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# **World Heritage Patrimoine mondial**

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UNITED NATIONS EDUCATIONAL,  
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POUR L'EDUCATION, LA SCIENCE ET LA CULTURE

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CULTURAL AND NATURAL HERITAGE

CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE  
MONDIAL, CULTUREL ET NATUREL

WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL

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**Item 7 of the Provisional Agenda:** State of conservation of properties inscribed on the World Heritage List and/or on the List of World Heritage in Danger.

**Point 7 de l'Ordre du jour provisoire:** Etat de conservation de biens inscrits sur la Liste du patrimoine mondial et/ou sur la Liste du patrimoine mondial en péril

MISSION REPORT / RAPPORT DE MISSION

Dong Phrayayen-Khao Yai Forest Complex (Thailand) (590rev)  
Complexe forestier de Dong Phrayayen-Khao Yai (Thaïlande) (590rev)

14-20 January 2014

This mission report should be read in conjunction with Document:  
Ce rapport de mission doit être lu conjointement avec le document suivant:

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IUCN

**REPORT ON THE MISSION TO Dong Phrayayen – Khao Yai Forest Complex, Thailand  
FROM 14<sup>th</sup> January TO 20<sup>th</sup> January, 2014**



Photos © Naomi Doak

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**April 2014**

## **ACKNOWLEDGEMENTS**

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## LIST OF ACRONYMS

<b>DNP</b>	Department of National Parks, Wildlife and Plant Conservation
<b>DoH</b>	Department of Highways
<b>EIA</b>	Environmental Impact Assessment
<b>FF</b>	FREELAND Foundation
<b>GIZ</b>	Deutsche Gesellschaft für Internationale Zusammenarbeit
<b>IUCN</b>	International Union for the Conservation of Nature
<b>MoNRE</b>	Ministry of Natural Resources and Environment
<b>ONEP</b>	Office of Natural Resources and Environmental Planning and Policy
<b>OUV</b>	Outstanding Universal Value
<b>PA(s)</b>	Protected Area(s)
<b>RID</b>	Royal Irrigation Department
<b>UFZ</b>	Helmholtz Environmental Research
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization

## EXECUTIVE SUMMARY

The monitoring mission was undertaken from 14<sup>th</sup> January to 20<sup>th</sup> January 2014 (see Terms of Reference Annex I, World Heritage Committee Decision 37COM 7B.15 Annex II; Itinerary and Programme Annex IV). It aimed to follow up on the issues and concerns raised by World Heritage Committee Decision 37COM 7B.15 and to assess progress in the implementation of the recommendations contained in the decision. Furthermore, the mission considered the recommendations made by the 2012 reactive monitoring mission, in particular the implementation of mitigation measures to address the impacts on the property's Outstanding Universal Value of the expansion of Highway 304, enforcement of speed limits on roads bisecting the property and restrictions of their use as shortcuts, encroachment, the Huay Samong Dam, cattle grazing, illegal logging, and a lack of management effectiveness. The mission comprised Dr Naomi Doak, independent consultant, and Mr Inam Ullah Khan, independent consultant, both representing IUCN.

The mission was able to meet with key representatives from the Management Authority for the property, the Department of National Parks, Wildlife and Plant Conservation (DNP), under the Ministry of Natural Resources and Environment (MoNRE), as well as staff from various other relevant government institutions including the Office of Natural Resources and Environmental Planning and Policy (ONEP), the Royal Irrigation Department (RID) and the Department of Highways (DoH). Issues pertaining to the conservation of the property and its Outstanding Universal Value (OUV) were also discussed and raised with representatives from IUCN Thailand, FREELAND Foundation (FF), local community members and Deutsche Gesellschaft für Internationale Zusammenarbeit, the German Society for International Cooperation (GIZ).

The mission noted the efforts of the State Party to address the issue of illegal logging in relation to the emerging and urgent issue of removal of Siamese Rosewood and ongoing issues of encroachment. However, the property remains under heavy pressure from illegal logging and encroachment, including resort development. In addition, ineffectiveness of current management efforts to address a number of present and potential threats means the property remains at significant risk.

The State Party continues to struggle to adequately address issues including enforcement of the boundaries, land use regulations for private properties within the current boundaries and related regulations, continued encroachment, tourism planning and ineffective management. There has been little if any progress in relation to these issues since the previous monitoring mission and unless there is immediate, significant, and clear improvement in field management performance and coordination with other agencies important areas of OUV and the overall integrity of the property will continue to be undermined, degraded, threatened or lost.

While the mission considers that the only substantial change in the scale or severity of the threats to the property is related to the significant increase in illegal logging for high value timbers, the property is without doubt facing serious and imminent threats from this and other issues identified. These directly threaten the integrity of the property and may still be corrected, but only if the State Party acts appropriately and in a timely manner. The apparent lack of response to priority issues and a lack of obvious and significant progress by the key

management authority underscores the apparent lack of effective management engagement to date. Despite clear steps taken on a number of issues threatening to impact on the property the overarching issue of management effectiveness remains the most important threat to the integrity of the property and the Outstanding Universal Value for which it was inscribed.

To summarize, the mission concludes that, while some of the recommendations and requests made under previous World Heritage Committee decisions have been addressed and positive progress made in regards to some threats to the OUV of the property, a number of both existing and emerging very significant issues have not been addressed, including the need to tackle illegal use, address integrated tourism management, and prevent increased encroachment. There is also a clear lack of capacity and the need for increased resources for management. The mission encourages the State Party to seek greater support and attention from the highest national political level and other relevant government agencies, along with engagement from the World Heritage Committee, in raising support to address the current and potential severe threats to the property.

The view of the mission is that the continued level of threat to the property, in particular the emergence of a significant threat from illegal logging as well as continued encroachment, including resort development, warrants the property's inclusion on the List of World Heritage in Danger, in line with Paragraph 180 a) ii) and iii), respectively, of the Operational Guidelines. In addition, the mission considers that inscription of the property on the List of World Heritage in Danger would provide a means to request the required international support to address the illicit rosewood trade, which concerns not only Thailand but also transit and destination countries. The mission therefore recommends that the World Heritage Committee inscribe the property on the List of World Heritage in Danger. The mission also recommends that the State Party request this recognition, considering the need for action to assure the conservation of the property.

It further considers the list of recommendations below as essential issues to be addressed by the State Party in regards to the threats to the property and its OUV.

R1. In relation to the issue of illegal logging and removal of high value timber;

*Enhance and strengthen inter-agency and international cooperation, including with the military and local police, to address the issue of illegal rosewood logging, transportation, and sale, including through budgetary provisions to facilitate increased regular joint patrolling activities, and through encouraging interactions at higher levels and consideration of new approaches, including ways to reduce demand.*

R2. In relation to the issues and impacts from roads;

*Urgently submit to the World Heritage Centre:*

- a) detailed plans for long-term enforcement actions to prevent encroachment after expansion of Highway 304; and*
- b) any plans to expand or reopen other roads bisecting the property, and confirmation of the status of discussions on expanding Highway 348 and reopening of Route 3462; and*

*Continue to take measures to enforce speed limits and limit the amount of traffic on Highway*

*304 and other roads that bisect the property.*

R3. In regards to construction and impacts of the Huay Samong Dam:

*Continue efforts to implement and enforce mitigation measures during and post construction, in cooperation between relevant authorities, specifically the Royal Irrigation Department and the Department of National Parks, Wildlife and Plant Conservation.*

R4. In regards to issues of encroachment:

*Urgently address the severe threats from the various types of encroachment to the property and its Outstanding Universal Value, including by:*

- a) undertaking, as a priority, the detailed mapping exercise as recommended by the previous monitoring mission and in previous Committee Decisions, including an assessment of location and magnitude of encroachment (differentiating between agriculture, settlements and resort development), as well as the evolution of land use since the inscription of the property, using satellite imagery analysis;*
- b) developing a long-term anti-encroachment plan that adequately addresses the situation, including close long-term monitoring of encroachment in all the protected areas constituting the property;*
- c) continuing, strengthening and concentrating efforts to engage local people in the process, to ensure awareness of the boundaries of the property and garner support for its conservation, as well as an understanding of the legal basis for current efforts and enforcement decisions;*
- d) closely monitoring the level and type of land use and encroachment and develop a detailed plan for zoning of the property to improve management of impacts from areas within the boundaries of the property currently inhabited and under investigation in regards to land tenure;*

R5. In response to issues of cattle grazing:

*Building on the positive results already achieved in reducing illegal grazing activities, continue to engage with local communities to fully remove the remaining domestic cattle from the property, and increase cooperation with local provincial authorities, including the Department of Agriculture, to support small scale cattle herders in finding and securing land outside the property.*

R6. In response to issues of management effectiveness:

*Take urgent measures to improve the property's management effectiveness, including:*

- a) engaging at the highest national political level to strengthen regulations and enforcement measures;*
- b) providing adequate resources to the management authority and law enforcement agencies to implement management actions;*

*c) strengthening cooperation and coordination with all relevant ministries, agencies and other stakeholders at both national and local levels to contribute to the effective enforcement of regulations and implementation of management actions; and*

*d) addressing impacts from high intensity tourism by developing and implementing an integrated management plan for tourism in the property and its vicinity. The State Party is encouraged to request International Assistance, if necessary, in order to address this ongoing issue; and*

*Submit to the World Heritage Centre an English version of the updated management plan for the property.*



## 1. BACKGROUND TO THE MISSION

Inscribed on the World Heritage List in 2005 under criterion (x) (threatened species), Dong Phrayayen – Khao Yai Forest Complex (DPKYFC) covers 615,500 ha and currently comprises five almost contiguous Protected Areas (PAs);

- Khao Yai National Park (KYNP), 216,555 ha;
- Thap Lan National Park (TLNP), 223,580 ha;
- Pang Sida National Park (PSNP), 84,400 ha;
- Ta Phraya National Park (TPNP), 59,400 ha;
- Dong Yai Wildlife Sanctuary (DYWS), 31,277 ha.

