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**UNITED NATIONS EDUCATIONAL,  
SCIENTIFIC AND CULTURAL ORGANIZATION**

**ORGANISATION DES NATIONS UNIES  
POUR L'EDUCATION, LA SCIENCE ET LA CULTURE**

**CONVENTION CONCERNING THE PROTECTION OF THE WORLD  
CULTURAL AND NATURAL HERITAGE**

**CONVENTION CONCERNANT LA PROTECTION DU PATRIMOINE  
MONDIAL, CULTUREL ET NATUREL**

**WORLD HERITAGE COMMITTEE / COMITE DU PATRIMOINE MONDIAL**

**Thirty-sixth session / Trente-sixième session**

**Saint Petersburg, Russian Federation / Saint Pétersbourg, Fédération de Russie**

**24 June – 6 July 2012 / 24 juin – 6 juillet 2012**

**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) (N 590)  
Complexe forestier de Dong Phrayayen-Khao Yai (Thaïlande) (N 590)**

**28 February – 6 March 2012 / 28 février – 6 mars 2012**

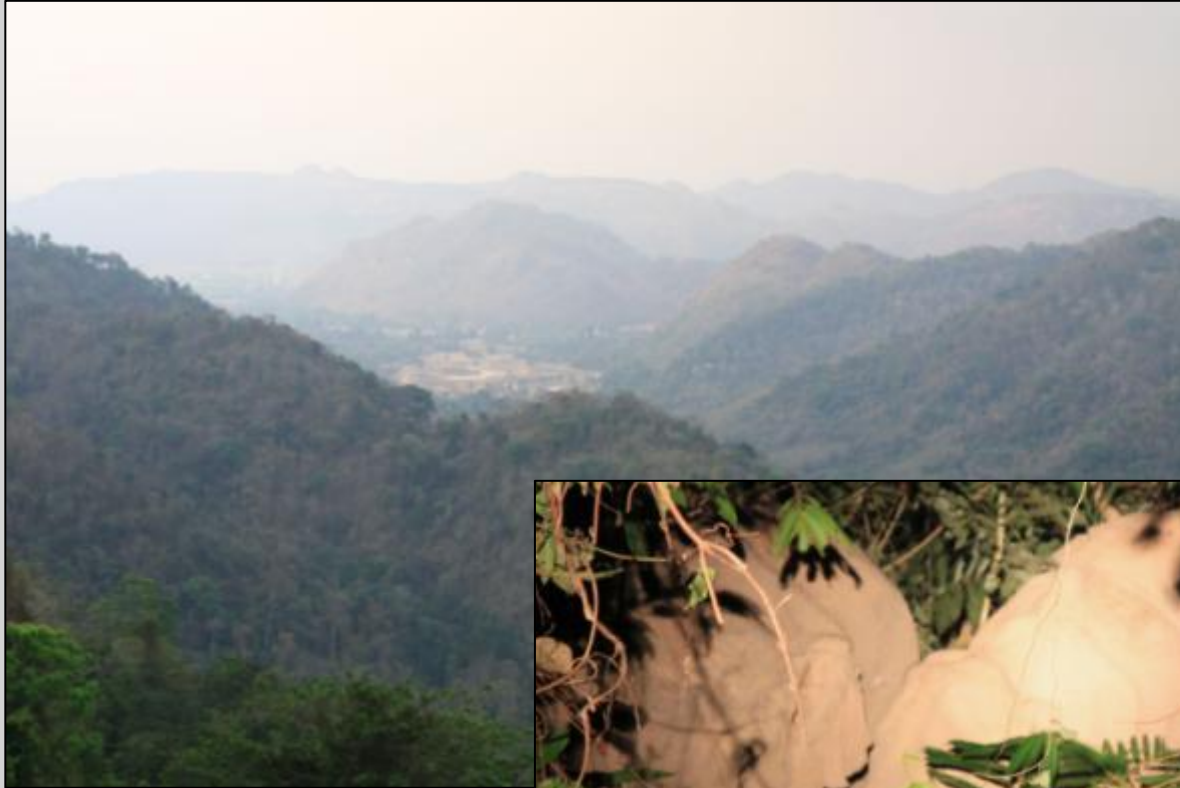
This mission report should be read in conjunction with Document:

Ce rapport de mission doit être lu conjointement avec le document suivant:

**WHC-12/36.COM/7B.Add**

UNESCO – IUCN

**REPORT ON THE MISSION TO Dong Phrayayen – Khao Yai Forest Complex, Thailand  
FROM 28<sup>th</sup> February TO 6<sup>th</sup> March, 2012**



Photos © Naomi Doak

**Tim CURTIS (UNESCO)**

**Naomi DOAK (IUCN)**

**March 2012**

## ACKNOWLEDGEMENTS

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The mission is grateful to Mr Supat Wangwongwattana, Secretary General of ONEP as Chairman for the meetings held in Bangkok and Dr Songtam Suksawong, Deputy Director of the Natural World Heritage Office (DNP), who accompanied the mission on the field visit.

The mission is also grateful to the Superintendents, Mr Krissada Homsud (Khao Yai NP), Mr Preecha Wittayaphan (Pang Sida NP), Mr Taywin Meesap (Tap Lan NP), Mr Boonchird Iaroensuk (Ta Phraya NP), Mr Somsuan Ruksattra (Dong Yai WS) and Mrs Auayporn Sangtian (Office of Natural World Heritage, Prachinburi Regional DNP Office) and their respective staff members from the property who provided the mission with helpful information, data and documentation and took time to exchange information with the mission. The mission would also like to thank representatives from the Royal Irrigation Department (Mr Somkiat Prachamwong, Mr Mapruet Wongsa, Mr Wachira Iamla-or), Department of Highways (Mr Surajit Tippayakesorn, Mr Win Triwittayanurak) and Tourism Authority of Thailand (Ms Thamolwan Ruengkajorn) who attended the briefings and meetings during the mission.

The mission team would like to extend its gratitude, thanks and congratulations to all of the NGO representatives (IUCN Thailand, FREELAND, GIZ) and other experts who met or consulted with the mission during their visit, for their efforts to preserve the Outstanding Universal Value of the World Heritage property.

The mission is extremely grateful to UNESCO Bangkok Office and its staff who provided valuable support prior to and throughout the duration of the mission, providing both technical and logistic support to the mission.

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## LIST OF ACRONYMS

<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>IUCN</b>	International Union for the Conservation of Nature
<b>MoNRE</b>	Ministry of Natural Resources and Environment
<b>DNP</b>	Department of National Parks, Wildlife and Plant Conservation
<b>ONEP</b>	Office of Natural Resources and Environmental Planning and Policy
<b>DoH</b>	Department of Highways
<b>RID</b>	Royal Irrigation Department
<b>TAT</b>	Tourism Authority of Thailand
<b>OUV</b>	Outstanding Universal Value
<b>EIA</b>	Environmental Impact Assessment
<b>PA(s)</b>	Protected Area(s)

## EXECUTIVE SUMMARY

The monitoring mission was undertaken from 28<sup>th</sup> February to 6<sup>th</sup> March 2012 (see Terms of Reference Annex I, World Heritage Committee Decision 35COM 7B.19 Annex II; Itinerary and Programme Annex IV) and aimed to follow up on the issues and concerns raised by World Heritage Committee Decision 35COM 7B.19. Specifically the Decision requested a monitoring mission to assess the potential impacts of the expansion of Highway 304, encroachment, the Huay Samong Dam, cattle grazing, and ineffective management on the property's Outstanding Universal Value. The mission team comprised Mr Tim Curtis, UNESCO Office, Bangkok, on behalf of the UNESCO World Heritage Centre, and Dr Naomi Doak, independent consultant, on behalf of IUCN.

While in Bangkok the mission was able to meet with key representatives from the Management Authority for the property 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. During the meetings in Bangkok the mission was also able to raise issues pertaining to the conservation of the property and its Outstanding Universal Value (OUV) with representatives from Non-Government Organisations including IUCN Thailand and Deutsche Gesellschaft für Internationale Zusammenarbeit, the German Society for International Cooperation (GIZ).

The mission visited the site of Highway 304 and had the opportunity to inspect the site of expansion works and to clarify the locations where expansion works have already been conducted and completed and notes that these are outside the boundaries of the property. The mission received a copy of the Executive Summary Report of the Environmental Impact Assessment (EIA) in English for the section of the highway from km 26 - 29. In addition they were provided with a Thai language version of the EIA for the section from km 42 - 57. Both of these sections run within the World Heritage property. The EIA documents include assessments of the proposed wildlife corridors and the mission stressed the necessity to complete and submit the EIA for the section of the highway between km 42 – 57. It also stressed the need to finalize plans for construction of ecologically effective wildlife corridors to mitigate impacts from the road expansion and functionally connect the eastern and western sectors of the complex.

