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Details of Filing

Document Lodged:	Submissions
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File Title:	FRIENDS OF LEADBEATER'S POSSUM INC v VICFORESTS
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Important Information

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Annexure A to Applicant's Closing Submissions:
Greater Glider Coupe table: GG detections & reports, silviculture system, Coupe Plan content re GG, Paul's statements, Smith's opinion, Davey's opinion, Agreed map summary

Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
Acheron	Mont Blanc 309-507-0001 9.13 Logged	STR 13ha nett 20.1ha gross	All Acheron coupes: **17**: LW (4-5 Jun 2017), CB 2.3 p38 at [115] Reported 8 Jun 2017, CB 2.3 p38 at [117] Mont Blanc only: **10**: VDR CB 4.1.1 p21 **9**: Smith CB 4.2.1 p106	1 May 2017 26 Jun 2017	7 Apr 2017 RRH CB 8.1 p4 No reference to Greater Glider in coupe plan. Coupe diary entry 7 Jul 2017 (2nd Paul CB 3.4 p126): "Follow up from DWELP on yellow bellied and greater glider. As stated currently no prescriptions but advice from Tim McBride 'recommend retaining the largest diameter hollow bearing trees near to locations where gliders have been observed (refer supplied map also). Younger trees adjacent to these HBT should be also retained for a food source for gliders as they are exclusively leaf eaters".	A Mixed Species coupe in which 13.57 ha nett of 20.06 ha gross was harvested by STR. CB 3.6.21A The post-harvest map depicts an area on the eastern side of the coupe that has been excluded from timber harvesting. CB 3.4 at [323(a)-(b)], p127	Forest Type/Structure: White House and part Mont Blanc are mapped as 1939 regrowth. Kenya is mapped as mostly 1939 regrowth with about 7ha of pre1900 mapped old growth forest (1850 -1859). Examination of stumps, retained habitat trees and aerial photographs indicates that most of the Mixed Species Forest on logged coupes was high quality mixed species old growth prior to logging. Glider Habitat and Abundance: Counts of habitat trees indicate densities of 5-9 per hectare before logging. A large proportion (48%) of these habitat trees appear to have been deliberately felled during logging operations as indicated by presence of old trees with hollows lying on the ground next to recently chainsaw cut stumps. The number of tree stumps 40-80 cm diameter was 120 to 214 per hectare which is indicative of structurally ideal forest for Greater Glider. The Greater Glider habitat model predicts that coupes Mont Blanc and The Eiger were high quality Greater Glider habitat before logging (0.9-1.0 gliders/ha). These predictions are supported by available Greater Glider records which show 2 - 10 records of Greater Gliders per coupe prior to logging. This high quality Glider habitat is likely to have been widely dispersed across all or most of the coupes. This finding is not consistent with the VicForests High quality	Significance of Logging Impact: Extremely high due to the total loss of high quality (important and critical) uneven aged old growth Glider habitat with a known high abundance of Gliders before logging. The habitat will never recover if it is logged again under short rotations as it takes about 75 years for Messmate Stringybark trees (a dominant species in Mixed Species forests) to reach a diameter of 40 cm in size (Ambrose 1982) suitable for re-occupation by Greater Gliders. The few retained habitat trees have been largely damaged by post logging burning and are likely to fall before the regenerating forest reaches an age suitable for recolonization by gliders. CB 4.2.1 p68	Around 20 GG records in the harvest area footprint of the coupe. Impact on individual gliders would have occurred, with a likely impact from harvest event on local population of GGs more generally. GGs now confined to SPZ, retained forest in coupe and unlogged forest outside of coupe. Coupe recolonization depends on presence of habitat trees (non-ash) in harvest area and growth of regrowth. Only seed trees were retained in harvest area. Impact on Greater Glider – Severe. Given the number of GGs impacted in harvest area there will likely be a long-term decrease in the local population, and because of the location of the coupe in the landscape there are likely limitations now in dispersal and movement of GGs in the landscape and recolonization of harvest area. Harvest area now likely to remain as sub-optimal habitat for gliders for more than 80 years. Assessment in Scheduled Coupe White House needs to consider Mont Blanc, Kenya and Eiger as a group. CB 5.1.1 p119	Collectively the rating is Severe. Collectively the group of harvested coupes in map series 4 (Mont Blanc, Kenya, The Eiger) in terms of area harvested has likely impacted on the GG local population. Collectively the amalgamated harvest area of coupes will likely result in a longterm decrease of the local population, with limitations now in dispersal and movement of GGs in terms of their recolonization capacity. How the harvesting operations in White House will now impact on the local population of GGs will be an important consideration. CB 5.1.1 p120, 152-153, 172-173 When the assessment of an individual coupe is put in the coupe group context, the assessment of the impact severity may alter. T506.44-507.27	Agreed Map CB 7.4F shows that the Acheron coupes were light or moderately affected by the 2009 fires, are surrounded by forest logged by clearfelling between 1993 and 2015 to the south-east, with a linear SPZ along the north east boundary. It shows that the nearest reserve is more than 3km as the crow flies and more than 5km along the linear SPZ.
	Kenya 309-507-0003 9.14 Logged	CFE 22ha nett 28.8ha gross	Kenya only: **4**: VDR CB 4.1.1, p21 **3**: Smith CB 4.2.1, p106	12 Jun 2017 24 Aug 2017	15 May 2017 RRH: CB 8.2 p4 No reference to Greater Glider in coupe plan. Coupe diary entry above for Mont Blanc stated to apply for	An Ash coupe in which 13.4ha gross area of 28.8 ha nett area was harvested by RRH. CB 3.6.21A The post-harvest map and agreed			Six GG records in north-east corner of coupe located in SPZ and forest classed as GG habitat class 1. GG habitat class 1 not in forest retained from harvest. Impact on individual gliders would have occurred with recorded individuals likely to		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
					Kenya (2nd Paul CB 3.4 p126). Coupe diary entry 11 July 2017 records a direction Andrew McGuire (Regional Manager, North East at VF) to harvesting contractor Darcy Buckett (4nd Paul CB 3.6 p6): "Met with Darcy. Instructed him to document sightings of [Greater Glider] and other species, document when they survey ahead at cutting. Document when they reserve areas from harvesting." Entry for 3 August 2017 (4nd Paul CB 3.6 p6): "No wildlife has been sighted on coupe Kenya during falling operations. D Buckett."	map 4C depict an SPZ along the northern boundary of the coupe and a stream buffer running from the western boundary to the centre of the coupe, from which timber harvesting was excluded. CB 3.4 at [323(c)-(e)], p127	Greater Glider Habitat Class 1 mapping. Compliance with Code: Poor, habitat trees not scattered across coupes (Kenya), habitat tree numbers less than prescription (Kenya), habitat trees not protected during logging operations with 48% burnt, felled or pushed (Kenya, the Eiger, Mont Blanc), and no habitat trees in clumps. Use of high intensity logging (clearfelling) in Mixed Species forest is inconsistent with the Code of Practice and will result in the death and elimination of all Greater Gliders on the logged areas. CB 4.2.1 p68 This was probably a very high carrying capacity site with the highest possible density of Greater Gliders. Under current rotation times, these forests are not likely to become structurally advanced enough to be recolonised by Greater Gliders even if a corridor did exist near to them. The habitat trees that were retained have been so damaged by fire and logging activity that few, if any of them, are likely to remain in 75 years time. Therefore all the Greater Gliders that were on these coupes have been lost, will remain lost and will contribute to an ongoing decline in Greater Gliders population in the Central Highlands. The situation is not recoverable because of the insufficient numbers of habitat trees. T432.9-30		move to SPZ. Unlikely significant immediate impact from harvest event with future impact more likely on the local population. Coupe recolonization depends on presence of habitat trees (ash and non-ash) in harvest area and growth of regrowth. Only seed trees were retained in harvest area and this will affect the recolonization of the harvest site. Impact on Greater Glider – Moderate. No mention of 1850 forest stand in coupe plan. I have assumed that these stands were field checked and any stand characteristics requiring retention under prescriptions were retained. Harvest area now likely to remain as suboptimal habitat for gliders for more than 80 years. CB 5.1.1 p119-120		
	The Eiger 309-507-0004 9.15 Logged	CFE 23ha nett 31.5ha gross	Eiger only: **4**: VDR CB 4.1.1, p21 **4**: Smith CB 4.2.1, p106	10 Jun 2016 16 Aug 2016	8 Jun 2016 CFE: CB 8.3 p5 No reference to Greater Glider.	A Mixed species coupe in which 28.7 ha nett of 31.38 ha gross was harvested by STR. CB 3.6.21A; CB 3.4 at [323(f)], p127			Ten GG records along the boundaries of Kenya and Mount Blanc coupes in northeast and north-west corners of coupe. Some are in or near SPZ and forest classed as GG habitat class 1. GG habitat class 1 not in forest retained from harvest. Impact on individual gliders would have occurred with many of the recorded individuals moving to the adjacent SPZ. Likely significant impact from harvest event on local population. Coupe		

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									recolonization depends on presence of habitat trees (ash and non-ash) in harvest area and growth of regrowth. Retained habitat trees should improve recolonization of the harvest site. Impact on Greater Glider – Moderate CB 5.1.1 p120		
	White House 309-507-0007 10.17 Scheduled	CFE 32ha nett 43.6ha gross	White House only: **4**: LW (10-11 Jun 2017), CB 2.3 p39 at [121] **5**: VDR CB 4.1.1 p21 **4**: Smith CB 4.2.1 p106	N/a	24 Apr 2017 STR: CB 8.27, p5 "Greater Glider record is adjacent to the coupe boundary. The Glider has been added to the DEPI Advisory List of Threatened Species. A site 200m from the coupe boundary was determined by spotlighting in 1996. 29/08/2014. No protection requirements for the special management of the species within the area covered by the Central Highlands Forest Management Plan. No further action required." p20 No Greater Gliders identified on coupe plan map.	N/a	Forest Type: Mapped as 1939 regrowth mixed species with some Ash. Ground inspection and aerial photography shows the site to be old growth. (see figure Acheron 3). Glider Habitat and Abundance: Predicted habitat quality is exceptionally high (1.9 Gliders/ hectare). This is confirmed by the occurrence of 4 actual Glider records in the coupe. VicForests mapping shows no High Quality Habitat Class 1 on the coupe. CB 4.2.1 p68	Significance of Logging Impact: Habitat on this coupe is predominantly (about 80% from aerial photographs) critical uneven-aged old growth habitat of very high quality for the Greater Glider. In my opinion any logging of this coupe under current harvesting practice could be considered to have a significant impact because it will cause the death of all resident Greater Gliders and permanently remove critical and important old growth habitat. CB 4.2.1 p68-69	Eight recent GG records within the coupe, with three other records in adjacent SPZ north of the coupe. Another record near eastern boundary with GG records in harvested coupe to the west (9.13). Imagery indicates suitable GG habitat across most of the coupe. Harvesting the coupe will likely impact on individual gliders with impacts on the GG local population classed as moderate given recent harvesting in adjacent coupes. Impact on Greater Glider – Moderate CB 5.1.1 p152-153		

