

HCV Assessment Report PT Sumalindo Hutani Jaya Unit

II

East Kalimantan, Indonesia

Asia Pacific Consulting Solutions

June 30, 2014

FINAL



ACKNOWLEDGEMENTS

We would like to thank Asia Pulp and Paper Group (APP) and Sinar Mas Forestry (SMF) for providing us the opportunity to help on such a dynamic and significant shift in the approach by the companies in managing their plantation concessions and the additional important high conservation value resources that are contained within. Particularly Ms. Linda Wijaya, Aida Greenbury, Rolf Jensen, Dolly Priatna and Dewi Bramono of APP were invaluable in providing guidance while still allowing for independence throughout the project. Robin Mailoa, Elim , and Adrianto plus the SMF staff at the field level has provided needed support in accomplishing what needed to be done within such a short time frame.

Equally as important, we would like to thank the 80+/- individual subcontractors without whom we would not have been able to achieve the objectives of the project. They worked hard, were dedicated and showed true professionalism throughout the entire period. Although too many to be acknowledged individually, of particular note are Kevin O’Grady of Pinnacle Quality Pty Ltd, Sam Ponder of SDP Holdings Pty LTD, Langlang Tata Buana and Yana Suryadinata are to be commended for their leadership skills in helping to manage the entire field data collection process. We would also like to thank Kenichi Shono of PT Hatfield Indonesia, Martin Hardiono, Iwan Kurniawan Permadi and Ersu Juara for their valuable time in assisting with the overall management of the project.

Finally, without the assistance, advice and guidance of key stakeholders in civil society to help us stay true to the HCV concept and ensure we remain committed to transparency and independence, the following group are just a few of the many that were there for us when we needed.

Greenpeace

WWF Indonesia

WWF International

HCVRN Indonesia

HCVRN International

Forest People’s Program

Eyes on the Forest

The Forest Trust

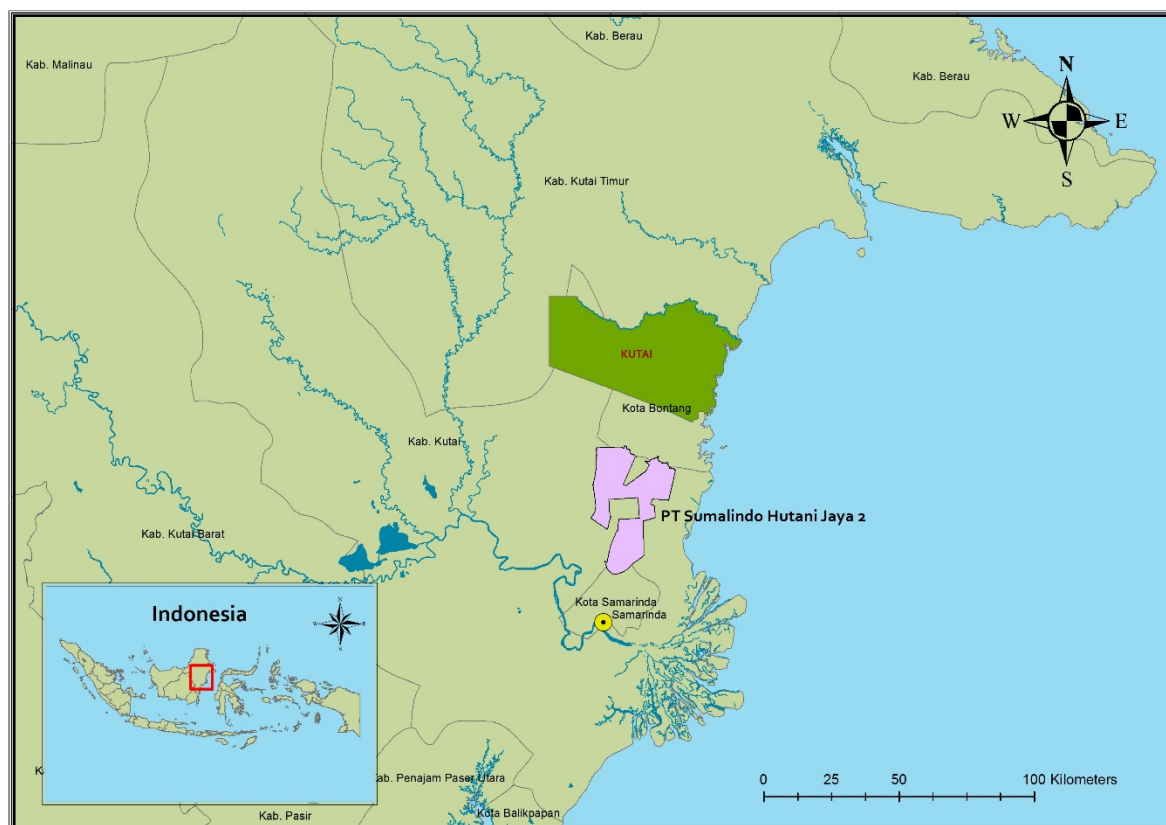
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and many others at the local level

Thank you all!!

