

# WORLD HERITAGE MIXED PROPERTY “ANCIENT MAYA CITY AND PROTECTED TROPICAL FORESTS OF CALAKMUL, CAMPECHE”



Organización  
de las Naciones Unidas  
para la Educación,  
la Ciencia y la Cultura



## PROGRESS REPORT ON THE DEVELOPMENT OF THE MANAGEMENT PLAN FOR MIXED PROPERTY

IN ATTENTION TO DECISION 38 COM 8B.16 OF THE  
WORLD HERITAGE COMMITTEE AT ITS 39th SESSION

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DE ÁREAS NATURALES  
PROTEGIDAS

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## **PROGRESS REPORT ON THE DEVELOPMENT OF THE MANAGEMENT PLAN**

Referring to the World Heritage Property "Ancient Maya City and Protected Tropical Forests of Calakmul, Campeche" and in particular Decision 38 COM 8B.16 of the World Heritage Committee at its 39th Session, during which the extension and re-nomination was approved, and requested the Government of Mexico to submit before 1 December, 2015, the joint management plan; report the progress achieved in the strengthening of the Advisory Council as a coordination mechanism for the protection and management at the mixed property; and report on progress to strengthen the surveillance system of natural and cultural values.

Following up on the inscription of the Property, the Government of Mexico organized an event at the highest level, led by the President of Mexico, with the presence of the Governor of Campeche, other authorities, heads of Secretaries from the federal government, state and municipal authorities, as well as representatives from the academic and social sectors. This event had great media coverage and endorsed the importance and richness of cultural and natural heritage of Mexico.

To address the provisions of the Decision of the Committee, the Government of Mexico, through the National Institute of Anthropology and History (INAH) and the National Commission of Natural Protected Areas (CONANP) have been given the task of strengthening coordination within the Mixed World Heritage Property, which has created a common framework of understanding for a deeper comprehension of the characteristics and values of the Property to strengthen conservation, protection and management.

The time invested since its inscription, has helped, in a coordinated way to collect more information, and to both the INAH and CONANP expand their knowledge in various aspects such as species populations, their habitat, ecological processes, their relation to archaeological sites, as well as pressures from tourism, land use planning and economic development of the region, all of which will guide the planning for the management of this heritage property in public use condition.

This document contains the following items:

1. Coordination between INAH and CONANP
2. Participation Mechanism
3. Modification of the Decree and Zoning
4. Organization for the development of the Management Plan
5. Strengthening the supervision and protection of the Property
6. Scientific research and monitoring

## **1. Coordination between INAH and CONANP**

The document "**General Principles of Collaboration between INAH and CONANP**" is currently being legally revised which aim to establish the terms for the conservation and protection of biodiversity and environment in natural protected areas under federal jurisdiction and the protection of monuments and zones of archeological monument, established within these natural areas in the national territory.

To accomplish the object of the General Principles of Collaboration, INAH and CONANP undertake to develop a "Work Plan" which must contain, among other points, objectives and targets, those responsible for the implementation of actions, the work schedule, the procedures established for their joint actions and operational participation, as well as instruments and control mechanisms in their collaboration for the effective implementation of the agreed activities, where appropriate, the breakdown of resources to be allocated, scheduling and ways of implementing them.

As these General Terms of Collaboration are formalized, for the Mixed World Heritage Property "Ancient Maya City and Protected Tropical Forests of Calakmul, Campeche", a Work Programme or Specific Agreement will be prepared, with which the INAH and CONANP strengthen and specifically establish coordination to conserve, protect and manage the property.

In order to strengthen coordination on the Site, CONANP already has the Director of the Natural Protected Area, Calakmul Biosphere Reserve, and INAH has appointed the Head of the Archaeological Zone Calakmul, and his functions are: to prepare reports, diagnoses and reports on the condition and operation of the archaeological site to optimize the control of cultural properties and ensure their dissemination; coordinate surveillance, cleaning and maintenance of the archaeological site, ensuring the actions taken by the Department of Stewardship of Cultural Properties, INAH Center and other relevant areas, in accordance with the internal regulations established in order to maintain optimal conditions in the area and other facilities; provide and coordinate the necessary support to the researchers responsible for archaeological projects authorized in the archaeological zone, as well as activities related to cataloging, registration and inventory of its cultural heritage, in order to contribute to the achievement of such activities; among others (General Organization Manual INAH-2015).