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Coupe group location	**Coupe name, no. & 2FASOC paragraph, Logged or scheduled**	**TRP[i]: Silv system & nett/ gross area**	**GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]**	**Harvest commence & complete dates[v]**	**Coupe Plan date, silviculture system & Greater Glider content**	**Mr Paul's statements re silv system, nett/gross area and coupe**	**Dr Smith's observations regarding GG habitat and habitat trees**	**Dr Smith's opinion re impact**	**Dr Davey's opinion re impact for coupe**	**Dr Davey's opinion re impact for coupe group**	**Agreed Map depicting records, 2009 fire & logging history**
Ada River	Tarzan 348-517-0005 9.26 Logged	CFE 19ha nett 30.5ha gross	**1**: Smith CB 4.2.1 p106	5 Feb 2014 27 Apr 2017	2 Sep 2016 CFE: 8.4 p3 "Greater Glider species record from 2012 within 500m west of coupe boundary. No protection requirements for special management of the species. No further action required." p18 No Greater Gliders identified on coupe plan map.	An Ash coupe in which 17.05 ha nett of 30.51 ha gross was harvested by RRH CB 3.6.21A Agreed map 5C depicts one 200m THEZ to the south of the coupe, partly overlaying the southern edge of the coupe, from which harvesting was excluded. CB 3.4 at [393(b)], p154 The post-harvest map depicts areas excluded from timber harvesting, being an area along the boundary adjacent to the steam buffer, an area of retained vegetation along the north western boundary adjacent to the stream buffer and a SPZ along the Ada River. CB 3.4 at [393(c)], p154	Forest Type/Structure: All three coupes were mapped Ash Forest by VicForests. Site inspection showed this to be incorrect. All coupes were a mixture of Mixed Species and Ash with Mixed Species predominant, except on Johnny. Retained habitat trees on Tarzan were consistent with Mixed Species predominance. All coupes were mapped as all or predominantly 1939 regrowth by VicForests. Site inspection showed this to be incorrect. All coupes were uneven-aged old growth with an abundance of living old Mixed Species in the canopy to provide hollows. Examination of stumps, retained habitat trees and aerial photographs indicates that most of the forest on the logged coupes was high quality mixed species uneven aged old growth prior to logging. Glider Habitat and Abundance: Counts of habitat trees were very high (8-16/ hectare) due largely to occurrence of Mixed Species old growth. A large proportion (>50%) of habitat trees on Tarzan were burnt and killed during logging operations. The number of tree stumps 40-80 cm diameter was 138 to 225 per hectare which is indicative of structurally ideal forest for Greater Glider. The Greater Glider habitat model (this study) predicts that these coupes were very high quality for the Greater Glider habitat before logging (1.5 – 3.0	Significance of Logging Impact: Extremely high on logged coupe and on scheduled coupes if logged. Due to the total loss of high quality (important and critical) old growth Glider habitat with a known occurrence of Greater Gliders before logging. The habitat will never recover under short harvesting rotations (<75 years). The few retained habitat trees on Tarzan have been largely damaged by post logging burning and are likely to fall before the regenerating forest reaches an age (about 75 years) suitable for recolonization by gliders. CB 4.2.1 p71	Historical GG records to the south in the SPZ with three 2017 records in the northern sector of coupe. Imagery of coupe and surrounding forest indicative of suitable glider habitat. Known locations of gliders were retained as unharvested forest. Gliders impacted would likely to move to the forest retained from harvesting. Limited impact from harvest event on local population. Retention of habitat trees in harvest area would promote recolonization of harvest area. Impact on Greater Glider – Limited CB 5.1.1 p124-125	N/a	Agreed Map CB 7.5F shows that the Ada River coupes are surrounded by forest logged by clearfelling between 1993 and 2017 to the north, east and south. It shows a linear SPZ along the western boundary of the coupe group.
	Johnny 348-518-0004 10.30 Scheduled	CFE 25ha nett 33.8ha gross	**3**: LW (19-20 Aug 2017) CB 2.3 p45 at [160] **3**: VDR CB 4.1.1 p22	N/a	N/a	N/a			Eight recent GG records in Turducken to the east. Imagery indicates suitable GG habitat found across most of coupe and surrounding forest not harvested. Harvesting will affect individual gliders and		

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			3: Smith CB 4.2.1 p106				gliders/ha). These predictions are supported by available Greater Glider records which show 1-4 recent (post 1998) records of Greater Gliders per coupe prior to logging. No mapped VicForests High Quality Greater Glider Habitat Class 1 occurs on any of the Coupes. Habitat on all of these sites is likely to have been particularly important to Greater Glider because it is located on the boundary of Mixed Species and Ash and has the structural and growth benefits of regrowth Ash coupled with the old growth hollow benefits of Mixed Species. Compliance with Code: Poor, habitat trees not protected during logging operations with 50% burnt and killed, and no habitat trees in clumps. Use of high intensity logging (clearfelling) in Mixed Species forest is inconsistent with the Code of Practice and will result in the death and elimination of all Greater Gliders on the logged areas. CB 4.2.1 p71		impact will depend on them moving to retained forest. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p160		
	Turducken 348-519-0008 10.31 Scheduled	CFE 32ha nett 43.1ha gross	**4**: LW (10-11 Sep 2017), CB 2.3 p45 at [157-158] **3**: VDR CB 4.1.1 p22 **3**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Eight recent GG records in coupe with three records occurring in forest to be retained, two on the edge of the harvest area and three within the harvest area. Imagery indicates suitable GG habitat found across most of coupe and forest not harvested. Harvesting will affect individual gliders and impact will depend on them moving to retained forest. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p160-161 In assessing whether the habitat in the coupe is critical habitat, a field visit would improve the assessment. T485.40 – 486.29		
Ada Tree	Ginger Cat 344-509-0009 9.17 Logged	CFE 5ha nett 11.8ha gross	**0**: LW **0**: VDR **1**: Smith CB 4.2.1 p106	10 Jan 2017 2 Feb 2017	9 Jan 2017 CFE 8.5 p3 Greater Glider species record from 1998 within 500m of coupe boundary. No protection requirements for the special management of the species within the area covered by the CH FMP. No	An Ash pre 1950s/uneven aged coupe in which 4.28 ha nett of 11.83 ha gross was harvested by RRH CB 3.6.21A The post-harvest map and agreed map 6C depict the coupe being surrounded by four	Forest Type/Structure: All three coupes were mapped by VicForests as predominantly 1939 Ash regrowth with some Mixed Species in the gullies. Site inspection showed this to be appropriate for most areas inspected on the ground, but examination of aerial photographs indicated presence of extensive uneven-aged old growth mainly in the gullies on Blue	Significance of Logging Impact. A significant impact on the Greater Glider is likely to occur in areas of uneven-aged old growth on Blue Cat if they are logged using current clearfelling methods. Use of high intensity logging (clearfelling) in Mixed Species forest on parts of the Coupes is inconsistent with the Code of Practice *(2.2.2.11 Use silvicultural systems that suit*	Historic and recent records of gliders located in or adjacent to coupe. Modelled GG habitat class 1 located on northern and southeast boundary. Both imagery of coupe and surrounding forest and description of stand in coupe plan indicative of suitable glider habitat. Any impact on gliders would be minimal with such a small harvest area. Known	N/a	Agreed Map CB 7.6F shows that the Ada Tree coupes are surrounded by forest logged by clearfelling between 1992 and 2010 to the north, east and west. It

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					further action required. p24 Greater Glider record is within 200m of the coupe boundary. The Glider has been added to the DEPI Advisory List of Threatened Species. Record is from a timed stag watch in 1998. p26 No Greater Gliders identified on coupe plan map.	200m THEZ, from which timber harvesting was excluded. CB 3.4 at [326(b)], p128 The post-harvest map depicts six additional 200m THEZ in proximity to the coupe and a further timber harvesting exclusion zone. CB 3.4 at [326(c)], p129	Cat and minor patches on Blue Vein. Glider Habitat and Abundance: The number of habitat trees was low (0-4/ha) and these were mostly of poor quality comprised mostly of short dead trees (spouts) most likely killed in the 1939 fire. These dead stags were unusually persistent in the general locality providing suitable habitat for Leadbeaters Possum where patches of Acacia dealbata were locally abundant in the understorey. The number of tree stumps 40-80 cm diameter was very high (320-430 per hectare) providing structurally suitable habitat for Gliders feeding above the understorey. The model predicts a medium to high suitability (0.4- 1.0/ha) for Greater Gliders due to low numbers of hollows. However, living habitat tree density is likely to be higher in areas of apparent old growth on aerial photographs that were not examined on the ground. There are three recent (post 1998) records of greater Glider in the coupes, one on the boundary of each coupe… Compliance with Code: Poor, no habitat trees have been retained for habitat tree recruitment in Ginger Cat or Blue Vein (see Figure). Ginger Cat is about 5 hectares net and under the Code should have 20 habitat trees instead of none. Recruitment of habitat trees in	*the ecological requirements of the forest type)* and will result in the death and permanent elimination of Greater Gliders. …examination of aerial photographs indicated presence of extensive uneven-aged old growth mainly in the gullies on Blue Cat and minor patches on Blue Vein, mostly in the general area mapped as Mixed Species. These areas are likely to be Critical and Important habitat for the Greater Glider and should be retained and protected to prevent a significant impact. Aerial photography suggests that uneven-aged old growth mixed species occurs in several large patches occupying about 25% of Blue Cat. This Critical and Important habitat for the Greater Glider (and Leadbeater's Possum) can only be reliably identified by pre-logging survey and if present should be protected by proposed protection measures previously described in answer to Questions 5a, 8b, 13e, and 22. CB 4.2.1 p74	locations of gliders were retained as unharvested forest. Impact on Greater Glider – Limited CB 5.1.1 p121-122		shows an area of SPZ and two conservation reserves to the south of the coupe group.
