



Independent Forest Monitoring Project in Nicaragua

Mission Report No. 015

Mission of the Independent Monitor

Karawala Annual Operational Plan 2006
Forest Management General Plan Karawala – San Roque Integral Project

Name of the area:	San Roque
Annual Operational Plan (2006):	Karawala
Forest Harvesting Permit:	07351
Forest Management General Plan:	1704L06001
Forest Regent:	Damaris Oporta
Owner:	Río Grande de Matagalpa communities
Permit holder:	Timber company Hermanos Úbeda
Municipality:	Desembocadura del Río Grande - RAAS

Mission date: 19 to 21 September 2007

Report date: 03 October 2007

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1. Executive summary

Between 19 and 21 September 2007, an Independent Forest Monitoring (IFM) mission was carried out in the area of the Annual Operational Plan (AOP) of Forest Management General Plan (FMGP) Karawala – San Roque Integral Project, in a forest area belonging to eight communities living in the river bank of Río Grande de Matagalpa, municipality of Desembocadura del Río Grande (DRG) in the South Atlantic Autonomous Region (RAAS). A total of 36,126 ha were allocated as a concession to Maximino and Adrián Úbeda Rivera, who represent the timber company known as Hermanos Úbeda, subject of this report.

This mission was carried out within the framework of a collaboration agreement signed between INAFOR¹ and Global Witness for the implementation of an Independent Forest Monitoring Project in Nicaragua. The mission involved two members of the Global Witness technical team in Nicaragua, a forest inspector of the INAFOR Delegation of District V, the INAFOR-DRG Municipal Delegate, three community síndicos², the technical advisor for the FMGP Karawala, a technical member of staff from the company and two members of the Naval Force of the Nicaraguan Army.

The FMGP Karawala comprises 22,000 ha; AOP 2006 covers an area of 1,275ha. A total of 20 years have been established as the timeframe for the implementation of the FMGP (2005-2024), subdivided in a similar number of AOPs. FMGP Karawala was approved by INAFOR in early 2006 through dossier No. 1704L06001. Subsequently, AOP 2006 was approved in March of the same year, and Forest Harvesting Permit (FAP) No. 07351 was issued on 17 March 2006, valid until 17 March 2007. Through this permit, the logging of a total of 2,733 trees of 8 species was authorised, with a total commercial volume of timber of 15,700 m³.

Company Hermanos Úbeda is certified (SCS-FM/COC-00039N) for forest management and chain of custody by company SCS (Scientific Certificación Systems – www.scs1.com), a certification entity authorised by FSC (Forest Stewardship Council). Moreover, it enjoys technical support from Costa Rican foundation FUNDECOR³, which provides a forester who is responsible for the forest operations of the company.

Currently, FMGP Karawala is suspended by INAFOR, in response to the demand from the Río Grande community leaders, as well as from the Municipal-DRG Mayor's office and from the RAAS Regional Government. The allegations from the communities and municipal and regional authorities are based on the breach of the agreements signed by the concessionaires (company Hermanos Úbeda) and on illegalities recognised by the community leaders related to the allocation of the forest area to the aforementioned concessionaires. To this date the case is still pending.

With a view to documenting in an objective and detailed manner the situation in the field related to this case, the independent monitor (Global Witness' technical team) carried out a mission focusing on assessing the technical and administrative aspects regarding the enforcement of the forest law and administrative regulations related to forest management carried out in AOP 2006.

¹ Instituto Nacional Forestal – Nicaragua Forest Authority.

² Community leaders elected by the Miskito community members.

³ Fundación para el Desarrollo de la Cordillera Volcánica Central, Costa Rica – Foundation for the Development of the Central Volcanic Mountain Chain, Costa Rica.

The monitoring mission focused mainly on the AOP 2006 area, where the following aspects were verified: the inventory data of trees to be cut and trees to preserve, trees felled by natural causes, the unauthorised felling of trees and the condition of the roads and related infrastructures. The documentation provided by INAFOR and company Hermanos Úbeda was also reviewed.

After concluding the fieldwork and reviewing the documents, the monitor presents the following conclusions:

1. The INAFOR Municipal Delegate did not rigorously follow the technical requirements to approve AOP 2006.
2. The FMGP and AOP 2006 maps were not produced following what is established in the current regulations.
3. AOP 2006 was not demarcated, and its area is defined by the lines done for the forest survey within the management area. This practice is not stipulated in the pertinent regulations.
4. The forest inventory lines were not distributed uniformly within the area under management.
5. The type of mark used the previous year to identify the trees renders it impossible to identify them.
6. The map for the commercial survey presents inconsistencies with what was verified in the lines on the ground.
7. A total of 20 trees were found to have been logged without authorisation in compartments 37, 35, 20 and 8.
8. Felled trees were harvested in contravention with the technical and administrative regulations in force.
9. The extraction roads are currently severely damaged as a consequence of recent rain. This is the result of not applying the technical specifications stated in the forest law.
10. The forest regent did not adequately comply with their functions as established in the regulations related to Law 462.

Based on the previous conclusions, the independent monitor presents the following recommendations:

1. INAFOR should ensure that the management plan remains suspended until the situation regarding the demand from the Río Grande community leaders, the Municipal-DRG Mayor's office and the RAAS Regional Government has been fully clarified.
2. INAFOR should proceed to determine and apply the pertinent corrective measures resulting from the findings presented in this report.