Spanning 230 km from Ta Phraya National Park on the Cambodian border in the east to Khao Yai National Park at the western end of the complex (Figure 1), it is home to more than 800 species of fauna including 112 species of mammals, 392 species of birds and 200 reptiles and amphibians. The property protects the last substantial area of globally important tropical forest ecosystems of the Central Indochina biogeographic province in northeast Thailand, providing valuable habitat for the long-term survival of endangered species, including tiger (*Panthera tigris corbetti*), elephant (*Elephas maximus*), leopard cat (*Prionailurus bengalensis*), Siamese crocodile (*Crocodylus siamensis*) and banteng (*Bos javanicus*). In addition to these and other resident species the property plays an important role for the conservation of migratory species including the near-threatened Spot-billed Pelican (*Pelecanus philippensis*) and endangered Greater Adjutant (*Leptoptilos dubius*). The unique overlap of the range of two species of gibbon, White-handed (*Hylobates lar*) and Pileated Gibbon (*Hylobates pileatus*), further adds to the global value of the complex.

Since the time of the property's inscription, through Decision 29 COM 8B.11, it has been the focus of a number of Decisions at World Heritage Committee meetings (31 COM 7B.22; 32 COM 7B.17; 34 COM 7B.18; 35 COM 7B.19; 36 COM 7B.17; 37 COM 7B.15). These decisions have focused on issues related to management planning, including long term tourism management, the need for increased management resources, encroachment along the boundaries of the property and concerns over road development and the need for ecologically effective wildlife corridors, and more recently the emerging threats posed by illegal logging of Rosewood (*Dalbergia cochinchinensis*). The property is currently experiencing serious impacts from illegal logging and continues to experience significant impacts from human activities that are affecting its integrity and threaten to compromise its Outstanding Universal Value (OUV).

The objective of the monitoring mission was to assess progress by the State Party in the implementation of Decision 37 COM 7B.15 as well as previous decisions and recommendations from a reactive monitoring mission in 2012, and to consider whether the property should be considered for inscription on the List of World Heritage in Danger.

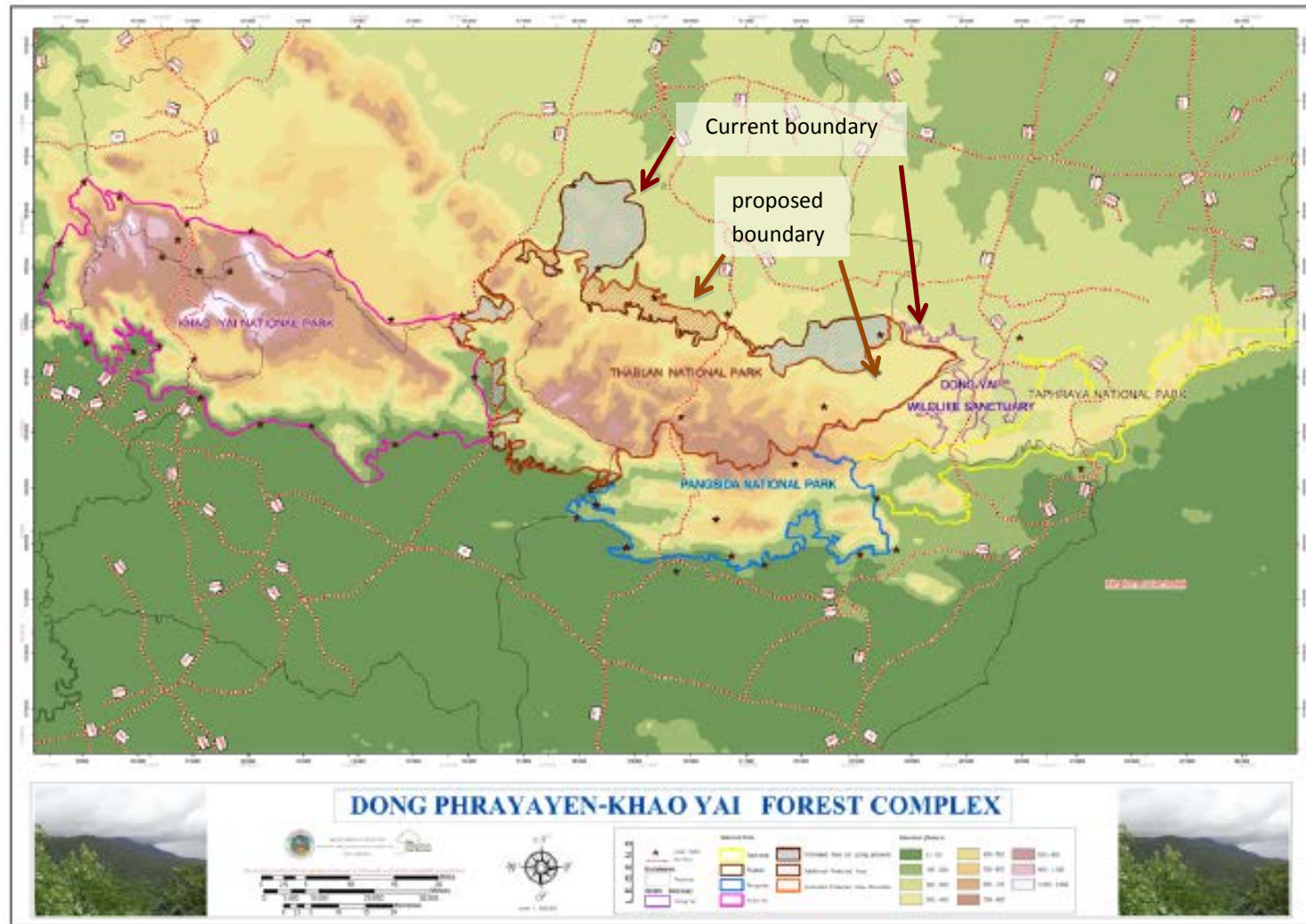
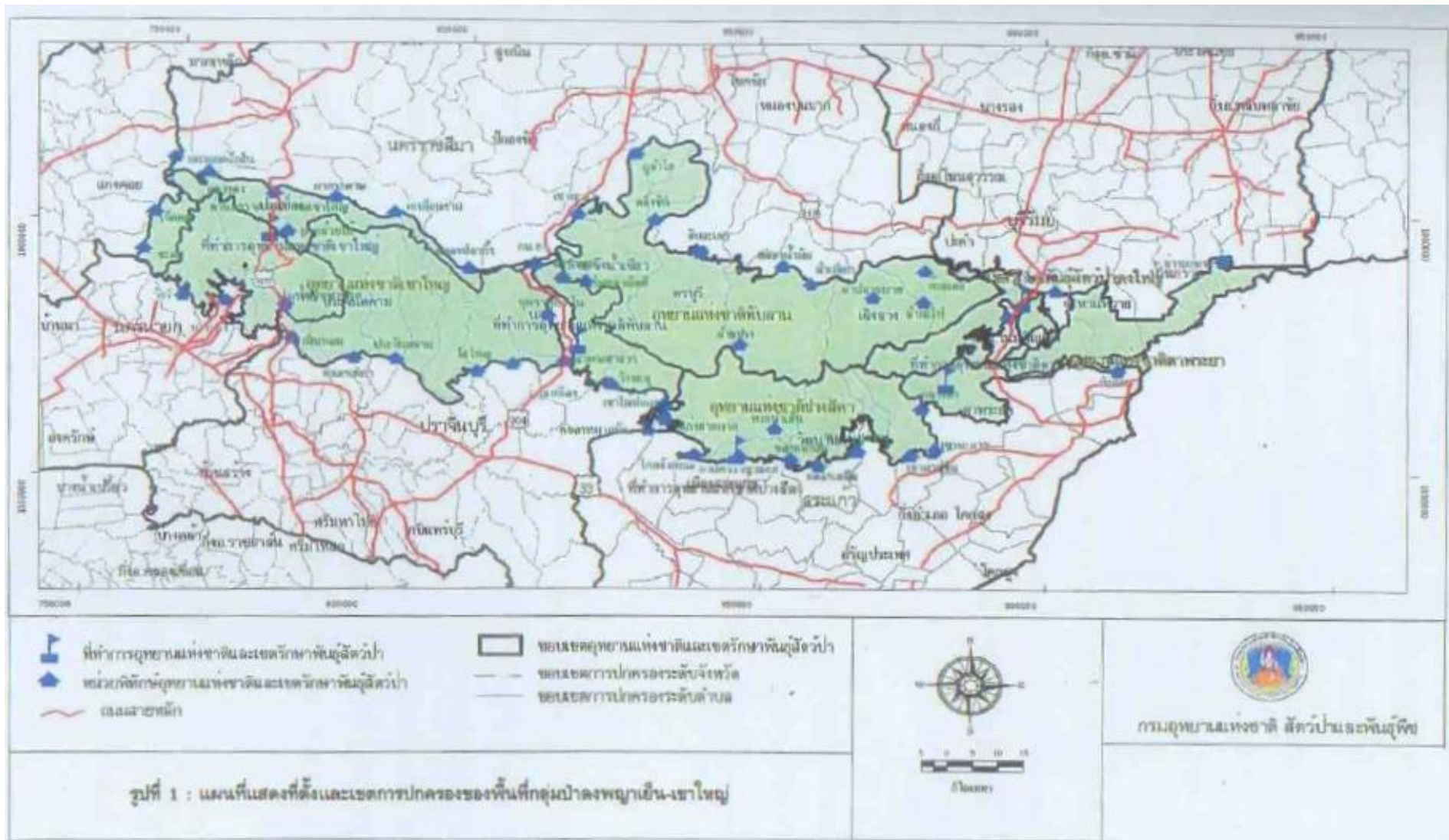


Figure 1: Location and boundaries of the property at the time of inscription including the boundaries of the 5 almost contiguous component protected areas that form the Dong Phayayen – Khao Yai Forest Complex. Current boundary for Thap Lan NP is the **darker red**, proposed boundary modification as intended by the State Party for submission in 2007 is **lighter red**.