	Blue Vein 348-506-0003 9.18 Logged	CFE 10ha nett 20ha gross	**2**: LW (3-4 Dec 2016), CB 2.3 p40 at [125-127] **2**: LW (2 Feb 2017), CB 2.3 p40 at [129] **1**: VDR CB 4.1.1 p23 **1**: Smith CB 4.2.1 p106	1 Feb 2017 27 Feb 2017	27 Jan 2017 RRH CB 8.6 p3 Several Greater Glider records located within within 500m of coupe boundary. No protection requirements for the special management of the species within the area covered by the Central Highlands Forest Management Plan. No further action required. p25 GG record is within 100m of the coupe boundary. The Glider has been added to the DEPI Advisory List of Threatened Species. Record spotlighting on foot 1991… p28 No Greater Gliders identified on coupe plan map.	An Ash coupe in which 2.52 ha nett of 19.97 ha gross was harvested by RRH CB 3.6.21A Agreed map 6C and the post-harvest map depict a 200m THEZ on the southern boundary of the coupe, implemented after harvesting was commenced. CB 3.4 at [370(b)], p145 The post-harvest map depicts an area of Zone 1A habitat in the west of the coupe which was excluded from harvesting. CB 3.4 at [370(d)], p145			Recent records of gliders located in or adjacent to coupe. Modelled GG habitat class 1 located on western boundary. Both imagery of coupe and surrounding forest and description of stand in coupe plan indicative of suitable glider habitat. Any impact on gliders would be minimal with such a small harvest area. Known locations of gliders were retained as unharvested forest. Impact on Greater Glider – Limited CB 5.1.1 p122		

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	Blue Cat 344-509-0007 10.22 Scheduled	CFE 30ha nett 42.4ha gross	**0**: LW **0**: VDR **1**: Smith CB 4.2.1 p106	N/a	N/a	N/a	areas where they are currently scarce is necessary to comply with the Code of Practice. CB 4.2.1 p75-75		Historic records of gliders located in or adjacent to coupe. Modelled GG habitat class 1 located in LBP SPZs. Imagery of coupe and surrounding forest indicative of suitable glider habitat. Any harvest impact on gliders would be limited as known locations of gliders remain as unharvested forest and individuals affected by harvesting will likely relocate to retained forest. Impact on Greater Glider – Limited CB 5.1.1 p155		
Baw Baw	Rowels 483-505-0002 9.32 Logged	STR 27ha nett 42.2ha gross	**0**: LW **0**: VDR **1**: Smith CB 4.2.1 p106	11 Apr 2017 24 Nov 2017	27 Oct 2017 STR CB 8.7 p5 Greater Glider within coupe boundary identified during overlay process. No detection based requirements exist for Greater Gliders within the Central Highlands FMA. Prioritise the largest diameter trees with large visible hollows for retention as habitat trees where possible/where they exist. p23 No Greater Gliders identified on coupe plan map.	A mixed species coupe in which 7.77 ha nett of 42.25 ha gross was harvested by STR CB 3.6.21A The post-harvest map and agreed map 7C depict a SPZ across the northern border of the coupe running in both directions. CB 3.4 at [409(c)], p159 The post-harvest map depicts an SPZ and a 200m THEZ to the south of the coupe. CB 3.4 at [409(d)], p159 Agreed map 7C depicts a Greater Glider detection at the eastern end of	Forest Type/Structure. Mapped as more than about 50% old growth (pre 1860) Mixed Species in both coupes with the remainder 1939 Mixed Species (Diving Spur) and about 25% 1939 regrowth and 2017 regrowth (Rowels). This is not entirely consistent with site survey which shows (from remnant old growth habitat trees (see Figure Baw Baw Rowels) that uneven-aged old growth occurred across the logged part of Rowels before timber harvesting. This old growth is not clearly evident on aerial photographs. Site inspection shows that the many living senescent trees in this area have broken tops which may have been damaged by wind throw, possibly making the canopy height more uniform than normal in old growth.	Significance of Impact: Very high on logged part of Rowels and scheduled coupes if logged. Due to the total loss of high quality (important and critical) old growth Glider habitat. The habitat will never recover under current harvesting practice because harvesting rotations are too short. The retained habitat trees Rowels have been largely damaged by post logging burning and are mostly likely to fall before the regenerating forest reaches an age (about 75 years) suitable for recolonization by gliders. If the forest is re-harvested within about 75 years of age the protection of habitat trees for Greater Gliders would be largely superfluous except in close proximity (75m) of permanently protected habitat. Aerial photography may not always be reliable for	2017 GG record located in forest not harvested in northeast of coupe. Imagery indicates suitable glider habitat in northern part of coupe and extending into northern SPZ. Likely limited impact from harvest events on local GG population with any individuals affected by harvest event moving into retained forest. Impact on Greater Glider – Limited CB 5.1.1 p126	N/a	Agreed Map CB 7.7F shows the Baw Baw coupes are surrounded by forest logged by clearfelling between 1987 and 1999 to the east. It shows an SPZ to the north and south of the coupe group, with fragmented SPZs to the east and west.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
						the coupe in the unharvested area and a visual amenity buffer for the Carringal Scout Camp CB 3.4 at [409(e)], p159	Glider Habitat and Abundance: Predicted suitability for Greater Gliders is very high (1.6 -2.1/ha) due to abundant living senescent trees with hollows, and abundant large stems (40-80 cm). There are actual records of Greater Gliders in both coupes. The VicForests Greater Glider High Quality Habitat correctly predicts about 75% of the old growth habitat in Diving spur,but misses all the old growth habitat in Rowels. Compliance with Code: Poor in the logged part of Rowels. Habitat trees not protected during logging operations with more than 50% severely burnt and not likely to survive. No habitat trees in clumps, old growth forest has not been protected from logging. Use of high intensity logging (clearfelling) in Mixed Species forest is inconsistent with the Code of Practice and will result in the death and elimination of all Greater Gliders on the logged areas. CB 4.2.1 p74 Photographs of uneven aged old growth Mixed Species and uneven aged old growth Ash p76-77	detection of old growth forest where it has a uniform (rather than irregular) canopy, such as on extensive parts of Rowels. This means that the presence of Greater Glider habitat can only be reliably determined by pre-logging surveys. CB 4.2.1 p74			
	Diving Spur 483-505-0018 10.34 Scheduled	CFE 17ha nett 45.7ha gross	**3**: LW (2-3 Sep 2017), CB 2.3 p50 at [185-186] **3**: VDR CB 4.1.1 p24 **2**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Three GG recent records located 500m northeast in Rowles coupe. Imagery indicates glider habitat in coupe and surrounding forests. Harvesting will affect individual gliders. About 50% of modelled GG habitat class 1 in harvest area. The impact on the local population is likely to be minor; a result of the amount of high-quality habitat being harvested. Impact on Greater Glider – Minor CB 5.1.1 p163		
Beech Creek	Waves 300-524-0002 10.12 Scheduled	CFE 20ha nett 43.3ha gross	**1**: LW (9-10 Aug 2017), CB 2.3 p68 at [283-284] **1**: VDR CB 4.1.1 p25	N/a	N/a	N/a	Forest Type and Structure: VicForests map these coupes as a mix of 1939 and pre-1900 Ash Forests. Site inspection occurred only in the 1939 portion of the coupes and was consistent with mapping. Aerial photography is	Significance of Logging Impact. Pre 1900 (old growth) Ash forest is a very rare and critical resource in the Central Highlands. It is estimated that prior to European settlement, 30-60% of the Mountain Ash	Recent GG record within 500m of eastern boundary. Imagery indicates suitable GG habitat in and surrounding the coupe. The LBP SPZs include the majority of the 1850s ash and class 1 GG habitat. Any GGs impacted by harvesting	N/a	Agreed Map CB 7.8F shows that the Beech Creek coupes are surrounded by forest logged by clearfelling

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
			0: Smith CB 4.2.1 p106				consistent with old growth forest mapping. Greater Gilder Habitat and Abundance. There are 3 Greater Glider records in Surfing and 1 in Waves (shared on the boundary with Surfing). These records are on (or in close proximity to) VicForests mapped Greater Glider High Quality Habitat Class 1 habitat. This mapping broadly corresponds with mapping of pre 1900 forests. CB 4.2.1 p78	forests of the Central Highlands were multi-aged or old growth (Lindenmayer *et al*. 2013b). However, due to fires and past management, <2% is currently estimated to be old growth or multi-aged forest (Lindenmayer *et al*. 2015). Protection of all of this remaining habitat is likely to be essential to meet current targets in the Code of Practice which have been set to protect at least 30% of the ash forest within each Leadbeater's Possum Management Unit from timber harvesting so that it can mature into old growth forest (DELWP 2015). This habitat is also critical to the Greater Glider because it provides a suitable structure for gliding and feeding and abundant hollows. The Interim Greater Glider Strategy (VicForests 2017) does not protect old growth ash forest (and is in this regard inconsistent with the Code of Practice). The Interim Strategy protects only some individual large living old Ash trees in proximity to retained areas. It does not protect whole stands, it excludes small trees with hollows, dead hollows, and trees with hollows < 150 cm diameter. Any logging of pre-1900 Ash Forest in Beech Creek coupes is therefore likely to have a significant impact by causing the death and permanent loss of Greater Gliders and their habitat by intensive logging on short rotations. CB 4.2.1 p78 There will be a significant	would likely move to the hydrological buffers and SPZs. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p149-150		between 1984 and 2015 to the north-east and south-west. It shows an SPZ to the south-east of the coupe group.