3. The Environmental Public Prosecutor should initiate the relevant legal investigations against those who are alleged to have carried out illegal activities, and impose the relevant administrative and penal sanctions.
4. INAFOR should review the AOP 2006 document and take the necessary measures regarding the breach of the approval procedure of the said document.
5. Company Hermanos Úbeda should produce and update the FMGP and AOP 2006 maps, using as a base the topographic maps (1:50,000) produced by the Nicaraguan Institute of Territorial Studies (INETER).
6. Company Hermanos Úbeda should proceed to delimit the management area of the AOP 2006.
7. Company Hermanos Úbeda should proceed to update the cartographic information of the commercial survey, the trees to log, preserve and trees felled, and also re-mark the standing trees, using paint that is adequate in colour and quality.
8. For the harvesting of felled trees, company Hermanos Úbeda should proceed according to what is established in art. 55 of the forest regulations.
9. Company Hermanos Úbeda should, weather permitting, proceed to repair the main road that leads to the FMGP, the area under management, and to redesign the drainage infrastructures.
10. The forest regent of the FMGP should produce a report for INAFOR, detailing all the changes, amendments and adjustments that are done in the FMGP and AOP 2006, and informing about the anomalies carried out by company Hermanos Úbeda in the implementation of AOP 2006.

2. Composition of the monitoring mission team

Waldo Martínez, síndico, Palpa community
 Lampson Abraham, síndico, Kara community
 Evaristo Aguilera, síndico, company Creek
 Rommel Spelman Logan, INAFOR – DRG Municipal Delegate
 Troy Thomas, District V – INAFOR forest inspector
 Pedro Zúñiga Mora, Technical Advisor - FUNDECOR
 William López López, forester – company Hermanos Úbeda
 Infantryman Rolando Caballero, Naval Forces of the Nicaraguan Army
 Infantryman Erick Suárez, Naval Forces of the Nicaraguan Army
 Arturo Avila, independent forest monitoring technical staff, Global Witness
 César Zelaya, independent forest monitoring technical staff, Global Witness

3. Positive aspects

The success of this mission was granted by the active participation of those accompanying the independent monitor team, as well as by the availability of the documents related to the FMGP San Roque, provided by the municipal and district INAFOR authorities, and the availability of the technical member of staff and advisor to the FMGP Karawala from company Hermanos Úbeda.

4. Constraints

There were no constraints hindering the development of this monitoring mission.

5. Description of the fieldwork

This monitoring mission was implemented over a period of three days, in which the following activities were carried out:

Day 1:

- Review of the documents related to AOP 2006
- Review of the maps
- Planning of fieldwork

Day 2:

- Verification of the logging of trees in inventory lines 37 and 35
- Georeferencing of the damaged water filters
- Georeferencing of the log ponds

Day 3:

- Verification of the logging of trees in inventory lines 21,20,8 and 1
- Georeferencing of the damaged water filters
- Georeferencing of the log ponds

Additionally, during field activities notes and pictures were taken regarding the condition of the forest roads constructed.

6. Results of the field mission

6.1 General description of FMGP - Karawala

The forest area of the FMGP Karawala was given out as a concession by the síndicos of the eight communities living in the Desembocadura de Río Grande – RAAS municipality, to José Maximino Úbeda Rivera and Carmen Adrián Úbeda Rivera. Legal rights were given to harvest timber in some areas of their community lands, as well as to set up a sawmill. The total area concerned is 36,126 ha of broadleaf forests, and the established timeline is a 10-year renewable period.

FMGP Karawala covers a total area of 22,000 ha and has 20 Annual Harvesting Areas with a total duration of 20 years (2005-2024). The forest management practice established is a poly-cyclic system.

In the year 2005, the FMGP was produced and presented to INAFOR for approval. It was subsequently approved in early 2006. AOP 2006 was also submitted, and was approved in March 2006 with the issuance of Forest Harvesting Permit No. 07351 on 17 March of the same year. In it, a total of 2,733 trees of eight commercial species are authorised for logging, with a total commercial volume of 15,700 m³ of timber.

Company Hermanos Úbeda is certified (SCS-FM/COC-00039N) for forest management and chain of custody by company SCS (Scientific Certificación Systems – www.scs1.com), a certification entity authorised by FSC (Forest Stewardship Council). In January 2007, the

company was re-certified as a result of an evaluation carried out, the report of which can be downloaded from its website: www.scs1.com. Moreover, it enjoys technical support from Costa Rican foundation FUNDECOR⁴, which provides a forester who is responsible for the forest operations of the company.

Currently, the activities within the forest management area are suspended until the conflict between the community, municipal and regional authorities and the Úbeda concessionaires is resolved. On the other hand, as expressed by staff of company Hermanos Úbeda, the harvesting activities and the implementation of the management plans in the area were affected by the logging ban issued by the President of the Republic of Nicaragua in May 2006.

The main objectives of the FMGP Karawala are:

- General:
 - Harvest in a sustainable way timber products using specific technical criteria.
- Specific:
 - Conserve the biological diversity and its associated values.
 - Conserve the water and soil resources, as well as the ecosystem functions.
 - Harvest timber.