## **2. Participation Mechanism**

### **Advisory Council and World Heritage Advisory Technical Sub-Council, CONANP.**

The natural protected area, Calakmul Biosphere Reserve, has an Advisory Council since 1993, which is a collegial body that functions as support for decision-making for proper administration, conservation, management, development and operation.

The Advisory Council is composed with people that live, possess, make use or affect the management and conservation of natural protected areas (NPA), through their representatives. It is composed of 21 members:

- An Honorary Presidency exerted by an official of the government of the State of Campeche.
- An Executive Presidency, elected by majority vote at a meeting of the Council.
- A Technical Secretariat, by the Office of the NPA.

- The presidencies of the two municipalities Calakmul and Hopelchen.
- Representativeness of academic institutions, research centers, social organizations, civic associations, business sector, ejidos, communities, owners and holders, and in general the actors involved in the use, development and conservation of natural resources NPA.

As a specialized body of the Advisory Council we are preparing the bases to operate a World Heritage Technical Sub-Council to coordinate decisions on the actions of management, conservation and protection of the Mixed World Heritage Property. This Sub-Council will consist of INAH and CONANP authorities, academics and specialists from both the cultural and natural fields, and may invite external consultants and the Advisory Bodies ICOMOS and IUCN, as appropriate.

### **Municipal territorial planning instruments**

As support to coordinate actions with the Municipal Council, there is a **Development Wide Vision Program for the Municipality of Calakmul 2013-2040, PDGV** (Second printed version September 2015), it is an initiative of the City of Calakmul that seeks to transcend short-term inertias of municipal administrations, forced to make because of the urgency in addressing the most basic needs of the population, to reach a development based on the balance between the potential of natural and cultural resources and the capacities of communities. In this effort, there is the support of the Selva Maya Program, implemented by the German Technical Cooperation Agency (GIZ), on behalf of the Federal Ministry for Economic Cooperation and Development (BMZ), in conjunction with the National Commission of Natural Protected Areas (CONANP), as a counterpart in Mexico.

This Program contains a detailed diagnosis of the municipality in all sectors, presents the results of research on the current state of the municipality and the City of Calakmul, particularly on the areas of social life, economic, environment and government; prioritize the most pressing issues for the population, as well as scenarios for future municipal development in accordance with the participation of the various sectors. Which provides valuable information to work with local authorities and communities living in proximity to the Mixed World Heritage Property.

In this sense, the challenge for PDGV is to build a planning proposal that includes economic alternatives for the protection and rational use of natural resources, while enabling the improvement in the quality of life of its population; all of the above in accordance with the different productive capacity of the territory, its natural and archaeological wealth, and with the strong involvement of communities.

Given this scenario and given the importance of the wealth of the territory, for PDGV there have been highlighted the values of conservation, sustainability, rational use of natural resources, environmental care and archaeological and cultural diversity, as axes guiding municipal development.

The **Protection and Sustainable Use of the Maya Forest Regional Programme, Component Mexico**, implemented by the German Technical Cooperation Agency (GTZ) is providing technical and financial support to the CONANP through actions in the Calakmul Biosphere Reserve, including support for the elaboration of the Management Plan of the Mixed Property Ancient City Maya and Protected Tropical Forests of Calakmul, Campeche.

### **3. Modification of the Decree and Zoning Background:**

In 1989 the Calakmul Biosphere Reserve (CBR) was declared a natural protected area.

On November 12, 2004, were expropriated for public purpose four forest extensions, with a total area of 150,710 ha, whose decrees established they should be allocated to conservation and preservation actions of the protected natural area Calakmul Biosphere Reserve, through the incorporation of expropriated land to its south core zone, and as protected area in the ecological land use planning for the Calakmul region. The cause of public utility of the expropriation was the conservation of natural resources and the ejidos involved received their compensation.

The decree would serve two purposes: first, to end the existing problems with the population of the surrounding agricultural centers, and the second, protect the expropriated surfaces incorporating to the RBC as Core Zone.

