

HCV	ID	GENERAL HCV MANAGEMENT OBJECTIVE	SPECIFIC HCV MANAGEMENT OBJECTIVE	MANAGEMENT TARGETS	MANAGEMENT STRATEGIES		MONITORING ACTIVITIES AND ACHIEVEMENT 2020
					AREAS	PRESCRIPTIONS	
1.1	64,953.74 ha Consisting of Ulu Kalumpang FR, Mt Wullersdorf FR, Kalumpang VJR 107 (C, D & E) FR and Madai Baturong VJR 107 F (Binuang) FR.	The whole project site remained protected from serious environmental or ecological threat.	Encroachment into the Project site is controlled and reduced. Total hectarage of restoration area of degraded forest is increased. *Indicators: 1. Number of cases of encroachment/ illegal felling/ illegal cultivation's/ illegal occupations/ forest fire/ poaching 3. Total hectarage of restoration area.	No new encroachment cases within the identified existing encroached area surveyed. Total percentage of restored area of the existing encroached area increased.	Whole area	<ul style="list-style-type: none"> No conversion of forests is permitted. No encroachment. No poaching. No illegal felling No illegal cultivation No illegal occupations Conduct periodic patrolling and surveillance in accessible HCV areas. Demarcation of main Forest Reserves boundary especially conflicted sites shall be completed. Gazette map of all FR within UKW shall be updated No open burning within the UKW SFM as well as right nearby/ boundary of UKW SFM Signboards to prohibit any illegal activities to be erected and visibly maintained at the strategic location as well as all identified HCV area. 	<ul style="list-style-type: none"> 200 DAYS OF GROUND PATROLLING – Boundary inspections within all FR CONDUCTED 2 TIMES AERIAL SURVEILLANCE – AUGUST AND NOVEMBER 2020 INSTALLATIONS OF FR AND PROJECT SIGNBOARDS MAINTENANCE OF PSP PLOTS JOINT OPERATION WITH WILDLIFE DEPARTMENT (TAWAU), SABAH PARKS, UNIT TASKFORCE WILAYAH TAWAU/ PROTECT TEAM SFD, AND WWF MALAYSIA (SABAH) TWO ARRESTS WERE MADE FOR ILLEGAL POACHING ACTIVITIES RE-BRUSHING OF BAUNDARY 10,000 METERS NO NEW ENCROACHMENT DETECTED NO OPEN BURNING ACTIVITIES DETECTED WATER QUALITY ASSESSMENET DONE IN DECEMBER 2020 REHABILITATION PLANTING AND MAINTENANCE DONE – 60 HECTARES TRAINING OF STAFFS – FSC REFRESH COURSE, FIRE DRILL TRIAINING, SILVICULTURE TRAINING
1.2	[Listed] Flora 26 species from 7 families of plants are rare, endangered or threatened plant species	Biodiversity in UKW is maintained or enhanced	Flora diversity in UKW is maintained *Indicators: 1. Number of changes in tree structure and species assemblages	No deterioration detected in diversity and/or abundance of identified flora in UKW. No cases of illegal felling of rare, threatened and endangered trees within UKW SFM	<ul style="list-style-type: none"> Whole area 14 permanent sample plots 	<ul style="list-style-type: none"> Conduct periodic patrolling and surveillance in designated HCV areas. No encroachment. No illegal felling and collecting trees species Establish a long-term biodiversity monitoring system for critical forest ecosystem, flora and fauna. Marked on the ground and on the maps of high conservation value plant species discover in PSP Plots and nature trails in UKW SFM Project area. Field staff is required to attend training courses on plants to further enhance their botanical knowledge on species that are currently listed in the threatened, endemic and forestry prohibited list to ensure they do not harvest or 	<ul style="list-style-type: none"> NO NEW ENCROACHMENT DETECTED NO OPEN BURNING ACTIVITIES DETECTED WATER QUALITY ASSESSMENET DONE IN DECEMBER 2020 REHABILITATION PLANTING AND MAINTENANCE DONE – 60 HECTARES MAINTENANCE OF PSP PLOT FOR FLORA DONE MARKING OF PSP PLOTS

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						damage and also for monitoring purposes. <ul style="list-style-type: none"> Update current biodiversity conservation status to management team of the upgrade or downgrading of threat status locally and globally. 	