**Figure 2:** Map of the property with current boundaries as presented in the revised Management Plan.

## **2. NATIONAL POLICY FOR THE PRESERVATION AND MANAGEMENT OF THE WORLD HERITAGE PROPERTY**

### **2.1. Protected area legislation**

To maintain long-term conservation of natural resources and to keep the ecosystems in Dong Phrayayen – Khao Yai Forest Complex intact and healthy, the Thai Government has committed to on-going investment in enhancing protection of the property and its OUV. The Dong Phrayayen-Khao Yai Forest Complex (DP-KYFC) is covered by legislation that concerns both National Parks and Wildlife Sanctuaries in Thailand. The need for laws and regulations applied as tools for enforcement, control and management of the property is widely recognized by the State Party and as such a strong legislation framework covers the property and governs not only activities within the forested area but also within the areas currently supporting communities.

The four National Parks included in the complex were declared under the National Parks Act B.E. 2504 (1961) and the Wildlife Sanctuary under the Wild Animal Reservation and Protection Act B.E. 2535 (1992). Other laws and regulations in regards to National Park and Reserved Area Management in Thailand, relevant to the management of the complex include:

- Forest Act, B.E. 2484
- National Forest Reserves Act, B.E. 2507
- Plantation Forest Act, B.E. 2535
- Enhancement and Conservation of National Environment Quality Act, B.E. 2535
- Cabinet Decision, June 30, B.E. 2541
- Sub-district Administration Organization and Sub-district Council Act, B.E. 2542
- Plan and Step of Power Distribution to Local Administration Act, B.E. 2542

### **2.2. Institutional framework**

Responsibility for the management of all national parks and wildlife sanctuaries in Thailand currently sits with the Department of National Parks, Wildlife and Plant Conservation (DNP), under the Ministry of Natural Resources and Environment (MoNRE). This department was established in 2002 and as such the overall institutional framework for management of the property has not significantly changed since inscription of the property in 2005. However, responsibility for coordination of management has moved within individual offices of the Department.

### **2.3. Management structure**

All of the five component Protected Areas (PAs), i.e. Khao Yai National Park, Thap Lan National Park, Pang Sida National Park, Ta Phraya National Park and Dong Yai Wildlife Sanctuary, are the property of the Government of Thailand and are managed by the DNP through offices in each PA which are overseen by regional offices. Khao Yai, Pang Sida, Ta Phraya National Parks and Dong Yai Wildlife Sanctuary all fall under the responsibility of the same Regional DNP administration office while Thap Lan National Park falls under a separate regional office.

Recent approval of changes to the administrative structure within DNP has led to the formation of an official World Heritage Facilitation Division that will now hold primary responsibility for reporting to the Committee and implementation of the Management Plan for the property, along with other key responsibilities outlined in Figure 3. However, a lack of clarity remains regarding the position of overall manager for the property, which does not appear to have been formalised or defined in the updated Management Plan for the complex or in the recently developed management structure. In addition the relationship between the regional offices and the recently created Division remains unclear as does the relationship or reporting line between the individual component PA Superintendents and the new Division (Figure 3).

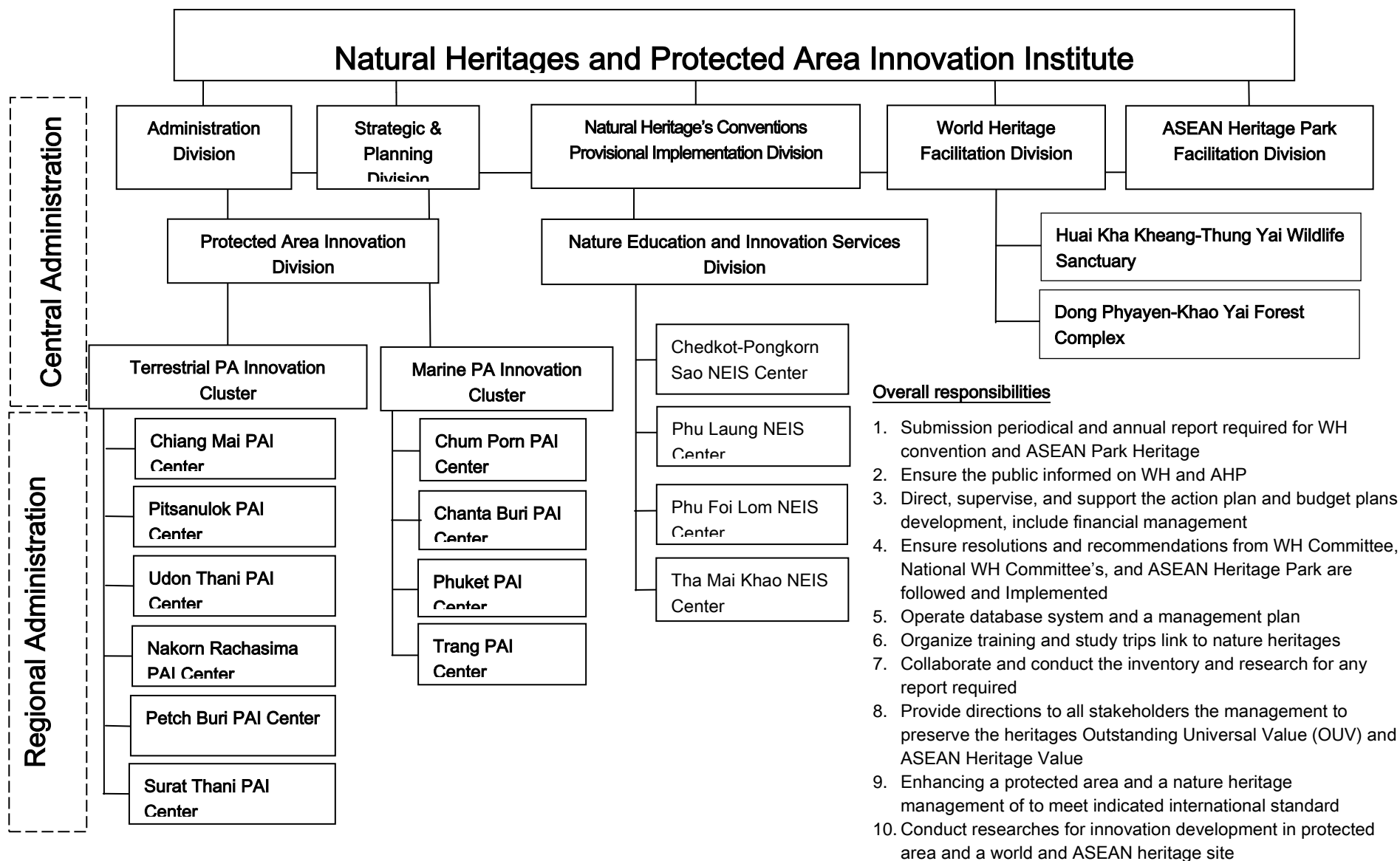
A Superintendent is responsible for the overall management of each individual PA, assisted by one or more Deputy Superintendents who are identified in the management plan as being responsible for individual fields of work. Each PA differs slightly in regards to the size and structure of the management arrangements. For example due to its large size and staffing levels Khao Yai National Park identifies 6 Divisions, each responsible for a different component of management, and a number of areas and ranger units.

Protected Areas Committees, comprised of representatives from the management agency, local communities and other stakeholders, have been set up to advise on the implementation of the management plan, including issues related to public participation in protected area management.

#### 2.4. Other International designations and programmes

Khao Yai National Park is also an ASEAN Heritage Park; however, the other component PAs, whether National Park or Wildlife Sanctuary, have no other international designations apart from World Heritage.





**Figure 3:** Proposed structure and role of the World Heritage Facilitation Division within the revised DNP management structure.

### 3. IDENTIFICATION AND ASSESSMENT OF ISSUES/THREATS

The IUCN reactive monitoring mission was invited to the property in order to assess key issues identified as having the potential to impact the OUV of the property (see Annex 1 for the Terms of Reference for the mission) including, but not restricted to those identified in Decisions 35 COM 7B.19, 36 COM 7B.45 and 37 COM 7B.15.