	Surfing 300-539-0001 10.13 Scheduled	CFE 9ha nett 27.3ha gross	**2**: LW (21 Jul 2017), CB 2.3 p69 at [286] **3**: VDR CB 4.1.1 p25 **3**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Recent GG record within 300m of southern boundary. Imagery indicates suitable GG habitat in and surrounding the coupe. The LBP SPZs and large SPZ include the majority of the 1850s ash and class 1 GG habitat. Most of the 1850s ash forest occurs in forest to be retained. Any GGs impacted by harvesting would likely move to the hydrological buffers SPZs or retained forest. Harvesting is limited to nine hectares; any impacts on GG would be limited. Impact on Greater Glider – Limited CB 5.1.1 p150-151		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
								impact on the coupes because, the interim Greater Glider strategy does not protect old growth ash forest. The way to prevent an impact is to protect the habitat around a tree, rather than just protecting an individual pre-1900 tree, so that you're protecting a stand of pre-1900 forest that the Greater Gliders can stay in. T451.3-42			
Big River	Camberwell Junction 290-527-0004 9.41 Logged	CFE 27ha nett 33.9ha gross	**2**: LW (17-18 Dec 2017), CB 2.3 p78 at [345-346] **1**: LW (24-25 Dec 2017), CB 2.3 p78 at [347-348] Reported 7 Jan 2018, CB 2.3 p79 at [351] **2**: VDR CB 4.1.1 p26 **2**: Smith CB 4.2.1 p106	Commence-ment date unknown. Completed 24 Apr 2018 (2nd Paul, CB 3.4 at [178], p77	16 Feb 2018 CFE: CB 8.8A p5 2 Greater Glider species observation records from 2017 within coupe boundary. No detection based requirements exist for Greater Gliders within the Central Highlands FMA. Prioritise the largest, live, hollowbearing trees for habitat retention. 1 Greater Glider species observation record within 500m of coupe boundary. No detection based requirements exist for Greater Gliders within the Central Highlands FMA. Prioritise the largest, live, hollow bearing trees tor habitat retention. CB 8.8A p19 Orange stars mark 'species observations' on coupe plan map at same locations as lay witness GG detections, per 4.1.1 p26. Not identified as	A mixed species coupe in which 20.6 ha nett of 33.88 ha gross was harvested by CFE CB 3.6.21A VF finalised a habitat assessment in the coupe on 12 February 2018, in the knowledge that Greater Gliders had been observed in or adjacent to the coupe. Following the habitat assessment, a number of habitat protection measures were planned. CB 3.2 at [79-81], p20 The coupe did not contain modelled suitable Greater Glider habitat, however an area to the north east of the coupe containing larger trees with hollows was retained. Areas containing pre-1900s trees	Forest Type/Structure: Both coupes are mapped as all 1939 regrowth and predominantly Mixed Species with about 50% crown scorch and some crown burn (Camberwell Junction) and about 30% crown scorch (Vice Captain) and light fire in 2009 in the balance of forest on both coupes. Site inspection revealed uneven aged old growth on both coupes with abundant large old senescent Gums and Stringybarks scattered across the coupes. These old growth trees appear to have survived and recovered after the 2009 wildfire. Greater Gilder Habitat and Abundance: Predicted greater glider abundance is high on both coupes (1.0 gliders/ha on Camberwell Junction and 1.9 on Vice Captain). Four Greater Gliders were reported from Vice captain and two (including one 75% certain) in Camberwell Junction in 2017. This indicates that Greater Gliders were able to recover from a quite severe fire in 2009 within a period as little as 8 years after fire in these Mixed Species forest.	Significance of Impact: High on Camberwell Junction due to the loss of high quality (important and critical) old growth Glider habitat with a known occurrence of Greater Gliders before logging. Very high on Vice Captain if clearfelled on short rotations (< 80 years) due to permanent loss of critical and important mature and old growth habitat with abundant hollows. CB 4.2.1 p79	No GG records in coupe or surrounding coupes. Two 2012 records located more than 2km southwest of coupe. Imagery indicates suitable glider habitat in coupe and surrounding forests. Quality of habitat dependent on forest recovery after 2009 fire. Two GGs observed in coupe and identified in coupe plan (FOR.002.010.0006_00 19 and FOR.002.010.0007). Harvesting will affect individual gliders and impact will depend on them moving to retained forest. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p164-165	N/a	Agreed Map CB 7.9F shows that the Big River coupes were lightly, moderately or severely burned by the 2009 fires and are separated by an area of forest logged by clearfelling between 2003 to 2005, with SPZ along the south and south-west of the coupe group.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
					Greater Glider on the coupe plan map. p22	were also excluded from harvesting. CB 3.4 at [446], p171	Compliance with Code: Stream VWB protection zones in the centre of the coupe (Map 9c) have been logged and not retained as shown. .. .. Timber Harvesting does not comply with Habitat Tree Prescriptions in the Code. Specifically retained habitat trees are not protected from damage during harvesting and site preparation, habitat trees are not retained in clumps. ..Areas shown as modelled exclusion zones for drainage buffers (Map 9c) were cleared during logging showing that these protection zones are not reliable for biodiversity and Greater Glider. CB 4.2.1 p79				
	Vice Captain 290-525-0002 10.38 Scheduled	CFE 20ha nett 42.8ha gross	**1**: LW (24-25 Dec 2017), CB 2.3 p80 at [355-356] **3**: LW (30-31 Dec 2017), CB 2.3 p80 at [357-358] Reported 7 Jan 2018, CB 2.3 p81 at [361] **4**: VDR CB 4.1.1 p26 **4**: Smith CB 4.2.1 p106	N/a	9 Apr 2018 CFE: CB 8.28, p5 & 8.28A, p6 3 unverified Greater Glider species observation records (2017) within coupe Boundary. No detection based requirements exist for Greater Gliders within the Central Highlands FMA. Prioritise the largest, live, hollow bearing trees for habitat retention. p19 Orange stars mark 'species observations' on coupe plan map at same locations as lay witness GG detections, per 4.1.1 p26. Not identified as Greater Glider on the coupe plan map. p24	VF finalised a habitat assessment in the coupe on 18 April 2018, in the knowledge that Greater Gliders had been observed in or adjacent to the coupe. Following the habitat assessment, a number of habitat protection measures were planned. CB 3.2 at [79-81], p20 The habitat protection measures are: an area in the north and south of the coupe containing larger trees with hollows has been retained, an area of Zone 1A to the south of the coupe will be excluded from harvesting and a number of isolated pre-1900 Ash trees will be excluded from harvesting. CB 3.2 at [104], p25 VF will conduct its operations in accordance with the management actions identified			Two 2012 records located more than 1km west of coupe. Imagery indicates suitable glider habitat in coupe and surrounding forests not severely affected by 2009 fire. Quality of habitat dependent on forest recovery after 2009 fire. Three unverified GGs observed in coupe (FOR.002.061.0010_0019 and FOR.002.061.0012). Harvesting will affect individual gliders and impact will depend on them moving to retained forest. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p165		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
						on the Biodiversity Inspection Map CB 3.2 at [105], p26					
Cambarville	Bromance 312-510-0007 9.33 Logged	CFE 18ha nett 34.5ha gross	**5**: LW (14-15 Jan 2018), CB 2.3 p52 at [198-200] Reported 15 Jan 2018, CB 2.3 p53 at [204] After the detection is reported, DELWP asks VF if a targeted pre-harvest survey was undertaken, CB 3.4.89, p2 **5**: VDR CB 4.1.1 p27 **5**: Smith CB 4.2.1 p106	10 Jan 2018 13 Mar 2018	10 Jan 2018 STR: CB 8.9 p5	A mixed species coupe in which 18.64 ha nett of 34.48 ha gross was harvested by STR CB 3.6.21A The post-harvest map depicts a stream buffer running along the south western boundary of the coupe and a further area of retained vegetation along the north west of the coupe, from which harvesting was excluded CB 3.4 at [414], p161	Forest Type/Structure: Mapping shows 1939 mixed Species regrowth on Lovers lane and about 60% 1939 Mixed Species and the balance 1939 Ash on Bromance. Both sites moderately burnt (about 15-20%) or lightly burnt in 2009. Site inspection showed vegetation on both sites to be uneven aged old growth with abundant scattered old trees with hollows suitable for Greater Gliders. Greater Glider Habitat and Abundance: Habitat is predicted to be highly suitable for Greater Gliders (1.1/ ha Lovers Lane and 1.5/ha Bromance). Actual Greater glider records include 5 on Bromance and 3 on Lovers Lane. No mapped Greater Glider High Quality Habitat Class 1 habitat occurs on either coupe, again confirming that the Greater Glider Habitat model of VicForests has no reliability for predicting the occurrence of high quality Greater Glider habitat. Compliance with Code: Stream VWB logging exclusion zones on drainage lines in the centre of both coupes (Map 10c) have been logged and not retained as shown. Post logging burning has been intense, causing death and damage to retained habitat trees. Use of high	Significance of Impact: High on both Coupes due to the death and loss of known Greater Glider populations on the site and permanent loss of high quality (important and critical) old growth habitat if the sites are relogged on short rotations of < 75 years. CB 4.2.1 p81 In relation to Bromance, the question of impact comes back to the problem of the capacity of Greater Gliders to reinvade that site in 40 or 50 years time, which relates to the issue of whether the corridors leading into that habitat sufficient to return Greater Gliders to the site in 40 years time when the forest regenerates. There is a short-term impact. The long-term impact is uncertain. On a precautionary basis (in the absence of information on the adequacy of a corridor leading into it, and 100 – 250 hectare reserves within three kilometres connected by corridors to that coupe to facilitate recolonization), it would be a precautionary and reasonable to assume that there is a risk of a long term impact as well as a certainty of a short term impact. T449.5-16	A GG record located in adjacent eastern coupe and observed in 2017. Imagery indicates good glider habitat assuming suitable habitat trees are present. Individuals affected by harvest event would have moved into retained forest. Likely minor impact from harvesting based on good habitat having been in harvest area. Impact on Greater Glider – Minor CB 5.1.1 p126-127	N/a	Agreed Map CB 7.10F shows the Cambarville coupes were lightly or moderately affected by the 2009 fires and are bordered to the south-west by forest logged by clearfelling between 1993 and 2005. The nearest SPZ is 1.3km (approx.), as the crow flies, from the boundary of the coupe group with no connecting SPZs.