6.2 Main findings

6.2.1 Authorisation of AOP 2006

Despite the fact that the FMGP Karawala dossier registered in INAFOR has the desk and field forms completed for the AOP 2006 approval, which have been signed by the competent authority, the independent monitor has verified that these documents were not rigorously observed. The INAFOR delegate should have conditioned the approval of the AOP to compliance with the technical aspects mentioned in this report.

6.2.2 Maps of AOP 2006

Despite the FMGP and AOP 2006 maps being produced based on satellite images, they are not easy to understand and interpret, as they do not provide enough clarity regarding the information presented and do not offer the information required by INAFOR. The main weaknesses of these maps are:

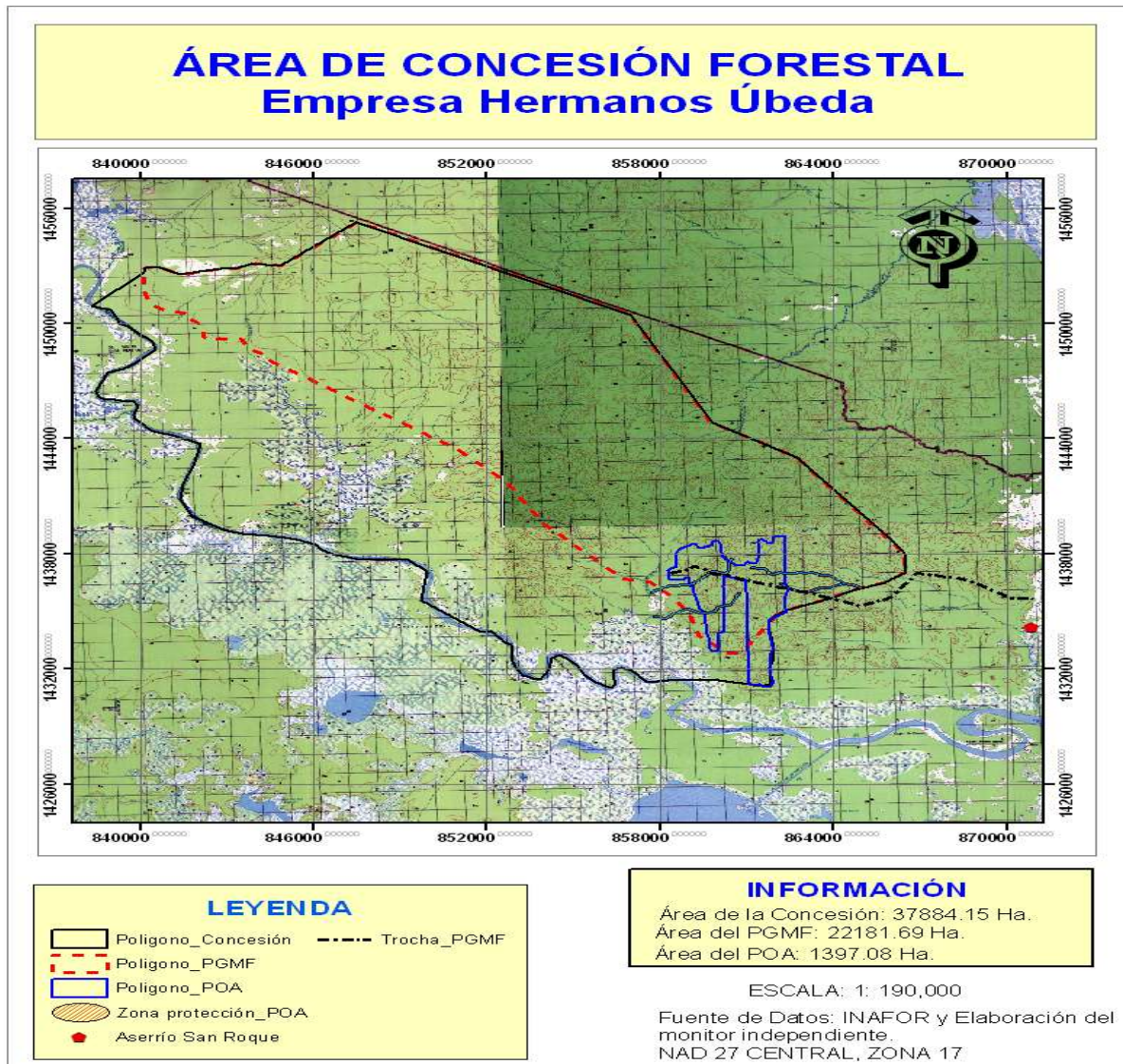
- The topographic sheets were not used as the basis of the said maps⁵
- They do not show reference points that are clearly identifiable on the ground.
- The roads and log ponds planned are not reflected.
- The hydrographic network of the area is not included.
- The AOP points are not reflected adequately.

⁴ Fundación para el Desarrollo de la Cordillera Volcánica Central, Costa Rica – Foundation for the Development of the Central Volcanic Mountain Chain, Costa Rica.

⁵ Article 4, section 4.1.2.1 of the Nicaraguan Obligatory Technical Norms for the sustainable use of the forests (NTON) clearly state that the hydrographic and topographic network of the areas under forest management must be included in the cartographic maps

The map below has been produced by the independent monitor and shows the forest area under concession of the FMGP Karawala, and the location of AOP 2006.

Image No. 1: Concession area, FMGP and AOP 2006



6.2.3 Delimitation of the AOP

After completing the IFM mission to the FMGP Hermanos Úbeda, the independent monitor verified that the AOP was not marked out as established in the relevant regulations.

