

**Environmental Impact Assessment
and
Environmental Management Plan
and
Social Assessment**

25th May 2021

CEPF Grant 111987

Indo Myanmar Conservation

Protecting Priority Tortoise and Freshwater Turtle Populations in Vietnam

Vietnam

Grant Summary

1. Grantee organization.

Indo Myanmar Conservation (IMC)

2. Grant title.

Protecting Priority Tortoise and Freshwater Turtle Populations in Vietnam.

3. Grant number.

CEPF-111987

4. Grant amount (US dollars).

\$200,000

5. Proposed dates of grant.

1st July 2021 – 30th June 2024

6. Countries or territories where the project will be undertaken.

Vietnam

7. Summary of the project.

As part of our project we will undertake a range of activities at several sites across north and central Vietnam to better protect priority populations of highly threatened tortoise and freshwater turtle species. This will include the capture and planning for conservation breeding in the world's rarest turtle, Swinhoe's Softshell Turtle (*Rafetus swinhoei*). The use of Environmental DNA and field surveys to monitor a reintroduced population of the endangered Big-headed Turtle (*Platysternon megacephalum*). The completion of a threat assessment and development of community engagement activities for the critically endangered Bourret's Box Turtle (*Cuora bourreti*) in central Vietnam. Lastly, we will work to support the development of new protected area plans for two sites in Phu Yen Province, central Vietnam. For a new forest Nature Reserve at Deo Ca Special Forest, home to the endemic Southern Vietnamese Box Turtle (*Cuora picturata*) and a wide variety of other threatened flora and fauna, and the establishment of a Species Habitat Conservation Area (SHCA) at the Cold Stream Swamp in Tay Hoa district with a focus on protecting a rare example of a habitat type for the endemic and critically endangered Vietnamese Pond Turtle (*Mauremys annamensis*).

8. Date of preparation of this document.

Document Preparation by: Timothy McCormack, Hoang Van Ha and Jack Carney – IMC/ATP

25th May 2021

Environmental Impact Assessment and Environmental Management Plan

9. **Status of the area to be impacted:** This section should describe the applicant's understanding of the site.

We are implementing our project at several sites, these are detailed below:

Objective 1. Securing a breeding group of the world's rarest turtles, Swinhoe's softshell turtle (*Rafetus swinhoi*).

Activities related to the Swinhoe's Softshell Turtle (*Rafetus swinhoi*) will focus on 2 primary sites, the 1,400 ha Dong Mo Lake and the 100 ha Xuan Khanh Lake both in Son Tay District, Hanoi. Both lakes are artificial, formed through the construction of dams and dikes originally built on stream sections with some small areas of associated wetland. Both lakes are currently rented to three "Lake owners" who manage the sites on long, 30-year leases from the water management board of Hanoi. While the primary use of water from these lakes is for agriculture and to a lesser extent industry in the surrounding communes, the lake's aquatic resources are under full control of these Lake owners. Fishing teams from the local communities are managed by the Lake owners to access resources in a variety of ways, this can be through the leasing of fishing rights by fishermen from the Lake owners or being hired to complete certain fishing activities as required by the Lake owners. No free/unrestricted access is permitted on either of the lakes.

Dong Mo Lake: when full, the lake is 1400 ha in size but this can reduce to 800ha or less during years of drought, maximum water levels are normally seen between October and March. The Lake was artificially made through the construction of a dike in 1969 with the water level being increased in 2008 when a larger dam was built with 4 large dam doors, replacing the previous spillway. Now, the lake is approximately 18m at its deepest point when full. Dong Mo Lake is located in Son Tay district (Kim Son, Son Dong and Co Dong communes), although the western edge of the lake borders with Ba Vi District (Yen Bai Commune); both districts are within Hanoi larger municipal area. 2 streams flow into the West of Dong Mo Lake from Ba Vi National Park, with the main large dam with 4 gates at the North East of the lake, these gates are only opened when the water level is very high and poses a risk of overflowing from the dam. Water is normally drained from the dam through a small outlet at the south-west of the dam in Song Dong commune which is for agricultural use in nearby districts. The northern and southern sections of Dong Mo Lake are divided by several heavy-duty nets near the dam, this is to separate the lake between 2 Lake owners. The IMC/ATP also maintains a net to prevent turtles from escaping through the dam when opened.

The IMC/ATP has had a full-time presence in Dong Mo Lake through the employment of a local counterpart and monitoring by program staff since late 2007. The majority of work undertaken there so far has focused on the northern section of the lake where observations of Swinhoe's Softshell Turtles have most often been made. Annual no-hunting agreements have been signed with approximately 44 fishermen in cooperation with the lake owner, commune police, Forest protection Department and fisheries department staff each year since 2011. Monitoring of the lake by the IMC/ATP in 2007 confirmed the first wild Swinhoe's Softshell Turtle at the site. This allowed for the subsequent rescue following the breaking of the dam in heavy flooding in November 2008. Since then continuous monitoring was only able to confirm a single large animal in the lake, despite many local fishermen claiming additional

animals of various sizes were present. It was not until September 2020 that we were able to confirm a second animal although of unconfirmed species. Since 2008 some improvements have been made to the habitat in Dong Mo Lake, this has included the demarcating of a no-fishing zone with an area of 21.7 ha and the construction of an artificial nesting beach/sandbank which also has a small no-fishing zone. However significant water fluctuations throughout the year mean that in the wet season this sandbank can be flooded while in the dry season it can be made inaccessible as the water level recedes over 50 m from the sandbank. Bamboo basking platforms have also been constructed which Swinhoe’s Softshell Turtles have been seen using.

Although several villages occur around Dong Mo Lake, the majority of fishermen come from Nghia Son village, Kim Son Commune. No ethnic minorities are found in this area, with the nearest ethnic minority community in Yen Bai commune near Ba Vi National Park.

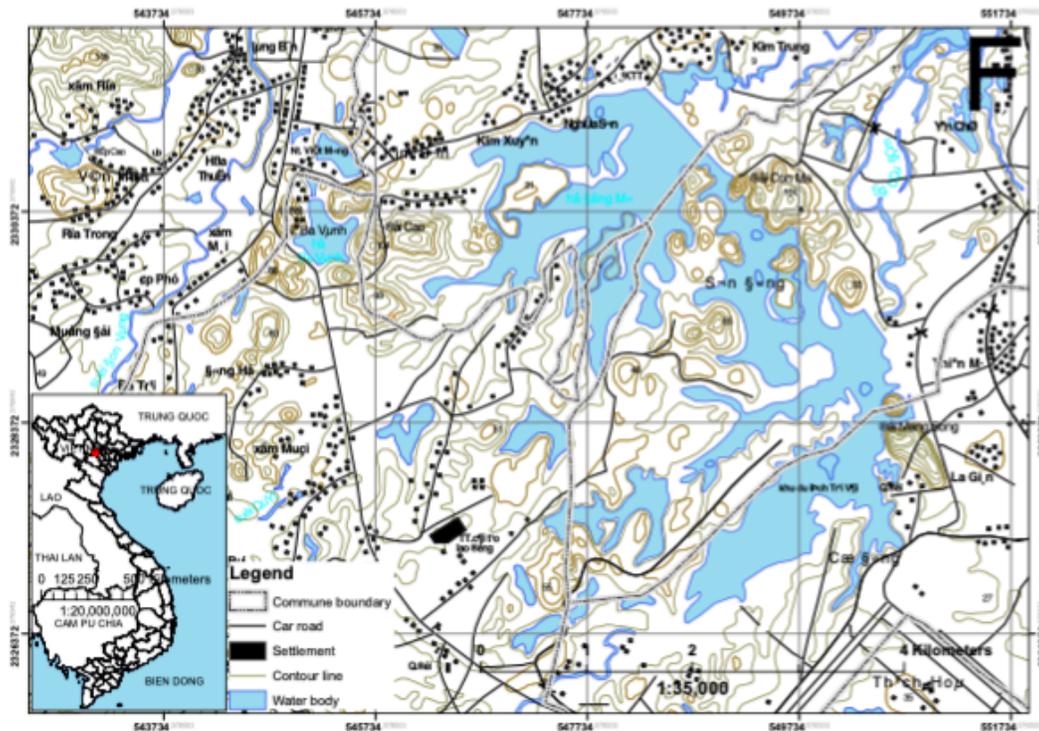


Figure 1. Map showing Dong Mo lake area, Hanoi, Vietnam

Xuan Khanh Lake is a small artificial lake of 100ha which was built through the construction of a dyke in 1971, the area of the lake can reduce to 60ha in the dry season. The lake is managed by a single lake owner who has rented the lake since 2017. Water from Xuan Khanh Lake is also used for agriculture and industry, however, a nearby landfill and waste incinerator (Xuan Son) has likely caused a reduction in water quality in this Lake; this situation has been covered by media.

Interview surveys from 2006 – 2010 did not find any good information for Swinhoe’s Softshell Turtle in Xuan Khanh Lake, however, in August 2012, we did receive reports of a large number of people from the local community seeing a large softshell turtle which they tried to capture. Extensive monitoring at this time did not find anything conclusive although we did undertake months of monitoring activities at the site. No further information came forward until May 2017, again intensive monitoring was undertaken, and this time a large softshell turtle of unidentified species was photographed. Environmental DNA

surveys were then undertaken for which one result did come back positive for Swinhoe's Softshell Turtle. While a full-time local staff member is employed to monitor this Lake, the turtle is not regularly seen.

The key threats to the aquatic ecosystems of Dong Mo and Xuan Khanh Lake include:

- Artificial habitats: both lakes are the result of man-made dikes and dams inundating small streams, wetlands and agricultural fields. Within the lakes, seasonal fluctuations in water level can be extreme resulting in the loss of emergent vegetation normally associated with wetlands. Although Swinhoe's Softshell Turtles have survived here it is not a natural habitat, and although their dietary requirements appear to be filled it is likely the necessities for a viable breeding population are missing, such as suitable nesting areas and potentially safe, shallow and vegetated areas that might benefit hatchlings and juveniles.
- Invasive species: the release of non-native fish species has taken place in the past, some of the species have been observed while monitoring fishing in the lake. These include the Giant Sensitive Tree (*Mimosa pigra*), Creeping Ox-eyes (*Wedelia sp.*), Golden Applesnails (*Pomacea canaliculata*), Marble Gobies (*Oxyeleotris marmorata*), and Spotted Gars (*Lepisosteus oculatus*).
- Harmful fishing practices: prior to 2020, fishing practices and Dong Mo Lake had remained little changed in the past 15 years since monitoring began, some of the techniques used could be considered harmful, such as long sine nets or bottom drop nets. On occasion, large turtles have become entangled in some of these fishing nets, but they seem to have been able to rip nets and escape. Fishermen sign annual no-hunting agreements in which they agree not to try and deliberately catch Swinhoe's Softshell Turtles. They also agree to not use prohibited fishing techniques, such as the long line hooks often set for softshell turtles. The lake owner has also asked for fishermen to remove these hook lines if seen. On occasion small softshell turtles have been caught in fishing nets, while some of these have been observed by field staff, other individuals have likely entered the trade without being observed. All specimens seen have been of the Spotted Softshell Turtle (*Pelodiscus variegatus*).
- Chemical pollution at both sites presents some risk, a golf course at Dong Mo Lake uses chemicals, herbicides and fertilisers, to maintain greens. And Xuan Khanh Lake pollution from the landfill and incinerator is likely to be causing a significant pollution problem.