Within the expropriated land there are 204.54 hectares of the main road to the Calakmul archaeological zone and a portion of 3,485.60 hectares within the archaeological zone, which correspond to areas of public use.

The activities carried out in this area are mainly tourist nature, closely related to the visit to the archaeological zone. Additionally, there are places close to the road as camps, interpretive trails, observation towers among others; activities of great importance for the economic development of towns near the area. This tourist activity is still very low, in 2015, the archaeological zone of Calakmul registered an entrance of 31,474 people; 59% were domestic tourism and 41% international. That same year, entered the RBC 6,186 vehicles (CONANP-RBC, 2015).

In addition to the land expropriated, national land was demarcated within the RBC, with a total area of 273,569.26 hectares were submitted under SEMARNAT's jurisdiction through CONANP.

#### **Zoning and Subzoning Adjustments**

All this detailed information on the identification and demarcation of land within the RBC, which was expropriated and other national land submitted for protection to SEMARNAT through the CONANP, requires adjustments of the zoning established by Decree of the RBC, for better management and governance. To this end we have established the process provided by the General Law of Ecological Balance and Environmental Protection (LGEEPA) and the Regulations on Natural Protected Areas (RANP).

Article 62 of the LGEEPA and 63 of its RANP indicate that the Secretariat (SEMARNAT) may propose to the Federal Executive modifications to a decree when the conditions that led to its establishment have changed, and that this may relate to changes in category, extension, limits, uses or activities permitted or zones and subzones. Once established a protected area, it may only be modified the extension, and, if applicable, permitted uses of land or any of its provisions, by the authority which established them.

The document is been prepared and the information it contains is included in the Previous Study Justification (EPJ), which is advanced in a preliminary version from December 2015. It was prepared based on Article 65 of RANP, in order to comply the decrees expropriating the land for common use, allocated to conservation and preservation actions, that established a zoning that

reflects the spatial reality of the area and is consistent with the guidelines established in the LGEEPA.

The EPJ proposed the following changes to the decree of the RBC, regarding zoning and subzoning:

LGEEPA Article 47a Section I states: *"The core areas will have as its main objective the preservation of ecosystems and their functionality in the medium and long term, where may be authorized activities for the preservation of ecosystems and its elements, research and scientific collection, environmental education, and restrict or prohibit uses that alter the ecosystems."*

On the other hand, Article 15 section XIII points out that for the formulation and direction of environmental policy and the issuance of instruments under the LGEEPA, will observe: *"To guarantee the right of communities, including indigenous peoples, to the protection, preservation, sustainable use of natural resources and the protection and use of biodiversity ... "*

*According to Article Third, section XXIX of the LGEEPA, zoning is defined as: "The technical planning tool that can be used in the establishment of natural protected areas, which allows ordering its territory according to the degree of conservation and representativeness of its ecosystems, the natural productive capacity of the land, its current and potential use in accordance with the objectives set in the same declaration. "*

The Decree published in the Official Gazette on 23 May, 1989 by which RBC is established, consider the following general zoning:

- Core Zone I (South)
- Core Zone II (North)
- Buffer Zone

On 23 February 2005, Article 47 Bis and 47 Bis I of the LGEEPA were reformed. The amendment to Article 47Bis states: *"... in relation to the establishment of natural protected areas, a division and subdivision will be made allowing the identification and definition of portions of the territory that constitute it, according to their biological, physical and socioeconomic elements... through the following zones and their respective sub-zones, according to its management category "*

- Core Zone:
  - Protection Subzone
  - Subzone of Restricted Use
- Buffer Zone:
  - Preservation Subzone
  - Subzone of traditional use
  - Subzone for sustainable use of natural resources
  - Subzone for sustainable use of ecosystems
  - Subzone for special use
  - Subzone for public use
  - Subzone for human settlements
  - Recovery Subzone

*Article 47 Bis I of the aforementioned Law, states that for Biosphere Reserves: "... may be established all subzones under Article 47 Bis."*

Therefore, the proposed modification of the decree, established through the EPJ in which the CONANP works in consultation with the INAH, mentions the zoning in which should be based the territorial delimitation of activities inside the RBC. These will allow to fulfill the objectives set out in the LGEEPA (Articles 47 Bis, 47 Bis 1 and 60), regarding the establishment and management of NPA and strengthen the management plan for the protection and conservation of the Mixed World Heritage Property, in compliance with its obligations under the Convention of 1972.