EXECUTIVE SUMMARY

The HCV Assessment in East Kalimantan province focused on two (2) concessions comprised of PT Sumalindo Hutani Jaya Unit 1 (SHJ1) and PT Sumalindo Huntani Jaya Unit 2 (SHJ2) all of which provides timber supply to PT Lontar Papyrus Pulp & Paper Industry which belongs to Asia Pulp & Paper (APP) Group. This particular report present findings for PT SHJ2 and the scope of the HCV Assessment for PT SHJ2 is limited only to primary field data collection within the area within the concession area.



PT SHJ2 is a forest management enterprise managing an industrial plantation forest located within Kutai Kartanegara Regency of East Kalimantan Province. Some of the concession area has been converted into plantation for pulpwood (planted forests), however a significant portion remains in degraded natural forest and shrub.

Project Ownership

This project was commissioned by Asia Pulp and Paper Group. Asia Pulp and Paper Group (APP) is a trade name for a group of pulp and paper manufacturing companies in Indonesia and China. The APP group of companies is one of the world's largest vertically integrated pulp and paper companies, with an annual combined pulp, paper, and converting products capacity of over 18 million tons. APP-Indonesia and APP-China currently market their products in more than 120 countries across six continents. Asia Pulp & Paper's Indonesian administrative office is located at Sinarmas Land Plaza, Jalan Thamrin, Jakarta, Indonesia.

At the time of this report, the pulp mills of the Asia Pulp and Paper Group (APP) receive pulpwood from the HTI concessions of 38 suppliers located on the islands of Sumatra and Borneo. This project covers one (1) of those supplies on the island of Sumatra.

Concession Historical Aspects

SHJ 2 was established in 1992 per the Notarial Deed No. 4 dated 1 April 1992 made before Notary Benny Kristianto, S.H. and is already authorised by the Ministry of Justice pursuant to the Decree No. C2-3221.HT.01.01.TH.92 dated 25 April 1992. The shareholding composition in the company was as follows: PT Sumalindo Lestari Jaya, Tbk. (60%) and PT INHUTANI I (40%). The notarial deed has been subject to several amendments, lastly made before Notary Linda Herawati, S.H. with the Deed No. 16 dated 14 January 2010. P T SHJ Unit II has been granted with the Definitive Decree No. 675/Kpts-II/1997, dated 10 October 1997, for an area of 70,300 hectares. As of the date of 26 November 2009 PT SHJ was taken over by APP Group through the ownership of PT Pabrik Kertas Tjiwi Kimia and PT Purinusa Ekapersada.

During its working period SHJ 2 has undergone several ownership changes as presented by the following table:

No	Year	Ownership
1	1992 – 2009	PT Sumalindo Lestari Jaya, Tbk. + PT Inhutani I
2	2009 – 2011	PT Pabrik Kertas Tjiwi Kimia, Tbk. (Sinarmas Group) + PT Inhutani I
3	2011 – now	PT Pabrik Kertas Tjiwi Kimia, Tbk. (Sinarmas Group) + PT Perinusa Ekapersada

Assessment Findings

Between February and March 2013 the area of PT Sumalindo Hutani Jaya Unit ii (SHJ 2) was surveyed for presence of high conservation values using the toolkit for identification of high conservation values in indonesia 2010. This study was on a scale and at a level of detail that had never been done before. Understanding the nature of HCV is fundamental to developing strategies to maintain and enhance the values and is a pre requisite to meeting the requirements of sustainability standards eg FSC principle 9. In addition, no conversion of HCV area is a key element of APP’s Forest Conservation Policy.

In an effort to provide APP a result that could be more easily utilized, this report is prepared at the concession (Forest Management Unit) level. The concession report provides:

- Introductions and assessment methods conducted during the survey for ecology, soil, hydrology, and social,
- HCV definitions according to the HCVF Toolkit for Indonesia,
- a landscape context summary of the management unit derived from secondary data and map analysis,
- a landscape perspective in which the concession is operating within,
- findings of the assessment,
- management and monitoring recommendations based on the identified threats, and
- barriers should the company choose to pursue FSC certification in the future.