The mission also visited the construction site for the Huay Samong Dam and areas adjacent to the construction site of the dam wall including sites within Thap Lan and Pang Sida NPs which will be inundated by flooding resulting from the dam wall. The mission was able to inspect detailed maps of the area including current land use, highlighting the extent to which encroachment by Eucalyptus plantation has already impacted on the property in the areas surrounding the dam wall construction site. Areas of the property that will be affected by flooding post construction are facing serious potential threats and impacts such as illegal poaching and encroachment during and post construction work, increased tourism pressures post construction, heavy traffic on existing roads, and construction of new roads, all of which have the potential for significant negative impacts on the property.

The mission visited areas of Thap Lan NP which surround the Lam Plai Mart dam in Ban Rat, where the work of the ranger unit is focused on issues related to encroachment and in particular impacts from cattle grazing and illegal removal of forest products, including wildlife. The mission was able to meet with a number of local residents and discuss some of the key issues with them. The issues of release of cattle for long term grazing, by commercial agricultural companies is one that will require a high level of political will and increased enforcement. However, action on this issue is critical to the maintenance of the property's OUV.

The mission was also able to meet with staff from each of the five component Protected Areas (PAs) that constitute the property and discussed a number of issues including the current management plan, resources, capacity, and other key issues for management. Superintendents from each of the five PAs presented summaries of key management issues and a number of issues were consistent across the complex including a need for clarification of land tenure, problems with encroachment, communication between relevant agencies, the need for improved resources (staff levels, vehicles, salaries, capacity), and problems with enforcement, poaching, community engagement and management structure. A number of other issues raised were particular to individual PAs including the expansion of Highway 304. However, impacts from roads that bisect the property remain relevant to all areas of the property and include the use of roads as shortcuts across the property and encroachment along the roads.

The mission noted the efforts of the State Party to address issues of encroachment and acknowledged some improvements and encourage the State Party to continue efforts in regards to clarifying land tenure, removing illegal structures and rehabilitating degraded land where possible. However, the property remains under heavy pressure from encroachment and neighbouring land use practices. In addition, ineffectiveness of current management efforts to address a number of present and potential threats means the property remains at significant risk. For example ineffective enforcement and management continue to allow significant impacts from tourism in Khao Yai NP in particular.

To summarize, the mission concludes that while recommendations made under previous World Heritage Committee decisions may have been addressed and positive progress made in regards to a number of threats to the OUV of the property, for example ongoing wildlife monitoring and a complex wide management plan, a number of important issues and related recommendations have not been addressed or implemented, including integrated tourism management, construction of wildlife corridors, prevention of increased encroachment and 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 team is that the property does not currently warrant inclusion on the List of World Heritage in Danger. The mission 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 issues and impacts from Highway 304;

- a) Urgently submit the completed EIA for section 26-29 km along with detailed plans for ecologically effective wildlife corridors including a detailed timeline, financial planning and resources for construction of the corridors, and mitigation actions to be implemented during construction and long-term enforcement actions to prevent encroachment;
- b) Implement and enforce speed limits and impact mitigation actions on the sections of Highway 304 running within the boundaries of the property, as well as other roads that bisect the property, and to monitor use of other roads as shortcuts and transport routes through the property.

R2. In regards to construction and impacts of the Huay Samong Dam:

- a) Halt construction of the Huay Samong Dam until appropriate resources are committed to ensure mitigation, enforcement and anti-encroachment actions are effectively in place including enhanced cooperation between management authorities and enforcement actions to prevent further impacts on the property;

- b) Submit as soon as possible the completed EIA for the dam and implement mitigation, enforcement and anti encroachment activities at the construction site and provide details of this implementation to the World Heritage Committee;

R3. In regards to issues of encroachment:

- a) Closely monitor the level of encroachment, including undertaking detailed mapping of the encroachments, including location, land use and magnitude, in relation to current boundaries of the World Heritage Property and to assess any increase in encroachment since inscription using satellite imagery and topographic analysis, and consider submitting a boundary modification request where appropriate, following the relevant procedures as outlined in the *Operational Guidelines*;
- b) Strengthen enforcement measures, provide adequate resources to the management authority and law enforcement agencies, work with surrounding communities to increase awareness of the boundaries of the property and garner support for the conservation of the property and its OUV;
- c) Prioritize reduction of illegal grazing activities within the property and pay particular attention to stopping grazing activities conducted by commercial agricultural companies;
- d) Consider extending the property in order to include areas that better represent its Outstanding Universal Value, based on the mapping of encroachments recommended above, and considering current levels of encroachment, realistic boundaries for enforcement, and impacts and mitigation from construction of the Huay Samong Dam;

R4. In response to issues of management effectiveness

- a) Strengthen efforts in implementing the Management Plan for Dong Phrayayen – Khao Yai Forest Complex, including a revised plan for the complex that involves and encourages cooperation and coordination of all relevant ministries and agencies (e.g. forestry, highways, agriculture, irrigation, tourism) and stakeholders at both national and local levels (province and district authorities, NGOs, local communities, private sector);
- b) Develop and implement a detailed, integrated, extensive and long-term tourism management plan that includes actions to address the current impacts from high intensity tourism and consider submitting an International Assistance Request to the Committee to support the development of this process;
- c) Consider a detailed management related zoning plan for the property, to ensure core areas of habitat are identified and provided with increased levels of protection, including designation of an appropriate buffer zone around the property to ensure protection against adjacent developments.

R5. In view of current actions underway to address issues highlighted above, and the time frame required for implementing a number of the recommendations, the mission further recommends that a follow-up joint World Heritage Centre / IUCN reactive monitoring mission be invited to the property after 2 years (2014) at the latest. This subsequent mission should consider overall progress made in regards to providing information and implementing the measures and recommendations above, including management effectiveness and enforcement issues related to encroachment. Based on its findings, specifically in regards to critical threats related to Highway 304, encroachment and management effectiveness, it should then make a clear recommendation on whether the inscription of the property on the List of World Heritage in Danger would be warranted.

## 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 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 and Khao Yai National Park in 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*) 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). These decisions have focused on issues related to management planning, including long term tourism management, increased management resources, encroachment along the boundaries of the property and concerns over road development and the need for ecologically effective wildlife corridors. The property continues to experience significant impacts from human activities and is suffering from serious human pressure that is affecting its integrity and threatens 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 35 COM 7B.19 as well as previous decisions and in particular in relation to escalating threats to the property's OUV from expansion of Highway 304 which bisects the property, construction of the Huay Samong Dam, encroachment, cattle grazing, and ineffective management.