#### 3.1 Illegal logging of high value timbers

The property is home to significant populations of Siamese rosewood (*Dalbergia cochinchinensis*). Classified as Vulnerable by IUCN and recently listed under Appendix II under the Convention on International Trade of Endangered Species of Wild Fauna and Flora (CITES), rosewood is a hardwood timber species highly sought after for decorative furniture, luxury flooring, and other items such as chess pieces and guitars. The high value of rosewood has made it increasingly vulnerable to exploitation, attracting groups of poaching gangs who infiltrate protected areas and remove timber for export.

Illegal logging of Rosewood has occurred previously in the property but at fairly low levels. However, the rate at which illegal logging has increased in the last 12 months has outpaced the ability of park officials to address this issue. Incursions by armed poachers are now happening weekly with large amounts of timber being removed and fatalities increasing both among poachers and park rangers. Groups of armed rosewood poachers have not only increased in frequency but also in size with over 30 individuals, equipped with GPS receivers and assault rifles frequently detected within the property. These groups cause significant disturbance to the local ecosystem including poaching wildlife and destroying areas of forests for camps.

Decision 37COM 7B.15 requested the State Party to take the necessary measures to halt illegal logging within the boundaries of the property. The decision requested the State Party to work with the support of other States Parties concerned, particularly Cambodia, China, Lao People's Democratic Republic and Viet Nam to address the illegal trade in Siamese Rosewood. The mission had detailed discussions with relevant authorities and stakeholders and with the Superintendent of each component PA of the property raising this issue as a key management issue with the only park not experiencing high levels of poaching being Khao Yai National Park.

Current budgetary provisions available to control illegal logging of rosewood are not sufficient for the extent of activities required, including the cooperation with military departments and local enforcement agencies. The mission also discussed the issue of penalties imposed on offenders if apprehended, as this is not considered by management authority staff to be commensurate with the damage caused.

The mission acknowledges the efforts of the State Party and in particular local park staff to control illegal logging, including the establishment of check points for vehicles and increased patrolling within the property. Park staff have also received increased training on tactical patrolling and cooperate with military departments to conduct joint patrolling in key areas where rosewood occurs. Local communities are being increasingly involved in the protection of the property through outreach programmes that raises awareness of the issue and the value of the property.

The mission commends the State Party for providing additional funds for anti-poaching activities but remains concerned that these funds will not be sufficient to sustain activities in the long term. The mission remains unsure how current activities will continue and is concerned that when the existing budget runs out, DNP would be unable to ensure the sustainability of the initiative to control illegal logging.

The mission recognises that the current level of illegal logging of rosewood is not only a domestic issue related to the management of the World Heritage property, and as such requires intervention beyond the protected area staff. The Royal Forest Department has identified the issue of illegal rosewood logging and transportation as a trans-boundary issue and steps have been initiated to discuss it at the international level including the formation of a Joint national Committee responsible for the prevention of illegal logging of Siamese Rosewood between Thailand and Cambodia. On 8 May 2013, the Vice Minister for Foreign Affairs led a bilateral meeting with Cambodia on this issue. To this effect the Royal Forest Department has formed a rosewood committee and the issue has been taken up at the diplomatic level.

**Recommendation R1**

*Enhance and strengthen inter-agency and international cooperation, including with the military and local police, to address the issue of illegal rosewood logging, transportation, and sale, including through budgetary provisions to facilitate increased regular joint patrolling activities, and through encouraging interactions at higher levels and consideration of new approaches, including ways to reduce demand.*

3.2 Expansion of Highway 304, and use of other roads

Running a distance of 110 km, Highway No. 304 connects two provinces, Prachinburi and Nakorn Ratchasima, and runs along the joint boundary of Khao Yai and Thap Lan National Parks between km 26 – 29 and again between km 42 – 57. The mission was provided with an updated overview of the plans for wildlife corridors in these sections of the road, to be constructed once the expansion of the current two lanes to the proposed four-lane highway is approved. At the time of the monitoring mission the EIA for the highway expansion and the wildlife corridors from km 42-57 was awaiting approval from the National Environment Committee before being sent to Cabinet for final approval and budget allocation. The mission has been subsequently advised that the Expert Committee approved the EIA on the 28 Jan 2014 as the first of the two-step approval process.

The mission was able to inspect the sections of the road that cross the boundary of the property during the field visit and confirmed that the expansion works so far have not been conducted inside the property. However, there remains little doubt that expansion works outside the property, which were completed some years ago, have increased the road traffic along the highway.

Following recommendations from previous Decisions and the 2012 monitoring mission the Department of Highways (DoH) confirmed additional signage had been erected along section 26 – 29 km. In addition, a traffic management system that allows for updated electronic information and monitoring of speed has been installed in the section 42 – 57 km.



However, the mission noted that despite these efforts the traffic level remains high and very few vehicles adhere to the assigned speed limits either on this road or others that are within the boundaries of the property.

The mission noted the plans for the wildlife corridors including fencing to guide wildlife to areas where corridors will be constructed. Installation of these is complicated where settlements exist along the road. Consideration of specific zoning of areas adjacent to the road that currently include settlements may also be required in this part of the property to identify sections of the property that are in high use and to avoid complications in terms of implementation of effective mitigation actions. For example some of the proposed construction of fences to direct wildlife to the corridors will have to be placed behind settlements and will thus exclude areas of the property.

The mission welcomes the plans for the construction of wildlife corridors but remains concerned about the lack of commitment in regards to decisions on the proposed mitigation actions during and post expansion works, the length of time taken to complete the EIA, the lack of clear funding options for mitigation actions and what appeared to be an overall lack of coordination and communication between relevant authorities including the Department of Highways and DNP.

Roads potentially impact directly on the fragile landscape and indirectly via initiation of illegal logging, facilitating encroachment and many other potentially threatening processes. While the mission saw no evidence of new roads being built or indeed planned, the existing roads, running north-south through the property, continue to exacerbate forest and habitat fragmentation and create disturbance to wildlife. A number of stakeholders raised concerns over information that there is ongoing consideration from the DoH of plans to also expand at least one other highway that bi-sects the property – namely Highway 348. While DNP has not granted permission for initial viability studies this raises concerns over ongoing development plans. Noting that expansion works were conducted on Highway 304 outside the property with apparently little consideration of the impacts and approval processes, it is important that the World Heritage Committee be informed of any plans to expand other key transport routes that bisect the property including expansion works outside the boundary of the property, in line with paragraph 172 of the *Operational Guidelines for the Implementation of the World Heritage Convention*.

Similar concerns were raised over suggestions of the reopening of roads that are currently closed (e.g. Route 3462) which if opened would bisect an area of high biodiversity and have significant impacts on the property's Outstanding Universal Value. DNP has indicated that approval for this re-opening would not be granted. However, it remains an issue of concern and requires further clarification from the State Party.

In addition, use of other roads that bisect the property and are used as short cuts mean increased impacts on the property and its values. The mission was advised that the Superintendent from Khao Yai National Park has signed a Memorandum of Understanding with provincial authorities to work together to limit access to the park to visitors and reduce the number of people using the roads in the park as short cuts and it will be important for these efforts to continue if levels of traffic are to be addressed.

The mission, noting that the implementation of effective wildlife corridors is essential for maintaining the integrity of the property, independent of the expansion of Highway 304, makes the following recommendations to the State Party:

### **Recommendation R2**

*Urgently submit to the World Heritage Centre:*

- a) detailed plans for long-term enforcement actions to prevent encroachment after expansion; and*
- b) any plans to expand or reopen other roads bisecting the property, and confirmation of the status of discussions on expanding Highway 348 and reopening of Route 3462; and*

*Continue to take measures to enforce speed limits and limit the amount of traffic on Highway 304 and other roads that bisect the property.*

### 3.3 Construction of the Huay Samong Dam and other proposed dams

In addition to meeting with relevant experts and representatives from the Royal Irrigation Department (RID), the mission visited a number of locations around the construction site of the Huay Samong Dam. The Cabinet approved the EIA for the construction of the dam in October 2009. The dam wall itself is located outside the boundaries of Thap Lan and Pang Sida National Parks, two of the component PAs that constitute the property. The area that will be flooded as a result of construction of the dam amounts to 2.63 km<sup>2</sup> and includes sections inside the boundary of the property (Thap Lan and Pang Sida). These areas have been recorded as important locations for both Siamese Crocodiles and prey species of tigers and as such flooding may impact on the OUV of the property directly but also through increased access and poaching activities.

The mission met with representatives from the RID at the construction site of the dam and also in Bangkok. While construction of the dam continues the RID has implemented mitigation activities with relevant agencies, including the DNP to implement effective measures to mitigate the environmental effects of the dam construction on the OUV of the property. The mission was provided with an opportunity to visit areas around the construction site and inspect:

- Anti-encroachment activities and restoration of forest inside the property
- Restoration activities and nursery facilities being undertaken in areas to be included in the property with submission of a boundary modification
- Relocation of current and establishment of new ranger units in Thap Lan NP and Pang Sida NP
- Local communities already relocated from within the area to be flooded
- Local communities yet to be relocated
- Housing and accommodation areas of staff working on the construction of the dam

In addition to visiting the construction site and adjacent areas, the mission had the opportunity to discuss issues of encroachment and poaching with DNP staff stationed near the construction site. While illegal logging of valuable timbers is a current major problem for

DNP staff in both Thap Lan and Pang Sida National Parks, staff indicated this is not being undertaken by workers from the dam site and to date no incidences of poaching by the construction staff have been recorded.