1.2	[Listed] Fauna 11 species of mammals, 4 species of birds	Biodiversity in UKW is maintained or enhanced	Fauna diversity in UKW is maintained *Indicators: 1. Number of poaching cases (arrests and prosecution) 2. Species composition presence and absence	No deterioration detected in presence and absence of identified fauna in UKW. No cases of poaching occurred within UKW SFM Project	Whole area	<ul style="list-style-type: none"> Conduct periodic patrolling and surveillance in designated HCV areas. Establish a long term biodiversity monitoring system for critical forest ecosystem, flora and fauna. Migratory pathway of wildlife on logging roads, along streams or wildlife trails in the forest should be marked on the map and kept to ensure wildlife are able to use it for movement within and between forest reserves. Field staff is required to attend training courses on wildlife to further enhance their wildlife knowledge on species that are currently listed in the threatened, endemic and forestry prohibited list to ensure they do not harvest or damage and also for monitoring purposes. Update current biodiversity conservation status to management team of the upgrade or downgrading of threat status locally and globally. 	<ul style="list-style-type: none"> NO NEW ENCROACHMENT DETECTED NO OPEN BURNING ACTIVITIES DETECTED WILDLIFE MONITORING DONE, REPORT BY QUARTERLY THREE METHODOLOGY OF WILDLIFE MONITORING: OPPORTUNISTIC SIGHTINGS, CAMERA TRAPPING AND LINE TRANSECT/ RECCE WALK MAMMALS: A total of 3,840 sightings were recorded with 84.24% derived alone from camera trapping method, while 10.23% for Line Transect and 5.52% from Opportunistic Sightings. Six (6) endemic species of mammal were recorded. A total of 10 species are known to be threatened under the IUCN Redlist of which 1 species are categorized as Critically Endangered (CR), 2 species as Endangered (EN) and 7 species as Vulnerable (VU). Among all the mammals recorded in 2020, four of them which is Orang Utan (<i>Pongo pygmeaus</i>), Bornean Pygmy Elephant (<i>Elephas maximus borneensis</i>), Bornean Gibbon (<i>Hylobates funereus</i>), and Bornean Sun Bear (<i>Helarctos malayanus</i>), known to be the most outstanding conservation value in Sabah, both endemic and threatened species. The most sighted wildlife in the project area is the Pig-Tailed Macaque with a total record of 1,873 sightings, followed by the Bearded Pig (9,51 sightings), Long-Tailed Macaque (387 sightings), Bornean Pygmy Elephant (238 sightings), and Sambar Deer (152 sightings). BIRDS: there were 98 sightings of birds during the wildlife survey. Of this figure, 6 species of birds that derived from 3 families were recorded. One are known to be endemic, namely the Bornean Crested Fireback, and three threatened species under the IUCN Redlist which is the Storm Stork and White Crowned Hornbill categorized as Endangered (EN) and one species categorized as Vulnerable (VU) which is Rhinoceros Hornbill
1.3	[Listed] Flora 98 species endemics to Borneo- 6 of these endemic to Sabah.	Biodiversity in UKW is maintained or enhanced	Flora diversity in UKW is maintained *Indicators: 1. Number of changes in tree structure and species assemblages	No deterioration detected in presence and absence of identified flora in UKW.	Similar to HCV 1.2 (Flora)	Similar to HCV 1.2 (Flora)	Similar to HCV 1.2 (Flora)
	[Listed] Fauna 5 species of mammals, 21 species of birds	Biodiversity in UKW is maintained or enhanced	Fauna diversity in UKW is maintained	No deterioration detected in presence and absence of	Similar to HCV 1.2 (Fauna)	Similar to HCV 1.2 (Fauna)	Similar to HCV 1.2 (Fauna)

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	and 8 species of insects are endemic		*Indicators: 1. Number of poaching / Species composition 2. Total number of animal poached / Species composition	identified fauna in UKW.			