Objective 2. Securing a viable population of the Big-headed Turtle (*Platysternon megacephalum*) activities for this objective will focus on Pu Mat National Park, Nghe An Province, Vietnam, situated in the mountainous area near the border with Lao PDR, Pu Mat National Park covers an approximate area of 94,800 ha and is spread across the 3 districts of Tuong Duong, Con Cuong and Anh Son. The park was established in November 2001 with the establishment of decision 174/2001/QD-TT. Pu Mat has been identified as an area of high species diversity, in addition it still has significant populations of a number of species, such as the Northern White Cheeked Gibbon (*Nomascus leucogenys*), Red-shanked Duoc Langur (*Pygathrix nemaeus*) and Annamite Striped Rabbit (*Nesolagus timminsi*) as well as potentially providing some of the last refuge some of the world's most endangered species including the critically endangered Saola (*Pseudoryx nghetinhensis*). The turtles the site has been identified as a priority for a number of highly threatened species, including the endangered Big-headed Turtle (*Platysternon megacephalum*) and critically endangered Four-eyed Turtle (*Sacalia quadriocellata*) and Indochinese Box Turtle (*Cuora galbinifrons*).

The high conservation value of Pu Mat National Park has been recognized through the formation of an informal alliance of NGO's working in the projected area, the 'Friends of Pu Mat', with a wide range of taxa supported along with community, research and enforcement activities all supported. As part of our project activities here we will focus survey activities in the Con Cuong district areas of the park, where a ongoing radio tracking project has monitored release big headed turtles since 2019, these animals had all

been rescued from the illegal wildlife trade. TFT focused field surveys have also been completed in a number of river valleys, with a focus on nonlethal aquatic trapping for freshwater species of turtle. During 2020 and 2021 the IMC/ATP has conducted a threat assessment focused on the Big-headed Turtle with community questionnaires and interviews completed in Con Cuong district.

The key threats to Pu Mat National Park

- Despite the large size of Pu Mat National Park and over two decades recognised as a protected area illegal logging, the collection of other nontimber forest product and hunting of wildlife is still concern. However, the protected area does have a well-managed Ranger team in addition to local community patrols undertaken in partnership with NGOs, saving Vietnam's wildlife (SVW) and flora and fauna International (FFI). A core zone for more focused patrols and protection has also been recognized, of 11,000ha, it is within this core zone there are survey activities will be focused. Existing enforcement patrols do make regular confiscation of wildlife, timber and tools and equipment required hunting logging.
- Encroachment on the boundaries of the protected area. Only one village, Co Phat Village, Mon Son commune, Con Cuong district is located inside the protected area, this is also a Dan Lai indigenous community which has farmed some of the land within the park for over 30 years. We do not have other information currently available on encroachment of the park boundaries.
- The impact of climate change and changes to hydrology within the protected area are not clearly understood yet, future predictions based on modelling and monitoring of impacts in the coming years/decades will better define this. It is expected that some herpetofauna may be impacted as a result, especially for those for which elevation and climatic envelopes within the park are already limited.
- Population growth is a looming threat for many wild habitats and species around the world, including Pu Mat. Current communities living in and around the Park have already had a worrying effect on populations of key species here, via hunting, logging etc., and while we, and our partners, have made dramatic efforts to tackle these impacts, continued growth of these local communities will most likely lead to greater pressure on the resources of the Park. We have to maintain a close relationship between the wildlife, natural environment and the people who reside here in order to promote sustainable harvesting of resources into the future.

Objective 3. Securing a population of the critically endangered Bourret's Box Turtle (*Cuora bourreti*) through reintroduction.

Bach Ma National Park in central Vietnam is within the Central Annamites Conservation Corridor and has an area of approximately 37,500 ha spread across Thua Thien Hue Province (34,400ha) and Quang Nam Province (3,100 ha), rising from almost sea level to an elevation of 1700m. Bach Ma National Park is a site of considerable interest for conservation with tropical monsoonal forest at a lower elevation and subtropical monsoon forest at higher elevations, above 900m (Nguyen & Saizen 2019). Notable species for conservation are the Saola (*Pseudoryx nghetinhensis*) which historically occurred in the Park and which may still survive, as well as populations of the Red Shank'd Douc Langur (*Pygathrix nemaeus*) and Northern Buffed-checked Gibbon (*Nomascus annamensis*). For tortoises and freshwater turtles, Bach Ma is also highly important, the critically endangered Bourret's box Turtle (*Cuora bourreti*) occurs in the park, with the species being localised to a small geographic area in central Vietnam and neighbouring Lao PDR. As such the populations in Bach Ma national Park are likely to be globally significant, although anecdotal information from local interviews conducted by the IMC/ATP since 2012 would suggest the population has been much depleted from its historic numbers. The national Park is also home to other species of conservation concern, including the big headed Turtle (*Platysternon megacephalum*), the keeled box Turtle (*Cuora mouhotii*) and the Four-eyed Turtle (*Sacalia quadriocellata*).

The IMC/ATP has conducted a number of interview surveys around Bach Ma National Park since 2011 , these were combined with broader provincial wide interview surveys that had focus on Nam Dong, A Luoi and Phu Loc districts in the buffer zones of Bach Ma National Park and Sao La Nature Reserve. In 2019 a group of confiscated and rehabilitated Bourret’s box Turtles were released into Bach Ma national Park and Sao La nature reserve. Six of the animals released into Bach Ma were attached with radio transmitters and have been monitored on a monthly basis to determine survival. Bach Ma National Park has also been designated the site for the construction of a conservation breeding centre for a group of highly threatened Annamite priority species, including the Bourret box Turtle. The Bach Ma Conservation Breeding Centre is part of a joint project by the Bach Ma National Park, WWF, GWC, Worlaw Zoo and the IMC/ATP. The Joint project will also support biodiversity monitoring to create a baseline for documenting the recovery of critical species, including Bourret’s box Turtle, through protection and animal reintroductions to augment remnant populations.



A critically endangered Bourret’s Box Turtle (*Cuora bourreti*) was release in 2019 in Saola Hue Nature Reserve. Photo by: Hoang Van Ha – ATP/IMC.



Bach Ma rangers collecting environmental data at the release location of one of six radio-tracking Bourret's box turtles. Photo by: Hoang Van Ha – ATP/IMC.

The key threats to Bach Ma National Park

- selective illegal logging, non-timber natural resource collection and hunting in trade continues to be a problem in some areas of Bach Ma National Park. Existing patrols and snare removal focused on reducing these threats and enforcement activities will not be a focus of our project proposed here. At low elevations, particularly in Phu Loc district, at present approximately 20,000 ha of the protected area is considered ecological restoration area.
- As with Pu Mat National Park, climate change and its impacts on Bach Ma national Park are not clearly understood or modelled. However, as a coastal protected area it is likely that Bach Ma could suffer from both periods of drought and intensified storm events. This could result in increased fire risk or place pressure on more climatically sensitive species, such as reptiles and amphibians. The undertaking of biodiversity surveys with a focus on herpetofauna will provide a valuable baseline against which future studies considering climate change can be compared.
- Again, like Pu Mat National Park, population growth is already threatening to compound the effects of logging, overcollection and hunting in Bach Ma, before we can get them under control. While there is not much we can do to limit population growth, we can work to weaken its impact by working closely with local communities to spread positive attitudes about the environment and support behaviours which are sustainable.

Objective 4.

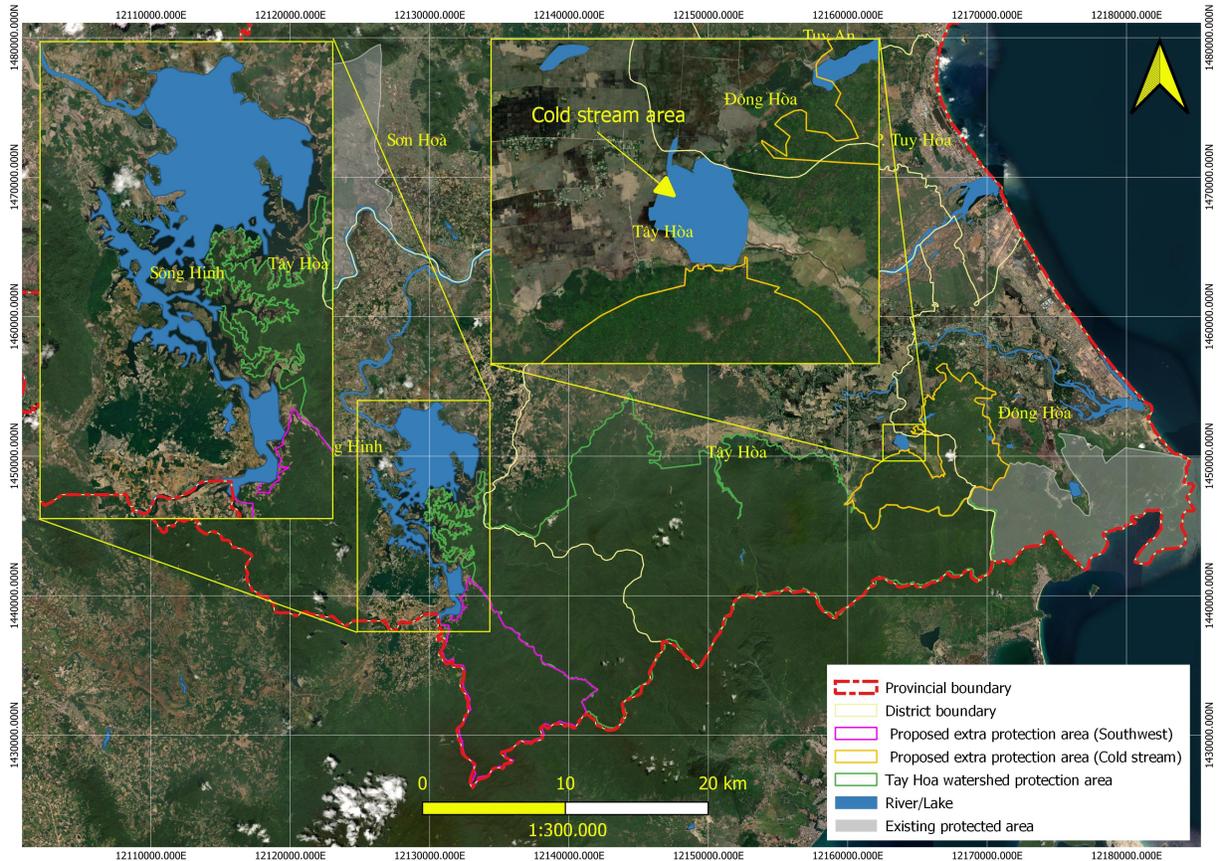
Establishing a protected wild population of the critically endangered and endemic southern Vietnamese Box Turtle (*Cuora picturata*)

The Deo Ca Forest Block occurs in the Southern Annamite Main Montane Block and covers an area of approximately 130,000ha across the three provinces of Phu Yen, Khanh Hoa and Dak Lak. The forest is currently not a fully protected area (National Park or Nature Reserve) but does encompass the Deo Ca – Hon Nua Cultural Historic sites (5,768.2Ha) and 46,316.26 Ha of watershed protection forest ranging from sea-level elevation in Dong Hoa district, Phu Yen Province, to approximately 1592m in elevation in Song Hinh district, Phu Yen Province. Recent surveys by IMC/ATP and the southern Institute of ecology (SIE) have been undertaken since 2012, findings from these surveys have as well as two newly described species, the Phu Yen Wart Frog *Limnonectes phuyennensis* described in 2020 (Pham *et al.*, 2020) and the new Mountain Horned Dragon *Acanthosauta murphyi* described in 2018 (Nguyen *et al.*, 2018).

