunting/poaching/fishing/mining etc.

To ensure the accuracy of the data presented in this PDD, an expedition conducted to project site of PROJETO PONTAROLO occurred, the results of which are shown throughout this document.

The first expedition to the project site of PROJETO PONTAROLO took place between April 25 and 27, 2014. All negative emissions related to the expedition were accounted and will become deducted from the ecological credits generated by the project. Any action related to the implementation of PROJETO PONTAROLO shall be described in a DATABOOK which, once completed, will have the original, as well as the electronic version available to the public.

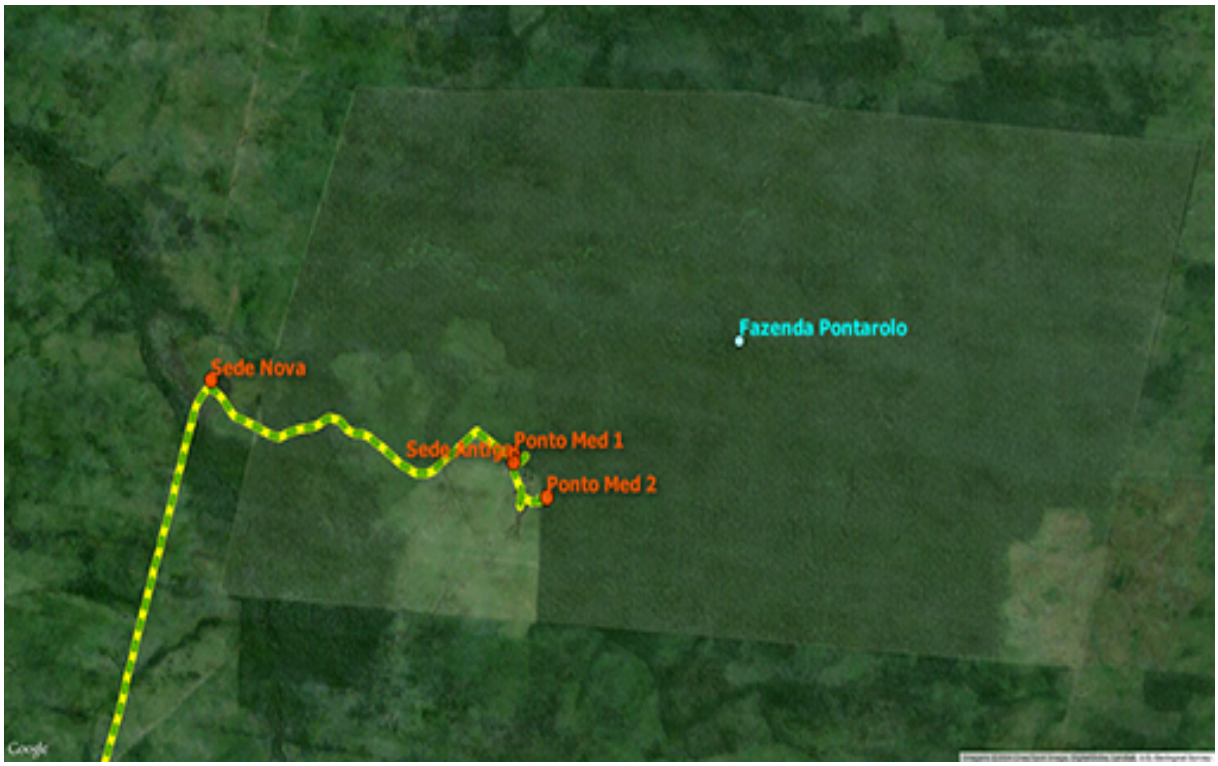
The objectives of the first expedition were the collecting of soil and water samples; determination of CO2 levels, CH4, luminosity (light incidence) and temperatures (air and water) at defined perimeters within the project site. The first expedition also aimed to assess the extent of anthropic activities within the region, with special emphasis on deforestation, as detailed in this PDD. The project site is virtually an intact portion of the Amazon biome and there is hard evidence of serious threatening human activity around the perimeter. A third goal of the expedition was to initially assess and establish the different points of the observation system which will permit the most effective monitoring plan for PROJETO PONTAROLO.

Below is the route traveled to the first expedition of PROJETO PONTAROLO:



Location of Project Activity

The total area of the project is 6,263 hectares. Please view map for location:

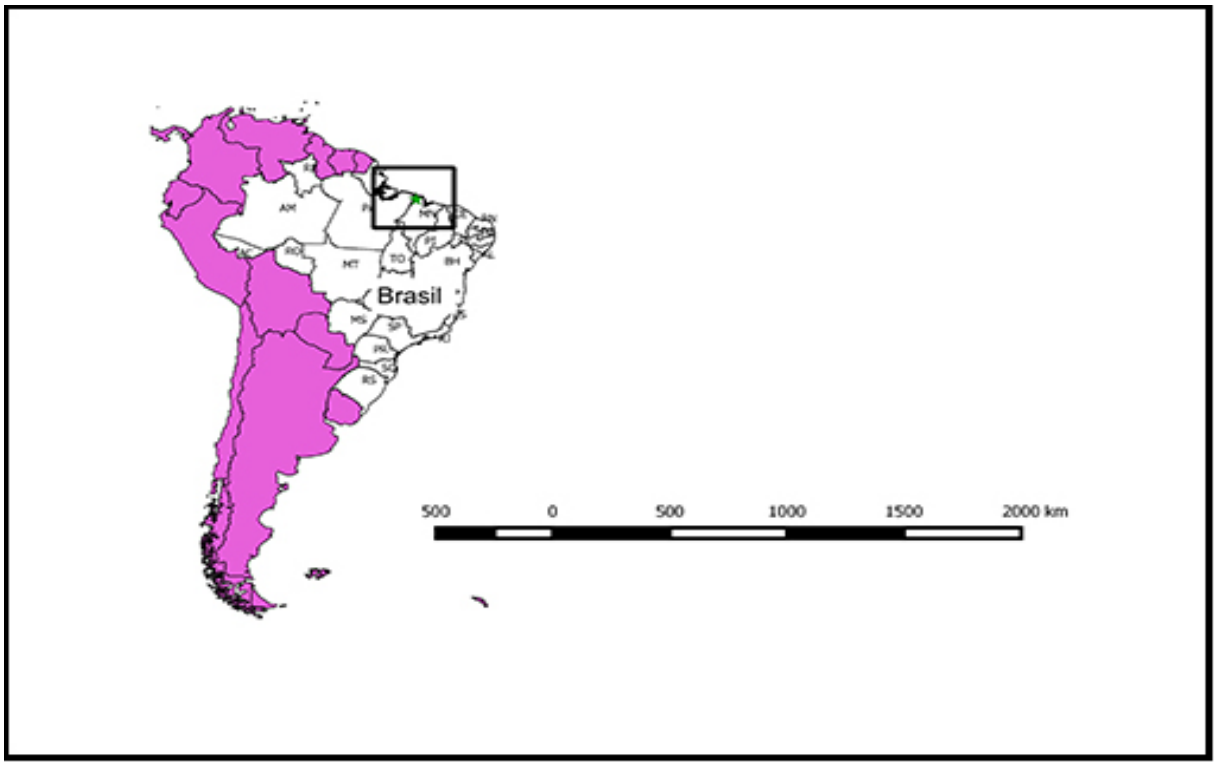


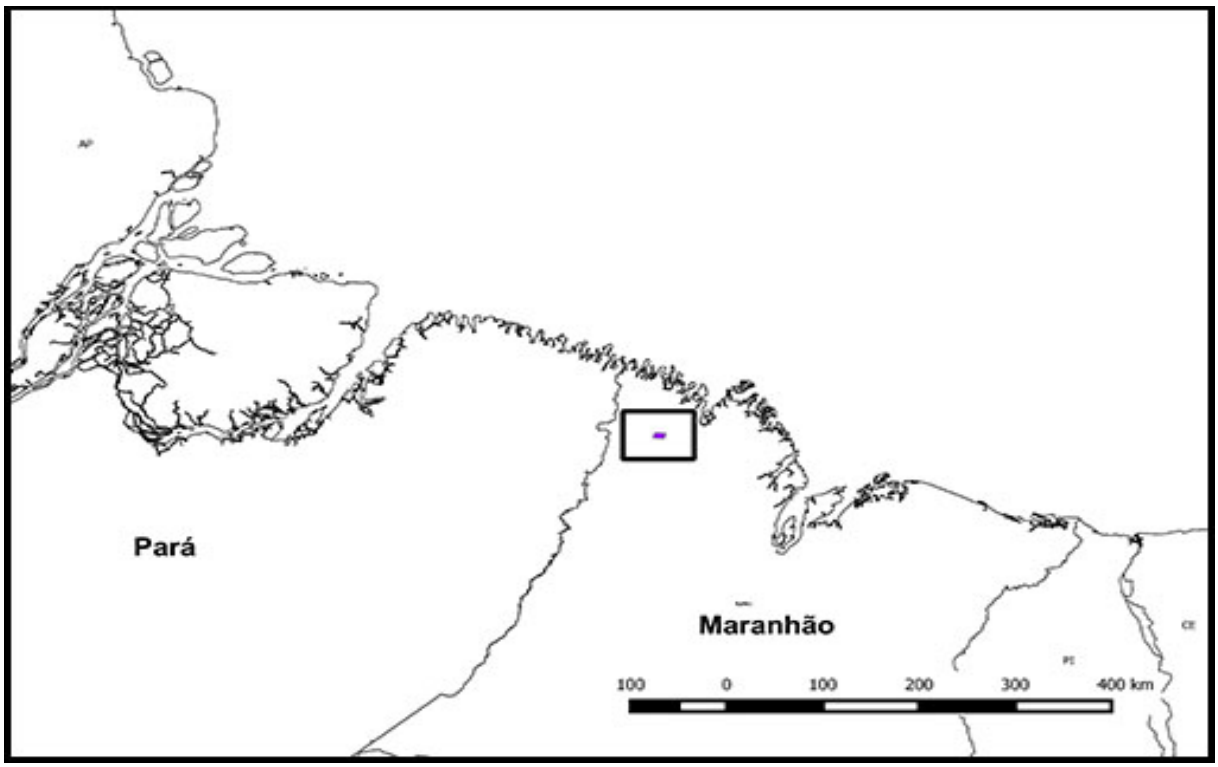
Complete Address

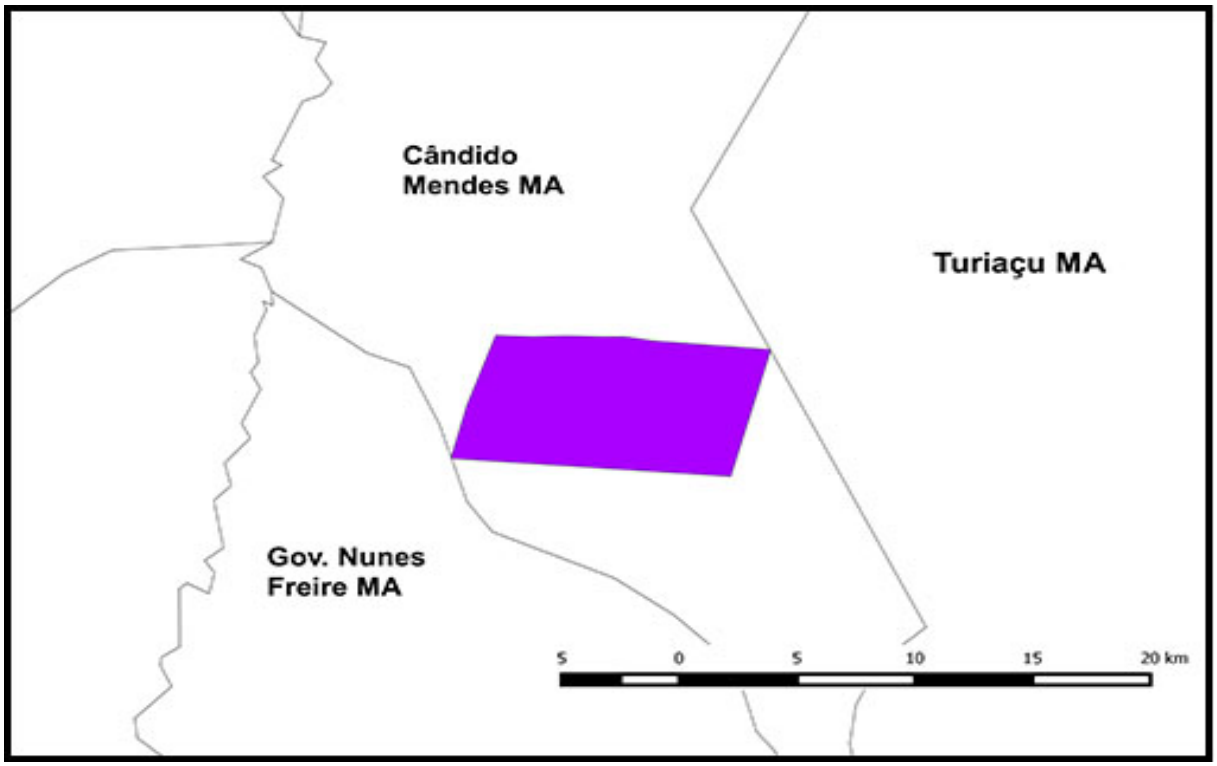
Street	Rua do Bec
Number	20
County	Brazil
City	Governador Nunes Freire
Country	Brazil
Zip Code	65284-000
Telephone	+55 98 8303-3396

Geographical Location of PA

Area of project relative to host country




Pará
Maranhão
100 0 100 200 300 400 km


Cândido
Mendes MA
Turiaçu MA
Gov. Nunes
Freire MA
5 0 5 10 15 20 km

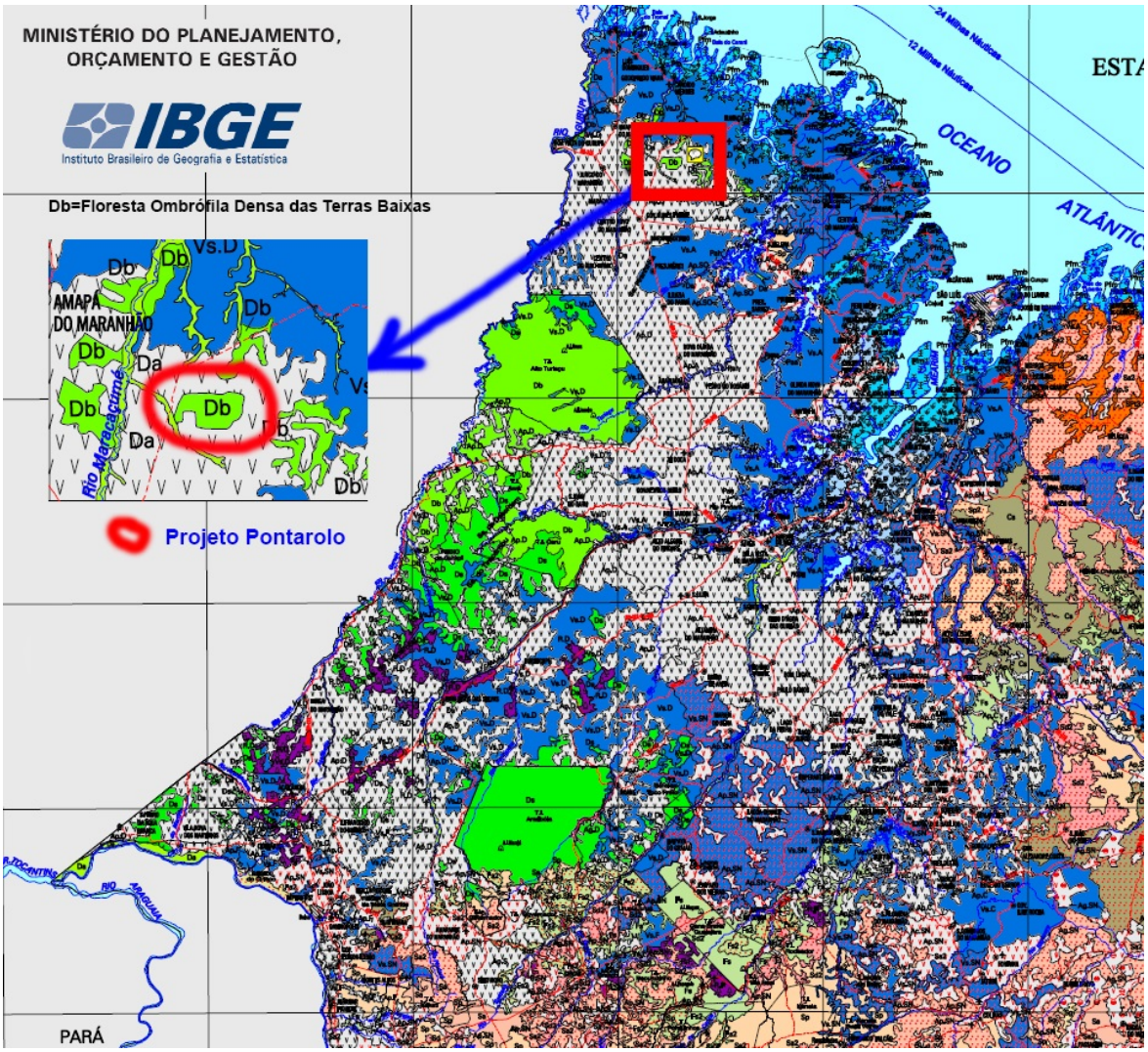
Geographical Boundaries of PA

The geographical boundaries of the land/property of PROJETO PONTAROLO project activity are established in annex 4 of this PDD.

Environmental Conditions of PA

Project PONTAROLO represents a virtually untouched area of nature: an oasis in the middle of an aggressive stage of deforestation and consequent deterioration of the region's environment.

The map below shows the result of human action which, if not properly restrained through proper investment in effective monitored preservation, can lead to rapid deforestation of the area.



The map above shows that Brazil's agricultural frontier has been exerting a strong economic pressure on the entire state of Maranhão. Farming which has taken over about 25% of the

Cerrado biome (mainland plateaus), now heads in big steps into the forests, increasing illegal logging. Studies made by the IBGE (Brazilian Institute of Geography and Statistics) show that of the original dense forest area of Maranhão, only 31% or 19,707.6km2 remain. Of the original semidecidual and decidual forests only between 45% and 25% remain, respectively. Of the original Open Forest (babassu palm trees), there remains a small area in the northwestern part of the state of only 27.5 km2, corresponding to 0.09% of the original area. Moreover, according to the IBGE, the vegetation occurring in the state of Maranhão represents three Brazilian continental biomes: the Amazon biome, the Cerrado biome and the Caatinga biome. Furthermore, the biomes have six major vegetation types: 1. Rain Forest (with trees that do not lose their leaves in the dry season); 2. Open Evergreen Forest (dominated by babassu and/or vines); 3. Semideciduous forest (with trees that lose their leaves in the dry part of the season); 4. Deciduous forest (with trees that lose more than 50% of the dry leaves); 5. Savanna Cerrado and Savanna-Steppe (arid backlands); 6. Pioneer Formation Areas (floodplains and wetlands, mostly).

Região Fitoecológica / Outras Áreas	Área (km²) primitiva	Área (km²) remanescente	Percentual remanescente
Floresta Ombrófila Densa	63.562,05	19.707,61	31,01
Floresta Ombrófila Aberta	31.350,28	27,50	0,09
Floresta Estacional Semidecidual	12.418,43	5.571,90	44,87
Floresta Estacional Decidual	20.829,99	5.021,48	24,11
Savana (Cerrado)	74.288,57	57.130,04	76,90
Savana-Estépica (Caatinga)	199,30	199,30	100,00
Formações Pioneiras	14.388,25	13.900,67	96,61
Contato Savana / Floresta Ombrófila	1.300,37	-	-
Contato Savana / Floresta Estacional	99.818,01	57.807,83	57,91
Contato Savana / Formação Pioneira	2.836,64	2.836,64	100,00
Contato Savana-Estépica / Floresta Estacional	363,70	193,95	53,33
Contato Savana / Savana-Estépica	3.024,62	2.615,82	86,48
Duna	1.262,16	1.262,16	100,00
Total	**325.642.4**	**166.274,9**	**50,1**

Geology - The geology of the state of Maranhão indicates the presence of aquifers, ideal for the supply of good quality and low cost water. Located in the Parnaíba Structural Province (which occupies more than 90% of the state), on rock formations of the Cabeças, Serra Grande, Sambaíba, Corda, Grajaú Itapecuru, Ipixuna and Barreiras, the aquifers contain an estimated volume of 17,500 km3, with flows that reach up to 1,000 m3/h, signifying great potential for future human supply.

The geology of the state also favors a great potential for tourism. The Structural Coast

Province dominates the coast of Maranhão in the form of dunes and pools of marine deposits, which together form the Maranhão Lowland and the 'Lençol Maranhense', already a much visited location in the state.

