

**HIGH CONSERVATION VALUE (HCV)
MANAGEMENT AND MONITORING PLAN
FOR SCA SFM PROJECT**



Prepared by SCA SFM Project

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INTRODUCTION

High Conservation Value (HCV) is areas that encompass exceptional or critical ecological attributes, ecosystem services and social function (eg. endemism, endangered species, refugia). The HCV areas can be classified into 6 categories as listed below.

HCV1. Forest areas containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species).

HCV2. Forest areas containing globally, regionally or nationally significant large landscape level forests, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.

HCV3. Forest areas that are in or contain rare, threatened or endangered ecosystems.

HCV4. Forest areas that provide basic services of nature in critical situations (e.g. watershed protection, erosion control).

HCV5. Forest areas fundamental to meeting basic needs of local communities (e.g. subsistence, health).

HCV6. Forest areas critical to local communities' traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).

The HCV Management and Monitoring Plan encompasses objectives, management target, management and monitoring strategies and verifiers which are crucial to ensure everything in placed. However, the above list and the contents of these documents should not be treated as a final complete document and is subjected to further revision as and when required. This is related to the FCP Interim Standard for Forest Management Certification in Malaysia, especially Principle 9 Criterion 9.4 Indicator 9.4.1

OBJECTIVES

This document serves as a guideline and reference on the **SCA SFM Project** in managing and monitor the particular HCV attributes. It also serves as a management and monitoring plan to ensure that the environment impacts are prioritized and well taken care of in the SFM Project.