Deo Ca Forest was also confirmed as the first known wild locality for the critically endangered and endemic southern Vietnamese box Turtle (*Cuora picturata*) (Ly *et al.*, 2011). The site has also had other priority species confirmed, including the Southern keeled box Turtle (*Cuora mouhotii* obsti), the Four-eyed Turtle (*Sacalia quadriocellata*). Community interviews and field surveys both give a strong indication that populations of the southern Vietnamese box Turtle are very depleted at the site, mainly impacted through illegal hunting for the wildlife trade.

The key threats to Deo Ca forest, Phu Yen province.

- Much of the forest is already protected as watershed protection forest, however its current status means that it has minimal Forest protection Ranger cover. As such this forest block does suffer from a high level of selective illegal logging and hunting of wildlife, including turtles. During field surveys at the site activities have been observed suggesting this is a regular occurrence.
- Climate change, and particularly extended drought periods, are likely high risk to this site. 2019 saw a significant drought year for Phu Yen province which saw the loss of some rice harvests. Within Deo Ca forest itself many localised patches of fire destroyed forest can be seen, although normally small, a few hectares in size, these are spread throughout much of the area and indicate a high vulnerability to climate change and potentially more widespread forest fires.
- Road construction and habitat loss, potential for tourism developments along the coast and at low elevation sites within Deo Ca forest. The main north-south road that stretches along coastal Vietnam, highway one, cut through Dong Hoa district in Phu Yen province. A tunnel was built through the mountain in 2017 to go through the Deo Ca Mountain Pass, while this resulted in localised forest loss and disturbance during construction it is likely in the long-term the past will benefit the forest area through directing traffic underground rather than along the historical coastal pass Road. Future tourism developments in the Deo Ca forest area could present a significant problem to lowland coastal forest areas (Hoa Tam and Hoa Hiep Nam communes, Dong Hoa District, Phu Yen Province) in the future, these areas could be considered underrepresented within the forest block as a whole and could provide important habitat for certain species, such as the silverbacked chevrotain (*Tragulus versicolor*).



Map showing Deo Ca area in Phu Yen province, including existing protected area and proposed protected area for Deo Ca.

Objective 5

re-establishing wild population of the endemic Vietnamese Pond Turtle (*Mauremys annamensis*)

This activity will focus on a 90ha of swamp forest in Tay Hoa District, Phu Yen Province, known as the cold Stream Swamp. Activities will focus on developing a plan for a new Species Habitat Conservation Area (SHCA) and working with local communities for engagement, awareness, threat assessment and consultation. As a lowland wetland site, the Swamp forest has a number of potential threats:

The Key threats to the Cold Swamp Forest

- Continued clearance for agricultural use, much of the historic swamp has already being converted to rice cultivation. The remaining swamp has remained due to its deeper water making it difficult to convert
- Drought, in 2019 the swamp almost entirely dried out due to drought, with water being pumped for irrigation or nearby rice fields. Such drought events could be climate change linked, which could result in more frequent or severe occurrence. In addition, such drought event could expose the forest to burning, deliberate or accidental.
- Pollution from agriculture, with pesticides and herbicides use in surrounding rice fields, water run off could be negatively impacting the swamp.
- Resource collection by the local community, fishing is the main activity undertaken by the local community in the Cold Swamp, however, historically such fishing activity has also resulted in the capture of turtles, believed to be the Vietnamese Pond Turtle.

10. **Approach:** This section will describe proposed actions during the project. Specifically, what do you intend to do and how will you do it?

Goal: Develop site-based conservation projects that support the protection and recovery of some of Asia's most highly threatened tortoise and freshwater turtle species.

Objective: 1. Securing a breeding group of the world rarest turtle, Swinhoe's Softshell Turtle (*Rafetus swinhoei*).

The critically endangered Swinhoe's Softshell Turtle (*Rafetus swinhoei*) survives as three known individuals, two of which live in two separate but neighbouring lakes in Hanoi, northern Vietnam: Dong Mo lake and Xuan Khanh lake. Monitoring has been done at the two lakes by the ATP/IMC since they were officially discovered in 2007 and 2018, respectively.

In the search for the presence of *Rafetus swinhoei* in other locations, extensive surveys throughout northern Vietnam by the ATP/IMC have identified over two dozen sites in lakes and river sections where *Rafetus swinhoei* has previously occurred. This is evidenced by the presence of skulls and shells from historically hunted animals or by recent interview reports for large softshell turtles fitting the description of *Rafetus swinhoei*. We believe at least half a dozen sites still support the species in Vietnam. Sites with the best information include Yen Lap lake (Quang Ninh province) and Suoi Hai Lake (Hanoi), Da river (Son La, Lai Chau province), Cua Dat Lake (Thanh Hoa province), and Hua Na Lake (Nghe An province). Additionally, it is hypothesised that the species may also be present in river sections in Laos which connect to China and northern Vietnam, therefore we will expand our efforts across the border.

Conservation activities for the Swinhoe's Softshell Turtle in Vietnam are being undertaken as part of a collaborative project by the Rafetus Alliance (the ATP/IMC, WCS, TSA, GWC, CRES, and Hanoi Fisheries Department).

1.1. Trapping of additional animals at two key sites

Following the confirmation of a second Swinhoe's Softshell Turtle (*Rafetus swinhoei*) in the wild in the second lake, Xuan Khanh Lake, in 2018, there is a need to capture this animal for sexing and health checking. A third large softshell turtle of an unknown species has also been observed, this animal is also in Dong Mo Lake and with the species of this individual not yet confirmed there is also a need to capture this individual. Trapping is a collaborative effort of the Rafetus Alliance and will involve using heavy fishing nets to form a fenced area within the lakes into which the animals will be trapped, following which 60 days (30 days at each lake) will be taken to use several fishing activities to capture the turtles, including deepwater funnel traps, trammel nets and drag nets. A capture and holding area has already been developed on an island in Dong Mo Lake and a temporary holding area will be prepared for Xuan Khanh Lake also. Once caught, a veterinary team, including WCS vets, will ultrasound animals to confirm the sex, implant a Passive Integrative Transponder (PIT) for future identification and take swab and blood samples for health screening and genetics. Current planning also includes the attachment of a subcutaneous radio transmitter for tracking of animal's post-release; this will be dependent on having suitably experienced veterinary staff attend the capture (something which may be

hampered by CoVID restrictions). Following measurement recording and photographing, the animals are to be released back into their respective lakes. We have highlighted with the authorities that if a male and female are identified for the Swinhoe's Softshell Turtle, more immediate action should be taken to bring the animals together.

1.2. Continued monitoring of key sites for Swinhoe's Softshell Turtle for animal behaviour and environment (SMART)

Currently, two lakes, Dong Mo and Xuan Khanh, both in Son Tay district of Hanoi have Swinhoe's Softshell Turtles (*Rafetus swinhoi*) confirmed. Monitoring will continue at these sites (5 days per week for another 3 years) and be extended to five other areas. SMART monitoring will also be trialled at Dong Mo Lake using existing data as part of a training exercise. SMART training will be given to all existing Rafetus staff (5 days of training for 3 staff).

1.3. Through our surveys, over a dozen potential sites where Swinhoe's Softshell Turtle has until recently survived have been identified. Five lakes have been selected for more intensive monitoring, these are Suoi Hai lake (Ba Vi district, Hanoi city), Yen Lap lake (Hoanh Bo district, Quang Yen district and Ha Long city, Quang Ninh province), Cua Dat hydropower Dam (Thuong Xuan district, Thanh Hoa province), Hua Na hydropower Dam (Que Phong district, Nghe An province) and the Da River which is located in Son La and Lai Chau provinces. The techniques applied will depend on the location and available funds, other sites could also be added if enough support was secured.

Habitat Assessments will be made at key sites, with site visits in Suoi Hai Lake (Hanoi) Yen Lap Lake (Quang Ninh province), Cua Dat Lake (Thanh Hoa province), Hua Na Lake (Nghe An province), Da River (Son La and Lai Chau province).

1.4. Habitat improvements including an improved nesting beach

Within Dong Mo Lake significant improvements have been made in the past decade to improve the habitat. including the construction of a 13ha no-fishing zone, a nesting beach, and floating platforms. These activities will be expanded. Importantly, the nesting beach will be made accessible year-round by increasing it in size by 100m² (we are still considering whether a floating sandbank barge may be a better idea). 8 new floating basking platforms (2 in Xuan Khanh and 6 in Dong Mo) will be constructed.

1.5. Other monitoring activities will include regular meetings with fishermen at key sites 2 sites, Dong Mo and Xuan Khanh. Any small softshell turtles caught will be recorded with DNA samples collected for analysis by CRES; approximately 100 samples will be taken for this over 3 years. Using acoustic hydrophones to identify the species of softshells is a relatively new technique, but evidence now exists that many aquatic turtle species do communicate with underwater vocalisations, these vocalisations appear to be species-specific. Local community networks at 5 sites will employ local counterparts to make observations and collect information from the local community on any observations.

1.6. Community awareness activities have been held around Dong Mo Lake since 2008, these include community football matches involving several villages from around Dong Mo and Xuan

Khanh Lakes, an annual no hunting agreement signed by 40 fishermen, and school programs in two districts. In this proposal, we will While school programs in two districts will be undertaken with a special lesson plan focused on the Swinhoe's Softshell Turtle. Socioeconomic and livelihood assessment around Dong Mo Lake in Kim Son communes as part of longer-term planning for the establishment of a protected area.

1.7. Support of development of a new protected area for the species

Dong Mo Lake was previously included on the list of a proposed protected area for Vietnam but not included. Following the Tortoise and Freshwater Turtle Action Planning Workshop which was held by the ATP/IMC with MoNRE in November 2016 the action plan was incorporated into law through decision 1176 in 2019. This action plan for Vietnam's tortoises and freshwater turtles lists Dong Mo Lake as a site for the development of a new protected area specifically for the conservation of Swinhoe's softshell turtle (*Rafetus swinhoei*). A workshop and meetings would be held to support the development of a protected area.