The AOP was rather determined by the lines of the commercial forest survey done in the FMGP, therefore disregarding the routine procedure whereby the AOP area has to be delimited prior to carrying out the commercial survey.

The irregular polygon obtained from applying this practice illustrates that the priority was the extraction of high commercial value species (so as to ensure the cost-effectiveness of the operations), as the commercial survey was done taking into consideration the location of these species. Thus, those places where no species were found were excluded from the survey. Annexes 1 and 2 offer the maps of FMGP and AOP 2006 as they appear in the official documents.

6.2.4 Forest survey lines

The forest survey lines were established with a north-south orientation. They were established along one of the main extraction roads, which implies that the procedure to establish a baseline for their location on the ground was not followed.

There are also further weaknesses regarding these lines, such as:

- Lack of continuity in their numbering.
- Inconsistency in the starting points of the lines.
- Inconsistencies in the distance between lines (for example, some are 100 m away from each other, others 150 m).
- Inconsistencies in their length (some are 400 m long, others over 2,500 m).

The next image shows the AOP 2006 and the inventory lines that were established on the ground.

Image No. 2 Inventory lines (Produced by FUNDECOR)



6.2.5 Marking of trees

The marking of trees in forests under management enables the identification of those trees of commercially valuable species that are to be logged or left standing, and also enables the monitoring of the harvesting activities.

The implementation of AOP 2006 included such marking. However, this was not done properly, as the marks are difficult to distinguish and that creates confusion amongst the operators in charge of logging the trees.

Moreover, although many of the trees were marked, it was not possible to verify the numbering of such trees, which raises questions about the quality of the commercial survey carried out by the company.

6.2.6 Forest inventory maps and forest harvesting

In order to enable the identification of trees to be cut and trees to be left standing, a forest inventory map was produced as a basis for the harvesting activities within the AOP. Trees are located on an XY plane related to the inventory line, where X shows their east-west location and Y shows their north-south location.

The independent monitor proceeded to verify the accuracy of this map by carrying out extensive fieldwork in six inventory lines.

Through this verification, the following weaknesses were identified:

- Tree stumps that were not included in the forest survey or the map.
- Tree stumps where the numbering could not be identified as the mark had been lost, but which were nevertheless included in the map.
- Trees that were located in a different location than that reflected on the map.
- Trees included in the commercial survey that did not exist on the ground.
- Trees without numbering.
- Trees which numbering was not visible because the mark had been lost.

6.2.7 Illegal logging of trees

Thanks to the verification carried out in survey lines 37, 35, 21, 20, 2 and 1, the independent monitor documented the unauthorised logging of trees as presented in the table below.

Table No. 1 Trees logged illegally in the survey lines monitored (local names are provided)

No	Species	Location	
		Latitude	Longitude
1	Almendro	207296	1435896
2	Caoba	210645	1435912
3	Cebo	207640	1435869
4	Cebo	208193	1436439
5	Cebo	207754	1436066
6	Cedro Macho	207285	1435910
7	Cedro Macho	207716	1435959
8	Cedro Macho	207728	1435854
9	Nanciton	207638	1435866
10	Almendro	207298	1435884
11	Cedro Macho	207282	1435900
12	Almendro	207181	1435837
13	Almendro	210518	1435338
14	Almendro	210587	1435294
15	Almendro	210498	1435196
16	Almendro	210605	1435134
17	Guayabo	210663	1434884
18	Santa María	210567	1434734
19	Guayabo	211282	1434938
20	Almendro	207695	1435877