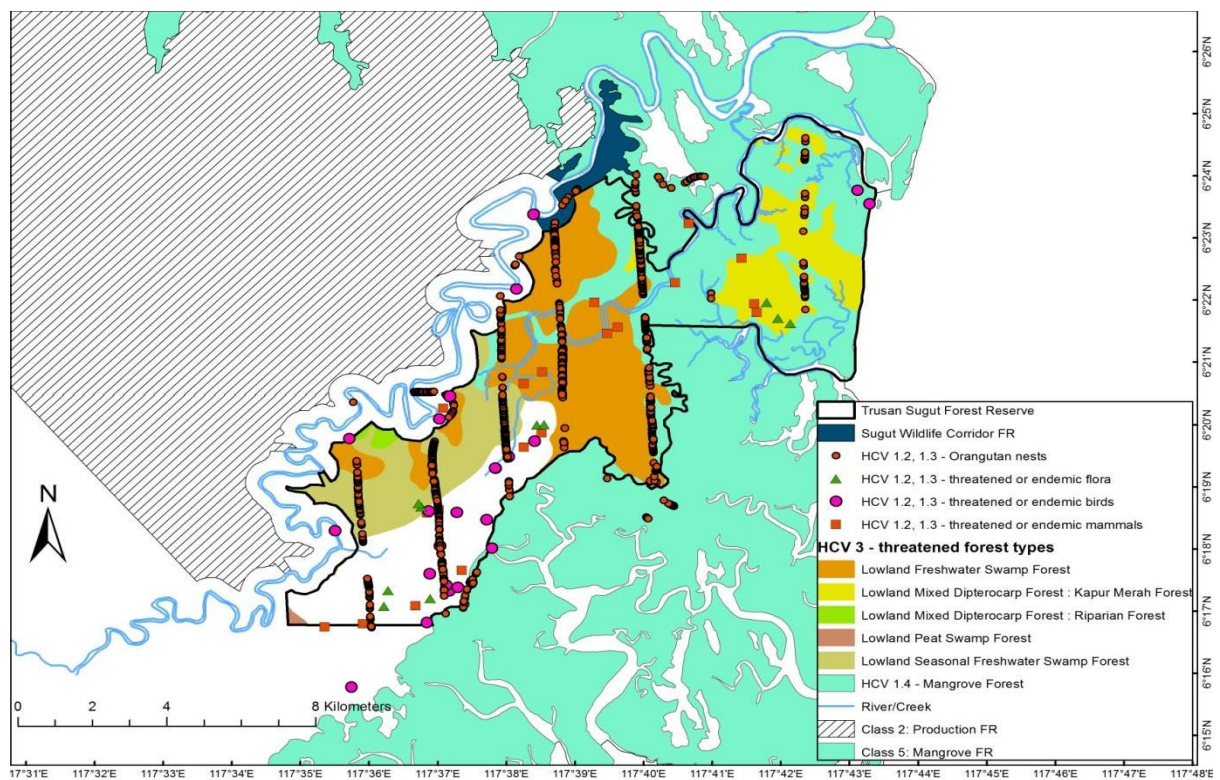


Figure 1: Composite map of HCV 1.2 -1.4 and HCV 3

HIGH CONSERVATION VALUE (HCV) MANAGEMENT AND MONITORING PLAN FOR SCA SFM PROJECT

HCV 1: BIODIVERSITY VALUES						
General HCV Management Objectives	Specific HCV Management objectives	Management Target	Management Strategies		Operational/Strategic/Threat Monitoring	Verifier
			Area	Prescriptions		
<p><u>HCV 1.1: Protected Area</u></p> <p>TSFR as protected area entirely including the boundary is maintained and enhanced.</p>	<p>Reduce the number of illegal activities and fire occur within the TSFR</p> <p>*Indicators:</p> <p>1. Number of encroachment/ tree felling/ illegal hunting/ illegal fishing/ fire locations.</p> <p>2. Total number of area encroachment/ tree felled/ animals/ mass of fish poached/ area burnt in fire.</p>	<p>Zero encroachment, fire, poaching, illegal felling and NTFP extraction in the TSFR</p>	<ul style="list-style-type: none"> • Entire TSFR 	<ul style="list-style-type: none"> • No entry without permission • No illegal felling • No poaching • No NTFP extraction • No open burning within the TSFR as well as right nearby/ boundary of TSFR • No illegal fishing • Signboards to prohibit any illegal activities to be erected and visibly maintained at the strategic location. • Awareness sessions to be conducted with local communities and neighbouring plantation owners regarding the protection status of TSFR, applicable laws, forest fire, biodiversity and habitats within. 	<ul style="list-style-type: none"> • Periodic monitoring and control to prevent encroachment in the TSFR. • Monitoring to be conducted as documented target in AWP as follow: <ul style="list-style-type: none"> I. Aerial survey: 6 times per year. II. Land monitoring to be conducted 2 times per week. III. Sea/river monitoring to be conducted 3 times per week. • The Land and Sea/River monitoring report to be prepared and sent to Beluran District Forestry Office for further actions. • Honorary Forest Warden act as eyes and ears to TSFR management. • The Satellite imagery to be used as a tool to monitor or detect hotspots. 	<ul style="list-style-type: none"> • Aerial survey report • Land and Sea/River monitoring report • <i>Borang-04: HCV 1.1: Rondaan Laut dan Sungai SFM SCA Hutan Simpan Trusan Sugut Beluran</i> • <i>Borang-05: HCV 1.1: Borang Rondaan Darat SFM SCA Hutan Simpan Trusan Sugut Beluran.</i> • Stakeholder Consultation meeting minutes. • List of stakeholders • AWP, Compliance Report and Quarterly Report • Communities and stakeholders grievance report • Satellite imagery monitoring report.
			<ul style="list-style-type: none"> • Boundary TSFR (particularly neighbouring estate) I. Sayoung Mas Sdn. Bhd II. IJM Plantation Berhad III. IDC Jadi Sdn. Bhd IV. Hibumas Sdn. Bhd 	<ul style="list-style-type: none"> • No entry without permission • No illegal felling • No poaching • No NTFP extraction • No open burning within the TSFR as well as right nearby/ boundary of TSFR • Signboards to prohibit any illegal activities to be erected and visibly maintained at the strategic location. 		