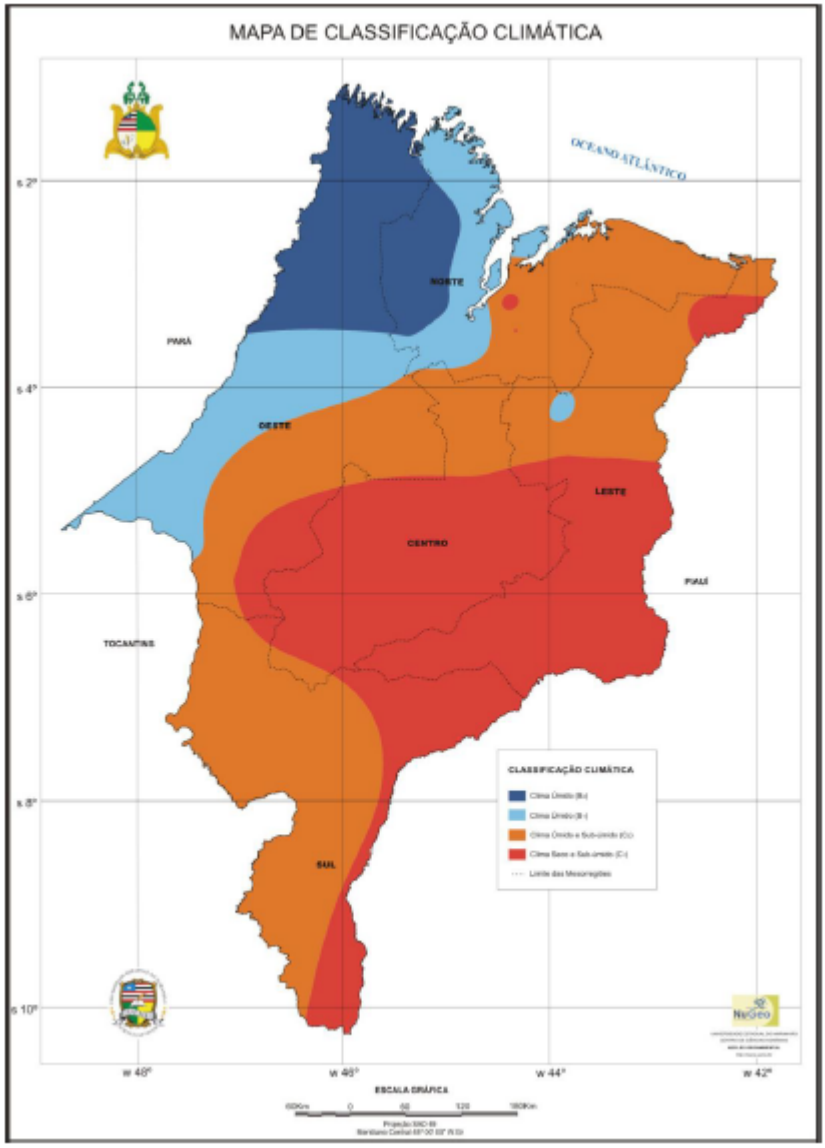
With respect to the plateau region of the state (Penitentes, Alpercatas and Espigão Mestre), a major concern relates to increasing farming activities, since these areas function as storage and supply of water to the river basins of the region. Farming activities, across the region (occupying much of the southern, western and southwestern parts of the state) produce incalculable negative environmental emissions, especially through the utilization of pesticides that infiltrate the soil and contaminate subterranean water channels.

The Gurupi Structural Province, located in the northwestern part of Maranhão, holds large mineral reserves of gold, already much explored in precarious and illegal manners. Moreover, carbonate deposits of the Cretaceous Age, in the formation known as Codó, contain significant reserves of limestone. Limestone is used in the production of cement at the plant in the city of Codó and as a corrective agent to regulate the acidity of the soils in the region and neighboring states such as Pará and Piauí.

The northwestern part of Maranhão has an important hydrocarbon concentration. Natural gas reserves were discovered there even recently (2010), in the municipality of North Capinzal (Grajaú Basin). Furthermore, in the region close to the city of Balsas, named Tinguá-Carolina, Brazil's oil company Petrobras, found natural gas during the 1960s.

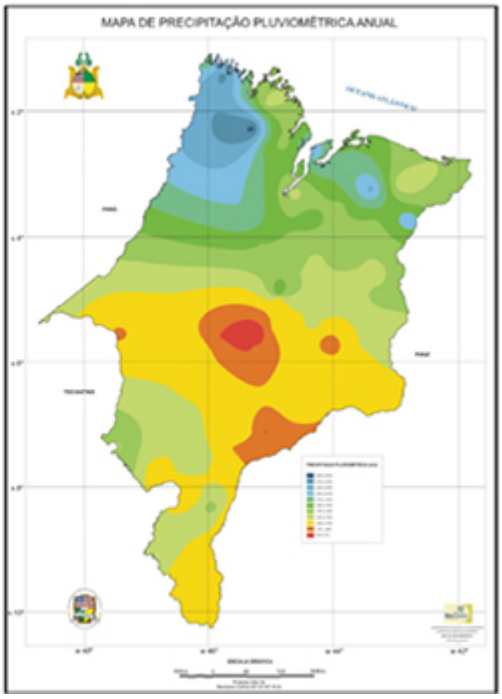
On January 2014, Maranhão was awarded the dubious honor of "poorest state in Brazil," a great irony if one considers the results of the IBGE studies presented above. PROJECT PONTAROLO serves as an example not only to Maranhão but also to Brazil as a whole, for despite all the natural riches available, the country suffers from incessant devastation caused mainly by incapacity, dishonesty or ignorance.

CLIMATE – The site of PROJETO PONTAROLO is located in the tropical monsoon zone (Köppen climate classification and Geiger). During most of the year, the state has significant rainfall. The average annual temperature in the region is 27.6 °C. The average annual rainfall is 2,784mm.



HYDROLOGY - The state of Maranhão is nationally and internationally prominent for its large hydro potential. Studies show that 97.2% of the state´s waters are underground and only 2.8% is surface water. In general, there is plenty of water supply with scarcity occurring only in areas of excessive demand. 74% of the municipalities are supplied solely by groundwater sources (wells), while 21% of municipalities are supplied with surface water with the remaining 5% are supplied by hybrid systems. Threats to the quality of the water are constant such as lack of sanitation, domestic sewage, untreated industrial effluents, pesticides, deforestation and soil erosion.

Nome da Região Hidrográfica	Bacia Hidrográfica	Área (km^2)	% sobre o Estado
Domínio Estadual			
		216.034,34	65,07
	Sistema hidrográfico do Litoral Ocidental	10.226,22	3,08
	Sistema hidrográfico das Ilhas Maranhenses	3.604,62	1,09
Atlântico Nordeste Ocidental	Bacia Hidrográfica do Rio Mearim	99.058,68	29,84
	Bacia Hidrográfica do Rio Itapecuru	53.216,84	16,03
	Bacia hidrográfica do Rio Munin	15.918,04	4,79
	Bacia Hidrográfica do Rio Turiaçu	14.149,87	4,26
	Bacia Hidrográfica do Rio Maracaçumé	7.756,79	2,34
	Bacia Hidrográfica do Rio Preguiças	6.707,91	2,02
	Bacia Hidrográfica do Rio Periá	5.395,37	1,62
Domínio Federal			
		115.948,95	34,06
Parnaíba	Bacia Hidrográfica do Rio Parnaíba	66.449,09	20,02
Araguaia-Tocantins	Bacia Hidrográfica do Rio Tocantins	30.665,15	9,24
Atlântico Nordeste Ocidental	Bacia Hidrográfica do Rio Gurupi	15.953,91	4,80
----	Águas Limítrofes do Litoral	2.880,80	0,87
TOTAL		331.983,29	100,00

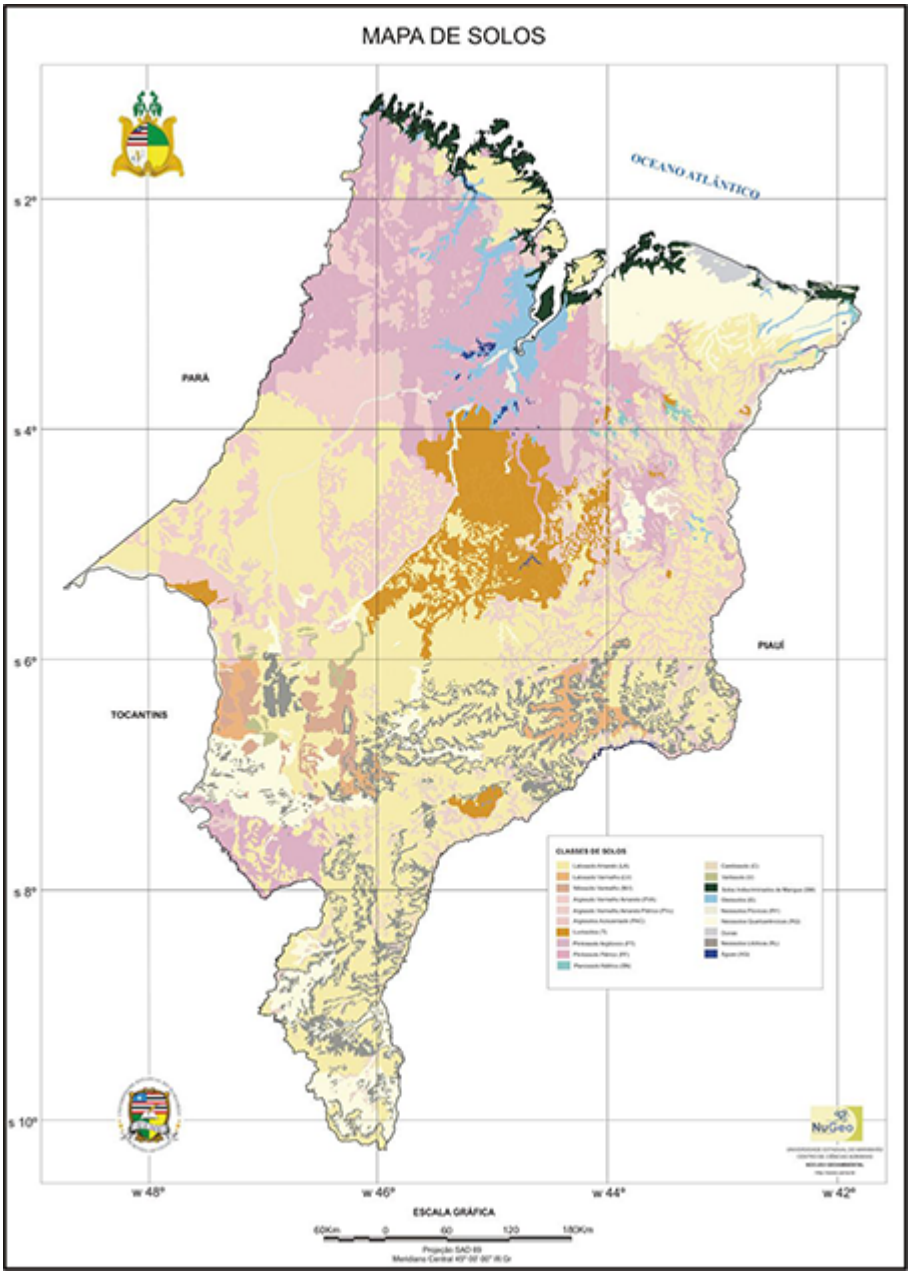


SOIL - The layer of the Earth's surface essential for plant life is sensitive to the action of rain, wind and heat which may culminate in erosion. Deforestation also damages the soil, removing its natural protection. The main soil types found in the state of Maranhão are:

