Public Sumamry of HCV Management by Bornion Timber Sdn Bhd. / FMU 11

Forest Plantation

1. Background and Overview

Bornion Timber Sdn Bhd. has been entrusted by the state Government to manage the Licensed Area (FMU NO. 11), comprising a total area of 99, 158.27 ha. The license Area has been subdivided into two parts or sub-management units for forest plantation development and natural management respectively.

The company management has determined to have its FMU certified under the Malaysian Criteria and Indicators (MC&I) Forest Plantation Management Certification. Operated by the Malaysian Timber Certification Scheme (MTCS). The total area certified are **25, 536.71 ha**. According to the MC&I for natural and forest plantation, the company is required to make available a public summary of its management prescriptions for areas containing High Conservation Values (HCV). These include standards under MC&I Principle 9 which require to identified, maintain or enhance HCV areas within the Licensed Area. MC&I Criterion 9.3 require these measures to be specifically included in the summary of a public available management plan.

For general overview, the figure on the following page shows the identified conservation and protection areas at compartment level under natural forest management regime, together with the relevant HCV category.

Additional areas at micro-scale would be identified during the process of Comprehensive Harvest Planning (CHP).

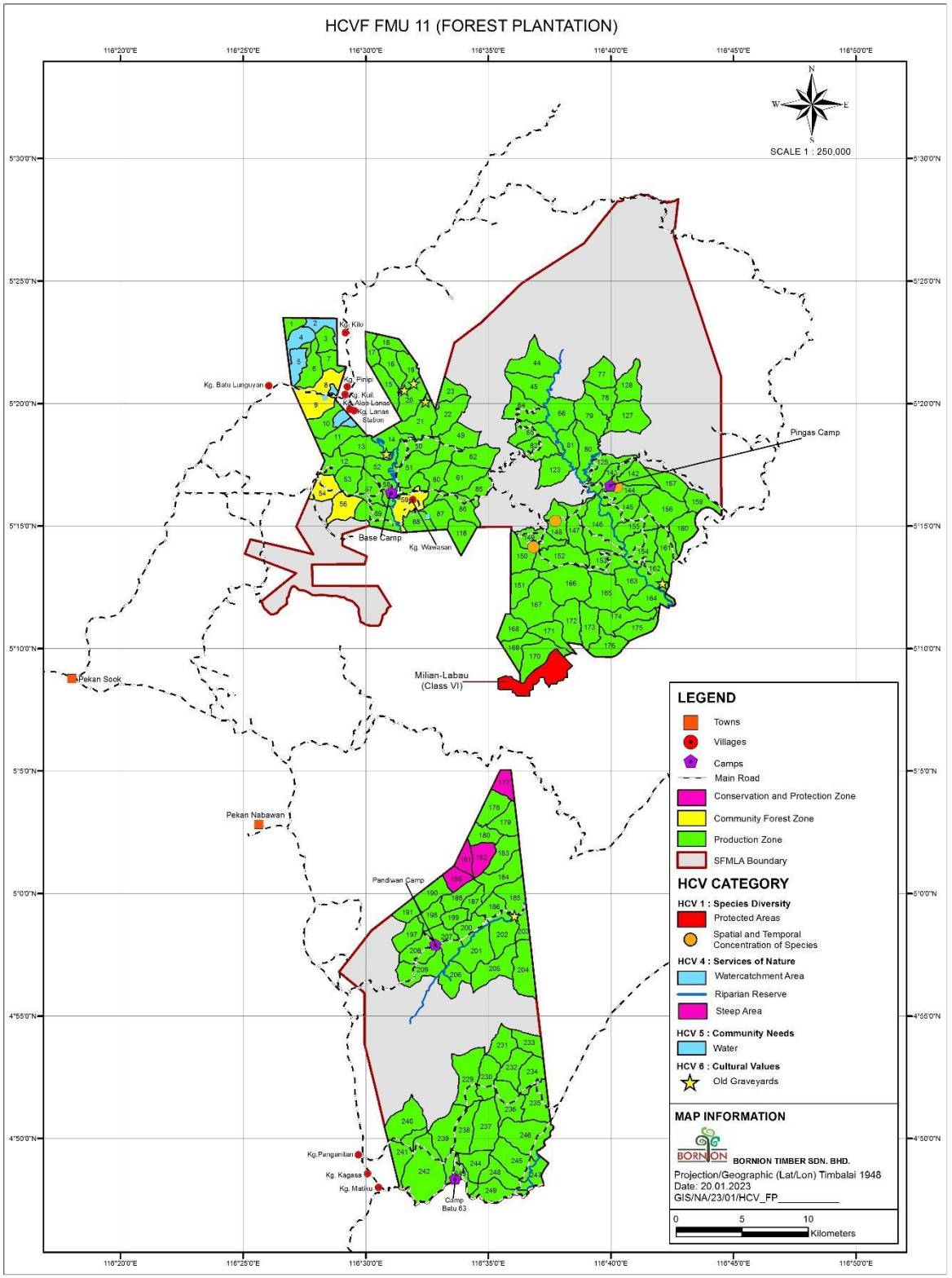

Figure: High Conservation Value in FMU 11 – Forest Plantation Management

2. HCV Area Summary

The following table summarizes the identifies area included in the six HCV categories as described on the High Conservation Value Forest (HCVF) Toolkit for Malaysia (2009) and were updated as in the new High Conservation Value (HCV) Toolkit (2018).

