



## Summary of Identification and Monitoring

HIGH CONSERVATION VALUE (HCV)

MUJONG – MELINAU

FOREST MANAGEMENT UNIT (FMU)

T/3361

### Introduction

The **High Conservation Value** (HCV) assessment was carried out by an independent consultant in April–October 2016 and the assessment report was released on May 2017. The assessment conducted was based on the tasks and attributes provided in High Conservation Value Forest (HCVF) Toolkit for Malaysia (October 2009) by WWF Malaysia.

The objectives of HCV assessment Mujong – Melinau FMU are listed below;

- 1) To identify High Conservation Values (HCV) presence within Mujong – Melinau FMU based on the tasks and attributes provided by WWF toolkits.
- 2) To propose a boundary delineation with relevant guidelines on HCV presence within the FMU.
- 3) To make management recommendations and monitoring procedures to protect, maintain and enhance any identified HCVFs.

## Findings on HCV identification assessment

In summary, the findings of **High Conservation Value** (HCV) within FMU based on the tasks and attributes provided by WWF toolkits are listed as Table 1 below;

**Table 1:** Summary of HCV findings.

Category of HCV	Sub HCV	Task and Attribute	Findings
<b>HCV 1</b> Biodiversity Values on forest area with globally, regionally or nationally significant biodiversity values	1.1	Determined if any Totally Protected Areas (TPAs) is present within or adjacent the FMU	Potentially Present
	1.2	Protected, Endangered and Threatened species according to Wild Life Protection Ordinance 1998, IUCN and Appendix II of CITES	Present
	1.3	Determine if forest area contains endemic species of flora or fauna	Present
	1.4	Critical temporal areas important for wildlife	Present
<b>HCV 2</b> Landscape-level forest	-	Forest areas important for wildlife species to exist in natural patterns of distribution	Present
<b>HCV 3</b> Endangered Ecosystems	-	Threatened or Endangered Ecosystems prioritized for conservation management as defined under National Conservation Strategy	Present
<b>HCV 4</b> Forest area that provides basic services of nature in critical situations	4.1	Watershed protection on forest area legally gazetted as Protection Forest for water catchment.	Present
	4.2	Determine if forest area is classified as Terrain 4.	Present
	4.3	Erosion Control on forest areas that have been legally gazetted for soil protection or conservation	Present
<b>HCV 5</b> Basic needs of local community	-	Forest area is fundamental to meeting basic needs of local communities.	Present
<b>HCV 6</b> Cultural identity of local communities	-	Forest area is critical to local communities' traditional cultural identity	Present

### Control Measure, Management and monitoring to the HCV findings

The FMU will manage, maintain and monitor the HCV identified based on the HCV report findings. The relevant recommendation in assessment report will be used as the baseline in managing and monitoring of HCV attributed presence within FMU. The control measure, action taken and monitoring are shown in table 2 below;

**Table 2:** Summary of control measures, action taken and monitoring

### HCV 1 – BIODIVERSITY VALUES

<b>HCV 1.1 - Protected Areas</b>		
<b>Control measure</b>	<b>Action taken</b>	<b>Monitoring</b>
The FMU should take management consideration on logging activities along the boundary of the proposed Hose-Laga National Park connected or adjacent with FMUs boundary. Upon and until the TPA is legally gazetted, the FMU will implement management actions in safeguarding HCV 1.1		
<b>HCV1.2 - Endangered, Rare and Threatened (ERT) SPECIES</b>		
<b><u>Flora</u></b>		
<b>Control measure</b>	<b>Action taken</b>	<b>Monitoring</b>
Training to surveyor and crew in tree ID; particularly the protected trees such as fig tree, mothers' tree and ERT species tree under WLPO 1998, CITES and IUCN Red list	Provide tree ID training program organized by STA, FDS and SFC to the surveyors.	Carried out internal audit on pre-felling inventory record to ensure the operation adheres to the procedures in pre-felling RIL guidelines to protect the threatened species and mother trees.
Marking ERT tree species and protected tree.	During the field work, the surveyor and tree feller will mark the protected tree and mother trees in order to protect them.	

<b><u>Fauna</u></b>		
<b>Control measure</b>	<b>Action taken</b>	<b>Monitoring</b>
Enhance awareness on wildlife particularly ERT species of fauna to workers and local communities.	<ol style="list-style-type: none"> <li>Briefing on ERT species of wildlife has been conducted to camp workers and local communities.</li> <li>ERT species poster has been put up on notice board at worker quarters, dining hall, FMU office, workshop and security post. The posters are also distributed to longhouses.</li> </ol>	<ol style="list-style-type: none"> <li>Long-term monitoring shall be carried out to gather information on the ERT fauna species population present at FMU, especially the species under Totally Protected (WLPO), Appendix I (CITES) and the Critically Endangered and Endangered (IUCN).</li> </ol>
To find out the information of ERT species abundance and distribution or presence of any new species	Recording during routine duty of any sighting, sound and sign of ERT species in the field has been carried out.	<ol style="list-style-type: none"> <li>The dynamics of the indicators will be gathered (e.g. Species Diversity, Richness, Evenness, Relative Density, Species Composition) after timber harvesting and continuously monitored.</li> </ol>
Strictly complying with “No hunting” and DF circular 6/99 for workers and outsiders	<ol style="list-style-type: none"> <li>“No hunting” signage and DF circular 6/99 are installed at FMU entrance and camp area.</li> <li>Security control and registration at FMU entrance.</li> </ol>	<ol style="list-style-type: none"> <li>Regular checking on the log book records.</li> </ol>
Marking critical resources for feeding and breeding of wildlife, such as fig tree	During Pre-Felling inventory, fig trees, protected trees and nesting tree should be tagged and recorded.	<ol style="list-style-type: none"> <li>Registration log book records should be updated regularly.</li> </ol>
<b>HCV 1.3 - Endemism Species</b>		
<b>Control measure</b>	<b>Action Taken</b>	<b>Monitoring</b>
The control measures, action taken and monitoring in HCV 1.3 is similar to HCV 1.		