	Lovers Lane 312-510-0009 9.34 Logged	CFE 21ha nett 34.6ha gross	**2**: LW (6-7 Jan 2018), CB 2.3 p50-51 at [189-191] Reported 7 Jan 2018, CB 2.3 p51 at [194] After the detection is reported, DELWP	18 Jan 2018 14 Mar 2018	17 Jan 2018 STR: CB 8.10 p5	A mixed species coupe in which 11.61 ha nett of 34.64 was harvested by STR CB 3.6.21A The post-harvest map depicts the north western half of the coupe was excluded from timber harvesting.			A GG observed in 2017 recorded on southern boundary of coupe. Imagery indicates good glider habitat assuming suitable habitat trees are present. Individuals affected by harvest event would have moved into retained forest. Likely minor impact from harvesting based on good habitat having been in harvest area. Impact on Greater Glider – Minor		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
			asks VF if a targeted pre-harvest survey was undertaken, CB 3.4.90, p2 **3**: VDR CB 4.1.1 p27 **3**: Smith CB 4.2.1 p106			CB 3.4 at [419], p162	intensity logging (clearfelling) in Mixed Species forest is inconsistent with the Code of Practice and will result in the death and elimination of all Greater Gliders on the logged areas. Areas shown as modelled exclusion zones for drainage buffers (Map 10c) were cleared during logging showing that these protection zones are not reliable for Greater Glider habitat protection and corridor networks… Timber Harvesting does not comply with Habitat Tree Prescriptions in the Code. Specifically retained habitat trees are not protected from damage during harvesting and site preparation, habitat trees are not retained in clumps. CB 4.2.1 p81		CB 5.1.1 p127		
Coles Creek	Home & Away 297-538-0004 10.8 Scheduled	CFE 27ha nett 41ha gross	**4**: LW (1-2 Sep 2017), CB 2.3 p68 at [279-280] **3**: VDR CB 4.1.1 p28 **2**: Smith CB 4.2.1 p106	N/a	N/a	N/a	Forest Type and Structure: Mapping shows 1939 Ash Forest. Site inspection showed advanced Ash Regrowth structurally suitable for Greater Gliders but no trees with hollows were observed in the inspection transect. Examination of aerial Photos (map 11A) indicated the likely presence of scattered small patches of irregular canopy consistent with old growth throughout the coupe. Greater Glider Habitat and abundance: The model predicts low (0.1/ha) Greater Gliders in the survey plot due to lack of tree hollows. However, survey records show that at least two Greater Gliders are present most	Significance of Impact: Moderate to High if logged, as aerial photographs show that all regrowth ash on the coupe is within 100m of patches of potential old growth. High impact if any living (critical) uneven aged old growth with living habitat trees is felled under short rotation clearfelling. A single plot survey is insufficient to determine the presence or absence of Greater Glider habitat and Greater Gliders within coupes before logging. This means that the procedure described in the Interim Greater Glider Conservation Strategy to survey and detect habitat trees is not adequately	1990s records of GGs located 100m southwest of coupe. Imagery indicates likely occurrence of GGs in coupe. Harvesting will likely impact on individual gliders occurring in the coupe away from the LBP SPZs. The impact on the local population is likely to be limited. Imagery indicates much of the GG population now confined to the large eastern SPZ and Yarra Ranges National Park. Impact on Greater Glider – Limited CB 5.1.1 P147-148	N/a	Agreed Map CB 7.11F shows Home & Away coupe surrounded by forest logged by clearfelling or seed tree retention between 1993 and 2011. It shows the nearest SPZ and reserves are more than 1km away as the crown flies, with no connecting SPZs.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
							probably associated with scattered small patches of old growth or habitat trees outside the plot survey area. No mapped Greater Glider High Quality Habitat Class 1 habitat occurs on this coupe. CB 4.2.1 p82	precautionary and insufficient to determine the presence of high quality Glider habitat. CB 4.2.1 p82			
Hermitage Creek	Guitar Solo 307-505-0011 9.12 Logged	STR 25ha nett 33.9ha gross	**7**: LW (18-19 Aug 2017), CB 2.3 p34 at [89-91] Reported 27 Aug 2017, CB 2.3 p34 at [96] After the detections are reported, VF confirms to DELWP that no targeted species survey for the GG was undertaken, CB 3.4 at [310], p122 **2**: LW (13-14 Sep 2017), CB 2.3 p35 at [102]	25 Aug 2017 3 Oct 2017	21 Aug 2017 STR: CB 8.11 p5 No reference to Greater glider in the text of the coupe plan. Coupe plan map on p25 marks locations of lay witness GG detections, all except 1 GG are located within the harvest unit, 2 are located on coupe boundary.	A mixed species coupe of which 15.76 ha nett of 33.86 ha gross was harvested by RRH CB 3.6.21A Agreed map 12C depicts three THEZ that overlay the coupe, from which harvesting was excluded. CB 3.4 at [314(b)], p123 The post-harvest map depicts areas excluded from harvesting, being a visual buffer along the southern boundary, a strip of retained vegetation across the north-eastern boundary and an additional strip of retained vegetation adjacent to the THEZ. CB 3.4 at [314(c)(i)-(iii)], p124 The post-harvest map also depicts 5m of retained vegetation surrounding two Tree Geebungs in	Forest Type/Structure: mapping shows forest on three coupes (Guitar solo, Flute and San Diego) to be predominantly Mixed Species and forest on one coupe (Drum Circle) to be predominantly Ash with about 20% Mixed Species. Mapping shows all four coupes to be 1939 regrowth. Site inspection and aerial photo inspection showed that all coupes are substantially old growth or within 100m of old growth, especially in the gullies and sheltered aspects. The least area of apparent old growth (about 20%) occurs on Guitar Solo. Greater Glider Habitat and Abundance: Greater Glider records are abundant (4-6) in all coupes. Predicted Greater Glider abundance is moderate (O.6/ha.) in Guitar Solo and high (1.3-2.0/ha) in all other coupes. Greater Glider High Quality Habitat Class 1 mapping only identifies a small portion (<1 ha) of high quality habitat in San Diego coupe. Compliance with Code: Poor, habitat tree numbers less than prescription, habitat trees not protected during logging operations with many burnt, felled or pushed and no habitat	Significance of Logging Impact. Extremely high if scheduled coupes are logged due to loss of high quality (important and critical) uneven aged old growth Glider habitat with a known high abundance of Greater Gliders before logging. Old growth habitat is particularly abundant in the general area making it an important fire refuge area (see large areas of forest with uneven-aged canopy on aerial photograph map 12A). The habitat will never recover if logged on short rotations (< 75 years in Mixed species and < 40 years in Ash). The majority of Mixed Species forests in these coupes has been miss-identified as 1939 regrowth rather than uneven-aged old growth with an overstorey of living senescent trees. This means that Critical and Important habitat for the Greater Glider can only be reliably identified by pre-logging survey and air-photo interpretation. CB 4.2.1 p83 *Evidence given on view*	Thirteen GG records occurring in eastern and western sides of the compartment, and more than 30 recent (2016, 2017) records south and south east of coupe. Six GG records occurred in the harvest footprint of the coupe. Gliders remain in SPZ and native forests south of coupe. Impact on individual gliders would have occurred, unlikely significant impact from harvest event on local population. Coupe recolonization depends on presence of habitat trees (non-ash) and growth of regrowth. Guitar Solo needs to be considered with coupes to be logged (Drum Circle, Flute and San Diego) as a group in Scheduled Coupes assessment. Impact on Greater Glider – Minor CB 5.1.1 p118 It is necessary to consider each coupe in its context which includes nearby coupes when looking at the impact or otherwise of proposed operations. T507.29-508.6	Collectively assessed as Moderate impact severity on local population because of the potential impact on the local Greater Glider population of harvesting the four coupes found in the map series. CB 5.1.1 p172, 173 CB 5.4.1 p42	Agreed Map CB 7.12F shows the Hermitage Creek coupes are surrounded to their west by forest logged by clearfelling between 1974 to 2010. It shows a SPZ along the south-west boundary of the coupe group that abuts a National Park.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