- Oxisoil (33.87%),
- Plintossolo Argiluvic (13.67%),
- Paleudult-Yellow (9.54%),
- Red Yellow Argisol petroplintic (9.22%),
- Quartzipsamments (8.84%),
- Entisols (6.98%), and
- Chromic Luvisol (6.70%)

The seven aforementioned classes correspond to 88.82% of the state´s soil. Classes of soils with lower cartographic expression are Gleysols (1.89%); Indiscriminate Mangrove soils (1.85%); UDULT (1.38%); Oxisol (1.20%); Fluvisols (1.07%); Plintossolo Petric (0.94%); Neossolos Eolic - Dunes (0.38%); Vertisoil (0.34%); Planossolo Natric (0.27%); Ultisol 0.20%); and Cambisol (0.07%). These classes correspond to about 10% of the state.

The Yellow Oxisol soils are more relevant because they represent approximately 33.87% of the state´s soil, occupying approximately 112,404.48 km2. Noteworthy is the occurrence of this type of soil in the savanna area of Maranhão, mainly in the south-central region where there has been steady advance of soybean monoculture, in addition to the cultivation of maize, beans, cassava and planted pasture.


MAPA DE SOLOS
OCEANO ATLÂNTICO
PARÁ
PIAUÍ
TOCANTINS
s 2°
s 4°
s 6°
s 8°
s 10°
w 48°
w 46°
w 44°
w 42°
CLASSES DE SOLOS
ESCALA GRÁFICA
60Km
0
60
120
180Km

Technologies and/or Measures

The intensive observation of the site of PROJETO PONTAROLO will occur according to the monitoring plan, incorporated in this PDD. Video cameras will be strategically positioned on access points to the site, allowing control over any activity that may occur in the area. The employees of the Sete Irmãos Farm, where the project site is located, will have the opportunity to work on the project activity, with a salary increment. Activities to be performed by those employees and/or new hires, will range from maintenance of video cameras to patrolling of the area. In case of the observation of any illegal activity, project members will be instructed to exit the site, ensuring the safety to their physical integrity, and trigger the appropriate security channels and environmental protection within the Brazilian public service.

Eligibility of the Land

According to methodology ZNP0001, paragraph 2.2 (a): In case of a ZERO2NATURE-PREFOR project activity, the project area may include different types of forests, provided they meet the following criteria: 'area measuring more than 0.5 hectare with trees higher than 5m and a crown coverage larger than 10%, or trees with potential to achieve these parameters in situ, excluding land that is predominantly under agricultural or urban use.' Moreover, the ZERO2NATURE standard states that a PREFOR project activity is eligible for areas classified as a forest for a minimum period of 10 years.

As attested by various maps of the project location included in this PDD:
a) The project area is 6,262.60 ha;
b) The vegetation of the project area is typical of the Amazon forest, with trees higher than 5m and over 20% crown coverage;
c) There is no agriculture or urbanization at the project site;
d) The project site is composed of almost intact Amazonian biome.

Considering all the requirements of the ZERO2NATURE Standard and the 'Procedures to demonstrate the eligibility of lands for ZERO2NATURE-PREFOR/PREBIO project activities', the project site of PROJETO PONTAROLO is eligible as a ZERO2NATURE monitored preservation project activity.

Reference of Methodology

The 'Methodology for developing ZERO2NATURE projects to reduce negative emissions through afforestation, reforestation, changes in land use or monitored conservation of forest-ZERO2NATURE-PREFOR' was employed in this project. As required by the methodology, the following tools, guidelines, references and documents were also used:

(a) Tool to identify the baseline scenario and demonstration of additionality in the ZERO2NATURE-PREFOR project activities;
(b) ZERO2NATURE Glossary of terms;
(c) ZERO2NATURE Standard;

(d) Harvard Atmospheric Chemistry Modeling Group - www.acmg.seas.harvard.edu;
(e) IPCC Guidelines for LULUCF, 2003;
(f) Procedures to demonstrate the eligibility of lands for ZERO2NATURE-PREFOR project activities;
(g) Tool for estimation of carbon stocks and change in carbon stocks in trees and shrubs in the ZERO2NATURE-PREFOR project activities.

Applicability of Methodology

The proposed ZERO2NATURE-PREFOR project activity meets the requirements of the chosen methodology for the following reasons:

a) The PDD is generated through the ZERO2NATURE project design platform;
b) The proposed ZERO2NATURE-PREFOR project activity adopts both forseen and unforseen deforestation in the baseline scenario;
c) The proposed ZERO2NATURE-PREFOR project activity will not alter more than 10% of the contemplated baseline scenario;
d) The area where the proposed ZERO2NATURE-PREFOR project acitivity will be implemented is not a swamp.

Sinks and Negative Emission Sources

Emission Sinks	Yes or No)	Rationale
Above soil carbon sink	yes	Primary source of the carbon reservoir object of the proposed ZERO2NATURE-PREFOR/PROJETO PONTAROLO project activity
Below soil carbon sink	yes	Primary source of the carbon reservoir object of the proposed ZERO2NATURE-PREFOR/PROJETO PONTAROLO project activity
Dead wood	no	The ZERO2NATURE-PREFOR PROJETO PONTAROLO project activity does not include changes related to dead wood
Waste material	no	The ZERO2NATURE-PREFOR PROJETO PONTAROLO project activity does not include changes related to waste material
Organic carbon on soil	no	The ZERO2NATURE-PREFOR PROJETO PONTAROLO project activity does not address changes related to the organic carbon stored in the soil

Strata Identification

According to EMBRAPA, department of the Brazilian Ministry of Agriculture, the following water strata occurs in the Amazon region:

- White Waters - pH 6.5 to 7 and transparency 0.10 to 0.50m.
- Black Waters - pH 3-5 and transparency from 1.30 to 2.90m.
- Clear Waters - pH 4.5 to 7 and transparency from 1.10 to 4.5m.

During the first expedition to the PONTAROLO project site, water samples were collected. The results are consistent with the definition of black and clear waters from EMBRAPA, as shown in the table below:

Area coordinates	Suspended Solids	Air Temp.	Water Temp.	Conductivity	Hydrogenionic Potential	Dissolved Oxygen	Dissolved Oxygen Saturation	Number of Samples
	$mg.L^{-1}$	°C	°C	$\mu S.cm^{-1}$	pH	$mg.L^{-1}$	%	n
1°51'818''S e 45°46'024''O. NASCENTE	283	29.7	26.9	83.4	6.8	7.0	99.0	1
1°51'827''S e 45°45'939''O. NASCENTE	225	28.4	25.3	78.7	4.8	5.9	89.0	1

The results of soil samples collected during the first expedition to the PONTAROLO project site can be found in table below:

Area coordinates	Hydrogenionic Potencial	Air Temp.	Soil Temp.	Organic Matter	CH_4	CO_2	Organic Carbon	Humidity
	pH	°C	°C	g/kg	ppb	ppm	g/kg	%
1°51'808''S e 45°46'024''O	5.8	27.6	25.5	44.8	1,702	368	25.3	84.15
1°51'803''S e 45°46'023''O	5.7	27.6	25.3	45.0	1,702	368	25.6	84.15
1°52'086''S e 45°45'792''O	6.1	29.7	25.2	45.1	1,700	368	25.4	79.35
1°52'083''S e 45°45'787''O	6.1	29.7	25.1	44.9	1,700	368	25.5	79.35

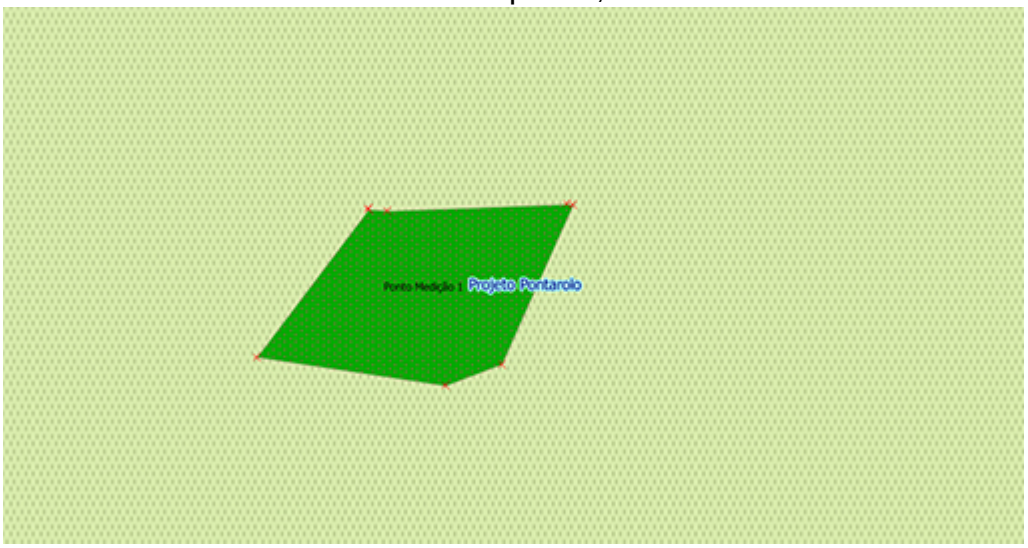
The following images show two perimeters that have been determined for the collection and complete survey of plant species occurring in each demarcated area. Two soil samples were collected at each perimeter. For precision purposes, new PVC tubes were used for soil collection with the following dimensions: Ø = 2' and L = 0.60m, with both sides sealed with appropriate caps.

Water samples were collected in the flow direction of the water current at approximately 0.20m from the surface. Soil temperatures and water were measured with a water-proof thermometer (Minipa MV-361), with a precision of quartz 1/10 degrees. Measurements of the levels of CO2, CH4, relative humidity and air temperature in the demarcated areas were performed by Futurlec MG811 (CO2) sensor, Futurlec MQ135 (CH4), humidity and temperature sensor SHT15 from Sensirion respectively.