				<ul style="list-style-type: none"> Awareness sessions to be conducted with local communities and neighbouring plantation owners regarding the protection status of TSFR, applicable laws, forest fire, biodiversity and habitats within. 		
			<ul style="list-style-type: none"> Sea/River: <ol style="list-style-type: none"> Sg.Sugut Parai, Sg.Sugut, Sg.Ladang, Sg.Rose, Sg.Cebai, Sg.Bhetumue, Sg.Pintasan, Sg.Juyan 	<ul style="list-style-type: none"> No entry without permission (riparian reserves) No illegal felling No poaching No NTFP extraction No open burning within the TSFR as well as right nearby/ boundary of TSFR Signboards to prohibit any illegal activities to be erected and visibly maintained at the strategic location. Awareness sessions to be conducted with local communities and neighbouring plantation owners regarding the protection status of TSFR, applicable laws, forest fire, biodiversity and habitats within. 		
<p><u>HCV 1.2: Threatened and Endangered Species</u></p> <p>Significant concentration of RTE species are maintained</p>	Maintain the habitat size of RTE species for flora.	Zero poaching, illegal felling and collecting any species which listed as RTE species in TSFR	<ul style="list-style-type: none"> Entire TSFR 10 permanent sample plots: 10 x 0.13ha 	<ul style="list-style-type: none"> No entry without permission No illegal felling and collecting trees species (except for authorised survey) Signboards of PSPs (No., Coordinate No, etc.), HCV 1.2 and list of RTEs species 	<ul style="list-style-type: none"> Monitoring structure and composition within the PSPs to be conducted every 5 years as stated in FMP. Satellite imagery used to detect hotspots 	<ul style="list-style-type: none"> AWP, Compliance Report and Quarterly Report Enforcement plan Wildlife monitoring report. Satellite imagery monitoring report.

or enhanced				<p>within the PSPs to be erected at the strategic locations.</p> <ul style="list-style-type: none"> The degraded parts of the TSFR to be rehabilitated with planting of endangered local species where suitable (refer to Reuben N. and John S., 2015) 		
	<p>Maintain the habitat size of RTE species of fauna</p> <p>Zero hunting of Orang-Utan within TSFR</p> <p>Maintain and enhance the habitat and Orang-Utan food trees within TSFR.</p>		<ul style="list-style-type: none"> Entire TSFR 250ha is for Enrichment planting 	<ul style="list-style-type: none"> No entry without permission No illegal felling No poaching No NTFP extraction No open burning within the TSFR as well as right nearby/ boundary of TSFR Enrichment planting of fleshy-fruited trees to enrich habitat for RTE species. 	<ul style="list-style-type: none"> Patrolling to be conducted to prevent /minimize hunting within TSFR as stated in AWP and enforcement plan. <ul style="list-style-type: none"> I. Land monitoring to be conducted 2 times per week. II. Sea/river monitoring to be conducted 3 times per week. A comprehensive enforcement plan to be implemented to safeguard the fauna HCVs identified (refer WWF-Malaysia,2015, <i>unpublished</i>) The distribution of Orang-Utan to be mapped once in 2 years based on FMP. The population size of Orang-Utan to be monitor 3 times within 10 years based on FMP. 	
<p><u>HCV 1.3: Endemism</u></p> <p>Significant concentration of endemic species are maintained or enhanced</p>	<p>Maintain the habitat size of endemic species of flora and fauna</p> <p>Zero hunting of endemic species within TSFR</p>	<p>Zero encroachment, poaching, illegal felling and collecting any species which listed as endemic species in TSFR</p>	<p>Similar to HCV 1.2</p>	<p>Similar to HCV 1.2</p>	<p>Similar to HCV 1.2</p>	<ul style="list-style-type: none"> AWP, Compliance Report and Quarterly Report Enforcement plan. Wildlife monitoring report.

<u>HCV 1.4: Critical Temporal Use</u>	Similar to HCV 1.1	Zero encroachment, fire, poaching, illegal felling and NTFP extraction particularly within the mangrove area.	<ul style="list-style-type: none"> • Mangrove area in TSFR • Particular riparian/mangrove area: <ol style="list-style-type: none"> 1. Sg.Sugut Parai 2. Sg.Sugut, 3. Sg.Ladang, 4. Sg.Rose, 5. Sg.Cebai, 6. Sg.Bhetumue, 7. Sg.Pintasan, 8. Sg.Juyan 	<ul style="list-style-type: none"> • No entry without permission • No illegal felling • No poaching • No NTFP extraction (to obtain <i>Tangar</i>) • Signage of HCV and signboards to prohibit any illegal activities, etc.) to be erected at strategic locations. • Stakeholder and communities engagement to raise awareness among local communities regarding the important to preserve the forest 	<ul style="list-style-type: none"> • Similar to HCV 1.1 	<ul style="list-style-type: none"> • AWP, Compliance Report and Quarterly Report • Land and Sea/River monitoring report. • <i>Borang-04: HCV 1.1: Rondaan Laut dan Sungai SFM SCA Hutan Simpan Trusan Sugut Beluran</i>
Similar to HCV 1.1		Zero encroachment, fire and poaching	<ul style="list-style-type: none"> • Caves and cavities 	<ul style="list-style-type: none"> • No entry without permission • No illegal felling • No poaching • Further scientific investigations (archaeologists/ geologists) to be carried out. 	<ul style="list-style-type: none"> • Patrolling to be conducted to ensure no encroachment • Both sites are placed under strict conservation zones until further scientific investigations have been conducted. 	<ul style="list-style-type: none"> • AWP, Compliance Report and Quarterly Report