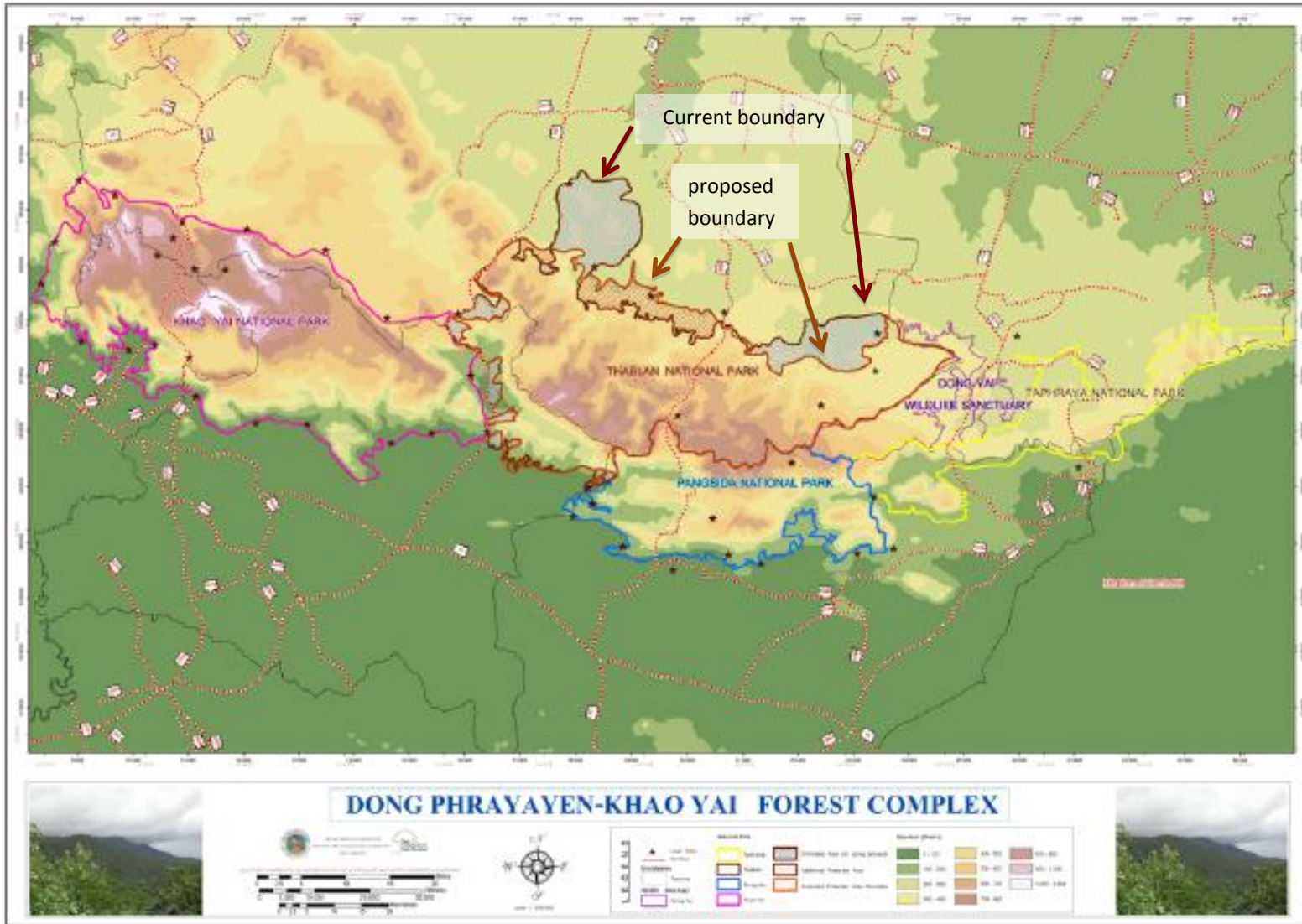


Figure 1: Location and boundaries of the property at the time of inscription including the boundaries of the 5 almost contiguous component protected areas that form the Dong Phrayayen – Khao Yai Forest Complex. Current boundary for Thap Lan NP is the **darker red**, proposed boundary modification as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

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

### 2.1. Protected area legislation

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 it.

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 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.

All of the 5 almost contiguous 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.

### 2.3. Management structure

Two regional administration offices administer the complex with each of the component properties falling under one of these regional offices. Following recommendations from the Committee at the time of inscription a manager was appointed with responsibility for the entire protected area complex, however, the current management structure for the property remains somewhat unclear. The creation of a new Office for Natural World Heritage within the DNP indicates that the position of manager for the complex has not been on-going or permanently filled since first appointed in response to the recommendation at the time of inscription. In addition the relationship between the regional offices and the recently created Office of Natural World Heritage remains unclear.

A Superintendent is responsible for the overall management of each individual PA, assisted by one of 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. Khao Yai National Park is also an ASEAN Heritage Park, however, the other component PAs have no other international designations apart from World Heritage.

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.

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

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 joint World Heritage Centre / IUCN 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 Decision 35COM 7B.19.

#### **3.1 Conservation Issues**

##### 3.1.1 Expansion of Highway 304

Running a distance of 110 km, Highway No. 304 connects two provinces, Prachinburi and Nakorn Ratchasima, and runs through 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 a Thai language copy of the Environmental Impact Assessment (EIA) report for the expansion of Highway 304 between km 42 – 57. An English language version of the Executive Summary for this report was provided to the World Heritage Committee as part of the recent State Party report. Unfortunately the Environmental Impact Assessment (EIA) for the 26 – 29 km section of the highway was not available and is yet to be submitted and approved by all relevant national authorities. However, a Draft English language version of the Executive Summary Report was provided to the mission.

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, while the exact location of the boundary remains unclear on the ground and is complicated by national legislation in regards to the tenure of land within 40m on either side of the centre line of any highway, expansion works have not been conducted inside the property. However, there is little doubt that expansion works outside the property, which have already been completed, have increased the road traffic along the highway. In addition no obvious measures to limit speed appear to be in place along the stretches of the highway that cross the property boundaries.

Results from wildlife surveys within the vicinity of the current road indicate a variety of species utilizing habitats relatively close to the road. The mission noted that current levels of traffic, resulting noise and speed means it is unlikely wildlife are able to cross between the two sections of the property, on either side of the highway. Plans for wildlife corridors will no doubt improve the current situation and potentially

enable movement of wildlife where currently this is not possible. Noting the potential for improvement provided by the wildlife corridors the mission welcomes plans for their construction but remains concerned over 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, exacerbate forest fragmentation and create disturbance to wildlife caused directly by road kill and indirectly by noise. Current noise levels from Highway 304 indicate a potential impact on wildlife, and hence the Outstanding Universal Value for which the property was inscribed, for a significant distance from the road and without concerted efforts and measures in place to limit noise the impact from the planned raised sections of the expanded highway will without doubt further impact on the values of the property. In addition, use of other roads that bisect the property as short cuts means increased impacts on the property and its values.

The mission was also alerted to potential long-term expansion plans for other roads that cross the property, namely Highway 348. According to a Cabinet resolution all highways in Thailand are approved for expansion to provide four lane highways. Highway 304 is not the only transport route crossing the property and any future plans for road expansion should be monitored and EIAs undertaken prior to approval. Noting that expansion works were conducted on Highway 304 outside the property with apparently little consideration to the impacts and approval process, 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.

### **Recommendation**

*The mission, noting that the implementation of effective wildlife corridors is essential to maintaining the integrity of the property, independent of the expansion of Highway 304, recommends that the State Party urgently submit detailed plans for the ecologically effective wildlife corridors, including the EIA for section 26-29 km, proposed for locations along Highway 304. The plans should include a detailed timeline, financial details and mitigation actions to be implemented during construction, as well as long-term enforcement actions to prevent encroachment after expansion.*

*It also recommends that the State Party take actions to limit speed and the amount of traffic on other roads that bisect the property and provide advance notice of any plans for the expansion of other highways that cross the boundaries of the property.*

#### 3.1.2 Construction of the Huay Samong Dam

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 ridge of the dam 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 is expected to be flooded by construction of the dam amounts to 2.63 km<sup>2</sup> and includes sections inside the boundary of the property as areas of Thap Lan and Pang Sida will be inundated when the dam is filled.

The mission met with representatives from the RID in Bangkok and also on the construction site of the dam ridge. RID has plans to work with relevant agencies, including the Office of Natural Resources and Environmental Policy and Planning (ONEP) and the DNP to implement effective measures to mitigate the environmental effects of the dam construction on the OUV of the property. The mission was presented with a summary of the planned activities including:

- Anti-encroachment of reservoir and restoration forest inside the property
- Declaring the reservoir as part of the national parks
- Declaration of additional protected areas
- Relocation of current and establishment of new ranger units in Thap Lan NP
- Relocation of current and establishment of new ranger units in Pang Sida NP

Unfortunately, at the time of the mission no English version of the EIA study was available. In addition details on the timeline and budget for the implementation of the mitigation activities were unavailable. Plans for mitigating effects on the wildlife were mentioned but were unclear in regards to the detail and timeline.

At the time of the mission construction on the dam site was continuing and the mission observed a number of incidences of timber clearing and encroachment in what appeared to be areas within the current boundaries of the property. Importantly anti-encroachment measures were not evident during the construction phase. Justification for the limited impacts on the site, provided by the RID and DNP is the size of the area to be flooded and the fact that a large percentage of this area has already been encroached by eucalyptus plantations. This highlights the potential for encroachment in the area given it has already occurred prior to construction and emphasises the current limited enforcement and monitoring.

### **Recommendation**

*The mission recommends that the State Party urgently submit the completed EIA for construction of the Huay Samong Dam, including plans for mitigation actions during construction; timeline for implementation and a detailed budget for mitigation activities.*

*The mission re-iterates the continuing importance of the request from the World Heritage Committee for the State Party to suspend construction on the dam ridge site until appropriate financial resources for mitigation measures are committed. Moreover, cooperation between relevant authorities specifically RID and DNP should be enhanced with a view to improving enforcement of mitigation actions both during and after construction.*