Information related to the volume of sequestered carbon in the Amazon rainforest are based on data from the Intergovernmental Panel on Climate Change - IPCC. On the advice of the IPCC, sequestered carbon in the soil of the project area was not accounted.

Project site and the demarcated areas:

AREA 1 - Start of data collection: April 26, 2014 08:05AM



Coordinates: 1086’347’’S e 45076’717’’O Perimeter: 44.52m Area: 102.00m2

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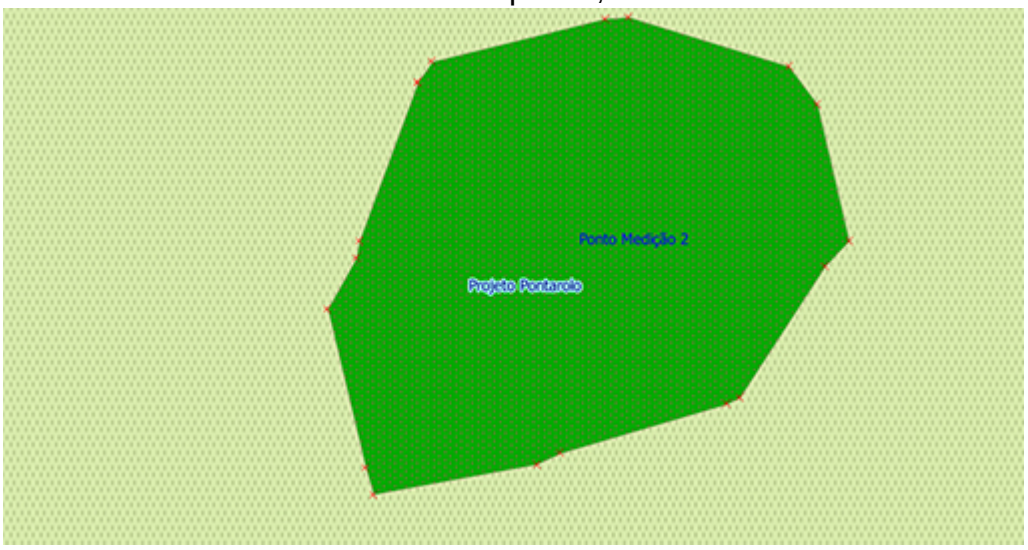
AREA 2 - Start of data collection: April 26, 2014 09:17AM



Coordinates:1086’806’’S e 45076’319’O Perimeter: 86.71m Area: 534.00m2

Establishment of Baseline Scenario

As a requirement of the applied methodology, the setting of the most plausible baseline was determined using the 'Tool to identify the baseline scenario and demonstration of additionality in ZERO2NATURE-PREFOR project activities'.

In accordance with item 7 of the 'Tool to identify the baseline scenario and demonstration of additionality in ZERO2NATURE-PREFOR project activities ', there are three steps to follow:

Step 1: Preliminary triage based on the beginning of the activities that resulted in the proposed ZERO2NATURE-PREFOR project activity, showing that the sale of 02NCs (ecological credits) was of fundamental importance in the realization and implementation of the project.

Consistency: Although the project area has been preserved until date, thanks to the efforts of the Pontarolo family, its maintenance and protection requires substantial capital. Due to a restricted budget, only recently it became possible to amass sufficient amounts to fund the first expedition to the PROJETO PONTAROLO project site and meet the requirements of the ZERO2NATURE Standard.

The project proponent has committed his lifetime savings to invest in PROJETO PONTAROLO project activity until registration and implementation of the first phase of the monitoring plan. However, the continuity of the monitoring process, from the second year of implementation onwards, depends entirely on the sale of eco credits.

Step 2: Identification of alternative scenarios to the one that should occur with the

ZERO2NATURE-PREFOR proposed project activity, in detailed and credible manner, through objective evidence.

Consistency: Without implementation of the PROJETO PONTAROLO project activity, there are four possible identified baseline scenarios in the region:

(i) Legal deforestation of 20% of the area where the project activity will be implemented, according to Brazilian Law number 12,651 signed in May 25, 2012;

(ii) Illegal deforestation, according to item 6 (b) of the 'Tool for estimation of carbon stocks and change in carbon stocks in trees and shrubs in ZERO2NATURE-PREFOR project activities' may be the average deforestation rate observed in the region, during the ten years prior to the start of the project activity, beyond the 20% deforestation permitted by law;

(iii) Forest management or

(iv) A combination of scenarios (i) and (ii) above.

Analysis of the proposed alternative scenarios

(i) According to Brazilian law, the owner of the land in the Amazon region has the right to deforest 20% of his/her property. Considering the quality of wood in the region, market prices and available finance, the removal of 20% of the forest is quite an attractive possibility and therefore a credible baseline scenario.

Investment in the exploration of timber revolves around US$25/ha, or about US$ 0.70/m^3, while the selling price of wood, in an absolutely conservative estimate revolves around US$290/ha. For this reason, it is realistic to assume a 4% per annum deforestation rate in the project area during a five-year period. In such a case, the area chosen for the project site would incur a legal deficit of 2,500.00ha. In an ultra-conservative approach, this scenario represents nearly US$700,000 immediate earnings in favor of the project proponent.

(ii) Illegal deforestation in the Amazon is a reality, as pointed out in section “Goals and Description of Project Activity” of this project design document. In accordance with item 13 (b) of the 'Tool for estimation of carbon stocks and change in carbon stocks in trees and shrubs in ZERO2NATURE-PREFOR project activities', official data related to the average annual deforestation rate of the region, considering the permitted 20% deforestation, until the start of the proposed ZERO2NATURE-PREFOR project activity is presented below.

DESMATAMENTO NO MARANHÃO			
	Km2/ano	Taxa de desmatamento	resultado Km2/ano
Ano/Total	128.160		
70	7.000	5,46%	
71	7.302	6,03%	121.160
72	6.998	6,15%	113.858
73	6.930	6,49%	106.860
74	6.700	6,70%	99.930
75	7.000	7,51%	93.230
76	5.686	6,59%	86.230
77	2.450	3,04%	80.544
78	2.450	3,14%	78.094
79	2.450	3,24%	75.644
80	2.450	3,35%	73.194
81	2.450	3,46%	70.744
82	2.450	3,59%	68.294
83	2.450	3,72%	65.844
84	2.450	3,86%	63.394
85	2.450	4,02%	60.944
86	2.450	4,19%	58.494
87	2.450	4,37%	56.044
88 (a)	2.450	4,57%	53.594
89	1.420	2,78%	51.144
90	1.100	2,21%	49.724
91	670	1,38%	48.624
92	1.135	2,37%	47.954
93 (b)	372	0,79%	46.819
94 (b)	372	0,80%	46.447
95	1.745	3,79%	46.075
96	1.061	2,39%	44.330
97	409	0,95%	43.269
98	1.012	2,36%	42.860
99	1.230	2,94%	41.848
0	1.065	2,62%	40.618
1	958	2,42%	39.553
2	1.085	2,81%	38.595
3	993	2,65%	37.510
4	755	2,07%	36.517
5	922	2,58%	35.762
6	674	1,93%	34.840

7	631	1,85%	34.166
8	1.271	3,79%	33.535
9	828	2,57%	32.264
10	712	2,26%	31.436
11	396	1,29%	30.724
12	269	0,89%	30.328
13 (d)	382	1,27%	30.059
Acumulado 1970-2013	98.483		
Remanescente 2011	30.328		-
Remanescente 2013	29.677		
Taxa média desde 1974		**2,98%**	
(a) Média entre 1977 e 1988			
(b) Media entre 1993 e 1994			
(c) Taxas Anuais Consolidadas			
(d) Taxa Estimada			
	km2	km2	
	Primitiva (1970)	Remanescente 2011	% reman
Floresta Ombrófila Densa	63.562	19707	31%
Floresta Ombrófila Aberta	31.350	27,5	0,09%
Floresta Estacional Semidecidua	12.418	5572	44,87%
Floresta Estacional Decidual	20.830	5021,48	24,11%
	128.160	30827,98	24%

Floresta Ombrófila Densa (com árvores que não perdem as folhas na estação seca), Floresta Ombrófila Aberta (dominada por babaçu e/ou cipós), Floresta Estacional Semidecidual (com árvores que perdem parte das folhas na estação seca), Floresta Estacional Decidual (com árvores que perdem mais de 50% das folhas na seca)

The calculation of ecological credits generated with respect to the preservation of 6,262.60ha, resulting from PROJETO PONTAROLO project activities, according to the ZNP0001 methodology, considers the region´s historical average annual deforestation rate of 2,98%, after the depletion of 20% of the regions forests.

(iii) Forest management is presented here as a possible but remote alternative baseline scenario. Forest management is a silvicultural system and depends on knowledge, action of competent professionals and ethics. Unfortunately, few people/companies, who live off Amazonian forest resources, are able to fulfill the above-mentioned requirements. Ethical and properly planned forest management improves the quality of the flora, since the increase in luminosity allows better development for many tree sorts. Since methodology ZNP0001 and the 'Tool to perform forest management within the ZERO2NATURE Standard' allows forest management, this alternative scenario analysis contemplates forest management related values.

The cost of eco-sustainable logging in the Amazon rainforest is around US$72/ha, or between $1.75 to 2.15/m³ considering a normal exploration volume between 35 to 40 m³/ha. Over 90% of these costs relate to the mapping of trees, vine cutting, planning of logging operations and timber displacement. The sales price of wood is around US$ 6.00/m3. Forest management brings long-term benefits while improving the life of the remaining trees. In addition, greater accumulation of wood in managed areas is an economical benefit to the landowner. Studies show that the available volume for a second selective harvesting of wood would be 68% higher than in an unmanaged forest. Over a 30 years cutting cycle, the NPV of two crops of managed wood would be between 38 to 45% higher than in an unmanaged operation. This scenario represents around US$100,000 in earnings in favor of the project proponent.

(iv) The most likely alternative baseline scenario to the one proposed by the PROJETO PONTAROLO project activity is a combination of legal and illegal deforestation. As is known, the Brazilian Amazon has 5,500,000km2. In addition to the typical difficulties of accessing a jungle region, the Amazon region is characterized by vast distances without any type of adequate infra-structure, low social income, ignorance and fierce corruption. The Brazilian culture of immediacy is also an important component in the equation. The idea of a project that can last over forty years and will reward yearly upon measured preservation, is new for the most part of Brazilians. In most cases, the difficulty of obtaining knowledge about eco-credit generation, capital requirement and the implementation of a project according to strict rules, are all strong reasons for the unaware to deforest 20% of their land and eventually some more, since the mathematical expectation of a fine is largely favorable to offenders in remote regions of the Amazon. Therefore, the PROJETO PONTAROLO project area can conservatively expect a forest depletion rate in excess of 4% per annum.