Support of government plan to bring animals together in a conservation breeding programme
A significant part of Swinhoe's Conservation Action Plan includes the need for bringing animals together for conservation breeding if a male and female can be located. The captures during 2020 and 2021 are key to decision making on this. Assuming that a breeding pair can be located a series of options have already been developed which present the options for maintaining animals, these are 1.) Animals are brought together in a captive breeding facility complete with holding ponds, offices and starting on raising funds, etc, 2.) As the semi-wild area is created in one of the lakes, most likely Dong Mo Lake, with a permanent fence, catch cages, observation station and office with a nesting beach. 3.) Animals could be released back into an existing Lake with additional observation stations, ranger stations, constructed along with an improved nesting beach and secure fencing protected to prevent animals escaping through the dam. While each of these options has potential benefits or risks, no final decision has yet been made. A workshop and meetings to decide on animal placement and management options will be held. An official design needs to be developed and approved, while community meetings and consultations would be held. We expect construction to happen within the 2021-2023 period and staff would need training for managing the selection option for animal placement.

Objective 2. Secure a viable population of the endangered Big-headed Turtle (*Platysternon megacephalum*) that will benefit other highly threatened tortoises and freshwater turtle species in Pu Mat National Park, Nghe An Province, Vietnam.

2.1. Monitoring of wild and released animals through regular trapping and eDNA monitoring of streams. Before this project, a radio tracking monitored release of Big-headed Turtles (*Platysternon megacephalum*) is being undertaken by the ATP/IMC from 2018 to 2021, this was also supported by some nonlethal aquatic trapping in streams throughout Mat National Park, Nghe An Province. The protected area has been identified by a collaborative group of NGOs, "The Friends of Pu Mat", to be a focal point for situ conservation and research. Additional monitoring with the use of non-lethal trapping with mark and recapture to look at the survival of released animals and monitor a range of TFT species. We will also use eDNA to take water samples going down the elevation gradient to identify whether species are limited to specific elevations (this method will only suggest upper limits).

2.2. Community activities: A range of community activities will be undertaken to support in situ TFT research and conservation. A varied range of activities is intended to reach wider demographics within the community with school programs and community football matches held.

Objective 3. Secure a population of the critically Endangered Bourret's Box Turtle (*Cuora bourreti*) through reintroduction.

3.1. Monitored release of rescued Bourret's Box Turtles (*Cuora bourreti*)

Since 2014 an increase in the confiscation of the critically endangered Bourret's Box Turtle (*Cuora bourreti*) has resulted from the listing of this box turtle species, along with others, under the national protection of decree 160. With over 200 individuals being rescued to the Turtle Conservation Centre (TCC) of Cuc Phuong National Park. As a species difficult to maintain in captivity it took considerable effort to recover many of these animals to the point where they were suitable for release. Health screening for mycoplasma and herpesvirus has also undertaken. 2 releases were undertaken in 2019 2020 of over 100 individuals of Bourret's Box Turtle into Sao La nature reserve and back Ma national Park. Six animals were fitted with radio transmitters to monitor post-release survival. As a species are limited to a geographically small area of central Vietnam and nearby Lao PDR there is much-needed to further study the survival of animals within these release groups over a longer period as well as to study a wild population of the species for which no such study has so far been undertaken. More intensive radio tracking will be continued for 18-24 months to determine the survival of released animals and the viability of reintroduction as a conservation tool for the species.

3.2. Field surveys and monitoring within key protected areas will be undertaken to monitor both released and wild animals, mark-recapture data will give an insight into the longer-term survival of individuals rescued from the wildlife trade and released and of the recovery or decline in the population in general. Data from this monitoring will also be made available to our project partners at WWF to include in SMART monitoring.

3.3. Species threat assessments at key sites around Bach Ma National Park, Sao La Nature Reserve, and Song Thanh National Park. Historical surveys from 2010 gave a clear indication of many of the species occurring at the sites, with anecdotal information for hunting and trade. However, these surveys formed part of the rapid assessment for the provinces of Quang Nam and Thua Thien Hue and did not focus specifically on threats. More focused threat assessments are required to develop more tailored responses to mitigate these threats.

3.4. Establishment of a captive assurance breeding facility for Bourret's Box Turtles
A captive assurance population will be established within a facility specially designed for Bourret's Box Turtle (*Cuora bourreti*), the enclosures will be located within the Annamite endemic Species Conservation Breeding Centre. The facility will allow a small group, initially of 10 to 20 Bourret's box Turtles to be transferred from the TCC. Further details are in the joint proposal on Annamite endemics jointly with WWF and GWC.

3.5. Community Activities. A range of community activities will be undertaken to support in situ TFT research and conservation. A varied range of activities is intended to reach wider demographics within the community using school programs and sporting events. A short annual interview survey to monitor the trade lasting 5-10 days will be completed annually.

Objective 4. Establishment of a protected wild population of the critically endangered and endemic Southern Vietnamese Pond Turtle (*Cuora picturata*).

4.1. Establishment of a new protected area for the Southern Vietnamese Box Turtle, Benefit to other priority taxa. Deo Ca Forest is a sizable block of broadleaf evergreen forest located across three provinces, Phu Yen, Khanh Hoa and Dak Lak, with a total area of approximately 130,000 Ha, going from sea level in Dong Hoa district, Phu Yen province to over 2000 m in M'Drak District, Dak Lak Province. The total sites are over 130,000 ha, currently, Deo Ca Forest is only recognised as a small area of Cultural Historic Site (5,768.2Ha) and 46,316.26 Ha of watershed protection forest.

The ATP/IMC has worked at the site since 2012, and, from 2018 to 2019, completed broad biodiversity surveys of both flora and fauna (including small mammal camera trapping, and surveys for amphibians, reptiles, fish, invertebrates, and birds). As well as confirming some priority TFT at the site, the Southern Vietnamese Box Turtle (*Cuora picturata*), keeled Box Turtle (*Cuora mouhotii*), Four-eyed Turtle (*Sacalia quadriocellata*) are confirmed at the site, while the Vietnamese Pond Turtle (*Mauremys annamensis*) has been reported from wetlands near the forest edge at some sites in Tay Hoa and Song Hinh district. In surveys, we also found a new species of *Acanthosaura* lizard (*Acanthosaura murphyi*), another undescribed species which is being described, Red Muntjac, wild pig, Indian Civet, Yellow Throated Marten, plus 3 macaque species had been seen and gibbons heard in the field. Interestingly, at least two healthy populations of Oriental small-clawed otters (*Aonyx cinerea*) have been found in this survey by Camera Trap. Flora surveys are expected to produce species that are also new to science. Also, no new information was recorded for the population of Siamese crocodile (*Crocodylus siamensis*) in Song Hinh District, with the last known individual found dead at the site in 2011 after being caught in a snare trap.

A significant site for endemism and priority species, we have been working with provincial and national authorities and a partner organisation, the Southern Institute of Ecology (SIE) to have the site recognised as a protected area. Conducting these initial biodiversity surveys has been an important part of this to collect information to support the promotion of this site and recommendations for the establishment of a nature reserve. Following a CEPF supported national action planning workshop in 2016 organised by the ATP/IMC in partnership with MoNRE, a Tortoise and Freshwater Turtle Action Plan for Vietnam was developed as recognised by the government in decision 1176/2019 in which Deo Ca Forest is specifically listed as a site for a turtle conservation area to help protect the Southern Vietnamese Box Turtle. As such this strongly supports this activity. We will work with the authorities and SIE to develop a plan for a new protected area with two workshops, one for development planning and another to focus on fundraising for the reserve.

4.2. Socio-economic survey and threat assessment around Deo Ca Forest in Phu Yen Province. While field surveys and community interviews have been undertaken for Deo Ca Forest and the nearby wetlands in Song Hinh and Suoi Lach, only limited socio-economic surveys have been completed. With future planning including the establishment of protected habitats socio-economic survey and threat assessment around the sites.

4.3. A range of community activities will be undertaken to support in situ TFT research and conservation. A varied range of activities, school programs, and community sporting events are intended to reach wider demographics within the community. Short annual interview surveys will also be undertaken in the key districts to monitor the trade.

Objective 5. - Re-establish a wild population of the endemic Vietnamese Pond Turtle (*Mauremys annamensis*) within the species range with the creation of a new protected habitat.

5.1. Creation of a new protected habitat for the Vietnamese Pond Turtle. progress at two locations will support the creation of protected habitats. Allowing future activities for habitat restoration/improvement and reintroduction. The first proposed site is the Three Lakes area of Binh Son District in Quang Ngai Province; previous work by the ATP/IMC has had this area highlighted in the national tortoise and freshwater turtle action plan for Vietnam, Decision 1176, which has increased both national and provincial awareness of the site's importance. The second site is in the area of the Cold Stream (Suoi Lanh) in Tay Hoa District, Phu Yen Province; a 90-ha remnant area of swamp forest has been identified where the Vietnamese Pond Turtle has recently been hunted. Workshops and meetings will be held to support the development of a provincially approved proposal for a protected area.

5.2. Establishment of a secure assurance breeding population with semi-wild habitat. A conservation breeding assurance colony facility for the critically endangered and endemic Vietnamese Pond Turtle (*Mauremys annamensis*) will be designed and constructed in Tay Hoa District, Phu Yen province. The facility will include 1 to 2 secure cages, a small office, and an accommodation block with several wetland/pond areas within a secure fence. Successful conservation breeding of the species is currently ongoing in Cuc Phuong National Park, Ninh Binh Province at the Turtle Conservation Centre, managed by the National Park, FPD, and the ATP IMC. The TCC can hatch over 300 Vietnamese Pond Turtles annually but there is an increasingly urgent need to establish a conservation breeding centre within the natural range of the species which is linked to a secure habitat where re-introductions into the wild can take place.

5.3. Community awareness and engagement Create local support and pride in the project through community engagement through regular community awareness activities. School programmes, community meetings, and sporting events will be undertaken in key districts in the Provinces of Phu Yen and Quang Ngai. Community surveys will include threat assessments for the Vietnamese Pond Turtle and other TFT species

5.4. Ongoing monitoring of habitat of the species and illegal trade in the species. In addition to the target sites mentioned above, ATP/IMC has identified several other areas with potential for wild populations of the Vietnamese Pond Turtle and require further surveys and monitoring. In

particular, Ea So Nature Reserve in Dak Lak province near the border of Phu Yen province, which has some level of national protection, has provided recent evidence of the existence of the species. EDNA will be used at the site along with traditional non-lethal aquatic trapping, while annual trade monitoring surveys will also be undertaken in key districts.

11. **Anticipated impact:** this section will describe the impact and how this impact has been determined.

Component 1.