### 3.1.3 Encroachment

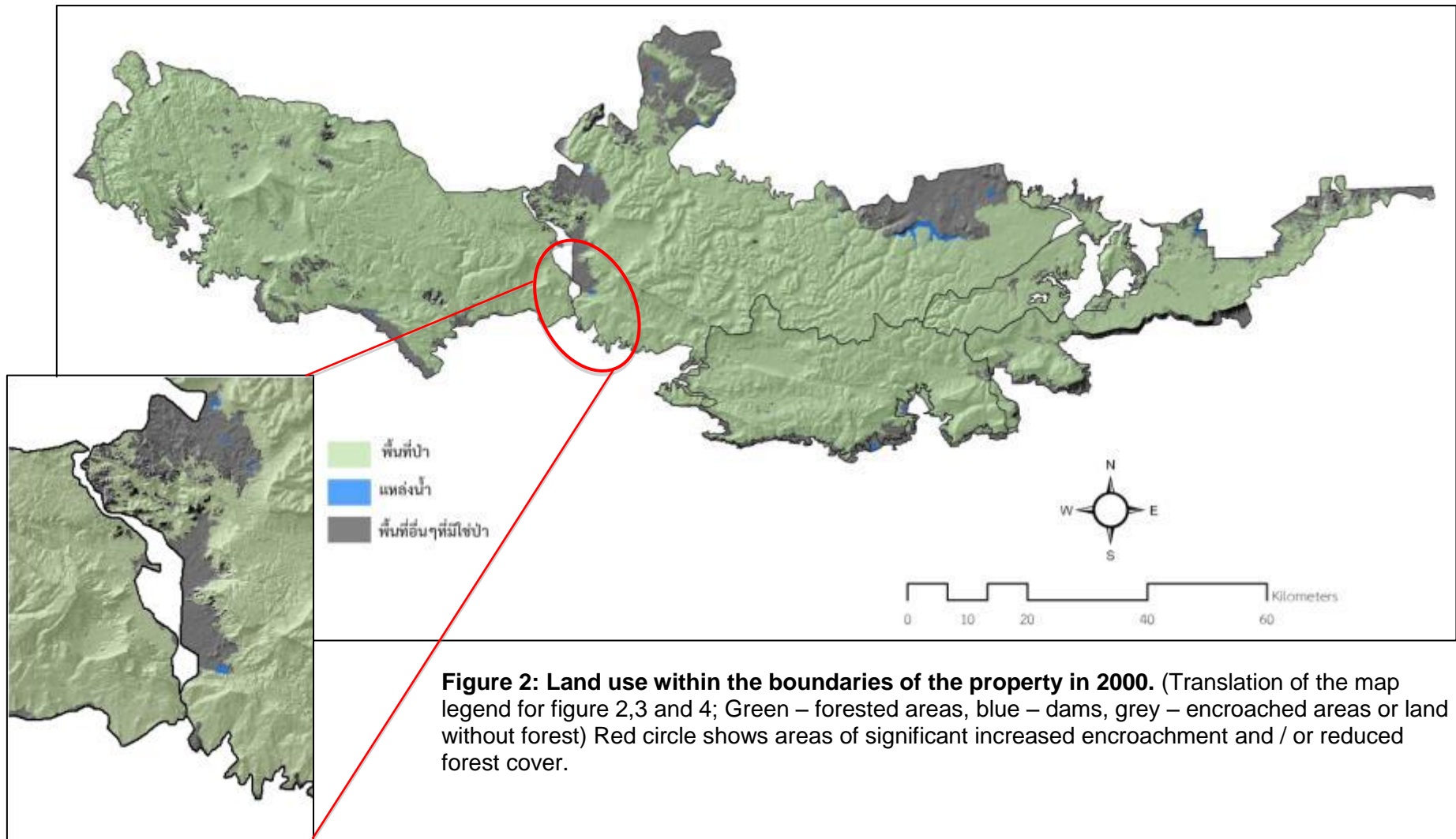
The mission visited areas surrounding the property where stricter measures have been put in place by DNP to tackle current and halt further encroachment within the property. At the early stage this has involved a lengthy process focused on clarification of land title and ownership between the National Park and the surrounding communities. A number of court decisions and writs have been issued to remove illegal buildings and these efforts continue. The mission commends the State Party on its efforts in this regard and encourage them to continue these with a focus on clarifying land tenure, removing illegal structures / plantation and rehabilitating degraded land.

The mission visited areas where removal of structures deemed illegal had begun and where steps were being taken to prevent further encroachment through large-scale developments. However, the mission also saw clear signs of recent extensions of small-scale encroachments both close to and well inside the current boundary and a significant area of land has been deforested and impacted inside the boundaries submitted at the time of inscription (Figure 2, 3 and 4). Impacts from encroachment in these areas should be addressed and efforts made to rehabilitate the degraded land.

The mission notes that the clarification of land tenure is a long and complicated process that stems from issues originating before inscription of the property. Initial relocation of communities from areas within the National Park boundaries combined with parliamentary approval for residents to remain within the boundaries, was undertaken with communities given land entitlements or lease hold as part of the relocation process. Complicated district administration processes and a lack of coordination and communication between authorities have subsequently resulted in the resale of land that technically still belonged to the management authority and transfer of lease rights without appropriate clarification of activities approved. Consequent resort developments and continued expansion of village areas have led to significant encroachment within the boundaries submitted at the time of inscription. The mission was not able to meet with district authorities at the time of the visit and the processes required for development approval remain unclear.

A lack of fine scale maps of the initial boundaries of the component PAs and corresponding World Heritage property has further complicated the ability to map the extent of encroachment and land use change as well as identifying the boundaries of the property on the ground. There appear to be no detailed, reliable data or maps available to provide a clear overview of the situation at the time the property was inscribed, making it currently impossible to accurately assess the trends and extent of encroachment. Maps prepared at the time of inscription, outlining the boundary modification planned (Figure 1) are out of date and under-represent the current extent of encroachment. An apparent absence of accurate monitoring also means there is substantial uncertainty over the extent of encroachments and the quantitative trend since inscription.

Images provided to the mission (Figure 2, 3, and 4) are not at a suitable scale and resolution to show accurate details of encroachment since inscription or changes in forest cover resulting from Eucalyptus plantations. However, as noted above in regards to the Huay Samong Dam construction and impacts on the property, areas along the southern boundary have also been subject to encroachment and in some cases from large-scale commercial eucalypt plantation operations, which is readily acknowledged by the RID and DNP as justification for allowing the construction of the dam and its limited impact on the values of the property.