There was a preliminary assessment conducted for SHJ1, and in addition there had been a landscape level assessment for all of East Kalimantan by Daemeter Consulting, thus this was the primary source of secondary data used prior to the field work. The field assessment sampled the area extensively using a systematic methodology for all HCV classes based on the latest Indonesia HCV toolkit available that is explained in greater detail in Section 1.

The following descriptions summarise the results of the HCV identification process:

HCV 1 Areas with Important Levels of Biodiversity

HCV 1.1 Areas that Contain or Provide Biodiversity Support Function to Protection or Conservation Areas

In the northeast area of the concession there is a government designated protected area (Bontang Protected Forest) that has been significantly encroached up by the local communities. Just to the north of this protected area is the Kuntai National Park. In addition, SHJ 2 management unit has established protection areas along riparian buffer zones inside its concession. These protection areas inside the concession cover 18,493.61 ha, or around 26.31 % of the total SHJ 2 area, and follow provisions laid out by Ministry of Forestry rulings. These protection areas are riparian buffer zones along the Tabor, Mao Kanan and Santan Ulu rivers, as well as a number of other rivers inside the SHJ 2 concession. In addition to water catchment areas (secondary forest), lakes, springs and riparian buffers, a basin that constitutes a water source has also been made a protection area thus a total area of 23,712.16 ha for HCV/A 1.1.

HCV 1.2 Critically Endangered Species

Field observations revealed no HCV 1.2 fauna species, but there was one HCV 1.2 flora species: *Dipterocarpus cf. validus (keruing)* which is categorised as critically endangered (CR) on the IUCN Red Data List. This species was found in the remnants of secondary forest inside the SHJ 2 concession. There is Bornean orangutan in the concession area, however it is not a CR species, only the Sumatran orangutan has that classification.

HCV 1.3 Areas that Contain Habitat for Viable Populations of Endangered, Restricted Range or Protected Species

This area is explained in the Toolkit (2010) as areas that constitute habitat for viable populations of endangered, restricted range, or protected species and the team found that there were 6 flora species, 12 mammal species, 30 bird species and 8 herpetofauna species that qualify as HCV 1.3 within the concession. Regions with HCV 1.3 value inside the SHJ 2 concession area are riparian buffer zones connected to surrounding secondary forest, small areas of secondary forest and secondary forest bordering forest outside the concession area. However, based on field sampling, in the northwest area of the concession there was a high concentration of HCV 1.3 species observed which under the precautionary principle makes this HCV/A 1.3 as well. However this does not preclude continued management of the plantations that are established in that area, simply a recognition that these species are present and need to be accounted for in the management planning both for natural areas and plantation management.

While a lot more work needs to be done by the company to determine population viability than was available during the assessment, a simple approach to “potential carrying capacity” used was by observing the presence of certain species and linking them to areas that allow populations of the same species in a larger and protected forest landscape in or near the concession.

HCV 1.4 Areas that Contain Habitat of Temporary Use by Species or Congregations of Species

Observations in the SHJ 2 concession area revealed HCV 1.4 in the form of keystone swamp habitats (wetlands) for various bird species and caves where bats breed and nest. In the HCV Toolkit for Indonesia they are categorised as breeding or nesting areas such as caves or wetlands used by birds, bats and reptiles.

HCV 2 Natural Landscapes and Dynamics

HCV 2.1 Large Natural Landscapes with Capacity to Maintain Natural Ecological Processes and Dynamics

HCV 2.1 assessments identified core areas; Bontang Protection Forest (19,000 ha) and Kutai National Park (198,600 ha) landscapes which are connected to each other and directly adjacent to the SHJ 2 concession area in the north. So it can be concluded that HCV 2.1 is present along the Santan River riparian buffer zone and in the remaining secondary forest directly bordering Bontang Protection Forest. Any remaining areas of natural forest in buffer zones inside the concession should be maintained and not converted to non forest even though they may not specifically fall within the buffer zone of HCV 2.1. The management unit should carry out enrichment planting in these areas with local tree species.