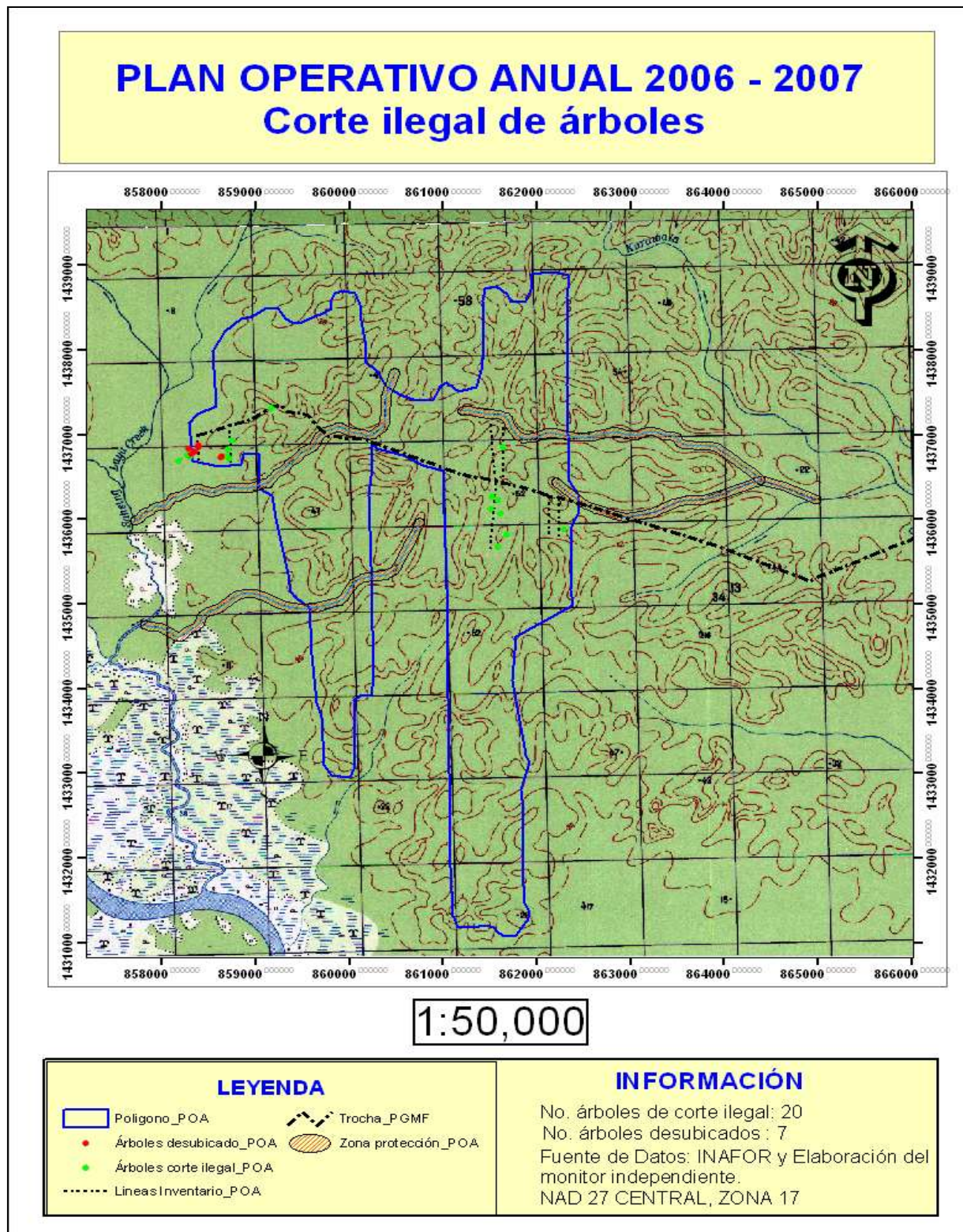
Table No. 2 presents those trees that were inconsistently located relative to the survey map used to forest activities in AOP 2006.

Table No. 2 Trees located inconsistently relative to AOP2006 (local names are provided)

No	Species	Location	
		Latitude	Longitude
1	Almendro	207353	1435940
2	Almendro	207312	1435910
3	Almendro	207395	1435988
4	Cedro Macho	207396	1436018
5	Nanciton	207296	1435974
6	Cebo	207650	1435883
7	Nanciton	207638	1435871

The following map shows the location of the inventory lines monitored and the location of the trees logged illegally.

Image No.3 Illegal logging of trees in AOP 2006 – FMGP Karawala



6.2.8 Harvesting of trees felled by natural causes

During the production of the commercial survey for the AOP, trees of commercial species felled by natural causes were also recorded. A total of 623 trees were included as such, with a volume of 1217 m³.

Most of these trees are apt for harvesting. Amongst them, those near trees marked for harvesting were in effect extracted too. The harvesting of these trees carried out by the company is inconsistent with what is established in the relevant forest regulations, as the following weaknesses were observed:

- The harvesting of these trees did not include a previous technical inspection by INAFOR, as Art. 55 of the forest regulations⁶ clearly establishes.
- The volume of 1217 m³ of felled trees was not included in the request for Forest Harvesting Permit # 07351.
- The stumps of those trees harvested were not marked as established in the administrative regulations.
- The volume of the felled trees was not included within the volume INAFOR authorised to log.

6.2.9 Pre-marking of logs in log ponds

The independent monitor has verified the pre-marking of logs in log ponds, an activity that is not included in the administrative regulations for the transport of harvested logs.

Logs are usually marked just before they are transported to the relevant processing facilities, not when they are stocked on the log pond. Despite this pre-marking not being common practice in other logging companies, the independent monitor cannot state that this is an illegal activity. However, it does entail clear risks related to:

- Confusion regarding the origin of the trees logged.
- Lack of control about the volume of timber logged and transported.
- Laundering of timber logged illegally.

The following pictures show logs marked in a log pond.

⁶ (Decree 73 – 2003)



6.2.10 Extraction roads

The extraction roads that are located within the AOP area are primary, secondary and tertiary, and are built according to the machinery used to drag and load the logged trees.

The primary and main road presents weaknesses regarding its construction, from which the following negative consequences stem:

- Sections cut by water courses.
- Excessive erosion in some steep areas.
- Sedimentation in water courses.
- Water stagnation.
- Collapses.
- Flooded sections.

Regarding the crossing of water sources over the road, an effort was done to enable their flow by placing filters (wooden-built boxes), but their design was seemingly inappropriate, as in the majority of the cases they could not cope with the volume of water flowing, which resulted in the destruction of such filters, some sections of the road, and also water stagnation.

In section 4.1.4 of the NTON, the technical specifications for the construction of forest roads are clearly stated. These were however not observed by the company when the roads were built. Annex 3 presents the map of infrastructures within AOP 2006.

The pictures below show sections of the road that are deteriorated by water flow, as well as water stagnation.



6.2.11 Forest regency

It is an obligation for forest regents hired by logging companies to maintain a constant information flow about the forest activities carried out in the implementation of FMGP and AOP. It is utterly important to inform the INAFOR Municipal Delegation about any changes or amendments in activities related to the FMGP.