Activity	Risks	Mitigation/safeguard measures	Likelihood
1.1. Trapping	The impact to the lake or surrounding areas through the trapping process, laying of nets or presence of field team.	New risk from this activity will be minimal as the lakeshore and bed have no aquatic vegetation to be disturbed. The field team will utilise a small stilt house already constructed on an island in the lake. A latrine area already exists with a deep 1.5m toilet area 2m from the lake. Cooking and cleaning parts will not be undertaken at the site during trapping, but in the village with staff also sleeping in the village. Any waste generated at the site will be removed and disposed of with regular waste back at the village. Recyclables e.g. glass, batteries etc. will be taken to Hanoi for properly recycling.	Low
	Injury to animals during trapping. There is a risk that animals may become entangled during trapping, this could potentially result in injury or drowning/death. There is also the potential to stress animals during capture.	The design and review of trapping techniques and equipment to be used has been developed by experts with decades of experience in trapping and surveying turtles. During trapping, staff will be present 24/7 to monitor nets when in place. A veterinary team will be on standby for rapid response to the lake when animals are caught. Documentation has already been prepared on trapping techniques, veterinary care, potential risks and responses. To reduce stress the amount of time animals are held will be kept to a minimum with the aim of releasing animals the same day. The number of people present at the capture will be reduced to those required.	Minimal
1.2. SMART monitoring	Boat use on the lakes, SMART monitoring will focus on Dong Mo and Xuan Khanh Lake's, as Dong Mo Lake is larger motorised boat will be used which could provide disturbance	This will use a small outboard motor similar to others used by fishermen and will be only used for longer trips. From moving between more localized sites traditional foot rowing methods will be used. At Xuan Khanh Lake an additional rowboat will be used. These boats are already in use at the sites and will not be purchased as part of this project.	Low
	Staff activities on the lakes,	Staff will continue to have a full-time presence at sites, this involves travelling around the area. Food is taken from the village during these activities and all waste is collected and disposed of in the village. Recyclables such as batteries etc. will be taken to Hanoi for properly recycling.	

1.3. Review Priority Sites	Visits will be made to already-identified sites, and at the sites, additional updated information will be collected on observations of Swinhoe's Softshell Turtles. Depending on new information acquired, periods of monitoring might be started with field staff spending time on or around lakes, wetlands or river sections.	Staff will travel to these locations by bus, car or motorbike. If it is required to go out on the lake locally available transportation will be utilised, e.g. renting other local boats and guides. Any waste generated such as food or wrappers will be removed from the site and disposed of back in the village or town.	Low
1.4. Extension of an existing nesting beach/sandbank	A nesting beach/sandbank of 60m ² was constructed on a small island in Dong Mo Lake in 2015. This provides the only real nesting opportunity in the lake, however, during the wet season the island nesting beach can be flooded and in the dry season, it can be a long way from the lake's edge. Two activities are proposed, improving the existing sandbank by adding more sand towards a deeper section of water. Construction of a floating platform with a nesting beach on it. Construction of the sandbank risks contamination of the water body and disturbance to areas of land.	The nesting beach is currently on a small island that has been rented by IMC/ATP since 2016, the island itself was artificially created by one of the Lake owners in 2009 and as such is not a natural feature. Some additional sand will be added at the northwestern end of the sandbank close to a deeper section of water. An existing artificial water channel will be widened and deepened (to a total of 3m deep and 5m wide) to improve access in the dry season. Work will be completed in the dry season to avoid disturbance in the water, no aquatic or emergent vegetation will be disturbed by this activity	Low
	Construction of a floating nesting beach presents a risk of disturbance on the lake if construction is to be done in situ. It also risks pollution from waste through production or elements of construction materials.	In the construction of a floating nesting beach, a number of designs are being considered using either a raft structure or simple barge. Both will be constructed off-site and put together at the lake. Non-toxic materials will be used, with durability and strength considered. Sand will be loaded onto the floating nesting beach at the lake edge before being floated out into position. Regular monitoring of the floating nesting beach will be undertaken to assess both accessibility and condition.	Low
	Construction of 8 bamboo floating platforms for basking. The bamboo rafts pose a potential risk if excessive bamboo is collected locally from around Dong Mo. In addition, if inorganic materials are used that could be potential pollutants, e.g. plastics	Bamboo floating platforms will be built following an existing design from which we have already some built and observed Swinhoe's Softshell Turtle basking on them. The IMC/ATP rents an island in Dong Mo of 8.4ha in size. Previously used to grow bamboo for commercial sale, when we took over the lease on this we also negotiated the preservation of a number of stands of bamboo, with the risk being clear-cut, to manage this more for wildlife. Some of these bamboo stands will be selectively thinned	Low

		<p>while additional bamboo will be bought either in Hanoi or another suitable nearby market. The bamboo platforms we have built are made from simple bundles of bamboo with wire ties and grasses. Any waste material resulting from their construction will be removed and the rest are designed so that they are degradable over time. Construction also should ensures sharp wires, edges etc. are not exposed.</p>	
<p>1.5. Genetic screening of softshell turtles caught in Dong Mo and Xuan Khanh Lakes</p>	<p>Genetic samples from oral and cloacal swabs, will be taken from all softshell turtles encountered during the project. In Dong Mo and Xuan Khanh Lake, this will include large Swinhoe's Softshell Turtles captured during the targeted trapping activities. In addition, any small softshell turtles that may be encountered during fishing activities of fishing teams working on the lakes will be swabbed.</p>	<p>The collection of swab samples is minimally invasive. Swabbing of the Swinhoe's Softshell Turtles captured during trapping will be part of the broader activity of collecting morphometrics and health assessments on the animals with the involvement of the WCS veterinary team.</p> <p>For other softshells captured in the lake, this exercise will give us increased opportunities to identify animals which in the past may have been released or entered into the trade without our knowledge. Information will be provided to the fishing team and Lake owners on this activity to encourage participation. Although no juvenile or hatchling Swinhoe's Softshell Turtles have been encountered to date, this activity will reduce the likelihood that such animals are missed. It also allows us to talk with fishermen about their intentions for these animals, the smaller Spotted Softshell Turtle (<i>Pelodiscus variegatus</i>) is not protected under Vietnamese law and as such it would be up to the discretion of the fishermen as to what they do with these animals if caught.</p> <p>This activity may require some additional trips on Dong Mo Lake to engage with fishermen. We already have an established communication network through mobile phones etc. with fishermen and will try and use this to reduce unnecessary travel on the lake.</p>	<p>Low</p>
<p>1.6. Community activities</p>	<p>The range of community activities will be held to increase support for the conservation of Swinhoe's Softshell Turtles within the local community. School programs will be held in 5 local schools. Some resources will be handed out but kept to a minimum and of sustainable construction</p>	<p>Any materials produced for the school programs will be kept to a minimum. Presentations and talks will be on PowerPoint. Lucky turtle games handed out and designed to be reused. Posters and other resources will only be given to students attending who wish to receive them to avoid unnecessary waste.</p>	<p>Low</p>

	Community boat races will be held on Dong Mo Lake and Lake. The main risk from this activity is noise disturbance on the lake or litter produced by spectators.	This race event is held on the nearby Kim Son village football pitch, this area is close to the village and is where the turtle is very rarely seen. Activities will be managed to be running heats with 5 to 10 boats per heat to reduce the number of boats active at one time. Spectators will be on the shore bank near the football ground where regular events only take place. Following the event, our staff will complete an inspection and litter pick if any rubbish has been left.	Low
	Annual community football tournaments will be held for 8 villages. The rubbish produced by spectators or waste produced through banners and other preparation for the event and noise disturbance the only real risks.	Banners and other resources produced will be designed to be reusable each year. During matches, bins will be made available and litter picking will be undertaken by staff following matches. Existing football fields and sports grounds will be used for this activity where events regularly take place to reduce disturbance	Low

Activity	Risks	Mitigation/safeguard measures	Likelihood
2.1. Field surveys and monitoring of wild populations of TFT in Pu Mat National Park	Annual field surveys in Pu Mat National Park will be undertaken with a duration of 8 to 10 days per survey. The risk here is from disturbance during field survey activities, such as preparation of field campsites, cooking and cleaning/washing	During field surveys, staff and local counterparts will be instructed to minimise the impact on survey sites. This will include only clearing potential areas needed to set, utilising materials, e.g. timber that's already been felled for example using existing logging camps. Food preparation and fires will be kept to a minimum only using already fallen timber and ensuring fires are completely extinguished when not in use. A latrine area will be dug 1-2m deep but over 10 m distance from water bodies and be completely filled at the end of the camp. We will aim to use organic soaps for washing of cooking utensils and field staff to wash. Any waste produced during the survey that is not suitable to be burnt will be removed, e.g. plastic bottles and batteries etc. these will be brought back from the field and recycle appropriately or disposed of appropriately in the village or taken back to Hanoi. Any TFT encountered in the field will be processed for field records and data collection before being released immediately back at the capture site	Low
2.2 environmental DNA	Collection of water	Combining this activity with other field	Low

and population monitoring of TFT in Pu Mat National Park	samples e.g. in the analysis as part of the population monitoring of TFT in Pu Mat National Park will be completed during annual field surveys and as such should pose no additional risks.	surveys will reduce the need for additional time in the forest and as such reduce associated risks.	
2.3. Health screening of big-headed turtles (Platysternon megacephalum)	The risk of producing excess waste from the processes associated with health screening of the big turtles is from the waste materials produced as a result of the activities, e.g. surgical gloves, swabs, vials and other disposable equipment	Health screening will take place in two places, with captive animals maintained at the Turtle Conservation Centre in Cuc Phuong National Park and in the field in Pu Mat National Park. Any waste produced at the sites will be collected and recycled where possible or disposed of appropriately. Similarly, any laboratory work completed at CRES in Hanoi will aim to reduce unnecessary waste	Low
	Disease risk through cross-contamination	To avoid cross-contamination between animals of potentially pathogenic diseases, strict screening protocols will be followed. These have already been developed and staff are trained in how to follow them. The management of animals in groups that are housed in close proximity and the changing of gloves, using of new swabs etc. will reduce this. Staff will also undergo handwashing and footwear changes between sections at the TCC. Completely separate sets of sampling equipment will be made available for field teams.	Low
2.4. Community engagement activities at key sites around Pu Mat National Park	School programs will be held at 4 schools in 3 communes around the national Park. There is a risk of waste being produced from sources handed out etc.	Threats to the environment, forest or wildlife, although. One consideration is easily made is that through lesson plans in school programs or other community activities that we aren't encouraging people to keep wildlife as pets. As such highlighting the negative impact and legal consequences of this will be included in activities. We will also reduce the number of resources produced, e.g. limit the number of handouts, posters etc. while concerns might be the risk of Covid 19 related to activities. We will ensure to monitor updates on the local and national situation and undertake activities only if it is safe to do so and in line with government guidance.	Low