Step 3 PROJETO PONTAROLO project activity breaks the following barriers:

(a) Economic - The monitored preservation of the area in which the PROJETO PONTAROLO project activity will be implemented requires significant monitoring equipment and manpower investment as can be attested in the monitoring plan;

(b) Institutional - Brazilian law is poorly enforced in the region. The PROJETO PONTAROLO project activity will carry out measures much beyond those enforced by the country´s mechanisms and in addition remain far below the permitted deforestation rate of 20%;

(c) Local Tradition – Unplanned deforestation is a common business practice in the Amazon region. PROJECT PONTAROLO project activity proposes to train and prepare the SETE IRMÃOS FARM employees and members of the local community, opening them to new perspectives and attitudes related to the forest, transforming them into citizens aware of the importance of the Amazon to the world, eventually curbing the practice of illegal forest activities in the region;

(d) Social - Although the region is immensely rich, the general population living in and from the Amazon rainforest lives in extreme poverty. By hiring local labor to carry out various tasks related to the PROJETO PONTAROLO project activities, social barriers are broken.

Demonstration of Additionality

Brazilian Law number 12,651 of May 25, 2012 allows the deforestation of 20% of a property located in the Amazon. The ZERO2NATURE-PREFOR PROJETO PONTAROLO project activity site will be fully preserved, with forest management occuring in 10% of the total project area. As previously demonstrated, the most likely alternative base line scenario to that proposed by the PROJETO PONTAROLO project activity would be a combination of legal and illegal deforestation. From the original 6,262.60ha, the PROJETO PONTAROLO project activity will avoid 4,349.00ha of deforestation, which equates to the sequestration of 1,288,907tCO2e. Furthermore, as stated in the section 'Establishment of Baseline Scenario' of this PDD, the project activity breaks barriers related to economic, institutional, local tradition and social aspects. Moreover, from an economic perspective, monitored preservation only brings some financial compensation in the form of ecological credits. In view of the above, it is concluded that the project is additional.

Sink Removal Method

The negative emissions of the ZERO2NATURE-PREFOR PROJETO PONTAROLO, refer only to carbon sequestration through the conservation of a monitored area of 6,262.60ha. Investments in the monitoring system will prevent the deforestation of 4,249.00ha and as a result will avoid the emission of 1,288,907tCO2e.

Fixed Ex-Ante Data and Parameters

Data or Parameter.	Baseline deforestation rate
Measuring Unit	%/year
Description	The rate of deforestation refers to the arithmetic average of the annual deforestation rate, above 20% of the original forest deforestation, until the start of the ZERO2NATURE-PREFOR project activity.
Data Source	Instituto Nacional de Pesquisas Espaciais – INPE (Brazilian Institute of Spacial Resarch)
Applied Value	2.98
Choice of Data or Measurement, Method and Procedure	Data represents the reality of deforestation in the Amazon and the source is official.
Purpose of Data	Establish the deforestation rate to be applied in the calculation of project negative emission removal.
Comments	

Data or Parameter.	Average weight of the living biomass (green biomass) of the Amazon
Measuring Unit	ton/ha
Description	The datum represents the average weight of the living biomass (green biomass) of the Amazon, by dry weight, above and below ground, with 50% of the weight refering to the sequestered carbon.
Data Source	Instituto Nacional de Pesquisas da Amazônia - INPA
Applied Value	247
Choice of Data or Measurement,	The datum comes from one of the most serious institutions of Brazil.
Purpose of Data	Establish the sequestered carbon on living biomass (green biomass) related to the PROJETO PONTAROLO project activity.
Comments	

Data or Parameter.	Estimated rate of deforestation for the first ten years of the project
Measuring Unit	%/year
Description	The datum represents the rate of estimated deforestation due to the project activity and unforseen events.
Data Source	PROJETO PONTAROLO project activity monitoring plan.
Applied Value	0.03
Choice of Data or Measurement,	Safety margin.
Purpose of Data	To maintain a conservative approach in view of possible deforestation even in a monitored condition.
Comments	

Data or Parameter.	Estimated rate of deforestation for the last thirty years of the project.
Measuring Unit	%/year.
Description	The datum represents the rate of estimated deforestation due to the project activity and unforseen events.
Data Source	PROJETO PONTAROLO project activity monitoring plan.
Applied Value	0.015
Choice of Data or Measurement,	Safety margin.
Purpose of Data	To maintain a conservative approach in view of possible deforestation even in a monitored condition.
Comments	

Data or Parameter.	Average carbon stock of intact forest in the project area.
Measuring Unit	tCO2e/ha
Description	Data represents the average carbon concentration contained in intact forest type of the Amazon.
Data Source	Instituto Nacional de Pesquisas da Amazônia - INPA. (Brazilian Research Institute for the Amazon)
Applied Value	412
Choice of Data or Measurement,	The data comes from one of the more credible institutions in Brazil.
Purpose of Data	Measures the amount of carbon stored in the area.
Comments	

Ex-Ante Calculation of Anthropic Emissions Reduction by Sinks

According to the adopted methodology, the net removal of anthropic emissions must be calculated using the following formula:

$$\Delta E_{RA\_02NATURE,y} = \Delta E_{EFFECTIVE,y} - \Delta E_{BL,y} - LEAKAGE_y$$

Where:

$\Delta E_{AR_{02NATURE},y}$ = *Net anthropic removals by sinks of negative emissions, in year y, in tEIP*

$\Delta E_{EFFECTIVE,y}$ = *Effective net removals through sinks, in year y, in tEIP*

$\Delta E_{BL,y}$ = *net removals baseline through sinks, in year y, in tEIP*

$LEAKAGE_y$ = *Negative emissions due to leakages, in year y, in tEIP*

Summary of Ex-Ante Negative Emissions Removal by Sinks

Year	Estimation of baseline net GHG removals by sinks	Estimation of actual net GHG removals by sinks	Estimation of leakage	Estimation of net anthropogenic GHG removals by sinks
	tEIP	tEIP	tEIP	tEIP
2015	0	55,501	742	54,759
2016	0	53,831	720	53,111
2017	0	52,210	698	51,512
2018	0	50,637	677	49,960
2019	0	49,112	657	48,455
2020	0	47,632	637	46,995
2021	0	46,196	618	45,578
2022	0	44,802	599	44,203
2023	0	43,451	581	42,869
2024	0	42,139	564	41,576
2025	0	41,148	550	40,598
2026	0	39,914	534	39,980
2027	0	38,716	518	38,198
2028	0	37,554	502	37,051
2029	0	36,426	487	35,939
2030	0	35,332	473	34,860
2031	0	34,271	458	33,813
2032	0	33,242	445	32,797
2033	0	32,243	431	31,811
2034	0	31,273	418	30,855
2035	0	30,333	406	29,928
2036	0	29,421	393	29,027
2037	0	28,536	382	28,154
2038	0	27,677	370	27,307
2039	0	26,844	359	26,485
2040	0	26,036	348	25,688
2041	0	25,252	338	24,914
2042	0	24,491	328	24,163
2043	0	23,753	318	23,435
2044	0	23,036	308	22,728
2045	0	22,342	299	22,043
2046	0	21,668	290	21,378
2047	0	21,014	281	20,733
2048	0	20,379	273	20,106
2049	0	19,763	264	19,499
2050	0	19,166	256	18,910
2051	0	18,587	249	18,338
2052	0	18,025	241	17,783
2053	0	17,479	234	17,245
2054	0	16,950	227	16,723

Monitoring Plan

(a) The entire project, including geographic coordinates of the border area will be monitored with the use of georeferenced spatial data, supplemented with measurements made during annual expeditions (at least once per year) and GPS coordinates. All data collected will be recorded and archived, including a fully documented databook.

(b) Widely accepted principles will be used in the inventory and management of the project area, which are:

(i) Application of Standard Operating Procedures-SOPs and Quality Control/Quality Assurance-QA/QC for forest inventory, including collection of field data;

(ii) Related to the field SOPs, checks were conducted during the first expedition to the project site of PROJETO PONTAROLO and the documented practice in this PDD was confirmed.

From the second year onwards of the project activity, Bushnell camera-traps (trail camera brand and model type Natureview CamHD Max) will be installed at points where human presence is more constant according to observations made during the first year of PROJETO PONTAROLO project activity. The project activity members will be responsible for the maintenance of cameras and data collection. In order to become guardians of the project activity, members will undergo training where they will learn to operate necessary monitoring equipment and become fully instructed about guidelines in case of project area invasion.

Data and Parameters to be Monitored

Data or Parameter.	Anthropic activity within the project area
Measuring Unit	Dimensionless
Description	From the second year of the project onwards, installed cameras and trained project members PROJECT PONTAROLO will monitor human presence within the project activity area.
Data Source	Direct observation.
Applied Value	n.a.
Choice of Data or Measurement,	On-site observation, data collection and maintenance of video cameras.
Monitoring Frequency	The cameras will operate non-stop and in situ monitoring and data collection will be held monthly.
QA/QC Procedures	Workers employed by the PROJETO PONTAROLO project activity will be trained and the presentation and content of the training will be attached to objective evidence available during the checks/certifications.
Purpose of Data	Ensure the integrity of the area where the project activity will be implemented, in order to ensure the generation of ecological credits.
Comments	

Stratification and Sampling Plan

Annual expeditions will follow the same pattern of data collection applied in the first expedition to the project site PROJETO PONTAROLO, detailed in section 'Identification of strata' of this PDD.

Other Elements of Monitoring Plan

There are no further elements to add to the monitoring plan.

Start Date of Project Activity

April 7, 2014

Expected Operational Lifetime of Project Activity

40 years

Start Date of Crediting Period

May 1, 2014

Length of Credit Period

15 years, renewable

Analysis of Environmental Impact

Considering the serious problem of deforestation in the region, the environmental impact caused by the PROJETO PONTAROLO project activity can only be categorized as positive.

Environmental Impact Assessment

PROJETO PONTAROLO project activity aims to preserve 6,262.60ha of the Amazon rainforest. With respect to possible risks:
Risk of Fire - Action: training of team members of the PROJETO PONTAROLO project activity will increasing the chance of fire contention;
Project implementation - all involved participants of PROJETO PONTAROLO project activity will have to undergo training emphasizing the need to comply with all requirements of the ZERO2NATURE Standard. Project implementation must occur without the production of waste in the area.