During the visit to the site the mission was also able to discuss a number of planned mitigation actions and issues of concern in regards to the management and mitigation of impacts post construction of the dam. These included plans already in place to address concerns raised previously as well as a number of other issues raised by the RID that may require further consideration and clarification:

- Declaring the reservoir as part of the national park and the World Heritage property
- Inclusion of additional areas into the boundaries of the national park
- Continued education and awareness activities with construction staff
- Provision of boats, vehicles and other resources to the DNP for improved management
- Use of the dam area post construction for tourism and the introduction of fish species
- The need to consider planning and development for areas downstream of the dam wall post construction

The mission recommended that detailed and clear plans for the above points be provided to the World Heritage Centre and that stakeholders be consulted in planning and further action. Issues discussed in detail included the suggestion of introduction of fish species post construction of the dam wall. The mission raised concerns in regards to this proposed activity and in particular requested the RID to reconsider this plan in regards to the species. Concerns were raised by other stakeholders in conjunction with reports that the area to be flooded is currently supporting a population of the Siamese Crocodile.

#### **Recommendation R3**

*Continue efforts to implement and enforce mitigation measures during and post construction, in cooperation between relevant authorities, specifically the Royal Irrigation Department and the Department of National Parks, Wildlife and Plant Conservation.*

#### 3.4 Encroachment

The mission visited areas within the current boundaries of the property where efforts continue to be made to tackle on-going land use changes. These changes are in contravention to the Cabinet decision of 30<sup>th</sup> June 1998 which allowed land owners, present at the time the National Parks were gazetted and before the property was inscribed on the World Heritage List, to remain within the boundaries of the property. While the Cabinet decision allowed existing land owners to remain it stipulated that no land use change may occur in these areas. The management authority believes these illegal changes also have the potential to lead to encroachment into forested areas of the property as initial land holders sell land to developers and then move further into the property to find land. This issue is of ongoing concern as requests for developments within the property appear to be continuing and new construction can be observed in a number of locations. Resorts of

significant size remain within the boundary and have both direct and indirect impacts through increased tourism, waste generation, increased traffic levels and resort expansion. The lack of action to either address these developments or propose management zones is increasingly concerning and indicates a lack of management effectiveness and a key threat to its integrity. Despite the focus placed on issues of encroachment in the northern sections of the property by previous Committee decisions, the mission noted that encroachment has continued in a number of locations and continues to impact the property in a number of areas. The mission was both shocked and alarmed at the increasing level of development both within the boundaries of the property and adjacent to the property since the previous mission, with large numbers of resorts and condominium style accommodation.

Efforts to resolve this issue are ongoing but involve a lengthy process focused on clarification of land title and ownership between the National Park and the surrounding communities. In cases where land tenure has been confirmed to sit with the park, and as a result DNP, the dwellings and developments have either been removed or are in the process of being removed. Additional court decisions and writs have been issued to remove illegal buildings and these efforts continue. The mission met with a group of local residents who indicated they were being removed from properties and this has caused tensions between local community groups and the management authority. The mission visited areas where removal of structures deemed illegal had begun and where steps were being taken to prevent further land use changes. However, while the mission acknowledges that clarification of land tenure is a long and complicated process that stems from issues originating from before inscription of the property, continued resort developments and expansion of village areas have led to significant land use change within the boundaries submitted at the time of inscription. Despite repeated requests for updated maps no detailed mapping of land use or encroachment has been undertaken since the last monitoring mission and as such no up to date assessment can be made at this time. In addition, the continued lack of fine scale maps of the initial boundaries of the component Parks, the corresponding World Heritage property, land use changes and proposed zoning plan, continues to complicate the ability to map or even ground truth the extent of encroachment and land use change. While a commitment to address boundary issues and options of zoning residential areas within the current boundaries continue to be discussed no progress appears to have been made on this issue. The DNP appears to remain unclear about appropriate actions that should be taken to deal with the current encroachment and prevent further impacts on the property.

The clarification of land use and boundaries is without doubt a key issue to the ongoing conservation of the property and the values for which it was inscribed, especially in light of the encroachment and development inside the property, which remains a major threat to its integrity. The State Party acknowledged the importance of this issue at the time of inscription and provided supplementary information to the nomination, which expressed a commitment to a boundary adjustment by 2007. This issue has subsequently been acknowledged by the State Party and the Management authority on a number of occasions. Despite this, no updated mapping has been undertaken, nor has the State Party, to date, submitted a proposal for a boundary modification to the World Heritage Centre (see also section 3.6).

The mission noted the efforts of the DNP to address issues of encroachment, in particular along the northern boundary of Thap Lan National Park. However, it considers that more

support is required from the highest national political level to address this issue. A large and integrated approach to sustainable development around the property is required to reduce the pressure and the threats to the integrity of the property. Greater attention needs to be paid to improved coordination, cooperation and collaboration regarding development schemes and proposals adjacent to the property. The mission makes the following recommendations to the State Party:

**Recommendation R4**

*Urgently address the severe threats from the various types of encroachment to the property and its Outstanding Universal Value, including by:*

- a) undertaking, as a priority, the detailed mapping exercise as recommended by the previous monitoring mission and in previous Committee Decisions, including an assessment of location and magnitude of encroachment (differentiating between agriculture, settlements and resort development), as well as the evolution of land use since the inscription of the property, using satellite imagery analysis;*
- b) developing a long-term anti-encroachment plan that adequately addresses the situation, including close long-term monitoring of encroachment in all the protected areas constituting the property; and*
- c) continuing, strengthening and concentrating efforts to engage local people in the process, to ensure awareness of the boundaries of the property and garner support for its conservation, as well as an understanding of the legal basis for current efforts and enforcement decisions.*

3.5. Cattle grazing

In the recommendations of the previous monitoring mission and in subsequent Committee decisions (36COM 7B. 17 and 37COM 7B.15) the State Party was urged to rapidly halt ongoing cattle grazing affecting the property. The mission visited areas of Thap Lan NP which surround the Lam Plai Mart dam in Ban Rat, along the north eastern boundary of the property, where it noted that significant reductions in the number of cattle have occurred as a result of efforts by the DNP and engagement with local communities, and where park staff continue to work with the local communities and settlements towards an eventual removal of all domestic cattle. The mission was able to meet with a number of local residents and discuss some of the key issues with them and with representatives of those who previously grazed cattle within the property, discussing at length some of the issues related to the delay in removing all of the cattle. Continued commitment from the management authority and increased enforcement to address this issue is critical to the maintenance of the property's OUV.

The mission noted and acknowledged the ongoing issue of land ownership and land provision resulting from the complicated history of resettlement of local communities that occurred in the area during initial construction of the Lam Plai Mart dam and the conflicts arising from a large demand for small amounts of land and re-settlement of large families on small land parcels. The mission commends the DNP for ongoing efforts to engage and support the remaining illegal cattle grazers to reduce cattle numbers and eventually move their cattle out of the property. However, the issue of removal of cattle can't be addressed by the DNP alone and requires cooperation from local provincial authorities including the Department of Agriculture.

**Recommendation R5**

*Building on the positive results already achieved in reducing illegal grazing activities, continue to engage with local communities to fully remove the remaining domestic cattle from the property, and increase cooperation with local provincial authorities, including the Department of Agriculture, to support small scale cattle herders in finding and securing land outside the property.*

### 3.6 Boundary Modifications

In 2005, upon the inscription of the property on the World Heritage List, the World Heritage Committee encouraged the State Party to submit a boundary modification request, in light of issues of encroachment in a number of areas, in particular forested areas, within the property, in order to better address forest conservation issues. The need for this issue to be addressed was recognised by the State Party in the supplementary information provided with the nomination document, which expressed a commitment to a boundary adjustment by 2007.

The maps provided at meetings during the previous reactive monitoring mission indicated significant changes in land use within areas already inhabited prior to inscription of the property but included within its boundaries. They also showed an increase in encroachment and highlighted the need to address the issue of the property boundaries through either modification of the initial boundaries or consideration of a zoning plan for the property. As noted in previous reports and recommendations, the mission acknowledges that large areas of the property, heavily impacted by land use and encroachment, should never have been included in the property at the time of inscription. Combined with an inability to effectively enforce and manage activities in these areas, largely a result of limited cooperation and coordination between DNP and the district administration, this situation has led to ongoing land use change and an expansion of encroachment (see section 3.4).

Requests for an overlay of the initial boundaries, subsequent proposed boundary modifications, current land use and forest cover were made in the previous mission. However, it appears that this mapping exercise is yet to be undertaken and no detailed or updated images, showing the current boundaries and potential revisions, have been provided. Discussions during this mission indicate that the State Party has decided against any modification of the boundaries to address land use change and encroachment as there were concerns that this would reduce any power to prevent further land use change. However, it remains unclear how these issues will be addressed and as such developments within the boundary appear to be continuing with little, if any, control.

In light of the fact that the majority of pressures on the property originate from highly developed areas within and adjacent to its current boundaries, and considering the unfavourable socio-economic status of many communities surrounding the property and an apparent lack of political support for enforcement of the property boundaries, the mission suggests the State Party consider a management zoning plan to ensure core areas of habitat are identified and provided with increased levels of protection, while ensuring that the entire property is protected against undue developments within and adjacent to its boundaries, including through the legal designation of an appropriate buffer zone around the property. The report of the State Party in response to decision 37COM.7B.15 outlines six zones within the property. However, no maps have been provided to outline these in relation

to the boundaries submitted at the time of inscription and no detailed maps were presented to the mission.