						the southern part of the coupe and Greater Glider detections. CB 3.4 at [314(c)(iv-v)], p124	trees in clumps. Use of high intensity logging (clearfelling) in Mixed Species forest is inconsistent with the Code of Practice that requires low intensity harvesting in Mixed Species. Timber Harvesting does not comply with Habitat Tree Prescriptions in the Code. Specifically retained habitat trees are not protected from damage during harvesting and site preparation, habitat trees are not retained in clumps, habitat tree numbers are insufficient. CB 4.2.1 p83 *Evidence given on view* Forest type near detection record number 37 in Guitar Solo coupe on pg 29 of Dr Van de Ree's report (CB 4.1.1) is mixed species. VT40.1-6 At the top of the incline the view party stopped at in Flute coupe, there are about eight to ten habitat trees per hectare. That is about as good as habitat gets. This is typical high quality mixed species habitat with large old trees in the overstory and a mix of trees at different age underneath. Because there are so many habitat trees here you would expect to get the highest possible density of Greater Gliders in this area because they're mainly limited by the number of habitat trees. VT53.41-47	Forest in proximity to detection record number 37 in Guitar Solo coupe on pg 29 of Dr Van de Ree's report (CB 4.1.1) has been clear-felled with seed and habitat tree retention. The burn has been exceedingly hot. Around half of the retained habitat trees have been killed. This type of logging will create a uniform aged mixed species forest which is not a natural condition for that forest type. In this type of forest you should have selective silviculture that maintains an uneven aged stand rather than uniform clearfelling which creates a uniform tree crop. VT40.11-22	*Evidence given on view* Forest type near detection record number 37 in Guitar Solo coupe on pg 29 of Dr Van de Ree's report (CB 4.1.1) is mixed species. VT40.1-6		
	Drum Circle 307-505-0001 10.14 Scheduled	CFE 14ha nett 35.5ha gross	**4**: LW (13-14 Jul 2018), CB 2.3 p36 at [107-108] **7**: VDR CB 4.1.1 p29 **6**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Eleven recent GG records within the coupe, the majority of which are in what is likely to be Foothill Mixed Species Forest in the northern sector of the coupe. This forest type apparently will not be harvested (FOR. 002.015.0004) and will remain as retained forest and harvest impacts on GGs would be minimal. Likely minor impact on local GG population. Impact on Greater Glider – Minor CB 5.1.1 p151		
	Flute 307-505-0009 10.15 Scheduled	STR 26ha nett 46ha gross	**10**: LW (19-20 Sep 2017), CB 2.3 p36 at [105] **8**: VDR CB 4.1.1 p29 **7**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Six recent GG records within the coupe, with 30 other records in Foothill Mixed Species Forest in neighbouring coupes to the north and east. Imagery indicates suitable GG habitat across most of the coupe. As the six records are in the area to be harvested there will most likely be impacts on individual gliders as a result of harvesting. Likely minor impact on GG local population. Impact on Greater Glider – Minor CB 5.1.1 p151-152 Flute coupe is certainly very		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
									high-quality habitat but doesn't meet the definition of critical habitat. T485.13-17 *Evidence given on view* Flute coupe is very good quality habitat for Greater Gliders; calculated nine habitat trees per hectare. VT54.4-5		
	San Diego 307-505-0010 10.16 Scheduled	STR 27ha nett 35.9ha gross	**11**: LW (13-14 Jul 2018), CB 2.3 p36-37 at [109] **8**: VDR CB 4.1.1 p29 **5**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Six recent GG records within the coupe, with 11 other records in Foothill Mixed Species Forest in neighbouring coupes to the north and east. Three records occur in Modelled GG habitat class 1 and 1850s aged mixed species found in southern portion of the coupe. Imagery indicates suitable GG habitat across most of the coupe. Three GG records are in forest to be retained. There will be impacts on individual gliders as a result of harvesting. Impacts on the local population of GGs would be limited. Impact on Greater Glider – Limited CB 5.1.1 p152 Later revised to Minor impact severity based on Dr van der Ree's report dated 31 Oct 2018 CB 5.4.1 p42		

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Coupe group location	**Coupe name, no. & 2FASOC paragraph, Logged or scheduled**	**TRP[i]: Silv system & nett/ gross area**	**GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]**	**Harvest commence & complete dates[v]**	**Coupe Plan date, silviculture system & Greater Glider content**	**Mr Paul's statements re silv system, nett/gross area and coupe**	**Dr Smith's observations regarding GG habitat and habitat trees**	**Dr Smith's opinion re impact**	**Dr Davey's opinion re impact for coupe**	**Dr Davey's opinion re impact for coupe group**	**Agreed Map depicting records, 2009 fire & logging history**
Loch and Noojee	Estate 462-507-0008 9.30 Logged	STR 24ha nett 34.5ha gross	**8**: LW (11-12 Apr 2017), CB 2.3 p46 at [163-165] **5**: LW (19-20 Aug 2017), CB 2.3 p47 at [168] **8**: VDR CB 4.1.1 p3 **8**: Smith CB 4.2.1 p106	1 May 2017 23 Feb 2018	28 Apr 2017 STR: CB 8.12 p4 No reference to Greater Glider.	A mixed species coupe in which 18.66 ha nett of 34.53 ha gross was harvested by STR CB 3.6.21A The post-harvest map depicts areas along the western boundary of the coupe that were retained in addition to stream buffers. There is further retained area on the north-east side. CB 3.4 at [399]	Forest Type/Structure: Mapping shows forest on three coupes to be predominantly Mixed Species with minor amounts of Ash. Mapping shows Brugha to be predominantly pre 1860 and part Jakop to be pre 1860 and mostly pre 1910. Estate is mapped as mostly 1939 and recently logged. Site inspection and aerial photo inspection showed that all coupes are substantially old growth or within 100m of old growth, especially in the gullies and sheltered aspects. Greater Glider Habitat and Abundance: Greater Glider records are abundant, 8 in Estate and Jakop and 3 in Brugha. Predicted Greater Glider abundance is high in Jakop (2.6/ha.) and Estate (1.0). Compliance with Code: Poor, habitat tree numbers less than prescription, habitat trees not protected during logging operations with some felled or pushed and no habitat trees in clumps. Use of high intensity logging (clearfelling) in Mixed Species forest is inconsistent with the Code of Practice that requires low intensity harvesting. Timber Harvesting in Mixed Species Forests does not comply with the Code of Practice. It does not use silvicultural systems that suit the ecological requirements of the forest type. In order to be consistent with the Code	Significance of Logging Impact. Extremely high in Estate and in Jakop and Brugha if these scheduled coupes are logged due to the loss of high quality (important and critical) uneven aged old growth Glider habitat with a known high abundance of Greater Gliders before logging. Old growth habitat is particularly abundant in this general area making it an important fire refuge area (see large areas of forest with uneven-aged canopy on aerial photograph, map13A). The habitat will never recover under short harvesting rotations (< 75 years) and extensive clearfelling that does not retain approximately one third of the forest to reach maturity (> 75 years) and one third to reach old growth (> 120 years). Clear felling is inappropriate and contrary to the Code of Practice in Mixed Species. CB 4.2.1 p85	Eleven recent GG records in northern and eastern part of the coupe with some records in modelled GG class 1 habitat. Other recent records in Jakop coupe immediately southwest. Impact on individual gliders would have occurred as harvest footprint overlaps most of the recent records. Individuals in northern sector likely to move into SPZ. Likely impact from harvest event on local GG population has occurred given the number of recent records located in coupe and the distribution of high quality habitat recorded in coupe. Impact on Greater Glider – Moderate CB 5.1.1 p125	Collectively assessed as Moderate impact severity on local population. The distribution and amount of modelled Greater Glider Habitat Class 1 found across the coupes and the scale of likely impact of harvesting Class 1 habitat contributed to the collective ranking of these coupes as Moderate. The scale of impact on the local population of Greater Gliders will be influenced by the number of gliders found in the high-quality habitat in these coupes and how much of the high-quality habitat has been or will be harvested. CB 5.1.1 p172-173	Agreed Map CB 7.13F shows the Loch and Noojee coupes surrounded on the eastern boundary of the coupe group by forest logged by clearfelling between 1987 and 2013. It shows a linear SPZ to the north of the coupe group, bordering Brugha and Estate coupes.