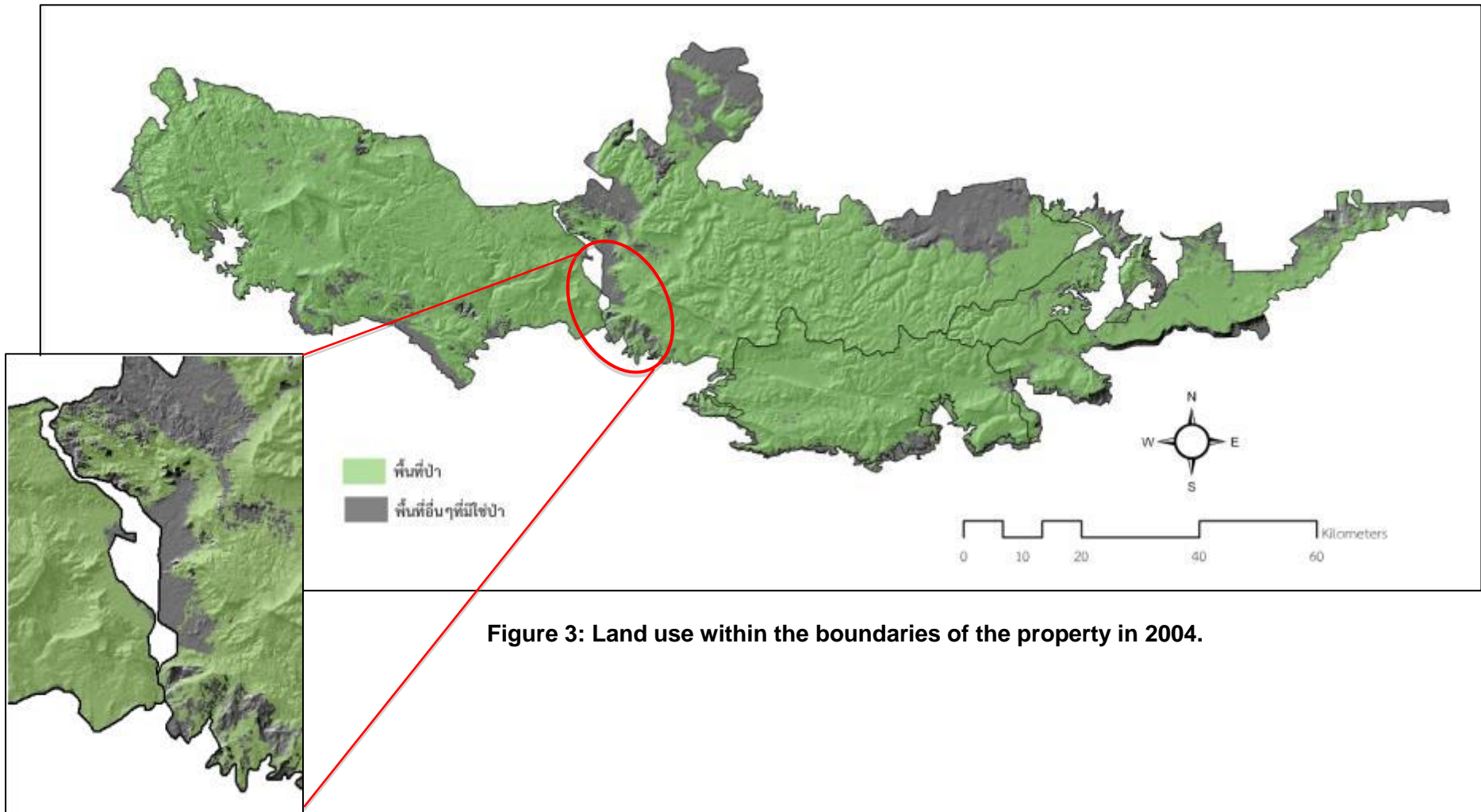
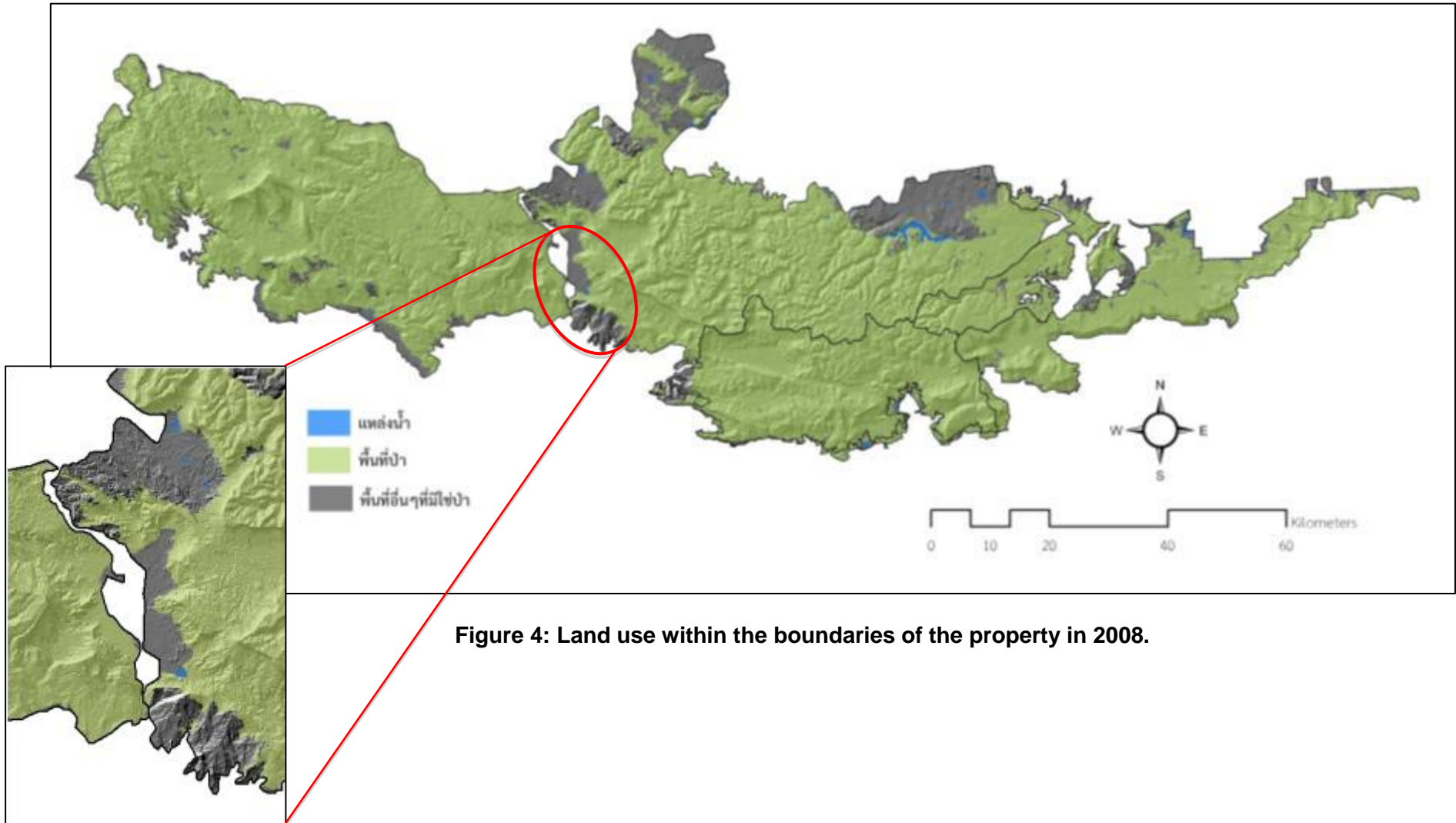


Figure 3: Land use within the boundaries of the property in 2004.





**Figure 4: Land use within the boundaries of the property in 2008.**

The DNP appears to be unclear in regards to the appropriate actions to take to deal with the current encroachment and prevent further impacts on the property. A number of locations have already been through the long legal process required to clarify property ownership. In these cases land tenure has been confirmed to sit with the park, and as a result, DNP. In these instances the dwellings and developments are in the process of being removed. However, as noted this is a long and complicated process. Where possible these areas should remain within the property and undergo rehabilitation with continued clarification of land tenure and removal of illegal structures / plantations. The subsequent clarification of boundaries both on the ground and in regards to any modification to them in areas where rehabilitation is no longer an option, is without doubt a key issue, especially in light of the encroachment and development inside the current boundary. The State Party acknowledged the importance of this issue at the time of inscription with inclusion of supplementary information to the nomination, which expressed a commitment to a boundary adjustment by 2007.

The mission noted the efforts of the State Party to address issues of encroachment, in particular along the northern boundary of Thap Lan National Park. However, it recommends that the State Party seek more attention from the highest national political level in addressing the severe threats to the property and its OUV. The State Party should also consider, where appropriate and where rehabilitation is not possible, boundary modifications to the property in order to clarify the demarcation of the boundaries, following the relevant appropriate procedures as outlined in the *Operational Guidelines*. The mission encourages the State Party to continue, strengthen and concentrate efforts on engaging local people in this process. Encroachment remains a major threat to the integrity of the property and it is important that the State Party build a long-term plan that adequately and urgently addresses the situation.

### **Recommendation**

*The mission recommends that the State Party carry out a detailed mapping exercise and assessment of encroachment in the property including; location, magnitude, land use and their evolution since the inscription of the property, using satellite imagery analysis. This mapping should also differentiate between land use in regards to agriculture, plantations, settlements and resort development.*

*The State Party should also work on a number of components in tackling the encroachment issue, namely:*

- *Strengthening regulations and enforcement measures to provide adequate resources to the management authority and law enforcement agencies*
- *Work with surrounding communities to ensure sufficient awareness of the boundaries of the property and garner support for the conservation of the property and its natural values*
- *Closely monitor the level of encroachment in all the protected areas constituting the property in conjunction with activities to measure and monitor Thailand's forest resources and efforts to map existing encroachment levels*

#### 3.1.4 Cattle grazing

In its recommendation and decision 35COM 7B.19 the World Heritage Committee urged the State Party to rapidly halt ongoing cattle grazing affecting the property. The mission noted that the State Party has made valuable efforts towards halting cattle grazing and removing existing illegal settlements within the

boundary of the property and in particular in areas within Thap Lan National Park, adjacent to the existing dam in Ban Rat, Lam Plai Mart, along the north eastern boundary of the property. However, the mission noted that despite these efforts, grazing of cattle continues within the boundaries of the property, although the situation is improving with the number of cattle decreasing along with the number and extent of settlements.

The mission visited areas of Thap Lan NP which surround the Lam Plai Mart dam in Ban Rat, where the work of the ranger unit is focused on issues related to encroachment and in particular impacts from cattle grazing and illegal removal of forest products, including wildlife. Park staff are working with the local communities and settlements towards an eventual removal of all domestic cattle and positive steps have been made to reduce the number of settlements and head of cattle. The mission was able to meet with a number of local residents and discuss some of the key issues with them.