HCV 2: LANDSCAPE-LEVEL FOREST						
General HCV Management Objectives	Specific HCV Management objectives	Management Target	Management Strategies		Operational/Strategic/Threat Monitoring	Verifier
			Area	Prescriptions		
TSFR as totally protected area entirely including the boundary is maintained and enhanced.	<p>Reduce the number of illegal activities and fire occur within the TSFR</p> <p>*Indicators: 1. Number of encroachment/ tree felling/ illegal hunting/ illegal fishing/ fire locations. 2. Total number of area encroachment/ tree felled/ animals/ mass of fish poached/ area burnt in fire.</p>	Zero encroachment, fire, poaching, illegal felling and NTFP extraction in the TSFR	<ul style="list-style-type: none"> Entire TSFR Sugut Wildlife corridor 	<ul style="list-style-type: none"> No entry without permission No illegal felling No poaching No NTFP extraction No open burning within the TSFR as well as right nearby/ boundary of TSFR 	<ul style="list-style-type: none"> Similar to HCV 1.1 	<ul style="list-style-type: none"> Aerial survey report Land and Sea/River monitoring report <i>Borang-04: HCV 1.1: Rondaan Laut dan Sungai SFM SCA Hutan Simpan Trusan Sugut Beluran</i> <i>Borang-05: HCV 1.1: Borang Rondaan Darat SFM SCA Hutan Simpan Trusan Sugut Beluran.</i> AWP, Compliance Report and Quarterly Report Communities and stakeholders grievance report Satellite imagery monitoring report.
			<ul style="list-style-type: none"> 2000 ha within TSFR for forest restoration 	<ul style="list-style-type: none"> Enrichment planting to restore forest structure, increase tree diversity and endangered tree species abundance over 8 years which is expected to be done 2024 as stated in AWP 	<ul style="list-style-type: none"> The Satellite imagery to be used as a tool to detect hotspots 	<ul style="list-style-type: none"> AWP, Compliance Report and Quarterly Report Satellite imagery monitoring report.
			<ul style="list-style-type: none"> 500 ha within TSFR for forest restorations 	<ul style="list-style-type: none"> Reforestation planting in severely degraded area over 6 years which is expected to start in 2018 as stated in FMP 	<ul style="list-style-type: none"> The Satellite imagery to be used as a tool to detect hotspots during the drought period. 	

HCV 3: ECOSYSTEMS

General HCV Management Objectives	Specific HCV Management objectives	Management Target	Management Strategies		Operational/Strategic/Threat Monitoring	Verifier
			Area	Prescriptions		
Ecosystem and rich biodiversity in TSFR are maintained and enhanced.	Reduce the number of illegal activities and fire occur within the TSFR	Zero encroachment, fire, poaching, illegal felling and NTFP extraction in the TSFR	<ul style="list-style-type: none"> Entire TSFR 	<ul style="list-style-type: none"> No entry without permission No illegal felling No poaching No NTFP extraction No open burning within the TSFR as well as right nearby/ boundary of TSFR 	<ul style="list-style-type: none"> Periodic monitoring and control to prevent encroachment in the TSFR. The Satellite imagery to be used as a tool to monitor forest cover as well as to detect hotspots 	<ul style="list-style-type: none"> Aerial survey report Land and Sea/River monitoring report <i>Borang-04: HCV 1.1: Rondaan Laut dan Sungai SFM SCA Hutan Simpan Trusan Sugut Beluran</i> <i>Borang-05: HCV 1.1: Borang Rondaan Darat SFM SCA Hutan Simpan Trusan Sugut Beluran.</i> AWP, Compliance Report and Quarterly Report Communities and stakeholders grievance report Satellite imagery monitoring report.
			<ul style="list-style-type: none"> 2000 ha within TSFR for forest restoration 	<ul style="list-style-type: none"> Enrichment planting to restore forest structure, increase tree diversity and endangered tree species abundance over 8 years which is expected to be done 2024 as stated in AWP 	<ul style="list-style-type: none"> The Satellite imagery to be used as a tool to monitor and detect hotspots 	<ul style="list-style-type: none"> AWP, Compliance Report and Quarterly Report Satellite imagery monitoring report.
			<ul style="list-style-type: none"> 500 ha within TSFR for forest restorations 	<ul style="list-style-type: none"> Reforestation planting in severely degraded area over 6 years which is expected to start in 2018 as stated in AWP 	<ul style="list-style-type: none"> The Satellite imagery to be used as a tool to monitor and detect hotspots 	