#### **4. Organization for the development of the Management Plan**

In order to have inputs needed to develop the Management Plan, always with the participation of the two institutions responsible for the Mixed Property, CONANP and INAH, performed a series of meetings, workshops with experts, researchers and officials. Also they were supported in the process by the advisory bodies of the World Heritage Committee, IUCN and ICOMOS, in one of the workshops for the preparation of the Management Plan. Of which can be mentioned:

- a) Working meeting for the development of joint Management Plan for the Property "Ancient Maya City of Calakmul, Campeche".  
In Mexico City, March 24, 2015  
INAH and CONANP staffs participated.  
Activities and responsible were established to carry them out.
  
- b) Workshop on ¿How to evaluate your NPA? Evaluating the effectiveness of protected area management.  
It was held from 23 to 25 September 2015 in Calakmul, Campeche.  
Participation of INAH and CONANP staffs, experts, researchers and civil society organizations.  
In this Workshop were selected the main Conservation Objects, the threats and the level of each of these identified for prioritization. These data will be analyzed in subsequent workshops.

For this workshop, the Management Program of Calakmul Biosphere Reserve and the statement of Outstanding Universal Value of the Mixed Property were taken as reference. Below is a table with conservation objects of cultural and natural values, and present target resources selected by the participants.

Conservation Objects	Goal or Target Resources
Water Bodies	Aguadas
Natural Ecosystems	Tall and medium semi-evergreen tropical forest
Natural Ecosystems	Low flooding tropical forests
Biodiversity	Species of Fauna: Key, Flag and Indicator: felines, tapir, primates (2 species), king vulture, bats, reptiles, amphibia, peccaries, parrot yellow cheeks
Cultural Legacy	Archaeological Sites (identity, historic dissemination, property) (consolidate, protect, research) (monitoring is over typology, density and distribution) Chultunes (Important as shelter and water catchment) traditional knowledge about the use and management of forest species and the tropical forests
Ecological Corridors	Dynamic and evolutive ecological processes Floristic composition and structure of tropical forests Animals with local migrations (butterflies, parrots, aquatic birds, bats) and large predators with great capacity of movements such as the jaguar and puma Connectivity

Threats and Affected Objects identified:

Direct Threat (pressure / damage and activity causing it)	Affected Object
Massive tourism, vandalism, does not follow rules, causes strain	Archaeological Site
Looting / Theft	
Fires	
Development Policy incompatible with the region	Tall and medium semi-evergreen and semi-deciduous tropical forest Low flooding tropical forests Species of Fauna: Key, Flag and Indicator: felines, tapir, primates (2 species), king vulture, bats, reptiles, amphibia, peccaries) Ecological corridors (connectivity) Aguadas
Invasions	Tall and medium semi-evergreen and semi-deciduous tropical forest Low flooding tropical forests Ecological corridors (connectivity)
Speculation on land sale	Tall and medium semi-evergreen and semi-deciduous tropical forest Low flooding tropical forests Ecological corridors (connectivity)
Illegal logging	Tall and medium semi-evergreen and semi-deciduous tropical forest Ecological corridors (connectivity)
Reduction of populations of species	Species of Fauna: Key, Flag and Indicator: felines, tapir, primates (2 species), king vulture, bats, reptiles, amphibia, peccaries)
Impact on the health of wild populations	
Population isolation and loss of integrity of the WH Property	
Illegal logging	Tall and medium semi-evergreen and semi-deciduous tropical forest Ecological corridors (connectivity)

- c) Workshop for the Preparation of the Management Plan "Ancient Maya City and Protected Tropical Forests of Calakmul, Campeche".

It was held from 26 to 29 September 2015, in Calakmul, Campeche.

INAH and CONANP staff participated, expert researchers, NGOs and experts from advisory bodies, IUCN and ICOMOS.

The participants took a field trip within the Mixed Property to observe its conditions (conservation, coordinated management between INAH and CONANP, threats, tourism, infrastructure, among others), and to show participants the Outstanding Universal Value for which it was inscribed on the World Heritage List.