Discussions with the local residents, Department of Agriculture and the DNP also raised the issue of release of cattle for long term grazing, by commercial agricultural companies that has been occurring in the area for some time. This use of the area by commercial agricultural companies complicates the removal of smaller subsistence cattle grazing from settlements that have been established within the property. It involves large numbers of young cattle being released into the property for prolonged periods of time. These cattle are then left to roam throughout the property to “fatten up” on vegetation and are subsequently rounded up for market. As such the potential impact on the property from this type of cattle grazing is significantly greater than that posed by small scale settlements which keep cattle enclosed at night, close to the water source, and watched by family members at all times. The issue of large numbers of cattle, free ranging throughout the area, is one that will require a high level of political will and increased enforcement. However, action on 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 also commends the DNP for existing efforts to engage and support the illegal cattle grazers to reduce cattle numbers and eventually move their cattle out of the property. 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**

*As indicated in Decision 35COM 7B.19 priority should be given to reducing illegal grazing activities; the State Party should pay particular attention to stopping illegal grazing activities conducted by commercial agricultural companies who release large numbers of cattle into the property for extended periods of time, only to return to round up the cattle after considerable time spent grazing within the property.*

*Efforts should continue to be made to engage with illegal settlements consisting of small family groups and low numbers of cattle. The State Party should be requested to increase communication and dialogue with the district Agriculture department and continue efforts to support the small family groups finding and securing land outside the property.*

### 3.1.5 Boundary Modifications

In 2005 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 within the property and in order to better address forest conservation issues. The need for this issue to be addressed was also recognised by the State Party in the supplementary information provided with the nomination document, which expressed a commitment to a boundary adjustment by 2007. Following the appropriate procedures outlined in the Operational Guidelines this process would allow for boundary modification to include areas appropriate for the integrity of the property while also identifying areas that require rehabilitation or excising from the property to ensure preservation of the OUV.

Much focus has been placed on issues of encroachment in the northern sections of the property. However, the mission noted that encroachment has continued in a number of locations and continues to impact the property in a number of areas. Requests for an overlay of the initial proposed boundary modification were made, after inspection of a previous map showing the boundary change proposed in 2007, to enable the mission to better assess and advise on the possibilities for boundary modification. No detailed or updated images, showing the current boundaries and potential revision, were provided to the mission for detailed inspection. The short time frame provided for inspection of the previous proposed boundary modification, a lack of updated land use information and no combined map to enable comparison, means that the recommendations and advice provided to the State Party during the mission was limited.

The maps provided (Figure 2, 3, 4) at the final meeting in Bangkok, show an increase in encroachment in a number of locations and highlight the need to address the issue of the property boundaries. As noted above under 3.1.3 and the resulting recommendation, the mission acknowledges that large areas of the property, heavily impacted by encroachment, should not 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 an expansion of encroachment. Other areas that have undergone significant development require clarification of land tenure, removal of illegal structures or developments (including plantations) and rehabilitation of degraded land. Steps undertaken to date in this process are encouraging and the State Party is encouraged to continue such efforts.

The mission was concerned by the nature and extent of developments outside but immediately adjacent to the current property boundaries. Resort developments, including a golf course at the front gate to the property and immediately adjacent to the boundary, increase access to the property and the risk of further encroachment and illegal activities such as wildlife poaching or removal of timber. In light of the fact that the majority of pressures on the property originate from highly developed areas within and adjacent to the 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 and activities within these areas, the mission suggests the State Party consider a management zoning plan aimed at providing the property with better and more effective protection, including through the legal designation of an appropriate buffer zone around the property.

In addition to the modification of boundaries aimed at addressing the issue of encroachment within the

property a detailed zoning plan may help 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. Increased coordination and cooperation between the DNP, the district administration and development approval processes is also required and will be key to the continued conservation of the property. The reduction of pressure and the threats to the integrity of the property will require a large and integrated approach to sustainable development around the property. Greater attention needs to be given to improved coordination, cooperation and collaboration regarding development schemes and proposals adjacent to the property.

### **Recommendation**

*The mission encourages the State Party to consider extending the property, following appropriate procedures as outlined in the Operational Guidelines, to include areas that better represent its Outstanding Universal Value, based on the mapping of encroachments recommended above, and considering current levels of encroachment, realistic boundaries for enforcement, and impacts and mitigation from construction of the Huay Samong Dam.*

*In addition the mission would encourage the State Party to;*

- Consider a detailed zoning plan for the property to ensure core areas of habitat are identified and provided with increased levels of protection*
- Ensure increased coordination and cooperation between the DNP and district administration in regards to the processes for development approval*
- Designate in law an appropriate buffer zone around the property to provide an added layer of protection against inappropriate developments adjacent to its boundaries;*
- Clearly demarcate the new boundaries in the field.*

### 3.1.6 Management Effectiveness

In November 2006 the State Party, through the management agency, developed a management plan for the property. Their approach to establishing PA complexes to maximise conservation opportunities is to be commended. In conjunction with the adoption of the Management Plan for Dong Phrayayen – Khao Yai Forest Complex a manager for the whole complex was recruited. Despite these steps, taken in response to previous recommendations from the World Heritage Committee, no detailed information on the resources available to ensure long-term management effectiveness across the complex has been forthcoming. While a new World Heritage Office has been established within the management complex it is unclear how this links to the previous position of a manager for the complex and management offices in place within the regional office of the DNP.

The mission was able to review the current management plan for the complex. In addition the mission was able to meet and discuss issues of management effectiveness with the Superintendents from each of the component PAs. While documents pertaining to individual management plans for each component property (Khao Yai, Thap Lan, Pang Sida and Ta Phraya National Parks and Dong Yai Wildlife Sanctuary) were not available in English, a number of key issues were highlighted during presentations from each of the Superintendents. In particular concerns in regards to encroachment, illegal agricultural activities, poaching of wildlife, impacts from development surrounding the property, enforcement of

current regulations and resourcing in regards to staffing levels, capacity and equipment were raised by each of the superintendents.

The State Party has not provided detailed information on the resources, including staffing and budgets available to ensure long-term management across the complex and no integrated management plan for tourism has been developed for the property, despite annual increases in tourist numbers and significant impacts from extraordinary numbers of tourists, particularly in Khao Yai NP, at specific times of the year.

Valuable efforts have been made during recent years to improve the management situation on the ground in regards to a number of key issues and threats to the property and the current staff of the respective component PAs are highly dedicated to its conservation. Despite staff in the respective parks covering a wide array of expertise, there remains an overall lack of expertise and capacity, in particular in regards to tourism management. In order to address the main threats faced by the property, including encroachment but specifically related to an overall lack of guidance, policies, protocols and framework for cooperation, it is important to strengthen the staff capacity.

Effective management of the property requires that the DNP cooperate with local agencies and officials at a number of different levels, including ministerial, regional, district, amphur (village) and local stakeholders. As evidenced by the issue of cattle grazing such cooperation often leads to encouraging results. Nonetheless, a number of government decisions and actions directly oppose 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. Furthermore park authorities have insufficient human and financial resources to promote sustainable and environmentally friendly economic activities, including tourism management, and thereby reduce impacts and pressure on the property.

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 represents the most serious and immediate threat to the OUV of Dong Phrayayen – Khao Yai Forest Complex.

### **Recommendation**

*The mission noted the efforts of the State Party in developing a single management plan for the property. However it recommends that efforts to implement the Management Plan for Dong Phrayayen – Khao Yai Forest Complex, be strengthened. In addition an updated and revised management plan for the complex, that involves all relevant ministries and agencies (e.g. forestry, highways, agriculture, irrigation, tourism) and stakeholders at both national and local levels (province and district authorities, NGOs, local communities, private sector) and includes development of long term management policies is urgently needed.*

*The mission also recommends the management plan encourage improved cooperation and coordination between all stakeholders to contribute to the effective enforcement of regulations and implementation of management actions. As such the State Party is urged to seek increased attention from the highest national political level in addressing the threats to the property and improving its management.*

*The mission strongly recommends that the State Party develop and implement a detailed, extensive and long-term tourism management plan that includes actions to address the current impacts from high intensity tourism and to request International Assistance, if necessary, in order to achieve this.*

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

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

The mission affirms a number of issues highlighted in previous State of Conservation reports as well as past decisions made by the World Heritage Committee in regards to issues impacting on the integrity and OUV of the property. The State Party has made progress in terms of addressing a number of the issues raised by the Committee, including the extent of cattle grazing and encroachment, which have the potential to impact on the property's OUV. Since the time of inscription the State Party has achieved progress and results through:

- An approach to management of the property as part of a complex including adopting a Management Plan for Dong Phrayayen-Khao Yai Forest Complex
- Commencement of the study on the establishment of ecologically effective wildlife corridors
- Undertaking ongoing wildlife status monitoring
- Efforts to limit encroachment along the northern border of Thap Lan NP in regards to cattle grazing and large scale resort development

Despite progress on these issues a range of identified threats have not been addressed and the mission was unable to detect, clarify or document measures taken in response to the decisions and requests of the World Heritage Committee in regards to these threats. Issues regularly raised by the World Heritage Committee include ineffective management of the property and construction of effective ecological wildlife corridors. Specific issues raised by the Committee that remain significant threats 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,
- Management planning for tourism and related impacts in light of a considerable increase in visitor numbers,
- Provision of the completed Environmental Impact Assessment studies in relation to the expansion of Highway 304 and design of effective wildlife corridors
- Details on impacts from construction of the Huay Samong Dam and related mitigation actions
- Enforcement of regulations in regards to encroachment and boundary issues

The lack of a clear and coordinated response to these issues combined with observations made throughout the mission, are tangible evidence of the immediate threat now posed to the integrity of the property by ineffective management, a lack of a coordinated approach to encroachment and enforcement of regulations and a failure to implement a coordinated response to development pressures, including road expansion, agricultural needs and resort construction. The overarching issue for many of these is the apparent ineffective management and a lack of on-ground protection of the property resulting from insufficient coordination and communication with other relevant authorities.