Activity	Risks	Mitigation/safeguard measures	Likelihood
3.1 community engagement activities the Bourret box Turtle around Bach Ma National Park	Interview surveys to assess threats to Bourret's box Turtle and other TFT in Bach Ma National Park.	During interview surveys we will limit resources where possible by using motorbikes, or other more sustainable transport. We will limit the number of resources, interview questionnaires, printed out for use.	Low
	Installation of signboards at 10 locations in the local community and schools and production of A3 posters for distribution and providing books for conservation libraries and schools	For the installation of signboards, we will use existing locations within schools, community buildings or markets, removing the need for any site clearance and minimal preparation. Samples will be built of a durable material, metal frames and heavy-duty canvas on board. This will reduce the need for replacing boards in future years. Materials purchase locally were possible to reduce the need for transportation. Posters resources will be produced on recycle materials were possible, sizes are to be kept to A3 to reduce paper waste and we will keep print runs to a minimum. For school libraries we will purchase recent publications where possible to ensure content is up-to-date and will be relevant for longer. We expect schools to maintain the books within library for a number of years.	Low

Activity	Risks	Mitigation/safeguard measures	Likelihood
4.1. Progress made towards the establishment of Deo Ca forest, Phu Yen province, as a protected habitat	Meetings and at least one consultation workshop will be required, with a number of site visits as part of this process.	Where possible travel will be kept to a minimum, for necessary workshops and site visits we will ensure that any necessary participants are involved. We will aim to group project activities within a close timeframe to remove the need for multiple trips. E.g. community consultations held close the same time as governmental meetings and workshops. We will use collaborative meeting software when possible for smaller, less official, meetings. Resources that are required to be printed, such as draft or final plans, maps etc. will be kept to a minimum. During visits to the field or while engaging with community we will consider transportation used to minimise impacts and avoid littering or other negative impacts during this work.	Low

4.3 community engagement activities to support conservation of the southern Vietnamese box Turtle in Phu Yen province	Community engagement activities, 10 signboards in local schools and keep village areas, school programs and conservation libraries etc	For the installation of signboards, we will use existing locations within schools, community buildings or markets, removing the need for any site clearance and minimal preparation. Samples will be built of a durable material, metal frames and heavy-duty canvas on board. This will reduce the need for replacing boards in future years. Materials purchase locally were possible to reduce the need for transportation. Posters resources will be produced on recycle materials were possible, sizes are to be kept to A3 to reduce paper waste and we will keep print runs to a minimum.	Low
---	--	--	-----

Activity	Risks	Mitigation/safeguard measures	Likelihood
5.1. Development of the species habitat conservation area for the Vietnamese Pond Turtle in Phu Yen province	Development of a plan to establish the Vietnamese pond turtle species habitat conservation area and consultation meetings	Where possible travel will be kept to a minimum, for necessary workshops and site visits we will ensure that any necessary participants are involved. We will aim to group project activities within a close timeframe to remove the need for multiple trips. E.g. community consultations held close the same time as governmental meetings and workshops. We will use collaborative meeting software when possible for smaller, less official, meetings. Resources that are required to be printed, such as draft or final plans, maps etc. will be kept to a minimum. During visits to the field or while engaging with community we will consider transportation used to minimise impacts and avoid littering or other negative impacts during this work.	Low
5.2. Community engagement activities and consultation	Signboards in the local community buildings and schools	For the installation of signboards, we will use existing locations within schools, community buildings or markets, removing the need for any site clearance and minimal preparation. Samples will be built of a durable material, metal frames and heavy-duty canvas on board. This will reduce the need for replacing boards in future years. Materials purchase locally were possible to reduce the need for transportation.	Low

	School programs undertaken in 6 schools	Resources produced and distributed as part of school programs will be kept to a minimum, with the use of projectors and electronic resources where possible. For school libraries we will purchase recent publications where possible to ensure content is up-to-date and will be relevant for longer. We expect schools to maintain the books within library for a number of years	Low
--	---	--	-----

12. **Mitigation measures:** Describe measures that will be taken to mitigate negative impacts.

Included in the table

13. **Actions to ensure health and safety:** Describe actions that will be taken to ensure the health and safety of workers as well as the site. Include a description of waste management and/or disposal.

A variety of measures will be taken to ensure the health and safety of staff, local partners and stakeholders involved in activities. In general, these measures include providing comprehensive health cover for all IMC ATP staff, including full-time local staff working at sites including Dong Mo and Xuan Khanh. We also provide all of our staff with basic training, with a strong focus on working safely in the field. This includes aspects such as the use of compasses, GPS and maps, compulsory wearing of crash helmets when riding motorbikes in full compliance with national law, clear planning of all field activities to include emergency extraction plans, identifying local hospitals etc. before field activities. First-aid kits are provided to all field teams as is other essential equipment. When camping in the field staff have clear instructions on boiling and sterilisation of water for consumption, and safety when cooking on an open fire and made aware of any local disease concerns such as malaria or dengue, with prophylactic provided if considered necessary. Safety talks are held with local counterparts, such as Park or Ranger staff and local guides to clearly outline work and safe working practices, with an agreement signed in which this is stated. Local knowledge on risks will also be asked for as part of these preparations.

At sites where staff are working on or near water, as is the case with Dong Mo and Xuan Khanh Lake and other sites related to Swinhoe's Softshell Turtle or the Vietnamese Pond Turtle, lifejackets are provided.

When handling animals, staff are provided with surgical gloves, which should be used during activities involving health screening or DNA collection, or alternatively, regular hand washes with suitable soap or disinfectant are required.

14. **Monitoring and Evaluation:** This section aims to outline what steps the proponent will take to monitor and evaluate the impact of the proposed intervention.

As part of our monitoring and evaluation, a number of steps will be taken, these will help both our staff and the CPF management team to evaluate impacts throughout the project.

At each of our sites, clear baselines for both environmental and social impacts will be recorded/documented, this will be achieved in a variety of ways depending on the site.

- If activities present environmental risks at any of our sites, photographic records will be made prior, during and after the activities. For example, in Dong Mo Lake with the improvements to the nesting beach and construction of a floating nesting area, or the basking platforms, photographs will be taken of the area before work begins, during the working activities, on completion and at various stages thereafter throughout the duration of the project.
- A written record of impacts will also be made in monthly reports which are already completed the standard for all IMC/ATP projects. Additional information will aim to capture any environmental or social impacts that might arise through project activities.
- Existing IMC/ATP environmental guidance will be reviewed and updated, at present, this is largely focused on office policies that it will be extended to include more guidance and field activities, for example, the inclusion of policies on recycling or dispose of waste produced.
- Existing recycling stations in Cuc Phuong National Park and the Hanoi office will be reviewed and approved, for example, we have glass and metal recycling areas, waste disposal bins and collection points for battery recycling.
- The existing IMC/ATP staff handbook will be reviewed to ensure updates are made to environmental policy, awareness to minority groups and potential social impacts project work and a new section on gender and sexual harassment awareness.
- Monthly project staff meetings will be held, as part of which regular opportunity will be given to raise concerns related to environmental or social impacts that might exist.
- At Dong Mo Lake and Xuan Khanh Lake the monitoring of water quality is to be included in standard data collection, a new section will be added to the monthly report to ensure this is recorded.

15. **Permission of the landowner:** Please verify permission of the landowner to undertake actions on the site, and verify that you have the required permits to undertake this work.

Objective 1.

Both Dong Mo Lake and Xuan Khanh Lake are under private management, with long leases made out to the renters. In Dong Mo Lake, the lease is between 2 Lake owners, the vast majority of our work and particularly trapping has all been undertaken on one side. We have a long-standing relationship with this lake owner, working in Dong Mo since 2007, as well as renting an 8.4ha island in the centre of the lake from the lake owner since 2016 for which we have a contract due to expire in February 2026. The lake owner has also previously agreed to establish a no-fishing zone in the core area of the lake for the Swinhoe's Softshell Turtle and has asked his fishing teams not to catch Swinhoe's Softshell Turtle or to use small hook lines designed to target other aquatic turtle species. Annual no-hunting agreements have been signed with all the fishermen (44 fishermen) on this side of Dong Mo Lake in the presence of commune police, Forest protection Department and the lake owner. As part of the CEPF project, we will make additions to this signing process in which an opportunity for open discussion on project activities and potential grievances will be facilitated, as well as providing contact details and reporting mechanisms within the no-hunting agreements and as simple handouts during this activity. It should also be considered that Dong Mo Lake itself remains the property of the Vietnamese government, under management of the Song Tich Company, a state-owned company. Furthermore, Dong Mo Lake has been clearly mentioned in the national 'Tortoise and Freshwater Turtle Action Plan for Vietnam', decision 1176/2019, as a site for Swinhoe's Softshell Turtle conservation and for a future planned protected area the conservation of the species.

Similarly, we have met with the owner of Xuan Khanh Lake, who also supports our activities, during intensive fishing activities on this lake, we have staff present with the fishing teams throughout to ensure the safety of the turtle.

In both primary sites for the Swinhoe's Softshell Turtle, we work closely with provincial Peoples Committee, the fisheries department (FD) and on occasion with the Forest Protection Department (FPD). These project activities are also part of the Rafetus Action Plan for Hanoi (Plan No. 200 dated October 22, 2018 on conserving Swinhoe's Softshell Turtle (*Rafetus swinhoi*), a.k.a. Hoan Kiem turtle in Dong Mo, Xuan Khanh during the 2018-2020 period and vision to 2030) which we helped develop in partnership with the Rafetus Alliance, MoNRE, Hanoi Peoples committee and Hanoi Fisheries Department.

Objective 2.

Pu Mat National Park was established on the 21st May 1997, through Decision No. 2150 / QD-UB of Nghe An Provincial People's Committee on the establishment of Pu Mat Nature Reserve and under the management of the FPD of Nghe An province. The Nature Reserve was then upgraded to a National Park in 2001 and is managed by FPD under the Ministry of Agriculture and Rural Development (MARD).

Work will be completed in Pu Mat National Park, Nghe An Province. IMC/ATP has worked with Pu Mat NP National Park since 2018 undertaking a variety of field activities and training with the national Park, including a radio telemetry project for the Big-headed Turtle (*Platysternon megacephalum*). Standard permission letters are submitted for activities completed at this site which we have never had a problem. Furthermore, we have had three rangers from the national park complete a tortoise and freshwater turtle field skill training course with us and supported a number of projects following this.

Objective 3.

Bach Ma National Park is a national park in Thua Thien Hue province, 40 km from Hue city, established by Decision No. 214-CT dated 15th July 1991 of the Chairman of the Council of Ministers of Vietnam. In November 2019, 47 rescued critically endangered Bourret's Box Turtle (*Cuora bourreti*) were released in Sao La Nature Reserve with another 50 released in Bach Ma National Park, Thua Thien Hue Province, in September 2020, all these animals were transferred from the Turtle Conservation Centre (TCC) of Cuc Phuong National Park. From the animals released in Bach Ma National Park, 6 were fitted with transmitters as part of a radio-tracking project to look at survival post-release. At present, activities within Bach Ma National Park are undertaken with the submission of individual permission letters for each activity. However, the Bourret's Box Turtle activities covered here are in support of a larger joint project with World Wide Fund for Nature (WWF), Global Wildlife Conservation (GWC) and Wroclaw Zoo which will focus on Bach Ma National Park, the Thua-Thien Hue Saola Reserve and the Quang Nam Saola Reserve under which we will be working as a partner focused on TFT. For the captive component of this project, an MoU is being signed with MARD and will have IMC/ATP added in the coming months.