During 3 days, six working sessions were held, and the participants received information about the management of other World Heritage properties in Mexico, containing natural and cultural values (Archaeological Site of Monte Alban and the Prehistoric Caves of Yagul and Mitla in the central valleys of Oaxaca); the natural, cultural and social context of the Mixed Property; NPA and Mixed property zonification; the background and the legal, administrative and institutional framework for the management of the Property by INAH and CONANP; and worked on defining the content of the Management Plan, its Objective; and designed a roadmap for the next steps for the final document.

- The content of the Management Plan is characterized primarily by achieving the integration of natural and cultural aspects since the conception of the Plan.

The components of the Management Plan are:

<b>INDEX OF THE MANAGEMENT PLAN FOR THE MIXED PROPERTY</b>	
<b>Executive Summary</b>	
	Acronims
<b>1. Introduction</b>	1.1 Importance (about the Selva Maya Region) and cultural wealth in the Regional Context
<b>2. Background in heritage protection in México</b>	2.1 Legal Instruments for Natural Protected Areas, Authorities and procedures
	2.2 Legal Instruments for Monuments and Archaeological Zones, Authorities and procedures
<b>3. Management Plan Structure Presentation</b>	3.1 Explain the structure, content, scope of the Management Plan
<b>4. The World Heritage Convention</b>	4.1 Inscription of Ancient Maya City of Calakmul, Campeche as a Cultural Property (Characteristics and description)
	4.2 Renomination and Extension of the Mixed Property Ancient Maya City and Protected Tropical Forests of Calakmul, Campeche (Natural and Cultural characteristics and description)
	4.3 Description of the natural features (nomination file)
	4.4 Description of the cultural features (utilize additional archaeological information provided as complement to the file)
	4.5 Statement of Outstanding Universal Value Cultural and natural Criteria

	4.6 Authenticity
	4.7 Integrity
<b>5. Objective of the Mixed Property Management Plan</b>	
<b>6. Zonification, the Property and its Buffer Zone</b>	6.1 Boundaries of the World Heritage Site (Land owners)
	6.2 Buffer Zones
	6.3 Surface
	6.4 Management Zonification
	6.5 Table of uses
	6.6 Municipal Context (Land use planning and other plans)
<b>7. Identification of Conservation Objectives, linked to the Outstanding Universal Value</b>	7.1 Target Resources
	7.2 Pressures and Threats
<b>8. Protection and Management Actions</b>	<b>Natural</b>
	8.1 Protection and conservation of Natural Values: Biodiversity, Endangered Species, Connectivity, Climate change adaptation and mitigation, Sustainable use of natural resources Ecological values restauration and rehabilitation
	8.2 Scientific research and monitoring
	8.3 Education and dissemination
	8.4 Human, material and financial resources
	<b>Cultural</b>
	8.5 Protection and conservation of Cultural Values: Archaeological zones and remains; Inventory, sites registration or recording; Climate change; Restauration
	8.6 Archaeological research and reserves for Investigation
	8.7 Interpretation and dissemination
	8.8 Human, material and financial resources
<b>9. Governance, Participation and Public Use</b>	9.1 Interinstitutional Coordination, concurrency and governance
	9.2 Advisory Council and World Heritage Technical Sub-Council
	9.3 Coordination Mechanism: Framework and specific Agreements
	9.4 Commitments / obligations / Convention guidelines
	9.5 Inspection and surveillance
	9.6 Risk prevention and control (hurricanes, flooding, fires)
	9.7 Aesthetic Values
	9.8 Cultural and natural sustainable tourism. Access, Infrastructure, safety and time tables