The mission encourages the State Party to consider boundary modifications or zoning of the property to clarify the demarcation of the boundaries and address issues of continued land use change, in order to enhance the protection of OUV, and following the relevant appropriate procedures as outlined in the *Operational Guidelines*. However, the mission emphasizes that any proposal for modification of boundaries of World Heritage properties should be based on a clear understanding of Outstanding Universal Value, and supported by strong scientific evidence.

### 3.7 Management Effectiveness

In November 2006 the State Party, through the management agency, developed a management plan for the property. The management plan was recently updated through a project on “Enhancing the economics of Biodiversity and Ecosystem Service in Thailand / South-East Asia (ECO-BEST) with funding from GIZ and UFZ. The overall national approach to establishing PA complexes to maximise conservation opportunities is to be commended.

During the mission presentations were made by each of the Superintendents on issues pertaining to the management of the property. In terms of management challenges particular concerns were raised by each of the superintendents about enforcement of current regulations and resourcing in regards to staffing levels, capacity and equipment, in addition to the other issues already discussed above.

As part of the process to update the management plan, as well as assess overall management within the DNP, an updated management structure has been outlined (Figure 3) and a World Heritage Facilitation Division has been established (see also section 2.3). However, no English version of the updated management plan was available at the time of the mission and detailed information on the resources, including staffing and budget available to ensure long-term management effectiveness across the complex was also lacking. It also remains unclear how the new management structure will impact the previously established World Heritage Office and how the new division will link to the previous position of a manager for the complex and management offices in place within the regional or individual offices of the DNP in each component PA of the property.

In addition no integrated management plan for tourism appears to have been developed for the property, despite annual increases in tourist numbers, which appear to have led to an increase in general traffic around the main entrance to the property with small road side stalls now apparent and a resulting issue of traffic management, particularly in Khao Yai NP, as well as an increasing amount of tourism targeted development surrounding the property. The State Party response to Decision 37COM 7B.15 indicates a tourism management plan is being drafted and yet no such plan was presented to the mission.

Effective management of the property requires that the DNP continue to cooperate with other agencies to address issues related to the intensity of illegal logging and removal of valuable timber. Cooperation with local police and armed forces has been undertaken but with limited budget these efforts have been restricted. Park authorities have insufficient human and financial resources to effectively combat the current levels of poaching and removal of these timbers.

Cooperation with local agencies and officials at a number of different levels, including ministerial, regional, district, sub-district and local stakeholders needs to not only continue but also be scaled up. As evidenced by the issue of cattle grazing such cooperation often leads to encouraging results. Nonetheless, a number of recent government decisions and actions are not in line with the conservation of the property's OUV, for example development approval, road expansion and dam construction. This complicates the ability of the DNP to manage the property and as a result there is limited institutional ability to enforce regulations or intervene both outside the limits of the property but also in areas of significant encroachment inside the current boundaries, where they lack a clear mandate.

Because it is directly or indirectly linked to all of the threats and issues outlined above either through a lack of enforcement of existing regulations or a lack of coordination and communication between relevant authorities, ineffective management of the property remains the most serious and immediate threat to the OUV of Dong Phrayayen – Khao Yai Forest Complex. No significant improvement in management of the property is obvious since the previous monitoring mission with a lack of resources and coordination with local authorities consistently highlighted as an issue for the property.

The DNP initiated Sister Park arrangements between Khao Yai National Park and the Great Smoky Mountains National Park, USA to enhance capacity and experience of national park officers through partner exchange of research and management practices. On 20<sup>th</sup> September 2013, the superintendent of Khao Yai National Park signed the Sister Park Arrangement with the superintendent of the Great Smoky Mountains National Park.

#### **Recommendation R6**

*Take urgent measures to improve the property's management effectiveness, including by:*

- a) engaging at the highest national political level to strengthen regulations and enforcement measures;*
- b) providing adequate resources to the management authority and law enforcement agencies to implement management actions;*
- c) strengthening cooperation and coordination with all relevant ministries, agencies and other stakeholders at both national and local levels to contribute to the effective enforcement of regulations and implementation of management actions; and*
- d) addressing impacts from high intensity tourism by developing and implementing an integrated management plan for tourism in the property and its vicinity. The State Party is encouraged to request International Assistance, if necessary, in order to address this ongoing issue; and*

*Submit to the World Heritage Centre an English version of the updated management plan for the property.*



#### **4. ASSESSMENT OF THE STATE OF CONSERVATION OF THE PROPERTY**

##### **4.1. Outstanding Universal Value**

The mission affirms a number of issues highlighted as threats to the Outstanding Universal Value of the property in previous State of Conservation reports, monitoring mission reports and decisions made by the World Heritage Committee. These impacts on the OUV of the property, including the conditions of integrity and current status of management remain of concern to the current mission and the apparent lack of tangible progress made by the State Party in addressing the majority of them.

Overall since the time of inscription of the property the State Party has achieved progress and results in addressing some of the threats to its OUV through:

- Efforts to limit cattle grazing and remove illegal settlements and livestock from within the property in the northern area of Thap Lan NP
- Implementation of mitigation actions recommended in previous decisions during construction of the Huay Samong Dam
- Completion of the study on the establishment of ecologically effective wildlife corridors along Highway 304
- An approach to management of the property as part of a complex including developing and updating the Management Plan for Dong Phrayayen-Khao Yai Forest Complex
- Identification of a sister park and signing of relevant agreements

While progress has been made on these previously identified threats, a lack of updated monitoring results in regards to specific species and biodiversity of the property makes it difficult to measure the impacts of measures taken on the biodiversity values for which the property was inscribed.

No detailed mapping of land use, including forest cover, has been undertaken and while monitoring of specific species is conducted in some areas of the property, no central database of research results appears to be available. As such no clear assessment of current population trends for key species is possible. However, indirect impacts from the identified threats are likely to pose significant threats to these important populations. For example, a lack of connectivity between key habitat areas within the property has also been identified as a significant threat to the ongoing conservation of species such as Asian Elephant and Tiger. Without effective wildlife corridors, populations on either side of Highway 304 remain isolated and vulnerable to other impacts. Reports have also been received indicating construction of the Huay Samong Dam will impact on remaining populations of Siamese Crocodiles as well as prey species for Tigers further threatening the OUV for which the property was inscribed.

Additional specific issues raised by the Committee that remain significant threats to the biodiversity values and resulting OUV, with no clear action from the State Party include:

- Provision of detailed information on the resources available to ensure effective management and long term conservation of the property,
- Enforcement of regulations in regards to land use change, encroachment and boundary issues,

- Management planning for tourism and related impacts in light of a considerable increase in visitor numbers.

Regular reports of increased illegal logging inside the property indicate this remains a significant threat to the biodiversity values of the property. The efforts of the State Party and in particular local staff to control illegal logging is to be commended given the escalation in both the number and scale of incursions from armed poaching groups. However, this remains a significant threat to the property and the imbalance between the escalating scale of the threat and the capacity of the authorities to respond, combined with observations made throughout the mission, are tangible evidence of the immediate threat now posed to the integrity, management effectiveness and ultimately the OUV of the property.

The State Party continues to struggle to adequately address issues including enforcement of the boundaries, land use regulations for private properties within the current boundaries and related regulations, continued encroachment, land use changes within the boundaries of the property, tourism planning and ineffective management. There has been little if any progress in relation to these issues since the previous monitoring mission and unless there is immediate, significant, and clear improvement in field management performance and coordination with other agencies, important areas of OUV and the overall integrity of the property will continue to be undermined, degraded, threatened or lost.

## 5. CONCLUSIONS AND RECOMMENDATIONS

The mission considers that while some progress has been made in regards to a number of the threats identified during the previous monitoring mission in 2012, sufficient threats remain to indicate that a greater level of protection and management control is urgently required. Unless there is immediate and decisive management action and intervention, the property and the values for which it was inscribed, will continue to be threatened. The mission makes a number of recommendations (see below) regarding action required to address the issues that continue to impact on the property. The mission suggests that the State Party express clearly its willingness and commitment to implementing the recommendations, while considering them a matter of urgency and high priority.

Home to significant populations of Siamese rosewood (*Dalbergia cochinchinensis*) the property is currently attracting groups of illegal loggers. The rate at which illegal logging has increased in the last 12 months has outpaced the ability of park officials to address this issue and reports continue to be received of weekly incursions by armed poachers with large amounts of timber being removed. While in the forest, these groups cause significant disturbance to the local ecosystem including poaching wildlife and destroying areas of forests for camps while undertaking illegal logging activities. The efforts of the State Party and in particular local staff to control illegal logging is to be commended given the escalation in both the number and scale of incursions from armed poaching groups. However, this remains a significant threat to the OUV of the property.

The mission notes with concern that enforcement of speed limits on the sections of Highway 304 and other roads that run within the boundaries of the property appear to be ineffective. Construction of effective wildlife corridors in key locations along highway 304 will without doubt improve the connectivity between the western and eastern sections of the property. However, concerns remain in regards to the potential impacts on the property during

construction and considerable potential impacts from the road expansion works on the property's integrity and OUV, through illegal logging, poaching and other illegal activities both during construction and after completion of the expansion. With no clear approval, time frame and budget for construction of the corridors the effectiveness of the mitigation actions remains unclear. Similar concerns remain in place for discussion on expansion or re-opening of other roads throughout the property.