HCV 4: SERVICES TO NATURE

General HCV Management Objectives	Specific HCV Management objectives	Management Target	Management Strategies		Operational/Strategic/Threat Monitoring	Verifier
			Area	Prescriptions		
<p><u>HCV 4.1: Watershed Protection</u></p> <p>Watershed area within TSFR is maintained and enhanced.</p>	<p>Maintain the riparian reserves along the 4 major rivers</p>	<p>Zero encroachment, fire, poaching, illegal felling, illegal fishing, trap and other illegal activities which are might contribute water pollutions and NTFP extraction along Sg. Sugut, Sg.Timbang 1, Sg.Timbang 2 and Sg. Parai.</p>	<p>30m buffer zone</p>	<ul style="list-style-type: none"> • No entry without permission • No illegal felling • No illegal fishing • No poaching • No NTFP extraction • No open burning • No chemical treatment/application • No trap • Maintain the natural vegetation along the riparian buffer zone 	<ul style="list-style-type: none"> • Periodic monitoring and control to prevent encroachment in the TSFR. • Sea/River monitoring activities to be conducted based on AWP and enforcement plan. • Water monitoring to be conducted yearly basis based on FMP. 	<ul style="list-style-type: none"> • Land and Sea/River monitoring report • <i>Borang-04: HCV 1.1: Rondaan Laut dan Sungai SFM SCA Hutan Simpan Trusan Sugut Beluran</i> • AWP, Compliance Report and Quarterly Report • Communities and stakeholders grievance report
<p><u>HCV 4.2: Erosion Control</u></p> <p>River or streams banks are maintain to prevent soil erosion</p>	<p>Maintain the riparian reserves to prevent soil erosion along the 4 major rivers</p>	<p>Zero encroachment, fire, poaching, illegal felling, illegal fishing, trap and other illegal activities which are might contribute water pollutions and NTFP extraction along Sg. Sugut, Sg.Timbang 1, Sg.Timbang 2 and Sg. Parai.</p>	<p>30m buffer zone</p>	<ul style="list-style-type: none"> • No entry without permission • No illegal felling • No illegal fishing • No poaching • No NTFP extraction • No open burning • No chemical treatment/application • No trap • Maintain the natural vegetation along the riparian buffer zone • Enrichment planting to be carried out within the riparian reserves which are degraded due to past encroachment or fire 	<ul style="list-style-type: none"> • Periodic monitoring and control to prevent encroachment in the TSFR. • Sea/River monitoring activities to be conducted based on AWP and enforcement plan. 	<ul style="list-style-type: none"> • Land and Sea/River monitoring report • <i>Borang-04: HCV 1.1: Rondaan Laut dan Sungai SFM SCA Hutan Simpan Trusan Sugut Beluran</i> • AWP, Compliance Report and Quarterly Report • Communities and stakeholders grievance report

<p><u>HCV 4.3:</u> <u>Barriers to destructive fires</u></p> <p>Barriers to destructive fire are maintained and enhance.</p>	<p>Maintain the riparian reserves along the 4 major rivers which are act as barrier to destructive fires</p>	<p>Zero encroachment, fire, poaching, illegal felling, illegal fishing, trap and NTFP extraction along Sg. Sugut, Sg.Timbang 1, Sg.Timbang 2 and Sg. Parai.</p>	<p>30m buffer zone</p>	<ul style="list-style-type: none"> • No entry without permission • No illegal felling • No illegal fishing • No poaching • No NTFP extraction • No open burning • No chemical treatment/application • No trap • Maintain the natural vegetation along the riparian buffer zone • Enrichment planting to be carried out within the riparian reserves which are degraded due to past encroachment or fire 	<ul style="list-style-type: none"> • Periodic monitoring and control to prevent encroachment in the TSFR. • Sea/River monitoring activities to be conducted based on AWP and enforcement plan. • The Satellite imagery to be used as a tool to monitor any encroachments. 	<ul style="list-style-type: none"> • Land and Sea/River monitoring report • <i>Borang-04: HCV 1.1: Rondaan Laut dan Sungai SFM SCA Hutan Simpan Trusan Sugut Beluran</i> • AWP, Compliance Report and Quarterly Report • Communities and stakeholders grievance report • Satellite imagery monitoring report.
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HCV 5: BASIC NEEDS OF LOCAL COMMUNITIES