<b>HCV 1.4 - Critical Temporal Use</b>		
<b>Control measure</b>	<b>Action Taken</b>	<b>Monitoring</b>
Establish buffer zone to protect critical site from disturbance by logging activities.	The identified saltlick has been demarcated with 100m buffer.	Periodic surveys carry out on saltlick area to monitor animal activities and ensure no encroachment or disturbance by machinery in the demarcation boundary.
Protection of potential nesting tree.	During the pre-felling inventory, potential nesting trees should be tagged and recorded.	Pre harvesting inventory should indicate the potential nesting tree on the protection tree record.

**HCV 2 - LANDSCAPE- LEVEL FOREST**

<b>Control measure</b>	<b>Action Taken</b>	<b>Monitoring</b>
To protect the river riparian reserve from any operation encroachment	The ground demarcation of riparian buffer has been conducted following guidelines recommended by NREB. Buffer zone signage was installed at roadside.	Periodic monitoring on the water quality following Environment Compliance Audit (ECA) implementation.

**HCV 3 - ENDANGERED ECOSYSTEM**

<b>Control measure</b>	<b>Action Taken</b>	<b>Monitoring</b>
Identified coupe low stand and allowed to regenerate and selected the Perfect Candidate Tree (PCT) to harvest.	Reduce Impact Logging (RIL) been conducted included the practical training on the ground by SFC for the surveyor and tree feller.	Internal assessment and audit to ensure compliance with management prescription.

**HCV 4 - SERVICES OF NATURE**

<b>HCV 4.1 - Watershed Protection</b>		
<b>Control measure</b>	<b>Action Taken</b>	<b>Monitoring</b>
Mark and mapped on the ground any terrain class IV identified during pre-harvesting inventory.	During implementing pre harvesting activities, any areas identify in category terrain class IV should be marked and mapped.	Checking on terrain class IV area prior to the submission of Detailed harvesting Plan (DP) for Permit to Enter Coupe (PEC).
To limit any activities at the areas steep slope above 33° within FMU.	During the harvesting operation, no logging activities is allowed in category terrain class IV (classified slope 35°) area.	
<b>HCV 4.2 - Erosion Control</b>		
<b>Control measure</b>	<b>Action Taken</b>	<b>Monitoring</b>
Adhere with the guidelines approval condition as stipulated in EIA and RIL	<ol style="list-style-type: none"> <li>1. No logging activities should be allowed within Stream Bank Buffer Reserve (SBR).</li> <li>2. Carryout river buffer demarcation</li> <li>3. Re-using existing road and skid trail within FMU</li> <li>4. Proper drainage maintenance and road maintenance.</li> </ol>	Periodically monitoring following Environment Compliance Audit (ECA) implementation.

<b>HCV4.3 - Barrier Destructive Fire</b>		
<b>Control measure</b>	<b>Action Taken</b>	<b>Monitoring</b>
Monitor any activities of local communities in SA area during dry season especially nearest with the operation areas.	Periodically monitoring the fire prone area especially, the SA near to operation area during dry season.	Any issue related to open burning should be recorded. The reports of any occurrence will be prepared and discussed in FMCLC.

### **HCV 5 - BASIC NEED OF LOCAL COMMUNITY**

<b>Control measure</b>	<b>Action taken</b>	<b>Monitoring</b>
Protect the local community areas that provided basic need such as food sources and water sources for livelihood from any impacts of operation.	<ol style="list-style-type: none"> <li>1. The ground demarcation of boundary was conducted to protect the Shifting Agriculture (SA) areas within and adjacent with operation areas.</li> <li>2. All longhouses water catchments within FMU have been identified, mark, and mapped.</li> </ol>	<ul style="list-style-type: none"> <li>● Any issue arise, conflict and grievances should be recorded. The Forest Management Certification Liaison Committee (FMCLC) meeting is conducted annually to monitor the issues.</li> <li>● The water catchment area is demarcated on HCV map for monitoring.</li> </ul>

### **HCV 6 - CULTURAL IDENTITY OF LOCAL COMMUNITY**

<b>Control measure</b>	<b>Action taken</b>	<b>Monitoring</b>
Protect the burial site of local communities within FMU.	All longhouses burial site within FMU has been identified, marked and mapped.	The monitoring of HCV 6 is same as HCV 5.