A cross-sectoral approach to management of the property, as well as coordination and cooperation between stakeholders, including the management authority, at both a national and local level, is lacking.

The Management framework remains unclear with no single management unit or DNP office, clearly and effectively responsible for a coordinated approach to address the threats and management issues. The property also lacks an up to date, long-term management plan that integrates and addresses the issue of increasing tourism and its related impacts. While a large majority of the current problems and threats faced by the property originate from external pressures, ineffective management and limited enforcement of existing regulations act in unison with these threats and compound their impacts on the property. While the mission considers that there has been no substantial change in the scale or severity of the threats to the property, since the time of inscription and subsequent submission of State of Conservation reports, the property is without doubt facing serious and imminent threats. 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 State Party has struggled to adequately address issues including enforcement of the boundaries and related regulations, continued encroachment, cattle grazing, tourism planning and ineffective management. This includes management of the property as a single unit with a clear management structure and long-term plan. Unless there is immediate, significant, and clear improvement in field management performance and coordination with other agencies important areas of Outstanding Universal Value and the overall integrity of the property will be undermined, degraded, threatened or lost.

Previous decisions of the World Heritage Committee have included persistent requests and urging of 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, and 35 COM 7B.19.

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. 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.

While ineffective management of the property remains the single most important issue in regards to its integrity and the conservation of its OUV, 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 remains an ongoing issue that requires immediate attention and response from the State Party. While the expansion itself poses a number of threats and impacts to the property the current situation can only be improved through the construction of ecologically effective wildlife corridors. The plans and details of these corridors remain unknown and repeated requests (including decisions 29 COM 8B.11, 31 COM 7B.22, 32 COM 7B.17, 34 COM 7B.18, and 35 COM 7B.19) for further information on this issue have failed to provide satisfactory detail.

The apparent failure to respond to these priority issues is most regrettable and 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.



## 5. CONCLUSIONS AND RECOMMENDATIONS

The mission considers there to be sufficient threat and signs to indicate that unless a greater level of protection and management control is applied in the foreseeable future, important areas of the property could be seriously threatened. Unless there is immediate and decisive management action and intervention, the property will continue to be threatened, to the point of warranting listing as World Heritage in Danger. The mission team recommends that the State Party express clearly its willingness and commitment to implementing the recommendations, while considering them of high priority and a matter of urgency. The mission further suggests that by 2014, clear action is required to address the issues of Highway 304 expansion including construction of wildlife corridors, encroachment and management effectiveness.

The mission notes with regret and concern that expansion works on Highway 304 were conducted without due consideration of the impact of these works on the sections of road running within the boundaries of the property and without corresponding enforcement of speed limits and mitigation actions. The potential impacts from the road expansion works on the property's integrity and OUV, through illegal logging, poaching and other illegal activities, are clear and require considerable mitigation actions both during construction and after completion of the expansion, to ensure limited impact on the property. Construction of effective wildlife corridors in key locations along the highway 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 with no clear approval, time frame and budget for construction of the corridors the effectiveness of the mitigation actions remains unclear.

Given the urgency and immediacy of the road expansion and construction of the Huay Samong Dam the implementation of mitigation actions during construction are a matter of very high priority. The fact that expansion works have already been completed outside the boundaries of the property, without doubt increases the level and speed of traffic and subsequent impacts along the road within the boundaries. Resolution of this serious threat to the property is urgently required. Construction of the Huay Samong Dam continues despite requests from the World Heritage Committee to halt it, and with no clear mitigation plans, timelines and budget for implementation of mitigation actions. As such it remains a clear and imminent threat to the integrity of the property.

Large areas in the north and north-east sections of the property have suffered heavily from encroachment and it is the view of the mission that they do not fulfil the criteria for being considered a part of the World Heritage property. The mission considers that this situation existed at the time of inscription of the property and the conditions have not improved since. In the view of the mission there is little basis for maintaining these areas within the property.

Progress has been made in regards to a number of the threats, however continued construction of the Huay Samong Dam and encroachment issues at the dam construction site, combined with continued encroachment and overarching issues of ineffective management, result in the values of the property being under significant threat. 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 team is that the property does not currently warrant inclusion on the List of World Heritage in Danger. The mission 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 Outstanding Universal Value.

R1. In relation to the issues and impacts from Highway 304;

- a) Urgently submit the completed EIA for section 26-29 km along with detailed plans for ecologically effective wildlife corridors including a detailed timeline, financial planning and resources for construction of the corridors, and mitigation actions to be implemented during construction and long-term enforcement actions to prevent encroachment;
- b) Implement and enforce speed limits and impact mitigation actions on the sections of Highway 304 running within the boundaries of the property, as well as other roads that bisect the property, and to monitor use of other roads as shortcuts and transport routes through the property.

R2. In regards to construction and impacts of the Huay Samong Dam:

- a) Halt construction of the Huay Samong Dam until appropriate resources are committed to ensure mitigation, enforcement and anti-encroachment actions are effectively in place including enhanced cooperation between management authorities and enforcement actions to prevent further impacts on the property;
- b) Submit as soon as possible the completed EIA for the dam and implement mitigation, enforcement and anti encroachment activities at the construction site and provide details of this implementation to the World Heritage Committee;

R3. In regards to issues of encroachment:

- a) Closely monitor the level of encroachment, including undertaking detailed mapping of the encroachments, including location, land use and magnitude, in relation to current boundaries of the World Heritage Property and to assess any increase in encroachment since inscription using satellite imagery and topographic analysis and consider submitting a boundary modification request where appropriate, following the relevant procedures as outlined in the *Operational Guidelines*;
- b) Strengthen enforcement measures, provide adequate resources to the management authority and law enforcement agencies, work with surrounding communities to increase awareness of the boundaries of the property and garner support for the conservation of the property and its OUV;
- c) Prioritize reduction of illegal grazing activities within the property and pay particular attention to stopping grazing activities conducted by commercial agricultural companies;
- d) Consider extending the property in order to include areas that better represent its Outstanding Universal Value, based on the mapping of encroachments recommended above, and considering current levels of encroachment, realistic boundaries for enforcement, and impacts and mitigation from construction of the Huay Samong Dam;

R4. In response to issues of management effectiveness

- a) Strengthen efforts in implementing the Management Plan for Dong Phrayayen – Khao Yai Forest Complex, including a revised plan for the complex that involves and encourages cooperation and coordination of all relevant ministries and agencies (e.g. forestry, highways, agriculture, irrigation, tourism) and stakeholders at both national and local levels (province and district authorities, NGOs, local communities, private sector);

- b) Develop and implement a detailed, integrated, extensive and long-term tourism management plan that includes actions to address the current impacts from high intensity tourism and consider submitting an International Assistance Request to the Committee to support the development of this process;
- c) Consider a detailed management related zoning plan for the property, to ensure core areas of habitat are identified and provided with increased levels of protection, including designation of an appropriate buffer zone around the property to ensure protection against adjacent developments.

R5. In view of current actions underway to address issues highlighted above, and the time frame required for implementing a number of the recommendations, the mission further recommends that a follow-up joint World Heritage Centre / IUCN reactive monitoring mission be invited to the property after 2 years (2014) at the latest. This subsequent mission should consider overall progress made in regards to providing information and implementing the measures and recommendations above, including management effectiveness and enforcement issues related to encroachment. Based on its findings, specifically in regards to critical threats related to the expansion of Highway 304, encroachment and management effectiveness, it should then make a clear recommendation on whether the inscription of the property on the List of World Heritage in Danger would be warranted.

## ANNEXES

## Annex I – Terms of Reference

### UNESCO - IUCN Reactive Monitoring Mission Dong Phrayayen-Khao Yai Forest Complex - Thailand

**28 February – 3 March (proposed dates)**

The objective of the monitoring mission is to assess progress by the State Party in the implementation of **Decision 35COM 7B.19** recommendations, and in particular in relation to escalating threats to the property's Outstanding Universal Value from encroachment, the Huay Samong Dam, cattle grazing, and ineffective management. The mission team will be composed of Naomi Doak, IUCN representative, and Timothy Curtis from the UNESCO Bangkok Office.