HCV Category	Description
HCV 1: Species Diversity	
Protected Areas	▪ Milian-Labau VJR (Block II) – Cpt. 170
Rare, Threatened and Endangered Species	▪ Fauna – Mammals (33 species) and Avies (58 species) ▪ Flora – Dipterocarpaceae (10 species), Lauraceae (1 species), Rafflesiaceae (1 species), Thymeleaceae (1 species) and Vitaceae (1 species)
Spatial and Temporal Concentration of Species	▪ Pond area for feeding and nesting – Cpt. 148 ▪ Saltlick area – Cpt. 144 and Cpt. 149
HCV 4: Services of Nature	
Watershed Protection	Cpt. 2, 4, 5A, 8A, 9, 10A, 11A and 88
Erosion Control	Riparian reserve area: Sg. Labau, Sg. Pingas, Sg. Melikop and Sg. Pinangah (30 m buffer)
	Areas with slopes >25° (steep areas): Cpt. 177, 181, 182 and 189
HCV 5: Community Needs	
Water	Cpt. 2, 4, 5A, 8A, 10A, 11A and 88
HCV 6: Cultural Values	
Old Graveyards	Cpt. 14, 19, 21,162 and 185.

Additional HCV areas may be added upon identification during research and operational activities. The HCV area summary will be updated an annual interval.

3. Management Prescription for HCV Areas

The management prescriptions for areas with the identified High Conservation Value within the Licensed Area of Bornion Timber Sdn Bhd. are summarized in the table below:

HCV	Attribute	Management prescription
1	Species Diversity	
Protected Areas		● Mark the boundary of the area. ● Undertake ground patrolling to ensure integrity.
Rare, Threatened and Endangered species		● Carry out awareness campaigns and ground patrolling to prevent illegal hunting. ● Set up transect in selected areas to monitor any changes in species composition and abundance.
Spatial and Temporal Concentration of species		● Establish buffer zone. ● Ground patrolling to prevent illegal hunting.
4	Ecosystem Services	
Watershed protection		● Tree marking along buffer boundary at intervals of 20 m. ● Erection of HCV signboards at strategic access points. ● Carry out ground patrolling to ensure integrity. ● Carry out aerial survey in inaccessible areas.
Erosion control		● Establish buffer zones of 30 m width to both sides of riparian reserves. ● Erection of signboards demarcating buffer zone boundaries at strategic locations. ● Ground patrolling to ensure no encroachment takes place. ● Carry out aerial survey in inaccessible areas. ● Tree marking along boundary of steep areas at intervals of 10 – 15 m. ● Erection of signboards to mark steep areas. ● Ground patrolling during timber harvesting operations.
5	Community Needs	
Water		● Protect watershed areas through clear demarcation. ● Ground patrolling of water catchment boundaries. ● Carry out aerial survey in inaccessible areas.
6	Cultural Values	
Old Graveyards		● Buffer zone establishment: 10 m around market graveyard boundary. ● Tree marking along graveyard boundary at intervals of 10 m. ● Ground patrolling to ensure there is no disturbance.

These HCV management prescriptions shall be reviewed at annual intervals to include any new HCV categories, areas and management requirements that support and ensure the protection of these important sites. Updates of this public summary will be regularly published on the company website.

4. Enhancement Measures for HCV Areas

The following table describes the measures to be undertaken to enhance the integrity, quality and functionality of areas containing High Conservation Value that have been or might be affected to some degree of disturbance or degradation.

ITEM	DESCRIPTION
Enhancement Measures	
1	Re-brushing of unclear boundaries and maintenance of HCV signboards for HCV areas
2	Restoration of HCV areas by planting fruit or indigenous species according to original forest type (where applicable)
3	Ensure integrity (i.e. no disturbance) through intensification of regular patrolling and reporting activities
4	Carry out species sampling (flora, fauna) to determine species composition and verify representative (as part of R&D and forest monitoring)
5	Enhance forest ecosystems where they have been disturbed/degraded or otherwise affected negatively through replanting the species typically occurring in the affected ecosystem and/forest type.
6	Provide buffers around representative forest ecosystem areas not to be disturbed.
7	Erect signage and provide fencing for graveyard areas (if agreed by local community) and others areas with high disturbance risk.
8	Conduct HCV training and SMART monitoring by collaboration with WWF
9	Conduct HCV awareness programme for staff and local communities
10	Conduct road blocks and enforcement measures in cooperation with Sabah Wildlife Department
11	Prevent vehicle entry into inactive forest areas by erecting physical barriers
12	Aerial survey to monitor any inaccessible area
13	Set up camera trapping to determine fauna species that present at HCVs area.