Analysis of Social Economic Impacts

As previously mentioned, Maranhão is the poorest state of Brazil. The PROJETO

PONTAROLO project activity, besides ensuring the preservation of the forest will provide socio-economic benefits, since project members hired to work in the implementation and maintenance of the project will have the opportunity to further their overall education and improve their economic and social status.

Social Economic Impact Assessment

According to item 'Analysis of Socio-Economic Impact' of this PDD, the socio-economic impact of the PROJETO PONTAROLO project activity is positive.

Solicitation of Comments from Local Stakeholders

Invitation to local stakeholders to inform about the PROJETO PONTAROLO project activity:

CONVITE À POPULAÇÃO

Governador Nunes Freire, 8 de maio de 2014.

Frederico Pontarolo faz saber e convida, por meio desta, toda a população a conhecer detalhes do PROJETO PONTAROLO, no próximo dia 23/5/2014, às 10:00h, na Fazenda Sete Irmãos. Na ocasião, o projeto gerador de créditos ecológicos será apresentado e aberto a comentários que, uma vez ocorram serão, juntamente com suas devidas respostas, partes integrantes do documento de concepção de projeto.

Summary of the Comments Received

No comments were received.

Report on Considerations on Comments Received

Not applicable.

Estimated Project Flow

Year	Area of remaining forest without project activity	Area of remaining forest with project activity	Cumulative area of avoided deforestation due to project activity	Annual area of avoided deforestation due to project activity	Emission reductions	Eco-Credits deposited in non permanency fund	Total generated eco-credits
	hectares	hectares	hectares	hectares	tCO2eq	O2NCs	O2NCs
2013	6,263	6,263	0	0	0	0	0
2014	6,076	6,261	185	185	57,641	2,882	54,759
2015	5,895	6,259	364	179	55,906	2,795	53,111
2016	5,719	6,257	538	174	54,223	2,711	51,512
2017	5,549	6,255	706	169	52,590	2,629	49,960
2018	5,383	6,253	870	163	51,005	2,550	48,455
2019	5,223	6,251	1,028	159	49,468	2,473	46,995
2020	5,067	6,249	1,182	154	47,977	2,399	45,578
2021	4,916	6,248	1,331	149	46,530	2,326	44,203
2022	4,770	6,246	1,476	145	45,126	2,256	42,869
2023	4,628	6,244	1,616	140	43,764	2,188	41,576
2024	4,490	6,243	1,753	137	42,735	2,137	40,598
2025	4,356	6,242	1,886	133	41,452	2,073	39,380
2026	4,226	6,241	2,015	129	40,208	2,010	38,198
2027	4,100	6,240	2,140	125	39,002	1,950	37,051
2028	3,978	6,239	2,261	121	37,831	1,892	35,939
2029	3,860	6,238	2,379	118	36,695	1,835	34,860
2030	3,745	6,237	2,493	114	35,592	1,780	33,813
2031	3,633	6,236	2,603	111	34,523	1,726	32,797
2032	3,525	6,235	2,711	107	33,486	1,674	31,811
2033	3,420	6,234	2,815	104	32,479	1,624	30,855
2034	3,318	6,234	2,916	101	31,503	1,575	29,928
2035	3,219	6,233	3,014	98	30,555	1,528	29,027
2036	3,123	6,232	3,109	95	29,636	1,482	28,154
2037	3,030	6,231	3,201	92	28,744	1,437	27,307
2038	2,940	6,230	3,290	89	27,879	1,394	26,485
2039	2,852	6,229	3,377	87	27,040	1,352	25,688
2040	2,767	6,288	3,461	84	26,225	1,311	24,914
2041	2,685	6,227	3,542	82	25,435	1,272	24,163
2042	2,605	6,226	3,622	79	24,668	1,233	23,435
2043	2,527	6,225	3,698	77	23,925	1,196	22,728
2044	2,452	6,224	3,773	74	23,203	1,160	22,043
2045	2,379	6,223	3,845	72	22,503	1,125	21,378
2046	2,308	6,222	3,915	70	21,824	1,091	20,733
2047	2,239	6,221	3,982	68	21,165	1,058	20,106
2048	2,172	6,220	4,048	66	20,525	1,026	19,499
2049	2,107	6,220	4,112	64	19,905	995	18,910
2050	2,045	6,219	4,174	62	19,303	965	18,338
2051	1,984	6,218	4,234	60	18,719	936	17,783
2052	1,925	6,217	4,292	58	18,153	908	17,245
2053	1,867	6,216	4,349	56	17,603	880	16,723

Contact Information

Organisation	FAZENDA SETE IRMÃOS
Street	Rua do Bec
Number	20
County	Brazil
City	Governador Nunes Freire
Country	Brazil
Zip Code	65284-000
Telephone	+55 98 8303-3396
Email	abas_mel@hotmail.com
Website	
Represented by	Adão Pontarolo
Title	
Salutation	Mr.
Last Name	Pontarolo
Middle Name	
First Name	Adão
Mobile	+55 98 8303-3396
Direct Telephone	
Direct Email	

Appendix 1 - Applicablity of Selected Methodology

Does not apply.

Appendix 2 - Further Background Information on Ex-Ante Calculation of ER by Sinks

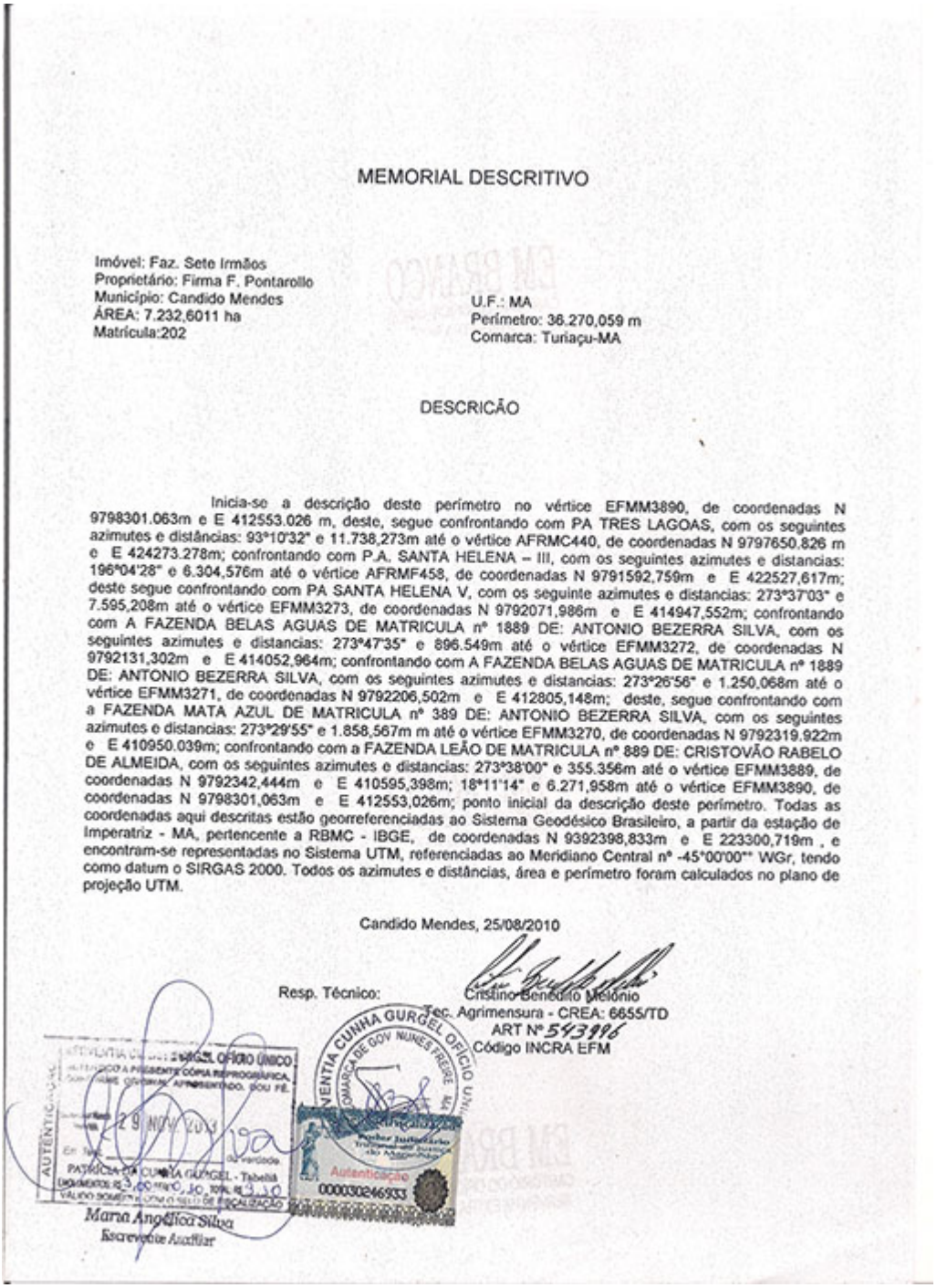
Does not apply.

Appendix 3 - Summary of Post Registration Changes

Does not apply.

Appendix 4 - Property Rights and 02NC Rights

Geographical boundaries established in Documento 'Memorial Descritivo':



MEMORIAL DESCRITIVO

Imóvel: Faz. Sete Irmãos
Proprietário: Firma F. Pontarollo
Município: Candido Mendes
ÁREA: 7.232,6011 ha
Matrícula:202