1.4	The limestone Karst in Madai Baturong VJR 107F (Binuang) - nesting site for swiftlet, bats and other troglifauna.	Biodiversity of Madai Baturong VJR 107F (Binuang) Baturong cave is maintained or enhanced Habitat function is maintained	The limestone Karst in Madai Baturong VJR 107F is maintained *Indicators: 1. Number of illegal entry 2. Habitat function	No illegal entry and encroachment within the area Habitat function is maintained	Madai Baturong VJR 107F (Binuang)	<ul style="list-style-type: none"> Conduct periodic patrolling and surveillance in designated HCV areas. Any salt licks and potential nesting sites found within NGR area in the future, demarcation of HCV Boundaries on the ground and installing clear signage along existing road, foot trails and navigable rivers/stream indicating critical values. 	<ul style="list-style-type: none"> 200 DAYS OF GROUND PATROLLING – Boundary inspections within all FR CONDUCTED 2 TIMES AERIAL SURVEILLANCE – AUGUST AND NOVEMBER 2020 INSTALLATIONS OF DR AND PROJECT SIGNBOARDS MAINTENANCE OF PSP PLOTS JOINT OPERATION WITH WILDLIFE DEPARTMENT (TAWAU), SABAH PARKS, UNIT TASKFORCE WILAYAH TAWAU/ PROTECT TEAM SFD, AND WWF MALAYSIA (SABAH) NO NEW ENCROACHMENT DETECTED NO OPEN BURNING ACTIVITIES DETECTED WATER QUALITY ASSESSMENET DONE IN DECEMBER 2020 REHABILITATION PLANTING AND MAINTENANCE DONE – 60 HECTARES TRAINING OF STAFFS – FSC REFRESH COURSE, FIRE DRILL TRIAINING, SILVICULTURE TRAINING
2	Ulu Kalumpang, Mt. Wullersdorf and Madai Baturong (Binuang) form a continous forested landscape to support high conservation value.	Ulu Kalumpang, Mt. Wullersdorf and Madai Baturong (Binuang) project site remained protected from serious environmental or ecological threat.	Connectivity of the Forest Reserves is maintained. The functions of the Forest Reserves as a large forest landscape is maintained	No new forest fragmentation. Total percentage of restored area of the existing encroached area increased.	Ulu Kalumpang, Mt. Wullersdorf and Madai Baturong (Binuang)	<ul style="list-style-type: none"> Conduct periodic patrolling and surveillance in designated HCV areas. Establish a long term biodiversity monitoring system for critical forest ecosystem, flora and fauna. Migratory pathway of wildlife on logging roads, along streams or wildlife trails in the forest should be marked on the map and kept to ensure wildlife are able to use it for movement within and between forest reserves. 	<ul style="list-style-type: none"> 200 DAYS OF GROUND PATROLLING – Boundary inspections within all FR CONDUCTED 2 TIMES AERIAL SURVEILLANCE – AUGUST AND NOVEMBER 2020 INSTALLATIONS OF DR AND PROJECT SIGNBOARDS MAINTENANCE OF PSP PLOTS JOINT OPERATION WITH WILDLIFE DEPARTMENT (TAWAU), SABAH PARKS, UNIT TASKFORCE WILAYAH TAWAU/ PROTECT TEAM SFD, AND WWF MALAYSIA (SABAH) TWO ARRESTS WERE MADE FOR ILLEGAL POACHING ACTIVITIES RE-BRUSHING OF BAUNDARY 10,000 METERS NO NEW ENCROACHMENT DETECTED NO OPEN BURNING ACTIVITIES DETECTED WATER QUALITY ASSESSMENET DONE IN DECEMBER 2020 REHABILITATION PLANTING AND MAINTENANCE DONE – 60 HECTARES Consultations with community – Kg Balung Cocos, Tawau and Kg Airport Bt. 10 and smallholders. TRAINING OF STAFFS – FSC REFRESH COURSE, FIRE DRILL TRIAINING, SILVICULTURE TRAINING MAINTENANCE OF FOREST CHECKING STATIONS RECORD OF ENTRY AT MAIN FOREST CHECKING STATIONS – FCS SG MANTRI AND FCS WULLERSDORF
3	The forested area below 200. a.s.l of seasonal freshwater swamp and mixed dipterocarp, including association of limestone vegetation and kerangas forest with the mixed dipterocarp forest	Ecosystem and rich biodiversity in UKW SFM which is rich in significant diversity of ecosystem are maintained and enhanced.	The identified forested area below 200. a.s.l of seasonal freshwater swamp and mixed dipterocarp, including association of limestone vegetation and kerangas forest	No encroachment and forest clearing into HCV3 identified area No deterioration detected in in presence and absence of identified flora and fauna in UKW.	Whole area	<ul style="list-style-type: none"> Conduct periodic patrolling and surveillance in designated HCV areas. Establish a long term biodiversity monitoring system for critical forest ecosystem, flora and fauna. 	<ul style="list-style-type: none"> 200 DAYS OF GROUND PATROLLING – Boundary inspections within all FR CONDUCTED 2 TIMES AERIAL SURVEILLANCE – AUGUST AND NOVEMBER 2020 INSTALLATIONS OF DR AND PROJECT SIGNBOARDS MAINTENANCE OF PSP PLOTS JOINT OPERATION WITH WILDLIFE DEPARTMENT (TAWAU), SABAH PARKS, UNIT TASKFORCE WILAYAH TAWAU/ PROTECT TEAM SFD, AND WWF MALAYSIA (SABAH) RE-BRUSHING OF BAUNDARY 10,000 METERS NO NEW ENCROACHMENT DETECTED NO OPEN BURNING ACTIVITIES DETECTED WATER QUALITY ASSESSMENET DONE IN DECEMBER 2020 REHABILITATION PLANTING AND MAINTENANCE DONE – 60 HECTARES TRAINING OF STAFFS – FSC REFRESH COURSE, FIRE DRILL TRIAINING, SILVICULTURE TRAINING