5. Annual Monitoring to Assess the Effectiveness of the Measures in the management of the High Conservation Value (HCV)

The following tables assess the effectiveness of the measures in the management of HCV through annual monitoring and future improvement to enhance the effectiveness of the measures.

HCV Category	Management prescription	Effectiveness of the Measures	Future Improvement
HCV 1: Species Diversity			
Protected Areas	● Mark the boundary of the area. ● Carry out ground patrolling.	● Effective but need to improve. ● Boundary of the area was marked ● No physical disturbance reported	● Aerial monitoring to monitor
Rare, Threatened and Endangered Species	● Set up transects to monitor any changes. ● Carry out ground patrolling. ● Conduct tree marking (if any)	● Effective ● No physical disturbance reported ● Wildlife sightings are stable or increase over time.	● None
Spatial and Temporal Concentration of Species	● Establish buffer zone. ● Carry out ground patrolling to prevent illegal hunting.		● None
		● No physical disturbance reported	

HCV Category	Management prescription	Effectiveness of the Measures	Future Improvement
HCV 4: Ecosystem services			
Watershed Protection	• Carry out tree marking along boundary. • Erect HCV signboard at strategic access points. • Carry out ground patrolling.	• Effective but need to improve • No physical disturbance reported • HCV signboard was erected	• Analysis of water quality • Aerial survey to monitor any inaccessible area
Erosion Control	• Establish 30 m riparian reserve. • Carry out tree marking along boundary of steep areas. • Erect signboards at strategic locations. • Carry out ground patrolling to ensure no encroachment.	• Effective • No physical disturbance reported • All accessible riparian reserve and steep areas were established, marked and erected with signboard • Water quality according to NWQSM standards within permitted range	• Aerial survey to monitor any inaccessible area
HCV 5: Community Needs			
Water	• Protect watershed areas. • Carry out ground patrolling.	• Effective but need to improve • No physical disturbance reported • Water quality according to NWQSM standards within permitted range	• Analysis of water quality • Aerial survey to monitor any inaccessible area

HCV Category	Management prescription	Effectiveness of the Measures	Future Improvement
HCV 6: Cultural Values			
Old Graveyards	● Establish buffer zone of 10 m around marked boundary. ● Conduct tree marking along boundary at intervals of 10m. ● Carry out ground patrolling.	● Effective but need to improve ● No physical disturbance reported ● No complaints received from local communities	● Aerial survey to monitor any inaccessible area

6. Available of Results from Monitoring Activities in Areas with High Conservation Value (HCV)

The results from monitoring activities in HCV areas in 2023 are as follow:

HCV Category	Results of Monitoring
HCV 1: Species Diversity	
Protected Areas	▪ The protected areas are still in good condition and no physical disturbance had been reported. ▪ The area boundary was marked and a signboard for HCV 1 was erected on site. ▪ Ground patrolling had been conducted regularly.
Rare, Threatened and Endangered (RTE) Species	▪ In 2022 ground monitoring were unable to be done at Cpt 177 for HCV annual monitoring due to inaccessible road. Therefore, there are no number of Rafflesia were recorded recently for Cpt 177. However, FMU's boundary around Cpt 177 were rebrushed to prevent encroachment.
Spatial and Temporal Concentration of Species	▪ There are three (3) sites of spatial and temporal concentration of species in ITP area were observed: Saltlick area at Cpt. 144 and Cpt. 149 and freshwater pond at Cpt. 148. ▪ There were five (5) birds species were recorded present at the saltlick area at Cpt 144 through direct sighting. The species are; Orange Bellied Flower Pecker, Little Spiderhunter, White Crowned Sharma, Black Headed Pitta and Yellow Vented Bulbul. As for mammals, there were only two (2) species were recorded which are Sambar deer and Otters. ▪ Eleven (11) numbers of bird's species were observed through direct sighting at Cpt 148. The species are Hill Myna, Dusky Munia, Yellow Vented Bulbul, Pied Fantail, Blue-eared King Fisher, Magpie Robin, Plaintive Cuckoo, Zebra Dove, Pacific Swallow, Greater Coucal and Chestnut Wing Babbler. ▪ In 2022, there is no camera trap were installed in the Cpt 149. However through ground monitoring, the saltlick were remained active with wildlife present such as Sambar deer.

HCV Category	Results of Monitoring
HCV 4: Ecosystem Services	
Watershed Protection	▪ Boundary was marked and HCV signboard was erected. ▪ Ground patrolling was carried out and no physical disturbance reported.
Erosion Control	▪ Ground patrolling were done regularly and found no disturbance. ▪ Water quality according to NWQSM standards mostly within permitted range.
HCV 5: Community Needs	
Water	▪ There was no physical disturbance reported by local community.
HCV 6: Cultural Values	
Old graveyards	▪ A buffer zone of 10 m was established around the old graveyard. ▪ Ground patrolling was carried out and no physical disturbance was reported. ▪ No complaints were received from local communities

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