General HCV Management Objectives	Specific HCV Management objectives	Management Target	Management Strategies		Operational/Strategic/Treat Monitoring	Verifier
			Area	Prescriptions		
					<ul style="list-style-type: none"> Stakeholder and communities engagement 	<ul style="list-style-type: none"> Communities and stakeholders meeting minutes. Resolutions List of Stakeholder

- Based on Stakeholder and communities consultations, there is no significant circumstance which may be considered HCV 5 since the communities are having their awareness regarding the important to conserve and protect the forest for their future generation. In addition, the communities also suggested TSFR to be as an ecotourism place in future which providing employment chance to local communities.
- Besides, in recent times, it had been observed that communities obtain basic needs as follow:
 - Food Sources and cooking fuel: obtain from nearby markets
 - Medicines: Obtain medical treatment at nearby clinic.
 - Building materials: Government has been providing allocation of PPRT House as well as allocation of boats. Besides, the communities also could purchase the boat and hosing materials such as woods and plywood from the towns,

HCV 6: CULTURAL IDENTITIES OF LOCAL COMMUNITIES

General HCV Management Objectives	Specific HCV Management objectives	Management Target	Management Strategies		Operational/Strategic/Threat Monitoring	Verifier
			Area	Prescriptions		
Cultural sites in the TSFR are maintained and enhanced	Maintain the area of cultural sites or historical sites	Zero encroachment within the significant HCV 6 area.	<i>Bukit Kumbawan Malawaring</i>	<ul style="list-style-type: none"> No entry without permission No illegal felling No poaching No NTFP extraction Signboard to indicate the area as HCV 6 should be erected at strategic place. 	<ul style="list-style-type: none"> Periodic monitoring and control to prevent encroachment in the TSFR. The Satellite imagery to be used as a tool to monitor forest cover as well as to detect hotspots. 	<ul style="list-style-type: none"> <i>Borang-05: HCV 1.1: Borang Rondaan Darat SFM SCA Hutan Simpan Trusan Sugut Beluran.</i> AWP, Compliance Report and Quarterly Report Communities and stakeholders grievance report Satellite imagery monitoring report.
		Zero violation of law or regulations that have been allocated for <i>Sg. Parai (Tagal System implemented)</i>	<i>Red Zone: 9.6km (within TSFR)</i>	<ul style="list-style-type: none"> No entry without permission No illegal felling No poaching No NTFP extraction No harvesting activities allowed As a conservation and fishing competition (Catch and Release) Prior to conduct any activities which are arranged by the Tagal System Committee should be notified to TSFR management for further actions. 	<ul style="list-style-type: none"> Periodic monitoring and control to prevent encroachment within the riparian reserves in the TSFR as stated in AWP. 	<ul style="list-style-type: none"> Land and Sea/River monitoring report <i>Borang-04: HCV 1.1: Rondaan Laut dan Sungai SFM SCA Hutan Simpan Trusan Sugut Beluran</i> Related document to Sg.Parai (Tagal System)
			<i>Yellow Zone: 6.9km</i>	<ul style="list-style-type: none"> Harvesting activities allowed only 2 and 3 times per year. No encroachment and fire within the riparian reserves No illegal felling No poaching No NTFR extraction 		

			Green Zone: 6.9km	<ul style="list-style-type: none"> • Harvesting activities allowed for year-round. • No encroachment within the riparian reserves • No illegal felling • No poaching • No NTFR extraction • No open burning 		
<p>*Bujang Timah: Known as 200 years-old burial site. The location is outside the Sugut SFM Project area. In terms of ecotourism, further discussion with local communities will be carried out since the place might be an interesting place as well as a strategic location for tourism purposes in future.</p>						