Objective 4

Deo Ca Forest, The management board of the Deo Ca - Hon Nua cultural and historical site of 5,768 ha was decided to establish by the People's Committee of Phu Khanh province (old) on 26th July 1989, while the larger watershed protection forest currently totals 46,316ha comprising two areas, the Tay Hoa watershed forest established in 2006 and the Song Hinh watershed protection forest established in 2000, which does have some FPD rangers assigned for protection. Currently we have worked with Phu Yen Provincial FPD with permission letters for activities to be undertaken. The Deo Ca Forest area is also specifically mentioned in the National TFT Action plan, Decision 1176/2019, developed in partnership with MoNRE, as a site for the establishment of a protected area. A principal reason for the creation of this site is to support habitat protection for the critically endangered and endemic Southern Vietnamese Box Turtle (*Cuora picturata*). We have also worked extensively at this site with the Southern Institute of Ecology (SIE) in completing biodiversity surveys and initial consultation workshops with provincial authorities on the site.

Objective 5

As part of the Vietnamese Pond Turtle (*Mauremys annamensis*) project, we will undertake field activities in Ea So Nature Reserve in Dak Lak province. We have already completed some activities, including initial surveys at this site in 2020. As a Nature Reserve we will work the reserve management and FPD staff, sending permission letters as required.

For the Vietnamese Pond Turtle in Phu Yen Province we are focused on the Suoi Lanh Streams area of swamp, which we refer to as the Cold Swamp. This is a 90 ha of swamp forest surrounded by agricultural land. The area belongs to the provincial Peoples Committee.

15. **Consultation:** This section aims to outline the range of informed consultations that the grantee has had both with experts to optimize the potential for success, and with stakeholders, particularly local communities, who are potentially affected by the proposed actions. Include dates of consultations.

Most of the activities proposed in this proposal have followed on from previous work by IMC/ATP for over a decade. Through our collaborations with various party partners and stakeholders we have been central to significant developments in both national legislation and action plans for priority tortoise and freshwater turtle species both in Vietnam and elsewhere regionally, and were involved with regional RUC and red listing and CITES CoP proposals. These collaborations have ensured that the priority actions within this proposal are very closely aligned with those of the action plans Vietnam.

- Decision 1176/QD-TT, 12th September 2019, the Approval for the program and the protection of Vietnam's endangered, rare and precious turtle species to 2025, with a vision to 2030' which we helped develop in partnership with MoNRE and included a national workshop with over 40 participation from national and provincial agencies associated with wildlife conservation, and was distributed to provincial agencies nationally for review and input.
- Decision 1176 clearly states actions for priority species and sites within this proposal. - Establishing 03 new species habitat conservation areas for endangered tortoise and freshwater turtle species (Expected to be deployed for: the Vietnamese Pond Turtle (*Mauremys annamensis*) in Binh Son district, Quang Ngai province, the Hoan Kiem Turtle [Swinhoe's Softshell Turtle] (*Rafetus swinhoei*) in Son Tay town, Hanoi and a group of box turtle species of genus *Cuora* in the area of Dong Hoa and Tay Hoa districts, Phu Yen province)" and Developing and implementing population restoration projects for a number of species of tortoises and freshwater turtles on the list of endangered, precious and rare species prioritized for protection (expected to be selected for deployment in the following provinces/cities under central government: Hanoi, Quang Ninh, Thanh Hoa, Nghe An, Quang Binh, Thua Thien Hue, Quang Nam, Quang Ngai, Phu Yen and Khanh Hoa)" being two key extracts from Decision 1176 which state this.
- MoNRE will remain a key partner in helping guide strategic implementation of these activities to meet some of the shared actions from this national plan. We have an existing MoU with MoNRE and will have regular meetings to share information and updates on the project as they develop. For key national and local stakeholder meetings, such as provincial meetings to discuss the creation of protected habitats in Phu Yen province MoNRE will be a key participant.
- The Southern Institute of Ecology (SIE), a Ho Chi Minh City based scientific institution has been involved as a partner on both the Vietnamese Pond Turtle project and survey work in Deo Ca forest, Phu Yen province, with over 5 years' experience working together. This partnership has involved doing joint biodiversity surveys and joint workshops and meetings to present findings

and discuss development options range of sites. For the Vietnamese Pond Turtle SHCA, the ATP/IMC and SIE have to work closely with Phu Yen DoNRE to go through the procedure, following decree 66/2019/ND-CP and the law on biodiversity. SIE has been out to provide a great deal of invaluable skills in flora and fauna identification and survey methodologies as well as having an outstanding relationship with key government partners at the project sites in central Vietnam. SIE also has expertise in supporting the establishment of new protected areas in Vietnam and we expect our partnership with SIE will continue throughout this project period.

- The Centre for Natural Resources for Environmental Studies (CRES) of Hanoi National University of Science has collaborated on a wide range of projects and scientific publications with IMC/ATP for over a decade, including work on previous CEPF projects. Within this relationship CRES is our partner in providing laboratory skills for genetic studies, Environmental DNA and health screening. We also work very closely with CRES in discussing project designs and planning and often run joint workshop or training events.
- At all sites which involve field work in forested areas, wildlife-focused surveys or community activities around protected areas, we have always coordinated with the Forest Protection Department (FPD), for this project the key sites are Pu Mat National Park, Nghe An Province, Bach Ma National Park, Thua-Thien Hue Province, Ea So Nature Reserve, Dak Lak Province and Deo Ca Special Use Forest, Phu Yen Province. At all sites, we ensure required permissions are obtained for all activities with the Peoples committee and FPD, this requires the sharing of activity details and objectives and we also meet with provincial or protected area FPD departments during these activities. Depending on the activities we will also have participation from Rangers, either making presentations, participating for discussions or involved in fieldwork. We always seek advice on our project design and objectives from these departments.
- The Turtle Conservation Centre (TCC) of Cuc Phuong National Park, Ninh Binh Province is the longest running partnership in Vietnam, having worked together to establish and comanage the Turtle Conservation Centre since 1998, with an existing MoU. Although the TCC is involved in a lot of conservation activities particularly focused on rescue and release or training activities, for this project the collaboration will mainly focus on health screening of select captive animals rescued from the trade.
- For the Rafetus project we work very closely with Hanoi Fisheries Department under the direction of the Hanoi Peoples Committee to implement the Hanoi focused Rafetus Action Plan, Plan No. 200 dated October 22, 2018 on conserving Swinhoe's Softshell Turtle (*Rafetus swinhoei*), a.k.a. Hoan Kiem turtle in Dong Mo, Xuan Khanh during the 2018-2020 period and vision to 2030, with the IMC/ATP and WCS Vietnam supporting activities such as trapping of the Swinhoe's Softshell Turtles within the Hanoi city area.
- The Rafetus Alliance was formed in 2018 to bring together relevant national and international experts and involved organisations to develop a clear plan of action for the conservation of Swinhoe's Softshell Turtle. The Rafetus Alliance is intended to support the national authorities in Vietnam and Hanoi Peoples committee in implementing the Plan No. 200 for the Swinhoe's Softshell Turtle. The Alliance members include IMC/ATP, CRES, the Turtle Survival Alliance (TSA) USA, Global Wildlife Conservation (GWC), the Wildlife Conservation Society (WCS) and Washington State University.

- For Bach Ma National Park in Thua Thien Hue Province and the Quang Nam Saola Reserve and Thua Thien Hue Saola Reserve, we have a collaboration to which we bring TFT expertise to the strong existing presence of the World Wildlife Fund for Nature (WWF), GWC and Wrocław Zoo
- In Dong Mo Lake, we work closely with the lake owner with regards activities at the site and have a contractual agreement with him to rent one of the islands for conservation purposes. The lake owner and all fishing team members from Dong Mo Lake are involved in an annual meeting to renew no-hunting agreements and discussed developments, furthermore during trapping events or other activities will sometimes employ fishermen to support this work. With community activities in communes surrounding Dong Mo Lake, we work with youth unions and People's committees in organising and implementing these joint activities.

In Phu Yen Province we have had some early discussions with the farmers Union in Tay Hoa district regarding some ideas on alternative livelihoods. We have also met with DoNRE in the province to discuss land use at key sites, in particular Deo Ca forest and the Cold Swamp. In August 2019, a stakeholder meeting was held with 14 representatives from relevant agencies of Phu Yen province to ask for their opinion on the Deo Ca PA establishment and Mauremys SHCA at Cold Swamp. The agreed was that there is an urgent need to protect Deo Ca due to its high level of biodiversity.

-

17. **Disclosure:** CEPF requires that safeguard documents are disclosed to affected local communities and stakeholders prior to project implementation. Please describe efforts to disclose this impact assessment and environmental management plan and provide dates.

To enable the disclosure of the impact assessment and environmental management plan a number of actions will be taken to inform our partners and reach affected local communities and stakeholders.

- The stakeholders the English language impact assessment and environmental management plan will be translated into Vietnamese language and made available in both hard and soft copy. We aim for this to be completed in the first 3 months of the project.
- The local partners, where specific provincial or protected area activities are most relevant, an edited version of the impact assessment and environmental management plan will be produced which is relevant only to the area of interest. This will be translated into Vietnamese language and made available in hard and soft copy.
- For the local community abbreviated version of the impact assessment and environmental management plan will be produced in a more simplified and informative format. We will aim to summarise this into 2-4 pages and translated into local language where necessary. Prior to this activity we will consult with the CEP F implementation team about which sites require these documents.
- All versions of the implementation and environmental management plans, in all languages, will include the section on the grievance mechanism.

Process Framework for Involuntary Restrictions

The Process Framework will describe the project and how restrictions of access to natural resources and measures to assist affected communities. Affected communities should have the opportunity to participate in the drafting of the Process Framework. Typically, the Applicant will prepare a draft Framework that will then be shared and discussed with local communities and other relevant stakeholders. Based on the consultations, a final Framework will be prepared. CEPF may provide guidance on development of the Framework and will review and approve the final Framework prior to approving the final project proposal application. The Process Framework should include the following elements:

A. Project background

For a more detailed background on our project sites please see the section above. With regards the voluntary restrictions a short note is provided here for each site.

Objective 1. - Dong Mo Lake & Xuan Khanh Lakes, Hanoi

At both of these sites Lake management is currently under the control of Lake owners who rent either whole or part sections of the lakes. The collection of resources from these lakes is controlled and managed by Lake owners, with fishermen either being employed to work the lake or purchasing fishing rights for certain fishing techniques.