In the case of forest operations of company Hermanos Úbeda, the independent monitor has determined that the forest regent has not observed what is established in art. 26 of the forest regulations. Breaches have occurred regarding:

- The implementation and update of all amendments carried out in FMGP and AOPs.
- Guaranteeing that all forest management activities comply with the NTON.
- Inform INAFOR about breaches of the forest law.

Many of the irregularities and weaknesses found in the implementation of AOP 2006 documented in this report would have not occurred if the forest regency had been observed as the law stipulates, that is, if the forest regent had followed the NTON and administrative regulations rigorously.

6.3 *Positive aspects found in the area under management*

The independent monitor, based on the verification activities related to compliance with the forest law in the AOP 2006 area, considers worth noting some positive aspects that were identified on the ground, amongst which are the following:

- Decrease of the harm done to the soil and the existence of natural regeneration thanks to an adequate extraction of the trees.
- A minimal existence of clearing areas within the forest.
- Efficiently harvesting of the trees and thick branches of the trees logged.
- Location and signalling of the lines of the commercial survey.
- Design and provision of small-scale log ponds.

7. Conclusions and recommendations

After concluding the fieldwork and reviewing the documents, the monitor presents the following conclusions:

1. The INAFOR Municipal Delegate did not rigorously follow the technical requirements to approve AOP 2006.
2. The FMGP and AOP 2006 maps were not produced following what is established in the current regulations.
3. AOP 2006 was not demarcated, and its area is defined by the lines done for the forest survey within the management area. This practice is not stipulated in the pertinent regulations.
4. The forest inventory lines were not distributed uniformly within the area under management.
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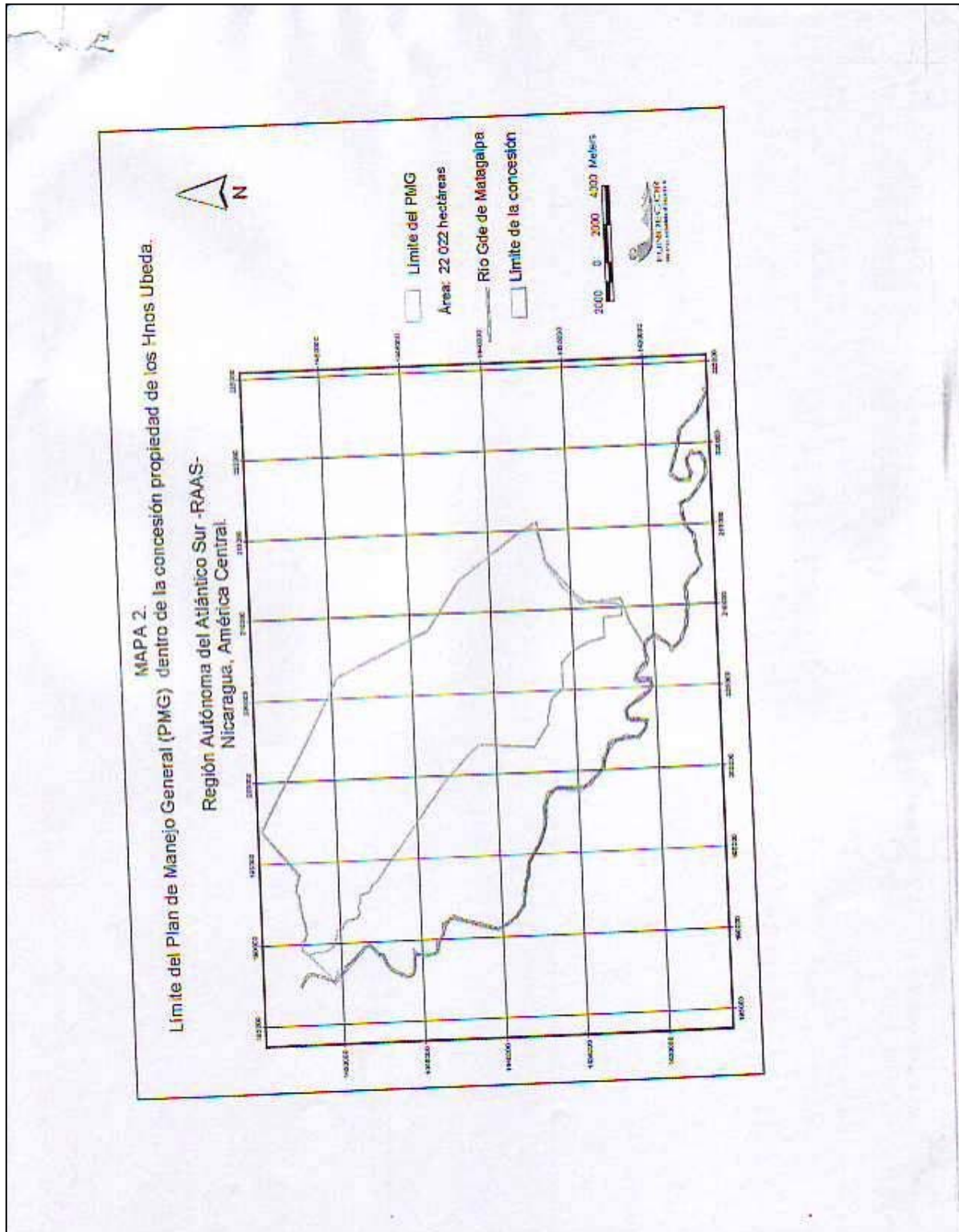
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2. INAFOR should proceed to determine and apply the pertinent corrective measures resulting from the findings presented in this report.
3. The Environmental Public Prosecutor should initiate the relevant legal investigations against those who are alleged to have carried out illegal activities, and impose the relevant administrative and penal sanctions.