Construction of the Huay Samong Dam continues despite requests from the World Heritage Committee to halt it. Mitigation activities are in place and appear to be effective. However, concerns remain in regards to the management of the area post construction, including an indication of plans for the introduction of fish species and the impact of flooding on areas of the property identified both as habitat for the endangered Siamese Crocodile and prey species for local populations of tigers.

Large areas found within the current boundaries of the property have suffered heavily from land use change and subsequent encroachment into forested areas and it is the view of the mission that this areas pose a significant threat to the integrity of the property and the values for which it was inscribed. This is especially the case if land use change and encroachment continue. The mission notes that much of the area currently under agriculture and intensive settlement existed at the time of inscription of the property. However, the issue of housing and resort developments within the boundaries and encroachment into forest areas has not improved and continues to impact the integrity of the property. The lack of response of the Management Authority to address these issues only emphasises the lack of management effectiveness.

Progress has been made in regards to a number of the threats, such as cattle grazing and the updating of the management plan. The mission encourages the State Party to seek greater support and attention from the highest national political levels and other relevant government agencies, along with engagement from the World Heritage Committee, in raising support to address the severe threats to the property.

Previous decisions of the World Heritage Committee have included persistent requests to the State Party to expedite “finalization and implementation” of the management approach for the property, i.e. decisions 29 COM 8B.11, 32 COM 7B.17, 34 COM 7B.18, 35 COM 7B.19, 36 COM 7B.17 and 37 COM 7B.15. Through the State of Conservation reporting process, the State Party has provided some detail on the status of management planning including tourism management and the construction of wildlife corridors. Recently the management plan for the property has been updated but has not been provided to the Committee and the only version made available to the mission was in Thai. However, there remains no detailed or comprehensive response on these issues, nor was the management authority able to provide the mission with an English copy of the necessary studies, reports, timeline or budget for response to these issues. This includes a lack of action on the clear need for an updated mapping of the boundaries and assessment of land use change and encroachment into forest areas.

Ineffective management of the property remains the single most important issue in regards to its integrity and the conservation of its OUV, while there have been a number of other issues repeatedly raised as a concern by the World Heritage Committee. Construction of wildlife corridors and the expansion of Highway 304 remain ongoing issues that require immediate attention and response from the State Party.

The view of the mission is that the threats to the Outstanding Universal Value of the property, including the conditions of integrity, remain considerable. In particular the emergence of a significant threat from illegal logging as well as continued encroachment, including resort development, warrants the property's inclusion on the List of World Heritage in Danger, in line with Paragraph 180 a) ii) and iii), respectively, of the Operational Guidelines. In addition, the mission considers that inscription of the property on the List of World Heritage in Danger would provide a means to request the required international support to address the illicit rosewood trade, which concerns not only Thailand but also transit and destination countries. The mission therefore recommends that the World Heritage Committee inscribe the property on the List of World Heritage in Danger. The mission also recommends that the State Party request this recognition, considering the need for action to assure the conservation of the property.

The mission makes the following recommendations as essential issues to be addressed by the State Party in regards to the threats to the property and its Outstanding Universal Value:

R1. In relation to the issue of illegal logging and removal of high value timber;

*Enhance and strengthen inter-agency and international cooperation, including with the military and local police, to address the issue of illegal rosewood logging, transportation, and sale, including through budgetary provisions to facilitate increased regular joint patrolling activities, and through encouraging interactions at higher levels and consideration of new approaches, including ways to reduce demand.*

R2. In relation to the issues and impacts from roads;

*Urgently submit to the World Heritage Centre:*

- a) detailed plans for long-term enforcement actions to prevent encroachment after expansion of Highway 304; and*
- b) any plans to expand or reopen other roads bisecting the property, and confirmation of the status of discussions on expanding Highway 348 and reopening of Route 3462; and*

*Continue to take measures to enforce speed limits and limit the amount of traffic on Highway 304 and other roads that bisect the property.*

R3. In regards to construction and impacts of the Huay Samong Dam:

*Continue efforts to implement and enforce mitigation measures during and post construction, in cooperation between relevant authorities, specifically the Royal Irrigation Department and the Department of National Parks, Wildlife and Plant Conservation.*

R4. In regards to issues of encroachment:

*Urgently address the severe threats from the various types of encroachment to the property and its Outstanding Universal Value, including by:*

- a) undertaking, as a priority, the detailed mapping exercise as recommended by the previous monitoring mission and in previous Committee Decisions, including an assessment of location and magnitude of encroachment (differentiating between agriculture, settlements and resort development), as well as the evolution of land use*

- since the inscription of the property, using satellite imagery analysis;*
- b) developing a long-term anti-encroachment plan that adequately addresses the situation, including close long-term monitoring of encroachment in all the protected areas constituting the property; and*
  - c) continuing, strengthening and concentrating efforts to engage local people in the process, to ensure awareness of the boundaries of the property and garner support for its conservation, as well as an understanding of the legal basis for current efforts and enforcement decisions.*
  - d) Closely monitor the level and type of land use and encroachment and develop a detailed plan for zoning of the property to improve management of impacts from areas within the boundaries of the property currently inhabited and under investigation in regards to land tenure;*

R5. In response to issues of cattle grazing:

*Building on the positive results already achieved in reducing illegal grazing activities, continue to engage with local communities to fully remove the remaining domestic cattle from the property, and increase cooperation with local provincial authorities, including the Department of Agriculture, to support small scale cattle herders in finding and securing land outside the property.*

R6. In response to issues of management effectiveness:

*Take urgent measures to improve the property's management effectiveness, including:*

- a) engaging at the highest national political level to strengthen regulations and enforcement measures;*
- b) providing adequate resources to the management authority and law enforcement agencies to implement management actions;*
- c) strengthening cooperation and coordination with all relevant ministries, agencies and other stakeholders at both national and local levels to contribute to the effective enforcement of regulations and implementation of management actions; and*
- d) addressing impacts from high intensity tourism by developing and implementing an integrated management plan for tourism in the property and its vicinity. The State Party is encouraged to request International Assistance, if necessary, in order to address this ongoing issue; and*

*Submit to the World Heritage Centre an English version of the updated management plan for the property.*

## **ANNEXES**

## TERMS OF REFERENCE

### IUCN Reactive Monitoring Mission Dong Phayayen-Khao Yai Forest Complex (DPKY) – Thailand

14-20 January 2014

At its 37th session, the World Heritage Committee requested the State Party of Thailand to invite a reactive monitoring mission to Dong Phayayen-Khao Yai Forest complex World Heritage Site (Decision **37 COM 7B.15**), to be conducted by IUCN. The objective of the monitoring mission is to assess progress in the implementation of the recommendations of the 2012 joint UNESCO / IUCN mission, and whether the property should be considered for inscription on the List of World Heritage in Danger. The mission will be led by Naomi Doak and Inam Ullah Khan, representing IUCN.

In particular, the mission should address the following key issues:

1. Assess progress achieved in the implementation of the recommendations made by the Committee in its Decision **37 COM 7B.15**, in particular:
  - a. the implementation of appropriate mitigation measures to address impacts from expansion works on Highway 304, particularly along the two sections of the highway that transect the property;
  - b. the implementation and enforcement of speed limits and impact mitigation actions on other roads transecting the property;
  - c. the completion of an up-to-date assessment of the level of encroachment and any increase therein since the inscription of the property, including a detailed mapping exercise;
  - d. the implementation of measures to halt all illegal logging in the property;
  - e. the implementation of the necessary mitigation, enforcement and anti-encroachment actions to ensure that the Huay Samong Dam project does not impact on the Outstanding Universal Value of the property;
2. Assess progress achieved in the implementation of the additional recommendations made by the 2012 joint UNESCO / IUCN mission, including a review of the extent and status of cattle grazing within the property, in particular of grazing activities conducted by commercial agricultural companies;
3. Based on the results of the above assessments, make a recommendation regarding the possible inscription of the property on the List of World Heritage in Danger;
4. If the mission concludes that the inscription of the property on the List of World Heritage in Danger is recommended, it should also develop, in close cooperation with the State Party and the World Heritage Centre, a proposal for the Desired state of conservation for the removal of the property from the List of World Heritage in Danger and a set of Corrective Measures, including a realistic timeframe for their implementation;

5. In line with paragraph 173 of the *Operational Guidelines*, assess any other relevant conservation issues that may negatively impact on the Outstanding Universal Value of the property, including the conditions of integrity and protection and management.

The State Party should facilitate necessary field visits to key locations. In order to enable preparation for the mission, it would be appreciated if the following items could be provided to the World Heritage Centre (copied to IUCN) as soon as possible and preferably no later than 1 month prior to the mission:

- a) (A) detailed map(s) of the property clearly indicating encroached areas and changes therein since the property's inscription;
- b) Detailed data on the extent and status of cattle grazing within the property;
- c) Data on illegal logging within the property, including volumes of illegally logged wood seized, numbers of offenders apprehended and convicted, number of illegal logging equipments seized, and patrol records;

The mission should also hold consultations with the Thai authorities at national, provincial and municipal levels. Particularly, the mission should meet with representatives of the Ministry of Natural Resources and the Environment, the Royal Irrigation Department, and the Department of Highways. In addition, the mission should hold consultation with a range of relevant stakeholders, including i) researchers; ii) NGOs; and iii) representatives of local communities.

Based on the results of the above-mentioned assessments and discussions with the State Party representatives and stakeholders, the mission will develop recommendations to the Government of Thailand and the World Heritage Committee to conserve the Outstanding Universal Value of the property and improve its conservation and management. It should be noted that recommendations will be provided within the mission report (see below), and not during the mission implementation.