	Brugha 462-506-0019 10.32B Scheduled	CFE 18ha nett 33.1ha gross	**3**: LW (24-25 Jan 2018), CB 2.3 p48 at [175-176] Reported 29 Jan 2018, CB 2.3 p48-49 at [180] **3:**VDR CB 4.1.1 p30 No data in Smith	N/a	N/a	N/a			Two recent GG records in coupe's modelled GG habitat class 1 and three records on the coupe boundary with the large SPZ. Imagery indicates suitable glider habitat in coupe, SPZ and surrounding forests. Harvesting will affect individual gliders. Impact will depend on the amount of modelled GG habitat class 1 harvested and the distribution of retained forest. Map shows much of the class 1 habitat being harvested. The impact on the local population is likely to be minor because of the GG population in SPZ even though high-quality habitat is being harvested.		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
							silviculture in Mixed Species forests would need to be low intensity (<33% basal area removal), regeneration would be by soil disturbance or low intensity burns, rotations would be longer (80-160) years, and retained habitat trees would be better protected. CB 4.2.1 p85		Impact on Greater Glider – Minor CB 5.1.1 p162		
	Jakop 462-507-0009 10.33 Scheduled	STR 22ha nett 39.6ha gross	**3**: LW (6-7 Jul 2017), CB 2.3 p47 at [170-171] **11**: LW (10-11 Jul 2018), CB 2.3 p47 at [173] **11**: VDR CB 4.1.1 p30 **10**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Six recent GG records in coupe's modelled GG habitat class 1. Imagery indicates glider habitat in coupe and surrounding unharvested forests. Harvesting will affect individual gliders. Impact will depend on the amount of modelled GG habitat class 1 harvested and the distribution of retained forest. Map shows much of the class 1 habitat being harvested. The impact on the local population is likely to be moderate; a result of the amount of high quality habitat being harvested. Impact on Greater Glider – Moderate CB 5.1.1 p162-163		
Matlock and the Triangle	Swing High 317-508-0010 9.35 Logged	CFE 9ha nett 23.4ha gross	**5**: LW (17-18 Feb 2018), CB 2.3 p54 at [208-210] Reported 18 Feb 2019, CB 2.3 p55 at [214] VF then undertakes a pre-harvest survey and does not detect any Greater Gliders, CB 3.4 at [422], p163	14 Mar 2018 30 Apr 2018	13 Mar 2018 CFE: CB 8.13 p5 "Coupe overlay has identified Modelled Greater Glider High Quality Habitat within the coupe boundary. High Quality Greater Glider Habitat has been defined as areas of mixed species forest where at least 15 living, large hollow-hearing trees per 3 ha are located." p 24 "Apply VicForests Interim Greater Glider Conservation Strategy prescriptions, If Greater Glider High Quality Habitat is	A mixed species coupe in which 3.07 ha nett of 23.43 ha gross was harvested by RRH CB 3.6.21A The post-harvest map depicts areas of Zone 1A, which were excluded from harvesting. CB 3.4 at [424(b)], p164 The post-harvest map and agreed map 19C depict three THEZ along the southern boundary that overlap parts of the coupe, which were	Forest Type/Structure: Mapped as predominantly 1939 Ash regrowth forest with about 20% pre 1860 forest. Site inspection and aerial photography indicates that the forest was substantially uneven aged old growth before harvesting. Greater Glider Habitat and Abundance: Greater Glider records were abundant (5) prior to logging. Greater Glider High Quality Habitat Class 1 habitat was present in a small area (<1 ha) on the margin of the coupe. Compliance with Code: Poor, habitat tree numbers less than prescription, habitat trees not protected during logging	Significance of Logging Impact: Extremely High. Pre1900 (old growth) Ash forest is a very rare and critical resource in the Central Highlands (<2% is currently estimated to be old growth or multi-aged forest). Protection of all of remaining old growth habitat is necessary to comply with the Code of Practice (2.2.2.9 Modify coupe size and rotation periods to maintain a diversity of forest structures throughout the landscape) and to meet current targets set to protect at least 30% of the ash forest within each Leadbeater's Possum Management Unit from timber harvesting so that it can mature into old growth forest (DELWP 2015). It stated in	No records of gliders located in coupe. Historic records occurring in neighbouring forest stands. Modelled GG habitat class 1 located on western boundary. Both imagery of coupe and surrounding forest and description of stand in coupe plan indicative of suitable glider habitat. Any impact on gliders would be limited with such a small harvest area (13% of coupe). Impact on Greater Glider – Limited CB 5.1.1 p127-128	N/a	Agreed Map CB 7.14F shows Swing High coupe bordered to the north by a SPZ and to the south-west by a National Park.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
			1: LW (16-17 Mar 2018), CB 2.3 p56 at [219-221] **6**: VDR CB 4.1.1 p31 **5**: Smith CB 4.2.1 p106		confirmed within 75m of the planned harvest area boundary, endeavour to retain additional live, large hollow-bearing trees that occur within 75m of forest that is likely to be retained for at least the next 20 years. This may include stream or other coupe buffers and any permanently reserved areas." p 24 "A Greater Glider record is adjacent to the coupe boundary. The Glider has been added to the DEPI Advisory List of Threatened Species. A site 200-500m from the coupe boundary was determined by stag watch in 1999. 29/08/2014 31/1/18: Record is outside planned area to be harvested. No further action required." p 25 No Greater Gliders identified on coupe plan map, p30.	excluded from harvesting. CB 3.4 at [424(c)], p164	operations no habitat trees in clumps, no recruited habitat trees in gaps, old growth clear felled contrary to Code (failure to maintain a diversity of forest structures). CB 4.2.1 p87	the Regrowth Retention Harvesting prescription that "all areas of pre1900 or Old Growth Ash forests are reserved and individual trees are protected from harvesting by legislation". If correct this would indicate that any logging of old growth ash on this site was illegal. CB 4.2.1 p87 Key Finding: … The Regrowth Retention Harvesting prescription has a goal to "To protect and enhance old-growth forest structures such as future habitat suitable for a range of forest dwelling species, especially those mature forest dependent species Specific mature forest features that will be targeted for retention include large diameter coarse woody debris, stags with hollows and large living trees. However there appear to be no specific measures to implement or enforce this in practice. This study has shown that dead trees in coupes are commonly felled or pushed and then burnt. The Interim Strategy for Greater Gliders protects only some individual large living old Ash trees in proximity to retained areas. It does not protect whole stands, it excludes small trees with hollows, dead hollows, and trees with hollows < 150 cm diameter. Many trees less than 150 cm diameter are likely to pre-date 1900 and to contain tree hollows. CB 4.2.1 p87			

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
Mount Bride	Louisiana 345-526-0003 10.27 Scheduled	CFE 12ha nett 23.4ha gross on 2019 TRP (16ha nett 29ha gross on 2017 TRP)	**1**: LW (29-30 Jun 2018), CB 2.3 p73-74 at [314-315] **1**: VDR CB 4.1.1 p32 **1**: Smith CB 4.2.1 p106	N/a	N/a	N/a	Forest Type and Structure: Site inspection showed the site to be advanced regrowth (probably 1939). Ash Aerial photographs showed an irregular canopy associated with old growth but ground inspection showed that irregularity was due to patchy regeneration with large patches of Acacia dealbata (excellent for Leadbeater's Possum) and "open grown" ash trees with unusually large crowns and stem diameters resulting from reduced competition. A number of these larger than usual open grown 79 year old Ash trees had developed hollows (fissures, dead crowns see Mount Bride photo below) at an unusually young age (normal age for hollow development is 120 years). Greater Glider Habitat and Abundance: The sites supported a moderate number of habitat trees due to unusual persistence of tall dead stags and early development of hollows in living open grown Ash. Predicted Greater Glider density was Moderate (0.5/ha) and there is one actual Greater Glider record in each coupe. Greater Glider High Quality Habitat Class 1 occurs on about 20% (Lousiana) to 50% (Bourbon St.) of the coupes. Compliance with Code: Any logging of this compartment would need to be consistent with the Regrowth Retention Harvesting Goals (see table xx) which require that dead stags with hollows (and living trees with hollows) are	Significance of Impact: Moderate to high if logged under current practice because all existing Greater Glider populations will be lost and are unlikely to recover because under current prescriptions and practice recruitment habitat trees are not retained, insufficient habitat (33 -66%) is retained permanently to advance to maturity and old growth, and wide (100m) corridor habitat links to other areas of old growth are narrow or non-existent. CB 4.2.1 p88	1990s GG records found in large SPZ to the south. Imagery indicates suitable GG habitat found across most of coupe, large SPZ and surrounding unharvested forest. Harvesting will affect individual gliders and impact will depend on them moving to retained forest. Modelled GG habitat class 1 is in harvest area but not as extensive as that found in Bourbon Street coupe. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited 5.1.1 p158	N/a	Agreed Map CB 7.15F shows the Mount Bride coupes are surrounded to the north, east and west by forest logged by clearfelling between 1974 and 1985. It shows a SPZ bordering the south-west boundary of the coupe group.