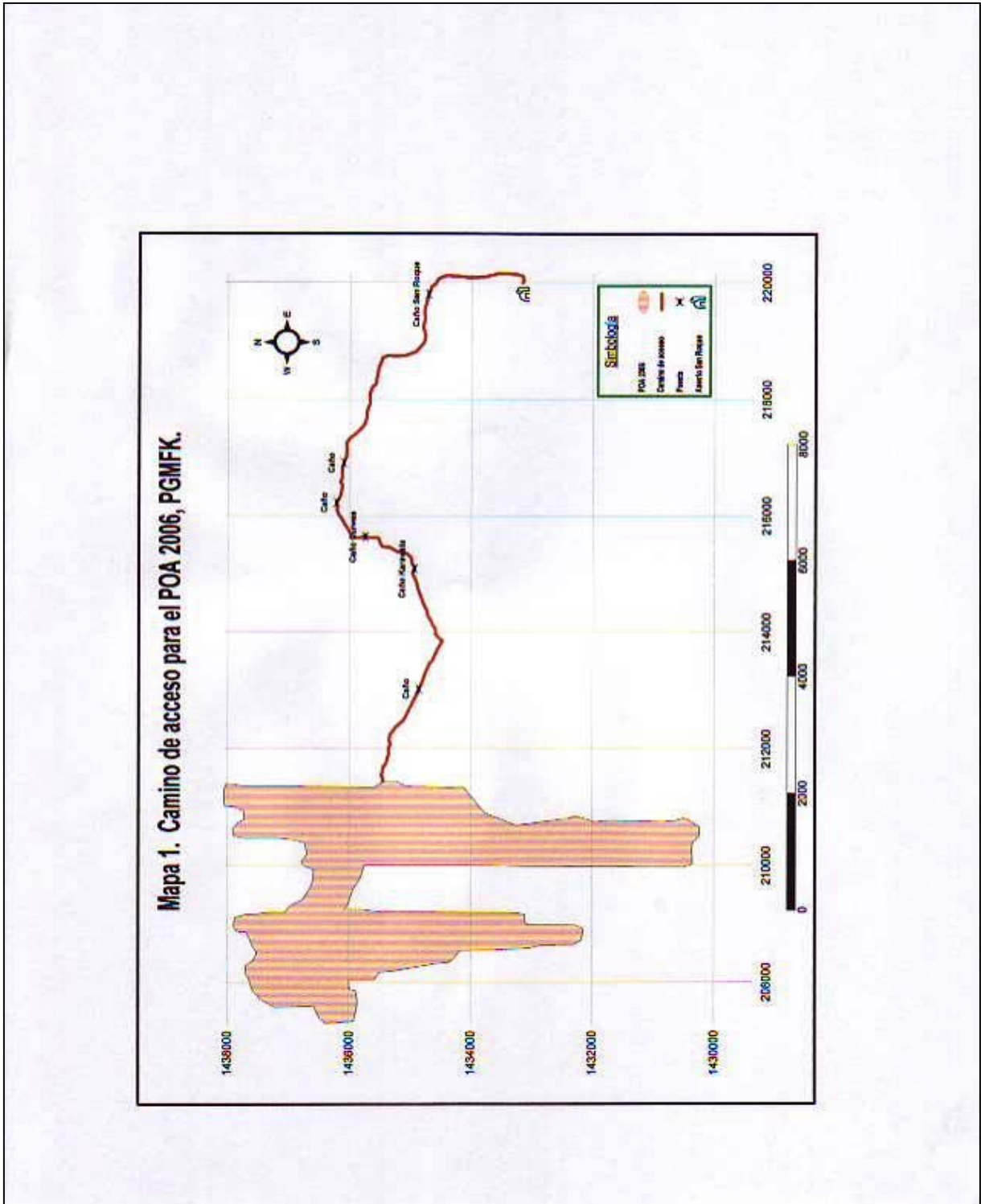
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9. Company Hermanos Úbeda should, weather permitting, proceed to repair the main road that leads to the FMGP, the area under management, and to redesign the drainage infrastructures.
10. The forest regent of the FMGP should produce a report for INAFOR, detailing all the changes, amendments and adjustments that are done in the FMGP and AOP 2006, and informing about the anomalies carried out by company Hermanos Úbeda in the implementation of AOP 2006.