The mission will prepare a concise report on the findings and recommendations within 6 weeks following the site visit, following World Heritage Centre reactive monitoring mission report format.



## Annex II – World Heritage Committee Decision, 37 COM 7B.15

### **Decision: 37 COM 7B.15**

The World Heritage Committee,

1. Having examined Document WHC-13/37.COM/7B,
2. Recalling Decision **36 COM 7B.45** adopted at its 36th session (Saint-Petersburg, 2012),
3. Extends its deepest condolences to the family of the guard killed during operations conducted to protect the property;
4. Notes with concern that implementation of appropriate mitigation measures, to address impacts from expansion works on Highway 304, particularly along the sections of the highway within the property, have not been undertaken and no timeline for completion has been provided, and urges the State Party to expedite the construction of ecologically effective wildlife corridors, based on detailed plans and on completed, approved Environmental Impact Assessments (EIAs), including detailed assessments of different options and carefully planned measures for mitigating impacts in the long term for both sections of the Highway transecting the property;
5. Reiterates its request to the State Party to implement and enforce speed limits and impact mitigation actions on other roads that bisect the property, and to monitor and restrict the use of other roads as shortcuts and transport routes through the property;
6. Requests the State Party to complete an up-to-date assessment of the level of encroachment and any increase therein since the inscription of the property, including a detailed mapping exercise, as a matter of priority, and recommends that the State Party considers submitting a request for a major boundary modification to exclude encroached areas that do not contribute to Outstanding Universal Value, and to include adjoining areas of high conservation value, following the relevant procedures as outlined in the *Operational Guidelines*, and with prior advice of IUCN;
7. Also requests the State Party to take the necessary measures to halt all illegal logging in the property, and ensure that all people participating in illegal resource extraction activities are removed from the property, and with the support of other States Parties concerned, particularly Cambodia, China, Lao People Democratic Republic and Viet Nam, halt illegal trade in Siamese rosewood (*Dalbergia cochinchinensis*);
8. Also notes that construction continues at the Huay Samong Dam site, and also reiterates its request to the State Party to undertake all necessary mitigation, enforcement and anti-encroachment actions to ensure this project does not impact the Outstanding Universal Value of the property;
9. Further reiterates its request to the State Party to implement all the recommendations of the 2012 joint UNESCO/IUCN reactive monitoring mission, including a clear statement on the extent and status of cattle grazing in the property, by **June 2014**;
10. Further request the State Party to invite an IUCN reactive monitoring mission to the property before the 38th session of the Committee in 2014, in order to assess progress in the implementation of the above recommendations and those made by the 2012 reactive monitoring mission, and to consider whether the property should be considered for inscription on the List of World Heritage in Danger;

11. Requests furthermore the State Party to submit to the World Heritage Centre, by **1 February 2014**, an updated and detailed report on the state of conservation of the property, including a report on the progress achieved in the implementation of the 2012 mission recommendations and those actions outlined above, for examination by the World Heritage Committee at its 38th session in 2014.

# Annex III – Mission itinerary and programme

**-Draft- Schedule**  
**Reactive Monitoring Mission**  
**Dong Phrayayen-Khao Yai Forest Complex (Thailand)**  
**14–20 January 2014**

Date	Time	Program	Remark
14/01/2014	09.30	Preparation with the relevant agencies: <ul style="list-style-type: none"> <li>- IUCN Mission (Dr.Naomi Doak and Mr.Inam Ulla Khan)</li> <li>- IUCN Thailand</li> <li>- UNESCO BANGKOK</li> <li>- Department of Highways</li> <li>- Royal Irrigation Department</li> <li>- Department of National Park, Wildlife and Plant Conservation</li> <li>- Office of Natural Resources and Environment Policy and Planning (ONEP)</li> <li>- Non-government organization</li> </ul>	Room 401, Floor 4 (ONEP)
	14.00	- Departure from Bangkok to Krabinburi District, Prachinburi Province.	
15/01/2014	08.00	- Explore the construction of Huay Samong Dam, Prachinburi Province.	
	14.00	- Explore the expansion of Highway 304.	
	14.30	- Review the situation of the illegal logging and encroachment in Thap Lan National Park.	
	15.30	- Explore the encroachment area.	
16/01/2014	09.30	- Explore the Thap Lan National Park and adjacent areas that have been compromised to agriculture and cattle grazing and will annex to the National Park.	
	13.00	- Heading to Dong Yai Wildlife Sanctuary.	

Date	Time	Program	Remark
	15.00	- Review the effectiveness of the illegal logging in Ta-Phraya National Park and Dong Yai Wildlife Sanctuary.	
17/01/2014	10.00	- Explore the Ta-Phraya National Park.	
	13.00	- Review the situation of the illegal logging in Pang Sida National Park.	
18/01/2014	09.00	- Review the situation of the illegal logging in Khao-Yai National park.	
	14.00	- Explore the Khao-Yai National park.	
19/01/2014	09.00	- Explore the Khao-Yai National park. (continue)	
	15.00	- Departure from Khao-Yai National park to Bangkok.	
20/1/2014	09.30	<ul style="list-style-type: none"> <li>- Meeting for conclusion with the relevant agencies:</li> <li>- IUCN Mission (Dr.Naomi Doak and Mr.Inam Ulla Khan)</li> <li>- IUCN Thailand</li> <li>- UNESCO BANGKOK</li> <li>- Department of Highways</li> <li>- Royal Irrigation Department</li> <li>- Department of National Park, Wildlife and Plant Conservation</li> <li>- Office of Natural Resources and Environment Policy and Planning (ONEP)</li> <li>- Non-government organization</li> </ul>	Room 401, Floor 4 (ONEP)

# **Annex IV – List and contact details of people met**

See lists of participants from individual meetings

Name	Position		Email
	Deputy Secretary-General	ONEP	
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Sawanit Tiamtinkrit	Environmental Officer	ONEP	<a href="mailto:thailandworldheritage@gmail.com">thailandworldheritage@gmail.com</a>
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Piyatip Eaungpanich	GIZ		
Tim Redford	FREELAND		
Somkiat Prachamwong	Director, Office of Project Administration	RID	
Mapruet Wongsas	Environmental Expert	RID	
Wachira Iamla-or	Specialist Civil Engineer	RID	
Surajit Tippayakesorn	Director of Office of Environment and Public Participation	DoH	
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Boonchid Jaroensuk	Superintendent, Ta Phraya NP	DNP	
Somsuan Raksat	Superintendent, Dong Yai NP	DNP	

## Annex V – Photographs



Figure V.1: Meeting with stakeholders in Bangkok.



Figure V.2: Confiscated Siamese Rosewood at Thap Lan National Park Headquarters.



Figure V.3: Vehicle checkpoint.



Figure V.4: Inspection station at vehicle checkpoint.





Figure V.5: Additional signs along Highway 304 to alert traffic of wildlife between km 26 – 29.

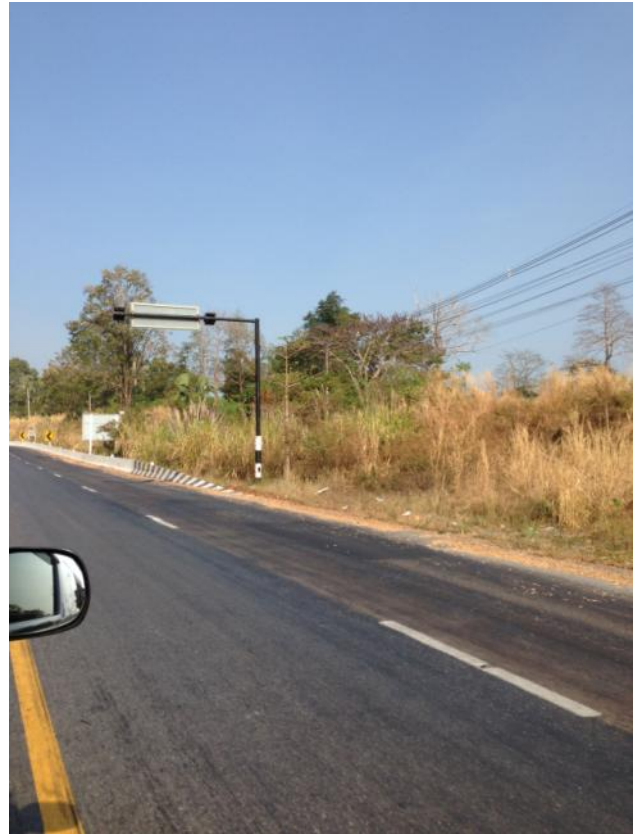


Figure V.6: Intelligent Traffic System along km 40 – 47.



Figure V.7: Traffic using Highway 304 between km 40 – 47.



Figure V.8: Revegetation area adjacent to the Huay Samong Dam



Figure V.9: Replacement field station for DNP staff adjacent to the Dam construction site in Pang Si Da



Figure V.10: Resort development in TLNP within the boundaries of the Property.



Figure V.11: Continued housing development in TLNP within the property.





Figure V.12: Wildlife crossing one of the main roads in Khao Yai adjacent to the Park Headquarters.



Figure V.13: Electric cars introduced to Khao Yai to assist with traffic levels and tourist management.



Figure V.14: DNP Staff at Ta Phraya National Park Headquarters.



Figure V.15: DNP Staff and the Mission team during the field visit.