U.F.: MA
Perímetro: 36.270,059 m
Comarca: Turiaçu-MA

DESCRIÇÃO

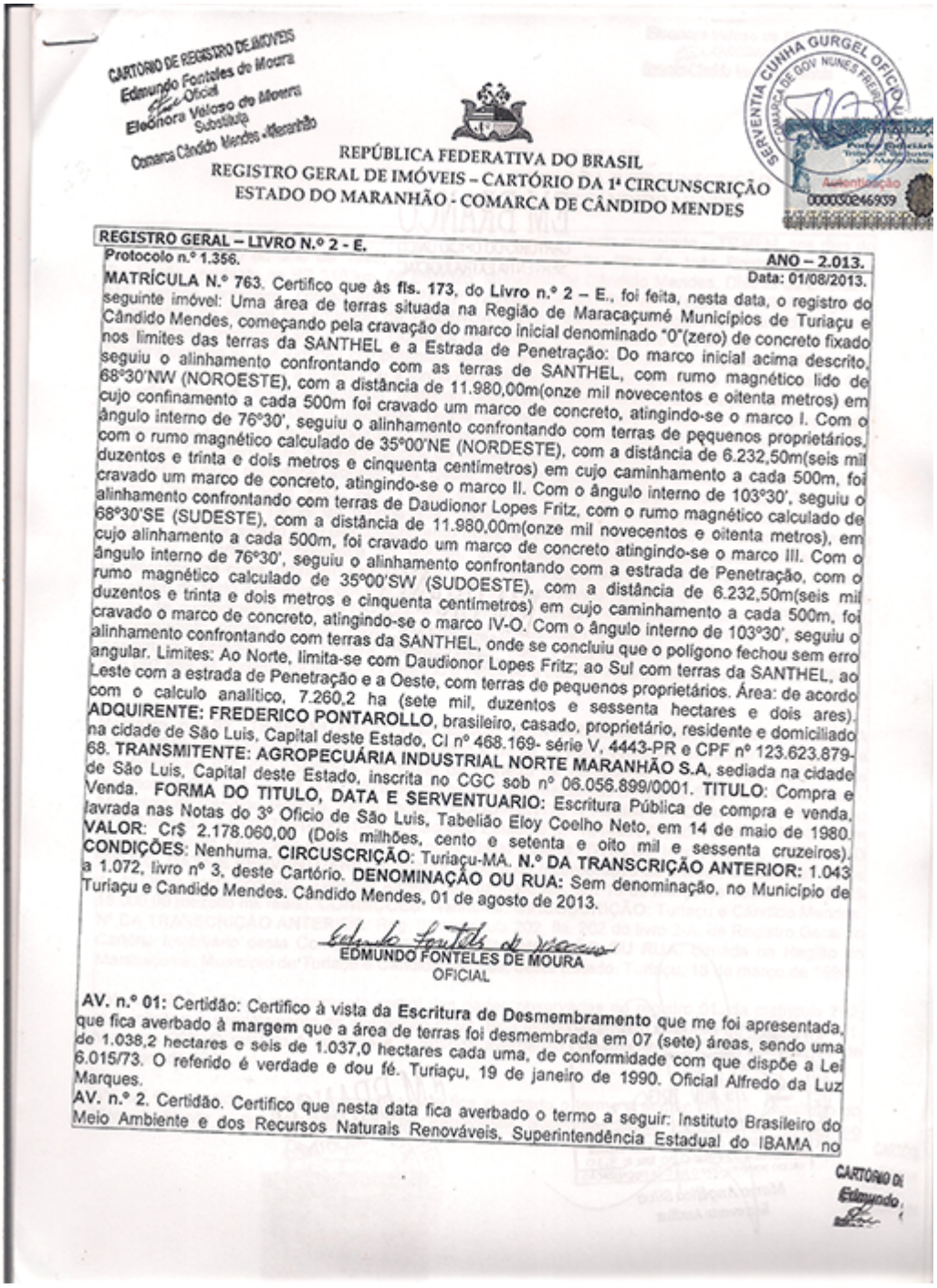
Inicia-se a descrição deste perímetro no vértice EFMM3890, de coordenadas N 9798301.063m e E 412553.026 m, deste, segue confrontando com PA TRES LAGOAS, com os seguintes azimutes e distâncias: 93°10'32" e 11.738,273m até o vértice AFRMC440, de coordenadas N 9797650.826 m e E 424273.278m; confrontando com P.A. SANTA HELENA – III, com os seguintes azimutes e distancias: 196°04'28" e 6.304,576m até o vértice AFRMF458, de coordenadas N 9791592,759m e E 422527,617m; deste segue confrontando com PA SANTA HELENA V, com os seguinte azimutes e distancias: 273°37'03" e 7.595,208m até o vértice EFMM3273, de coordenadas N 9792071,986m e E 414947,552m; confrontando com A FAZENDA BELAS AGUAS DE MATRICULA nº 1889 DE: ANTONIO BEZERRA SILVA, com os seguintes azimutes e distancias: 273°47'35" e 896.549m até o vértice EFMM3272, de coordenadas N 9792131,302m e E 414052,964m; confrontando com A FAZENDA BELAS AGUAS DE MATRICULA nº 1889 DE: ANTONIO BEZERRA SILVA, com os seguintes azimutes e distancias: 273°26'56" e 1.250,068m até o vértice EFMM3271, de coordenadas N 9792206,502m e E 412805,148m; deste, segue confrontando com a FAZENDA MATA AZUL DE MATRICULA nº 389 DE: ANTONIO BEZERRA SILVA, com os seguintes azimutes e distancias: 273°29'55" e 1.858,567m m até o vértice EFMM3270, de coordenadas N 9792319.922m e E 410950.039m; confrontando com a FAZENDA LEÃO DE MATRICULA nº 889 DE: CRISTOVÃO RABELO DE ALMEIDA, com os seguintes azimutes e distancias: 273°38'00" e 355.356m até o vértice EFMM3889, de coordenadas N 9792342,444m e E 410595,398m; 18°11'14" e 6.271,958m até o vértice EFMM3890, de coordenadas N 9798301,063m e E 412553,026m; ponto inicial da descrição deste perímetro. Todas as coordenadas aqui descritas estão georreferenciadas ao Sistema Geodésico Brasileiro, a partir da estação de Imperatriz - MA, pertencente a RBMC - IBGE, de coordenadas N 9392398,833m e E 223300,719m , e encontram-se representadas no Sistema UTM, referenciadas ao Meridiano Central nº -45°00'00"" WGr, tendo como datum o SIRGAS 2000. Todos os azimutes e distâncias, área e perímetro foram calculados no plano de projeção UTM.

Candido Mendes, 25/08/2010

Resp. Técnico: Cristino Benedito Meloni
Tec. Agrimensura - CREA: 6655/TD
ART Nº 543996
Código INCRA EFM

Maria Angelica Silva
Escrevente Auxiliar

Ownership deed:



CARTÓRIO DE REGISTRO DE IMÓVEIS
Edmundo Fonteles de Moura
Oficial
Eleonora Veloso de Moura
Substituta
Comarca Cândido Mendes - Maranhão

SERVENTIA CUNHA GURGEL OFICIAL
COMARCA DE GOV. NUNES FREIRE

Autenticação
000050246939

REPÚBLICA FEDERATIVA DO BRASIL
REGISTRO GERAL DE IMÓVEIS – CARTÓRIO DA 1ª CIRCUNSCRIÇÃO
ESTADO DO MARANHÃO - COMARCA DE CÂNDIDO MENDES

REGISTRO GERAL – LIVRO N.º 2 - E.

Protocolo n.º 1.356. **ANO – 2.013.**

Data: 01/08/2013.

MATRÍCULA N.º 763. Certifico que às **fls. 173**, do **Livro n.º 2 – E.**, foi feita, nesta data, o registro do seguinte imóvel: Uma área de terras situada na Região de Maracaçumé Municípios de Turiaçu e Cândido Mendes, começando pela cravação do marco inicial denominado "0"(zero) de concreto fixado nos limites das terras da SANTHEL e a Estrada de Penetração: Do marco inicial acima descrito, seguiu o alinhamento confrontando com as terras de SANTHEL, com rumo magnético lido de 68°30'NW (NOROESTE), com a distância de 11.980,00m(onze mil novecentos e oitenta metros) em cujo confinamento a cada 500m foi cravado um marco de concreto, atingindo-se o marco I. Com o ângulo interno de 76°30', seguiu o alinhamento confrontando com terras de pequenos proprietários, com o rumo magnético calculado de 35°00'NE (NORDESTE), com a distância de 6.232,50m(seis mil duzentos e trinta e dois metros e cinquenta centímetros) em cujo caminhamento a cada 500m, foi cravado um marco de concreto, atingindo-se o marco II. Com o ângulo interno de 103°30', seguiu o alinhamento confrontando com terras de Daudionor Lopes Fritz, com o rumo magnético calculado de 68°30'SE (SUDESTE), com a distância de 11.980,00m(onze mil novecentos e oitenta metros), em cujo alinhamento a cada 500m, foi cravado um marco de concreto atingindo-se o marco III. Com o ângulo interno de 76°30', seguiu o alinhamento confrontando com a estrada de Penetração, com o rumo magnético calculado de 35°00'SW (SUDOESTE), com a distância de 6.232,50m(seis mil duzentos e trinta e dois metros e cinquenta centímetros) em cujo caminhamento a cada 500m, foi cravado o marco de concreto, atingindo-se o marco IV-O. Com o ângulo interno de 103°30', seguiu o alinhamento confrontando com terras da SANTHEL, onde se concluiu que o polígono fechou sem erro angular. Limites: Ao Norte, limita-se com Daudionor Lopes Fritz; ao Sul com terras da SANTHEL, ao Leste com a estrada de Penetração e a Oeste, com terras de pequenos proprietários. Área: de acordo com o calculo analítico, 7.260,2 ha (sete mil, duzentos e sessenta hectares e dois ares). **ADQUIRENTE: FREDERICO PONTAROLLO**, brasileiro, casado, proprietário, residente e domiciliado na cidade de São Luis, Capital deste Estado, CI nº 468.169- série V, 4443-PR e CPF nº 123.623.879-68. **TRANSMITENTE: AGROPECUÁRIA INDUSTRIAL NORTE MARANHÃO S.A**, sediada na cidade de São Luis, Capital deste Estado, inscrita no CGC sob nº 06.056.899/0001. **TITULO**: Compra e Venda. **FORMA DO TITULO, DATA E SERVENTUARIO:** Escritura Pública de compra e venda, lavrada nas Notas do 3º Oficio de São Luis, Tabelião Eloy Coelho Neto, em 14 de maio de 1980. **VALOR**: Cr$ 2.178.060,00 (Dois milhões, cento e setenta e oito mil e sessenta cruzeiros). **CONDIÇÕES**: Nenhuma. **CIRCUSCRIÇÃO**: Turiaçu-MA. **N.º DA TRANSCRIÇÃO ANTERIOR:** 1.043 a 1.072, livro nº 3, deste Cartório. **DENOMINAÇÃO OU RUA:** Sem denominação, no Município de Turiaçu e Candido Mendes. Cândido Mendes, 01 de agosto de 2013.

EDMUNDO FONTELES DE MOURA
OFICIAL

AV. n.º 01: Certidão: Certifico à vista da **Escritura de Desmembramento** que me foi apresentada, que fica averbado à **margem** que a área de terras foi desmembrada em 07 (sete) áreas, sendo uma de 1.038,2 hectares e seis de 1.037,0 hectares cada uma, de conformidade com que dispõe a Lei 6.015/73. O referido é verdade e dou fé. Turiaçu, 19 de janeiro de 1990. Oficial Alfredo da Luz Marques.

AV. n.º 2. Certidão. Certifico que nesta data fica averbado o termo a seguir: Instituto Brasileiro do Meio Ambiente e dos Recursos Naturais Renováveis, Superintendência Estadual do IBAMA no

CARTÓRIO DE
Edmundo