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			with the mixed dipterocarp forest quality maintained				<ul style="list-style-type: none"> MAINTENANCE OF FOREST CHECKING STATIONS RECORD OF ENTRY AT MAIN FOREST CHECKING STATIONS – FCS SG MANTRI AND FCS WULLERSDORF
4.2	All areas with slopes >25° and 30 m riparian buffer zone	Areas with slopes >25° and river or streams banks are maintain to prevent soil erosion	Maintain the Areas with slopes >25° and riparian reserves to prevent soil erosion.	No encroachment, forest fire, poaching, illegal felling, illegal cultivation, and illegal occupation activities which are might contribute to soil erosion.	<ul style="list-style-type: none"> Slopes >25° 30m riparian zone 	<ul style="list-style-type: none"> Conduct periodic patrolling and surveillance in designated HCV areas. 	<ul style="list-style-type: none"> 200 DAYS OF GROUND PATROLLING – Boundary inspections within all FR CONDUCTED 2 TIMES AERIAL SURVEILLANCE – AUGUST AND NOVEMBER 2020 INSTALLATIONS OF DR AND PROJECT SIGNBOARDS MAINTENANCE OF PSP PLOTS JOINT OPERATION WITH WILDLIFE DEPARTMENT (TAWAU), SABAH PARKS, UNIT TASKFORCE WILAYAH TAWAU/ PROTECT TEAM SFD, AND WWF MALAYSIA (SABAH) TWO ARRESTS WERE MADE FOR ILLEGAL POACHING ACTIVITIES RE-BRUSHING OF BAUNDARY 10,000 METERS NO NEW ENCROACHMENT DETECTED NO OPEN BURNING ACTIVITIES DETECTED WATER QUALITY ASSESMENET DONE IN DECEMBER 2020 REHABILITATION PLANTING AND MAINTENANCE DONE – 60 HECTARES Consultations with community – Kg Balung Cocos, Tawau and Kg Airport Bt. 10 and smallholders. TRAINING OF STAFFS – FSC REFRESH COURSE, FIRE DRILL TRIAINING, SILVICULTURE TRAINING MAINTENANCE OF FOREST CHECKING STATIONS RECORD OF ENTRY AT MAIN FOREST CHECKING STATIONS – FCS SG MANTRI AND FCS WULLERSDORF
4.3	100 m band of moderate ti high forest structure inside the project area that border local communities land and oil palm estate are categorised as HCV 4.3.	Barriers to destructive fire are maintained and enhance.	Maintain the buffer zone along neighbouring boundaries of local communities and oil palm plantations	<p>No encroachment, fire, poaching, illegal felling, illegal cultivation, and illegal occupation activities which are might contribute to fire.</p> <p>Natural Forest cover maintained.</p>	100m band of buffer zone	<ul style="list-style-type: none"> Conduct periodic patrolling and surveillance in designated HCV areas. The Forest Fire Management Plan has to be updated periodically. Identification of low vegetation structure that is susceptible to catch fire, i.e grassland and shrubs along the 50 m band inside the FMU boundaries is crucial. Forest restoration of indigenous tree species as part of the remedial action to increase forest structural diversity and mitigate any forest fire incidence spreading into the FMU core area, especially area dominated with lalang grassland and ferns. 	<ul style="list-style-type: none"> 200 DAYS OF GROUND PATROLLING – Boundary inspections within all FR CONDUCTED 2 TIMES AERIAL SURVEILLANCE – AUGUST AND NOVEMBER 2020 INSTALLATIONS OF DR AND PROJECT SIGNBOARDS MAINTENANCE OF PSP PLOTS JOINT OPERATION WITH WILDLIFE DEPARTMENT (TAWAU), SABAH PARKS, UNIT TASKFORCE WILAYAH TAWAU/ PROTECT TEAM SFD, AND WWF MALAYSIA (SABAH) TWO ARRESTS WERE MADE FOR ILLEGAL POACHING ACTIVITIES RE-BRUSHING OF BAUNDARY 10,000 METERS NO NEW ENCROACHMENT DETECTED NO OPEN BURNING ACTIVITIES DETECTED WATER QUALITY ASSESMENET DONE IN DECEMBER 2020 REHABILITATION PLANTING AND MAINTENANCE DONE – 60 HECTARES Consultations with community – Kg Balung Cocos, Tawau and Kg Airport Bt. 10 and smallholders. TRAINING OF STAFFS – FSC REFRESH COURSE, FIRE DRILL TRIAINING, SILVICULTURE TRAINING MAINTENANCE OF FOREST CHECKING STATIONS RECORD OF ENTRY AT MAIN FOREST CHECKING STATIONS – FCS SG MANTRI AND FCS WULLERSDORF