HCV 2.2 Areas that Contain Two or More Contiguous Ecosystems

Three approaches used to identify HCV 2.2 i.e. contiguous forest ecosystems were based on (1) **differences in elevation (ecocline)**, the area was formerly a natural lowland rainforest ecosystem with elevations between 0-500 m asl. According to available topographic data, the highest region is around 100 m asl. Most of this area has changed to become a man-made acacia plantation forest ecosystem, while some is heavily degraded lowland rainforest ecosystem. (2) **Contiguous swamp and non-swamp ecosystems and** (3) **presence of kerangas forest**. HCV 2.2 assessments identified several ecosystem types inside the FME concession area lowland tropical rain forest, dryland forest, kerangas forest, karst forest, swamp forest and riparian forest. Assessments and analyses of the FME concession area identified ecotones between upland areas and wetlands, particularly on floodplains.

HCV 2.3 Areas that Contain Representative Populations of Most Naturally Occurring Species

HCV 2.3 was determined by identifying the minimum area required to sustain viable populations of **apex predator** species (for instance, leopard cats and eagles), the presence of highly forest-dependent apex herbivore/frugivore species (for instance, hornbills), or the presence of other species that require large amounts of space for a low density population (for instance, Bornean orang-utans).

Below are several important wildlife species found inside the SHJ 2 area and categorised into the following groups:

- 1) **Apex predators** – Kalimantan has apex predators from the cat family (Felidae), though none of these species were found in the SHJ 2 concession. However, it does have a species that can function as an apex predator; the sun bear (*Helarctos malayanus*). Its main foods are rats, squirrels, lizards, birds and honey. Other apex predators are bird species, such as **eagles and falcons**.
- 2) **Apex frugivores** – There are no apex herbivore species in Kalimantan. Accordingly, attention was directed towards apex frugivore species or seed eaters not preyed on by other wildlife. Bird species categorised as apex frugivores that play a role in seed dispersal in forest ecosystems are **hornbill species**.
- 3) **Large area, low density** – A species that has low population densities and requires a large amount of space on Kalimantan is the large primate; the orang-utan. Bornean orang-utans were still found inside the concession during HCV assessments, suggesting that the area was a main orang-utan habitat before it was converted for plantation forest. Orangutans were also said to be found in the forest being cleared for oil palm estate development near the SHJ 2 concession.

From assessment results and analysis of HCV 2.3 in the SHJ 2 concession area it is apparent that areas that still have and conditions and habitat necessary for maintaining minimum viable wildlife populations are riparian zones connected to surrounding secondary forest and secondary forest bordering forest outside the SHJ 2 concession.

HCV 3 Rare or Endangered Ecosystems

Ecosystem types in the SHJ 2 concession area comprise lowland tropical rain forest ecosystems, such as dryland forest, kerangas forest, limestone forest, swamp forest and riparian forest. Rare and endangered ecosystems in the SHJ 2 concession area take the form of karst forest, freshwater swamp forest and remaining reasonably healthy natural forest. Karst forest plays a hydrological role essential for surrounding areas as it can function as a water catchment area.

HCV 4 Environmental Services

HCV 4.1 Areas or Ecosystems Important for the Provision of Water and Prevention of Floods for Downstream communities

The concession area of SHJ 2 , can be classified into 3 groups :

- (i) Upper reaches of water courses that function as water catchment areas
- (ii) Rivers and their tributaries as flood controllers and water recharge areas
- (iii) Small lakes (lebung), water spring and seeping.

Fitting this category there were a total of 14 sub-watersheds, 42 rivers and a number of springs and seeps which met the requirements for HCV 4.1.

HCV 4.2 Areas Important for the Prevention of Erosion and Sedimentation

HCV 4.2 determined by using DEM that generated into contour and slope. The slope factor used as a limit was the coefficient value of slope length and slope gradient factors in regions categorised as upstream areas (slope >15%). All area with steep slope and containing highly erodible soils, as well as riparian zones along major rivers and tributaries are identified as areas critical for preventing erosion and sedimentation. Steep areas within the upstream areas particularly need to be protected by maintaining vegetation cover necessary to prevent erosion. Maintaining healthy and adequate buffer zones provide a filtration effect that removes significant sedimentation from runoff prior to it entering the streams, rivers and other water bodies. The same 14 sub-watersheds and 42 rivers were found to meet the requirements of HCV 4.2.