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

1. Assess and make conclusions on the state of conservation of the property as a whole, and assess key issues identified as having potential to impact OUV, including, but not limited to, the expansion of Highway 304, the Huay Samong Dam, encroachment, and cattle grazing;
2. Assess progress of and review the Environmental Impact Assessments for the expansion of Highway 304 and the Huay Samong Dam and assess the potential impacts from these projects on the property's Outstanding Universal Value;
3. Review the management effectiveness of the different components of the property (Khao Yai, Thap Lan, Pang Sida and Ta Phraya National Parks, and Dong Yai Wildlife Sanctuary), in particular the existence and implementation of management plans (including for tourism management), available staffing and budgets of the management authority and their capacity to effectively conserve the Outstanding Universal Value of the property;
4. Advise the State Party on the possibilities for a boundary modification of Thap Lan National Park, within the provisions of the Operational Guidelines, in order to better address forest conservation and encroachment issues along the northern border of this component of the property;

The mission team should be assisted to conduct the necessary field visits to key locations, including i) along Highway 304 demonstrating the state of ongoing expansion work and the mitigation measures implemented; ii) in Wang Nam Khiao District and along the northern border of Thap Lan National Park illustrating the issue of encroachment; iii) the Soung Sang area of Thap Lan National Park where land has been converted to cattle pastures; and iv) the Huay Samong Dam project location. 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 early February:

- a) The Environmental Impact Assessments (EIA) conducted for the expansion of Highway 304 and for the Huay Samong Dam, or progress reports in the absence of completed EIAs;
- b) Maps of key locations at suitable scales and resolutions to determine the areas affected by the issues identified;
- c) The most recent versions of the management and financial plans, including a tourism management plan;
- d) Comparative maps, satellite imagery or aerial photographs of the encroached areas in Wang Nam Khiao District, the northern border and the Soung Sang area of Thap Lan National Park, and the Huay Samong Dam project location.

The mission team should hold consultations with the Thai authorities at national and provincial levels, in particular the Department of National Parks, Wildlife and Plant Conservation, The Royal Irrigation Department (which is

responsible for the Huay Samong Dam), the Ministry of Tourism and Sports, and the Ministry of Transport, and should also hold consultations with a range of relevant stakeholders, including: i) researchers; ii) NGOs; iii) representatives of the tourism sector; and iv) key local communities.

Based on the results of the above-mentioned assessment and discussions with the State Party representatives, the mission team will develop recommendations to the Government of Thailand and the World Heritage Committee to conserve the OUV of the property and improve its conservation and management.

The mission team will prepare a concise mission report (IUCN to lead) on the findings and recommendations of this reactive monitoring mission by mid-April 2012, following the standard format.

## Annex II – World Heritage Committee Decision

Decision: 35 COM 7B.19

The World Heritage Committee,

1. Having examined Document WHC-11/35.COM/7B,
2. Recalling its Decision **34 COM 7B.18**, adopted at its 34th session (Brasilia, 2010),
3. Notes the State Party's statement that it is conducting an Environmental Impact Assessment for the expansion of Highway 304, and expresses its concern over reports that highway expansion works are already underway;
4. Also expresses its concern about reports of escalating threats to the property's Outstanding Universal Value from encroachment, the proposed Huay Samong Dam, cattle grazing, and ineffective management;
5. Urges the State Party to rapidly halt any ongoing encroachment and cattle grazing affecting the property, and requests that all construction work on the Huay Samong Dam be halted until the World Heritage Committee has had the opportunity to review a completed Environmental Impact Assessment and assess its potential impacts on the property's Outstanding Universal Value, in line with Paragraph 172 of the *Operational Guidelines*;
6. Encourages the State Party to consider submitting a boundary modification request to the World Heritage Committee for Thap Lan National Park in order to better address forest conservation and encroachment issues in this area;
7. Also encourages the State Party to revise the property's management approach, and to develop long-term management policies, as well as a comprehensive tourism management plan;
8. Invites the State Party to submit an International Assistance request to support this process, and further encourages the States Parties of Thailand and the United States of America to consider the sister-parks proposal as an opportunity to explore capacity-building initiatives;
9. Also requests the State Party to invite a joint World Heritage Centre/IUCN monitoring mission to the property prior to its 36th session in 2012, in order to assess the potential impacts of encroachment, the Huay Samong Dam, cattle grazing, and the expansion of Highway 304 on the property's Outstanding Universal Value, and to review its management and financial plans;
10. Further requests the State Party to submit to the World Heritage Centre, by 1 February 2012, a detailed report on the state of conservation of the property, including information on the status of the Highway 304 Environmental Impact Assessment and the Huay Samong Dam, the progress achieved in halting any large-scale encroachment and cattle grazing, for examination by the World Heritage Committee at its 36th session in 2012.

### Annex III – Mission itinerary and programme

-Draft-

#### Schedule

#### Reactive Monitoring Mission

#### Dong Phayayen-Khao Yai Forest Complex (Thailand)

28 February – 5 March 2012

	Time	Activity	หมายเหตุ
28/02/2012	13.30.	Preparation of the relevant agencies: - IUCN (Dr.Naomi Doak) - UNESCO BANGKOK (Mr.Timothy Curtis) - Department of Highways - Royal Irrigation Department - Department of National Park, Wildlife and Plant Conservation - Office of Natural Resources and Environment Policy and Planning (ONEP)	Room 201, Floor 2 (ONEP)
29/02/2012	08.00	- Departure from Bangkok	
	10.00	- Explore the expansion of Highway 304	
	11.00.	- Arrival at Thap Lan National Park - Briefing from Department of National Park, Wildlife and Plant Conservation	
	13.00.	- Explore the construction of Huay Samong Dam	
01/03/2012	08.00	- Departure from hotel	
	11.00	- 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: Lam Plai Mat	
02/03/2012	09.00	- Explore the Khao Yai National Park and the effectiveness of the management plan	
	14.00	- Meeting for the conclusion with chief of the Khao Yai, Thap Lan, Pang Sida and Ta Phraya National Parks and Dong Yai Wildlife Sanctuary	Khao Yai National Park
05/03/2012	09.30-12.00	- Meeting for conclusion	Room 202, Floor 2 (ONEP)



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

Name	Position		Email
Supat Wangwongwattana	Secretary-General	ONEP	<a href="mailto:supat@onep.go.th">supat@onep.go.th</a>
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Annex V – Photographs



Figure v.1: Traffic on Highway 304 as the road enters property boundaries



Figure V.2: Traffic levels on the Highway



Figure V.3: Construction site of Huay Samong Dam



Figure V.4: Construction site of Huay Samong Dam showing flags that indicate the location of the dam ridge



Figure V.5: Office and accommodation on the Huay Samong Dam construction site including evidence of encroachment behind the accommodation area

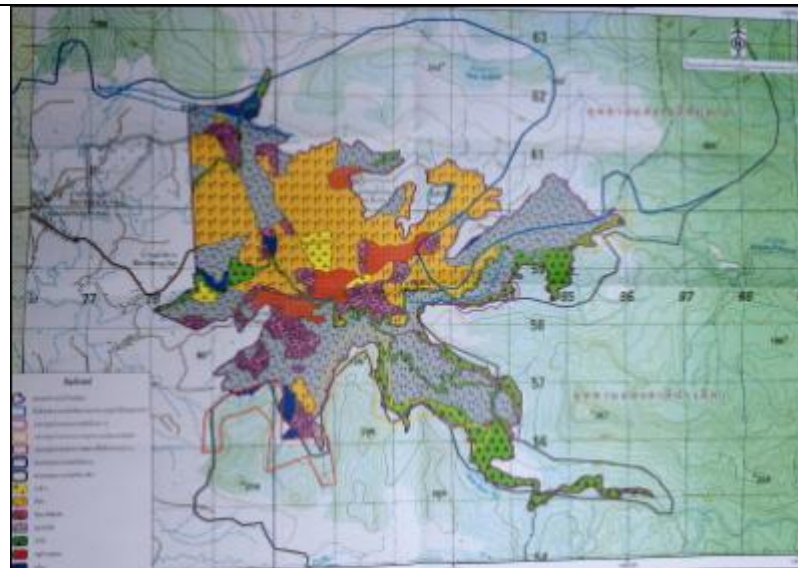


Figure V.6: Map of current land use in the area of Huay Samong Dam (grey shaded area is Eucalypt plantation, dark blue line = boundary of Thap Lan NP, black line = boundary of Pang Sida NP)



Figure V.7: Existing dam within the property boundaries of Thap Lan, near Ban Rat.



Figure V.8: Existing dam and evidence of grazing in Thap Lan NP.



Figure V.9: Settlement within the boundaries of Thap Lan NP



Figure V.10: Evidence of small scale cattle grazing within the property



Figure V.11: Fishing activities being undertaken at the Ban Rat dam, within the boundaries of the property



Figure V.12: Site of resort development along the northern boundary of Thap Lan NP