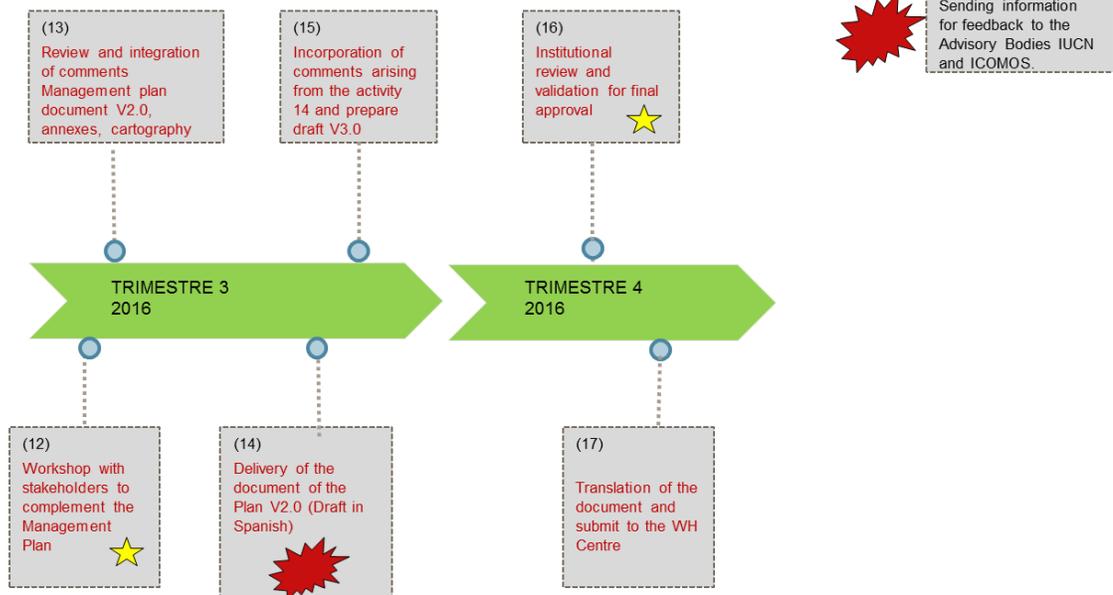
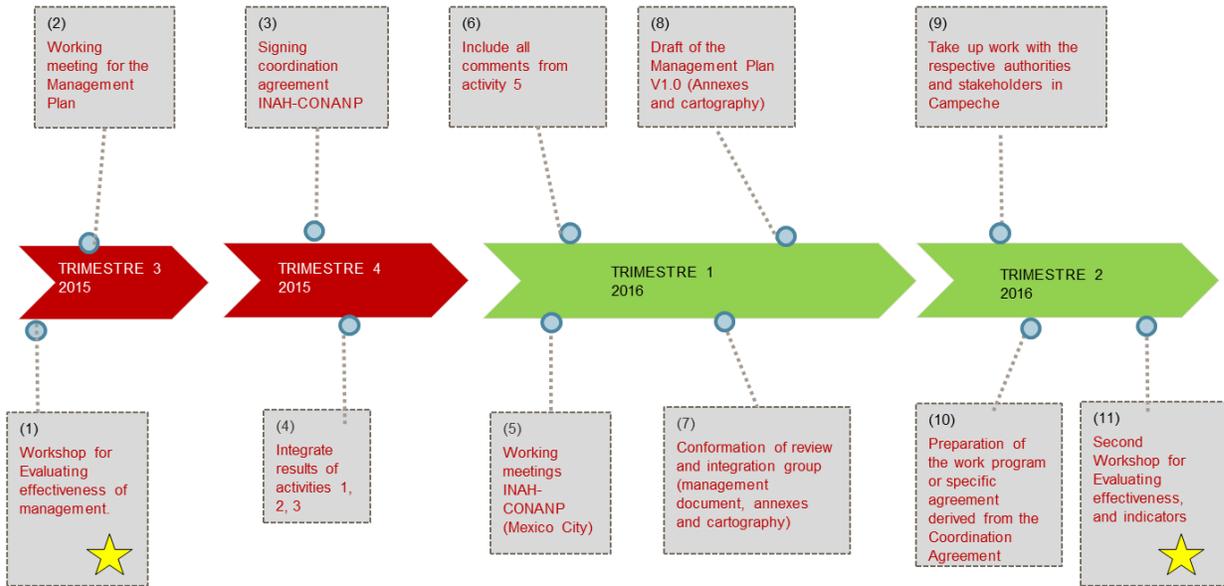
	9.9 Community involvement in protection
	9.10 Permits and authorizations inside the Property, in the NPA, in ejidos and private lands
<b>10. Administrative Regulations</b>	10.1 Provisions for the Management of World Heritage Property (Operational Guidelines)
	10.2 Administrative Rules in Calakmul BR
	10.3 Rules of Use and Operation in Calakmul Archaeological Zone
	10.4 Rules of Use and Operation in other Archaeological Zones
<b>11. Evaluation of management effectiveness</b>	
<b>Bibliography</b>	
<b>Glossary</b>	
<b>Annexes</b>	<b>I Legal Documents (Decrees, agreements)</b>
	<b>II Lists of flora and fauna and endangered species</b>
	<b>III Archaeological Sites</b>
	<b>IV Planning process (How was integrated)</b>