HCV 4.3 Areas that Function as Natural Barriers to the Spread of Forest or Ground Fire

These areas are marked by the presence of key elements that have important functions as firebreaks. The important value of such areas is identified from their capacity to prevent or contain actual or potential forest and land fires. Natural firebreaks constitute areas that tend to be wet all year round, or areas that have high moisture levels and relatively low temperatures. A fire break area can be categorised as possessing HCV 4.3 elements if it meets **some** of the following criteria (ProForest, 2003): (i) can naturally prevent, limit or control fires, (ii) covers a large area as a significant barrier to fire and (iii) has or is close to a community settlement, (iv) has or is close to a place of cultural significance (cultural sites, sacred places) and (v) has or is close to a conservation area containing important species or ecosystems. The establishment of HCV 4.3 is done with an approach that forest fires as a potential disaster. Although there is no record of previous fires, areas of potentially permanent firebreaks defined as HCV 4.3 were identified along 10 rivers.

HCV 5 **Natural Areas Critical for Meeting the Basic Needs of Local People**

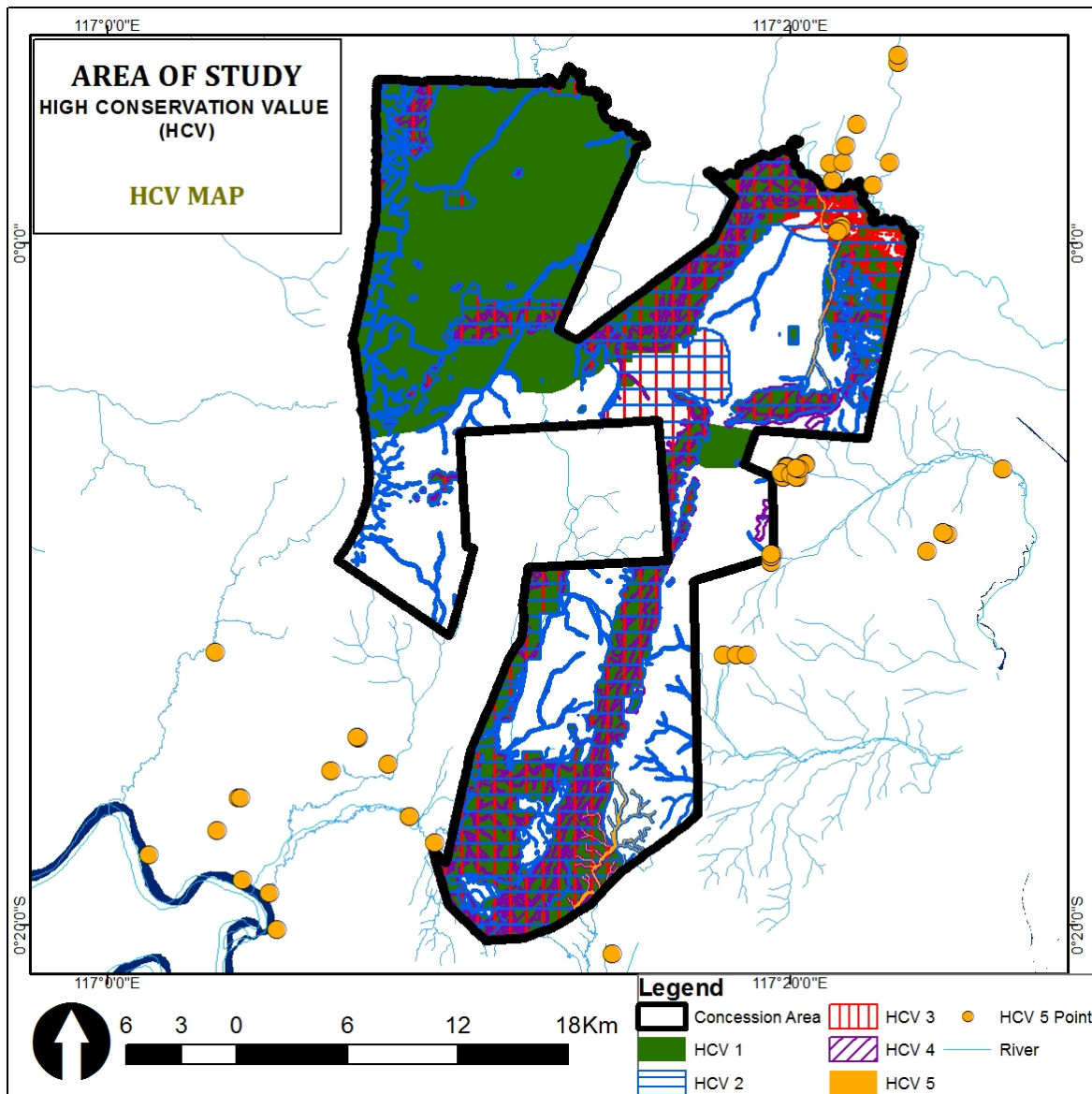
Outcomes of FGDs and interviews show that basic **needs for water** for bathing and washing are met from rivers, wells, springs and rainwater. Of the 34 desa sample villages, 11 (32%) meet their needs from rivers and springs, while 10 villages (29%) get their water from wells and a few from artesian wells or from lakes in former coal excavation sites like those in Mulawarman village. Thus, all HCV 5 found within the concession relates to availability of water for these villages.