At these lakes we will work with the Lake owners and fishermen as we have done well over a decade. We do not prohibit access to resources, but only ask that harmful fishing techniques are not used, for example long lines of hooks or string nets that risk entanglement and drowning. We work annually to hold no hunting agreements will discuss fishing techniques, upcoming activities etc. as part of the CEPF project we will also provide details on the grievance mechanism during these meetings. Our team regularly meets with fishermen in the Lake owners. Present we haven't identified any affected person or criteria for eligibility, we will seek guidance from the CEPF implementation team if any concerns arise.

Objective 2 - Pu Mat National Park, Nghe An Province

at Pu Mat National Park, we will be working to complete biodiversity surveys and community engagement activities. We will not be involved with enforcement actions that fall under existing responsibilities of national Park staff and other NGOs already engaged in community patrol team and enforcement activities. As Pu Mat National Park is already a well-established protected area, with relevant laws on forest protection and additional species focused wildlife protection laws related to our focal species we will not be bringing any additional involuntary restrictions at this site.

Objective 3 - Bach Ma National Park, Thua Thien Hue Province

In Bach Ma National Park, our activities as part of this grant are related to community engagement and awareness. We are not working on enforcement activities, or activities that should in any way restrict access to existing resources. We will only be providing knowledge on threats and protection status that we hope will support improved decision-making by members of the local community. In addition, Bach Ma National Park is a well-established protected area for which collection of forest resources is already in conflict with national forest protection laws. Also, the Bourret's box Turtle in which we are focused is fully protected under National wildlife protection laws, decree 160 and decree 06.

Objective 4 - Deo Ca Forest, Phu Yen Province

At the Deo Ca Forest site in Phu Yen Province our main activities are focused on supporting the national forest planning for a new protected area. The area upon which we are focused is already a combination of

cultural historic site and watershed protection forest. This forest type already has theoretical protection under Vietnam's forest protection law, with the focal species the southern Vietnamese box Turtle, is also fully protected under decision 160 and decree 06 under category IB, which means current forest exploitation and hunting within the project site is already illegal.

We will engage with the local community through community meetings and through knowledge, awareness and attitude surveys at 2 sites. During this engagement we will make sure the impact assessment and environmental management plans are made available, proposed activities clearly presented and access to details on the grievance mechanism provided.

While we have yet to identify any ethnic minority communities or disadvantaged individuals within the two districts we are focused, Tay Hoa and Song Hinh districts, we will ensure that staff are aware to consider this during activities. This will include awareness for ethnic, socio economic, gender or disability -related factors that may relate to voluntary restrictions or access to resources. If a situation, community or individual is identified for which involuntary restrictions are a potential concern this will be documented and discussed with the CEPF implementation team to determine necessary measures to assist the affected person/s.

Objective 5 - establishment of a wild population of the Vietnamese Pond Turtle in Phu Yen province with planning for a new Species and Habitat Conservation Area.

At present these activities are focused on the Coldstream swamp in Tay Hoa District, Phu Yen Province. This 90 ha area is currently Peoples committee wetland/swamp for which little existing management has been identified. As part of the planning process we will hold a number of meetings with provincial authorities to determine the current and historical land use. We will also hold community meetings to identify current resource use types and individuals who are accessing the area. A consultation meeting will be held in which the proposed plan for the site will be discussed and community members encouraged to voice their concerns or ideas. The current community use of the wetland, swamp Forest, the need to be considered the integration into any management plan.

The criteria for eligibility of affected persons has still not been clarified, within the communes we are working for this activity we have already held discussions with the farmers Union and those with agricultural fields close to the swamp. But we have yet to identify individuals who regularly access the swamp for resource collection. Upon progression of the project if affected individuals become apparent, we will seek guidance from the CEPF implementation team.

It should be noted that the Vietnamese Pond Turtle (*Mauremys annamensis*) is fully protected under decision 06 as a category IB species, meaning any hunting, consumption or trade would be prohibited.

Social Assessment

As has been highlighted in the involuntary restrictions section, our activities are primarily focused on conservation, research and community engagement activities that do not have a strong enforcement component that will limit access to resource beyond restrictions that are already supposed to be in place. However, an initial social assessment has been made for our project sites and throughout our projects we will be vigilant to indigenous communities and potentially disadvantaged individuals or groups. Where necessary we will adjust our activities to mitigate negative impacts and engage with the project partners/stakeholders, local communities and CEPF implementation team when required. If indigenous people are found to inhabit or use natural resources within either site, a process of consultation to obtain their Free, Prior, Informed Consent will be undertaken as part of the protected area establishment process.

Summaries of indigenous communities at each of our project sites is provided here:

Dong Mo and Xuan Khanh Lakes, Hanoi

within the communes surrounding Dong Mo and Xuan Khanh Lakes there is only one commune with any indigenous communities, this is Yen Bai commune where some Muong ethnic minority households are found. The main income for this community is from agriculture, dry and wet rice, cassava and sugarcane. Fishing teams currently working on the lakes are from minority communities.

Pu Mat National Park, Nghe An Province

Three main ethnic minority groups occur in many of the communities around Pu Mat National Park, these are Thai, Dan Lai and H'Mong ethnic groups. The Thai ethnic group is the largest in Con Cuong district where most of our activities will be focused, at 46.9% of the population. While a large part of household income is reportedly from rice and other agriculture, bamboo and rattan collection from the forest has also been highlighted with other nontimber forest resource collection, including hunting, likely to be undertaken by some households.

Throughout our activities in and around Pu Mat National Park we are focused on monitoring of priority populations and community engagement for awareness purposes. Enforcement activities within the national Park are already intensive and undertaken by Forest protection department staff and other NGOs working with community patrol teams. It is not expected that our activities will further increase restrictions of these indigenous communities.

If during our project activities, we identify any issues of concern related to indigenous communities we ensure that these are clearly documented and brought to the attention of the CEPF in the mentation team.

Bac Ma National Park, Thua Thien Hue Province

in highland areas of the buffer zone for Bach Ma National Park a number of ethnic minorities are present. In the districts of Phu Loc and Nam Dong the distributions of groups is approximately 80% Kinh (majority ethnic group), Co Tu, Van Kieu and Muong combined to make approx. 19% and Ta Oi and Pa Ko make up the remaining <1%. Officially the main income from these districts is agriculture, with dry and wet rice, cassava and sugarcane. However, from local community surveys it is clear that individuals from these ethnic groups are also involved in the forest resource collection including hunting of tortoise and freshwater turtles.

Our project activities will be focused on community surveys with questionnaires to assess threats to the Bourret's box Turtle and other species that might relate to local communities and indigenous groups. We will not however be involved in direct enforcement action. It should also be considered that as these animals are collected from a protected area and are fully protected under national laws, decision 160 and decision 06 it means that any enforcement action taken by wildlife protection agencies would be in line with national laws.

During community activities and surveys, we will provide information on our project activities, where necessary this will be in the form of an environmental impact assessment and management plans in local language. We will also make sure that guidance and access to grievance mechanism is made available, this will also be included in signboards and other materials produced.

When community engagement activities are undertaken, such as school programs, we will ensure that resources and presentations are made in local language when working within indigenous communities.

Deo Ca Forest and the Cold Swamp, Phu Yen Province

both of our project sites in Phu Yen province, Deo Ca Forest and the Cold Swamp, are located in two districts. In Tay Hoa district three indigenous groups are present, E De, Ba Na and Cham, with 2 communes having between 10-90% of the indigenous communities of these groups in the district. I present we haven't encountered these ethnic minorities which represent a small proportion of the community. During our debt assessment and community activities we will intend to identify these communes to ensure they are included in discussions and assessment. In Song Hinh district 19 of the 22 communes have ethnic minorities, ranging from between 10-90% of the population. As of yet we have not identified which ethnic minorities occur in Song Hinh district from the 11 different ethnic groups that occur in Phu Yen province.

With regards the proposed Deo Ca Forest protected area, this area should already have protected status meaning that hunting and resource collection is prohibited and the southern Vietnamese box Turtle (*Cuora picturata*) is also fully protected under national law, decree 160 and decree 06. As such any restrictions that may arise as a result of a new protected area would only be the implementation of existing law.

For the cold Swamp in Tay Hoa district, we do not expect any indigenous community use of this wetland, however as part of our activities we will try to identify those individuals using this area and the communities from which they originate.

Mitigation strategy and monitoring and evaluation

At present we have not identified any indigenous communities that are likely to be negatively impacted as a direct result of our project activities. Through the grievance mechanism and the use of our existing reporting system will ensure we capture any development that might require a mitigation strategy.

Through our community activities, whether that be community meetings, threat assessments and surveys or other activities we will make special consideration for indigenous communities potentially disadvantaged groups or individuals is given. With any developments documented and necessary changes to activities or development of mitigation strategies undertaken when necessary.

B. Conflict resolution and complaint mechanism - Grievance mechanism: All projects that trigger a safeguard must provide local communities and other relevant stakeholders with a means to raise a grievance with the grantee, the relevant Regional Implementation Team or the CEPF Secretariat.

We will work to develop a clear strategy for our grievance mechanism, this will include but not be limited to the following:

- In key communities in which we are working on bordering our project sites we will provide community leaders and heads of community groups (e.g. Women's Union, Youth Union, Farmers Union etc.) copies of the environmental and social management plan and health and safety plan.
- At community events, such as no-hunting agreement signings or community sporting activities, we will make available small flyers that highlight key project objectives at the local site along with contact details for reporting grievances. When necessary these will also be provided in local language.
- During talks and presentations within the local community we will ensure that the grievance mechanism is mentioned, where PowerPoint presented, we will add slides providing contact details for the grievance mechanism.
- We will produce short outlines for the project objectives and grievance mechanism to share with our project partners and discuss in more detail with them the need for the safeguard and how they apply to local communities and relevant stakeholders, in particular of vulnerable or disadvantaged groups and ethnic minorities within these communities.
- Where signboards are installed in community areas, we will ensure a section within the signs covers the grievance mechanism and provides the relevant contact details.
- The above stated resources will carry the information:

- Email and telephone contact information for the grantee organization. – Hoang Van Ha
- Project Manager, Tel: +84 (0) 24 7302 8389 or +84 (0) 981 175 912. Email:

- hvha@asianturtleprogram.org or info@asianturtleprogram.org

- Email and telephone contact information for the CEPF Regional Implementation Team (RIT)

Nguyen Duc Tu

RIT National Coordinator, Viet Nam

Biodiversity Coordinator

IUCN Viet Nam

1st floor, 2A Building, Van Phuc Diplomatic Compound

298 Kim Ma, Ba Dinh, Ha Noi, Viet Nam

Tel: +84 913 247 551

- The email of the CEPF Executive Director: cepfexecutive@conservation.org

- If we receive any grievance, we will share all grievances – and a proposed response – with the Regional Implementation Team and the CEPF Grant Director within 15 days. If the claimant is not satisfied following the response, they may submit the grievance directly to the CEPF Executive Director at cepfexecutive@conservation.org or by surface mail.

- 16. Budget:** This section will summarize dedicated costs related to compliance with the safeguard policy on Indigenous Peoples. These costs should be incorporated into the budget of the CEPF grant and/or covered by co-financing.