- It was defined in a collegial way the Objective of the Management Plan:

**"Provide the Strategic Framework and Institutional Coordination governing the development of actions to guarantee the conservation and comprehensive protection of natural and cultural values that constitute the Property, for the benefit, sustainable use and enjoyment of present and future generations, through the participation of different actors and their knowledge."**

- The Roadmap established for next steps is:

## Roadmap (timeframe) of the Process



## 5. Strengthening the surveillance and protection of the Property

The United Nations for Education, Science and Culture Organization (UNESCO), inscribed on 30 March 2016, at the express request of the National Institute of Anthropology and History, the nine Mexican archaeological zones already included in the World Heritage List, and under Article 5 of the Second Protocol (1999) of the Convention for the Protection of Cultural Property in the event of Armed Conflict (1954), in the International Register of Cultural Properties under Special Protection, now having immunity under the regime of Special Protection according to the Hague Convention, ratified by Mexico in 1956.

In addition to fully comply with the provisions of a Convention which Mexico is a State Party, the main interest behind the registration of the archaeological zone (including Ancient Maya City and Protected Tropical Forests of Calakmul, Campeche) is progressively guarantee complete and full protection and safekeeping under any circumstance. That is, with this measure Mexico:

- a) seeks to provide the highest protection to archaeological sites of great relevance to various assumptions impossible to foresee in advance, such as, natural or man caused disasters; and
- b) have public policies and protocols needed to prevent and respond timely and efficiently to any eventuality.

It should be noted that Mexico stands out again in the sphere of UNESCO by implementing in an articulated manner The Hague Convention of 1954, the World Heritage Convention (1972) and the Convention on the Means of Prohibiting and preventing the illicit import, export and transfer of cultural properties (1970).

## 6. Scientific Research and Monitoring

Since the integration of the file for renomination and extension of the Mixed Property Ancient Maya City and Protected Tropical Forests of Calakmul, Campeche began, there have been developed and published numerous documents that provide understanding of ecosystems, species, environmental services, also it has been expanded the archaeological scientific knowledge about the state of conservation, cultural affiliation, architectural styles among others, of which we can mention:

### *Archaeological Studies:*

In the cultural field, Doctors Pedro Francisco Sánchez Nava and Ivan Sprajc published in February 2016 by the publisher INAH, Colección Arqueología (Archaeology Collection), serie Logos; the scientific book ***Orientaciones Astronómicas en la arquitectura maya de las tierras bajas*** (Astronomical orientations in the lowlands Mayan architecture), where they explain that among ancient peoples of Mesoamerica, the Maya stand out above all for their astronomical knowledge. Very interesting data on this, but perhaps the most controversial are reflected on the orientations of architecture. During the last decades have been released many hypotheses that interpret their astronomical significance in many ways. This work returns to the topic, methodologically rigorous than those that characterizes most of previous studies. With the aim of providing convincing explanations, the authors determined with precise measurements in the field, the orientations of many buildings on many archaeological sites on the Maya lowlands; many of which are located inside the Mixed Property Ancient Maya City and Protected Tropical Forests of Calakmul, Campeche. When analyzing the data, the authors concluded that alignments relates mostly to the rising and setting of the sun at certain times, whose meaning can be understood in terms of their relationship with the agricultural cycle and formal calendaric

cycle, but also identifies various orientations towards the edges of Venus and the Moon. The proposed interpretations are both novel and convincing, not only based on a large sample of reliable data on the alignments, but also for being supported with plenty of independent kind of ethnographic, historical and iconographic information.