HCV 6 Areas Critical for Maintaining the Cultural Identity of Local Communities

No HCV 6 issues were reported inside, but one was reported outside the concession in an area controlled by PT SRH (PT Surya Hutani Jaya).

The following table and map summarize the HCV management areas identified by the assessment team. The size of the concession area based on the license is a bit different if compared with the GIS calculated size as shown in the table below. Regarding this discrepancy, the company has stated the following "The determination of concession area size is based on the Republic of Indonesia Ministry of Forestry Decree (Surat Keputusan or SK) for the plantation forest concession license which includes the appended concession map. Boundary in the field was laid down in accordance to the appended SK concession map. There is inconsistency between the calculated area size based on the field boundary and the area size that was stated in the SK. This variation is caused by the digitization process on the SK concession map, which was only available in hardcopy format when the SK was issued, into the company's Geographic Information System (GIS). The company is still in the process of settling the definitive boundary with relevant government institutions. Under the current situation, the company decided that HCV assessment will use the GIS map which is consistent with field condition."

Type of HCV	HCV area (hectare)
HCV 1.1	23,712.16
HCV 1.2	21,490.38
HCV 1.3	38,936.86
HCV 1.4	2,758.76
HCV 2.1	3,393.83
HCV 2.2	5,481.44
HCV 2.3	25,998.68
HCV 3	28,249.15
HCV 4.1	11,094.54
HCV 4.2	9,020.66
HCV 4.3	1,881.43
HCV 5	403.51
HCV 6	Not Present



Management and Monitoring Recommendations

APP has stated an intention to conduct an extensive “landscape management planning” process upon completion of HCV, HCS and social impact assessments that will provide a clear, holistic approach to dealing with all of the pertinent issues identified. The stated goal is to conduct extensive stakeholder consultations with government, universities, neighboring landusers, civil societies and communities during that process. **As a result management and monitoring recommendations provided in this report, as well as indicative High Conservation Management Areas (HCVMA) are provided in a generic framework to be used as a “guide” to help develop management prescriptions during this more extensive planning process.** HCV category and sub-category recommendations are provided in the full report and the following major generic recommendations have been provided without specific reference to HCV category or sub-category:

- Additional data for all HCV needs to be collected to supplement that from the assessment team, particularly relating to species presence, locality and potential population since due to time and budget constraints only a small fraction of the total area was able to be sampled;

- All final HCV management areas must be delineated on the ground and adequately protected from encroachment to protect and enhance HCV values present with the use of an appropriate buffer;
- Natural areas, particularly riparian zones and those areas that could be part of a larger concession wide wildlife corridor system connecting protected areas inside and outside the concession areas, need to be rehabilitated and restored with natural, indigenous species;
- Consultation with experts on specific species need to occur to determine when management activities have the most and least adverse effect on disturbance as well as what specific habitat needs are required;
- Hunting and encroachment of HCVMA must be controlled and prohibited, either using company staff, community patrols, government enforcement, civil society or a combination;
- Public education at the community level must occur to stress the importance of the HCV values, what they mean to the people living near the concession and why it is critical to protect and enhance these values;
- Designated staff responsible for HCV management should be assigned within each concession (at minimum concession level) and all field staff and contractors need training sessions explaining HCV values present and the importance of protecting and enhancing them;
- Areas with high populations of HCV 1.2 and 1.3 species should be considered for potential restoration as conservation areas;
- Collaboration with neighboring land users, particularly that can negatively influence HCV values within the concession and at the landscape level, must be undertaken in an effort to protect and enhance these values;
- Alternative species that require less intensive water management for survival and productivity need to be examined for peat soils to reduce the negative impact this has on the soil, hydrology and carbon emissions;
- HCV management prescriptions should be based on best practices instead of business as usual, summarized and made publically available;
- Identification of specific environmental values to monitor in order to determine the health of each HCV value and effectiveness of management programs must be developed and monitored on a regular basis;
- Periodic (minimum annually) summaries of monitoring results must be prepared and should be made publically available