8. Annexes

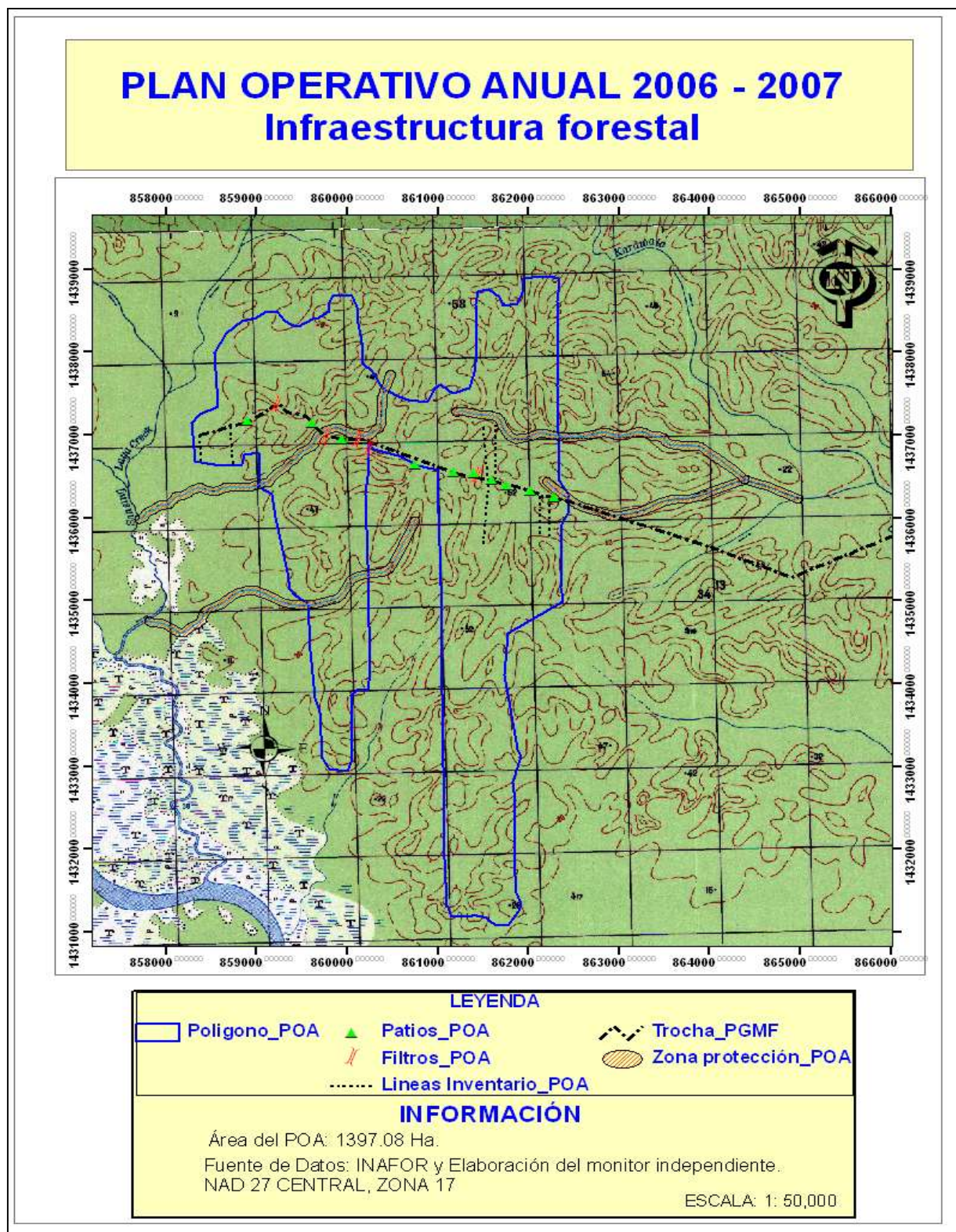
Annex 1: Map of FMGP Karawala (FUNDECOR)



Annex 2: Map of AOP 2006 and its access road (FUNDECOR)



Annex 3: Map of AOP 2006 infrastructures



Annex 4: Forest Harvesting Permit No. 07351

REPUBLICA DE NICARAGUA
INSTITUTO NACIONAL FORESTAL
PERMISO DE APROVECHAMIENTO FORESTAL

Expediente: 1704L06001 N° 07351

El Instituto Nacional Forestal otorga la presente autorización a nombre del Señor(a):
Jose Maximino Ubeto Rivera para que realice las actividades de Corte, Extracción
Transporte de árboles, del bosque ubicado en el sitio conocido como Karawala
el Municipio Desembocadura R. G del Departamento R.A.S.
que a continuación se detalla:

CÓDIGO	NOMBRE CIENTÍFICO	NOMBRE COMÚN	TOTAL ÁRBOLES	VOLUMEN (m3)	VOLUMEN POR ÁRBOL
81	Swietenia Macrocarpa	Cambo	411	1813.17	4.411
237	Dipteryx panamensis	Almendro	848	7077.14	8.34
15	Carapa guianensis	Cedro Macho	436	2924.7	6.708
31	Euterpe oleracea	Guayacanal	33	276.54	8.38
T01	Terminalia catappa	Guayabo Negro	172	580.15	3.372
H03	Hydrocotyle sp	Nacintón	107	701.9	6.55
14	Colophyllum baobab	Santa María	398	1045.05	2.625
J96	Vinola Kostuy	Sabo	385	1282.27	3.304
	8 sp				
Total Aprobado 8 sp			2733	15700.92	5.744

Esta autorización es válida hasta: 17-03-07 Marzo.

Para transportar la madera deberá hacerse con la guía de transporte de madera en rollo

Dado en la ciudad de Danlí Días del mes de Marzo
del 2006 17-03-06

Observaciones: 28/3/06

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