	Bourbon Street 345-526-0004 10.28 Scheduled	CFE 9ha nett 18.1ha gross on 2019 TRP (11ha nett 22.1ha gross on 2017 TRP)	**1**: LW (30-31 Jul 2017), CB 2.3 p72-73 at [308-309] **1**: VDR CB 4.1.1 p32 **1**: Smith CB 4.2.1 p106	N/a	N/a	N/a			1990s GG records found in large SPZ to the south. Imagery indicates suitable GG habitat found across most of coupe, large SPZ and surrounding unharvested forest. Harvesting will affect individual gliders and impact will depend on them moving to retained forest. Modelled GG habitat class 1 is in harvest area. The impact on the local population is likely to be minor. Impact on Greater Glider – Limited 5.1.1 p158-159		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
							protected from harvesting and regeneration impacts. It would also require the retention of at least 30% of the advanced regrowth in the coupe distributed so that the harvested area is no more than 60 m from retained forest. It would also require that recruitment habitat trees are retained and protected throughout logged forest. There is no evidence from similar coupes logged elsewhere (see Ada Tree Ginger Cat) that these requirements will be complied with. CB 4.2.1 p88				
Mount Despair	Glenview 298-516-0001 9.5 Logged	STR 26ha nett 40.9ha gross	**2**: LW (9-10 Aug 2017), CB 2.3 p29 at [60-62] **3**: LW (10-11 Aug 2017), CB 2.3 p29 at [63-65] Reported 12 Aug 2017, CB 2.3 p30 at [69] After the detections are reported, VF confirms to DELWP that no targeted species survey for the GG was	4 Sep 2017 6 Nov 2017	2 Aug 2017 STR: CB 8.14 p4 No reference to Greater Glider.	A mixed species coupe in which 30.01 ha nett of 40.92 ha gross was harvested by STR CB 3.6.21A The post-harvest map depicts an area of 10ha (approx.) was retained for stream buffers and habitat protection where five Greater Gliders were detected. A further Greater Glider was detected in the vicinity of the stream buffer. CB 3.4 at [300], p119	Forest Type/Structure: Flicka is mapped as 1939 and 1960 Ash, Chest is mapped as 1939 Ash (about 40%) and the balance 1939 Mixed Species. Glenview and Bridle are mapped as 1939 Mixed Species. Site surveys and aerial photography showed that mapping was mostly incorrect. Flicka is uneven-aged Mixed Species old growth (as evidenced by the large numbers of senescent Mixed Species habitat trees retained see photo below). Bridle is also Mixed Species uneven-aged old growth with abundant senescent trees and Glenview was uneven-aged Mixed Species with about 4 senescent old growth trees/ha remaining after logging and burning. Chest was listed as scheduled for logging but has been logged in the lower (Ash) part	Significance of Logging Impact. Extremely high in Glenview and Flicka. Due to loss of high quality (important and critical) uneven aged old growth Mixed Species Glider habitat with a known high abundance of Greater Gliders before logging. Old growth Mixed Species habitat is particularly abundant in this general region making it an important sub-population and fire refuge area. The habitat will never recover under current clearfelling practice if harvesting rotations are too short (<75 years) for the slower growing Mixed Species to exceed a size suitable for Gliders (40+ cm diameter), retained habitat trees have been so severely damaged and left isolated and unprotected that they are unlikely to survive until	Eight glider records 2017 with 4-5 records in logged area. GGs in harvest area likely to be affected by harvesting. Gliders likely now in surrounding habitat reserve and hydro buffer and areas west and south of coupe. Impact on individual gliders would have occurred, unlikely significant impact from harvest event on local population. Coupe recolonization depends on presence of habitat trees (non-ash) and growth of regrowth. Impact on Greater Glider – Minor CB 5.1.1 p117	Collectively assessed as Minor impact severity on local population. CB 5.1.1 p172-173; CB 5.4.1 p42	Agreed Map CB 7.16F shows Glenview and Bridle coupes were lightly, moderately and severely affected by the 2009 fires, while Chest and Flicka coupes were lightly and moderately effected. It shows a large area of forest sitting between Chest and Flicka coupes that was logged by clearfelling between 1989 and 2017.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
			undertaken, CB 3.4 at [294], p117 **5**: LW (26-27 Aug 2017), CB 2.3 p31 at [75-77] Reported 29 Aug 2017, CB 2.3 p32 at [80]				uphill of the road and was found to support predominantly 1939 regrowth with a low density of larger trees with hollows in the area examined. Greater Glider records on Chest are mostly located in the Mixed Species part of the coupe. This part of the coupe was not inspected on the ground but based on aerial photographs is considered likely to be similar to that on Bridle and Glenview (uneven-aged old growth Mixed Species). Greater Glider Habitat and Abundance. Large numbers of Greater Gliders have been recorded on Glenview (7) Chest (13) and Bridle (12) and moderate numbers on Flicka (3). Greater Glider density is predicted by the model to be high on Glenview (0.9/ha), Bridle (1.6/ha) and Flicka (1.2/ha) and moderate on the Ash part of Chest (0.6). No modelled High Quality Class 1 Greater Glider habitat is mapped as occurring on the site. Compliance with Code: Very poor, both Glenview and Flicka were clearfelled which is inappropriate in Mixed Species forest and inconsistent with the Code of Practice that requires low intensity harvesting consistent with natural ecology in this forest type. Post logging burning on Glenview was so severe that most retained habitat trees appear to have been killed or severely damaged. No habitat	forests recover, and insufficient area of each coupe is protected and allowed to grow to maturity to provide future old growth. …The Vicforests Forest Age Class Mapping is not reliable for Mixed Species Forests. The majority of Mixed Species forests in these coupes has been miss-identified as 1939 regrowth rather than uneven-aged old growth with an overstorey of living senescent trees. This means that Critical and Important habitat for the Greater Glider can only be reliably identified by pre-logging survey and air-photo interpretation. CB 4.2.1 p89			A linear SPZ abuts the southern end of Flicka coupe.
	Flicka 298-519-0003 9.6 Logged	CFE 28ha nett 37.8ha gross	**1**: LW (7-8 Apr 2017), CB 2.3 p27 at [46-48] **2**: LW (26-27 Jul 2017), CB 2.3 p27 at [49-51] Reported 28 Jul 2017, CB 2.3 p28 at [55] After the detection is reported, DELWP asks VF for the pre-harvest survey status, CB 3.4 at [303], p120 **10**: VDR CB 4.1.1 p33	24 Jul 2017 20 Nov 2017	20 Jul 2017 CFE: CB 8.15 p4 No reference to Greater Glider.	An Ash coupe in which 19.86 ha nett of 37.75 ha gross was harvested by RRH CB 3.6.21A The post-harvest map depicts an area of SPZ that runs up the centre of the coupe and the area surrounding the SPZ within the coupe, which were excluded from the coupe boundary, and a patch in the northern section of the coupe which was not harvested. CB 3.4 at [306(b)-(c)]			Three GG records on eastern edge of coupe. Area with records appears to be in a patch of forest retained from harvesting. GGs in harvest area likely to be affected by harvesting. Gliders likely to be now in surrounding retained habitat, SPZ reserve and hydro buffer in southern part of coupe. Coupe recolonization depends on presence of habitat trees (ash and non-ash) and growth of ash regrowth. Limited impact on local population. Impact on Greater Glider – Limited CB 5.1.1 p118		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
			7: Smith CB 4.2.1 p106				trees seem to have been recruited or retained on Chest so that the cleared area may become permanently devoid of hollow dependent wildlife. No habitat trees were retained in clumps and none appear to have been protected from logging damage or regeneration burns. On Flicka felled trees were regenerating from coppice growth on cut stumps indicating that no regeneration burn was necessary and may even have been detrimental. CB 4.2.1 p89				
	Chest 298-502-0003 10.9 Scheduled	CFE 21ha nett 46.8ha gross	**12**: LW (24-25 Jan 2017), CB 2.3 p25 at [35-37] **4**: LW (9-10 Nov 2017), CB 2.3 p26 at [39-41] **3**: LW (12-13 Nov 2017), CB 2.3 p26 at [43]	N/a	16 Nov 2017 RRH: CB 8.29 p4 No reference to Greater Glider.	N/a			No record of GG in coupe or immediate surrounding forest. Imagery indicates likely suitable habitat in coupe and surrounding forest. Any GGs in harvest area likely to be affected by harvesting. Gliders likely to relocate to the surrounding retained habitat in the coupe and hydro-buffer in southern, eastern and northern parts of coupe. Limited impact on local GG population. Coupe recolonization depends on presence and distribution of habitat trees (ash and non-ash) and growth of ash regrowth. Impact on Greater Glider – Limited CB 5.1.1 p148 Later revised to Minor impact severity based on Dr van der Ree's report dated 31 Oct 2018 CB 5.4.1 p42		
	Bridle 298-510-0003 10.10 Scheduled	STR 28ha nett 38.6ha gross	**25**: LW (3-4 Oct 2017), CB 2.3 p33 at [85] **17**: VDR CB 4.1.1 p33 **12**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Recent GGs recorded in Glenview coupe immediately north of coupe. Imagery shows coupe to be suitable glider habitat and this continues south and west of the coupe. Impact on gliders will depend upon habitat trees (non ash) retained and scattered through coupe. Likely limited impact on local GG population. Impact on Greater Glider – Limited CB 5.1.1 p148/149		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
									Later revised to Minor impact severity based on Dr van der Ree's report dated 31 Oct 2018 CB 5.4.1 p42		
New Turkey Spur	Gallipoli 348-504-0005 10.29 Scheduled	CFE 15ha nett 24.9ha gross	**3**: LW (13-14 Aug 2017), CB 2.3 p44 at [152-153] **3**: VDR CB 4.1.1 p34 **5**: Smith CB 4.2.1 p106	N/a	N/a	N/a	Forest Type/Structure: Mapped as 1939 regrowth Ash. Site inspection showed the site to have an exceptional abundance of large dead trees with hollows (stags) (11/ha) and at least one living old growth ash with hollows (see photo). Greater Glider Abundance: The site is predicted to have a high density of Greater Gliders (2.5/ha) and it has been recorded in at least 3 locations on the coupe. Modelled High Quality Class 1 Greater Glider Iabitat is mapped as occurring on about 1.5 ha on the western boundary of the site (not inspected) and aerial photography suggests that old growth Ash could occur in this area and other small patches of the coupe. CB 4.2.1 p92	Significance of Impact. A very high impact on Greater Gliders is likely if the site is logged due to the unusual density of tall dead stags which are unusually persistent on this coupe. Protection of dead stags is a stated goal of Regrowth Retention Harvesting but I saw no evidence of compliance with this goal in site inspections. On many logged coupes large dead stags were found to have been cut and felled or pushed over and burnt. During a previous enquiry I was advised by forestry personnel that dead stags are usually deliberately felled for safety reasons (Gruen et al 1989). This practice can be considered to have highly significant adverse impact because dead trees are often the only source of hollows in 1939 regrowth Ash until it reaches older age in about another 40 years. Stags in regrowth Ash are also critically important to Leadbeater's Possum which is known to favour this type of habitat tree (Smith et al 1985). CB 4.2.1 p92 Key Finding: Dead stags provide a critical habitat tree resource in regrowth Ash forests. Due to the scarcity of habitat trees in such forests all remaining dead stags in 40+ year old regrowth forests should be protected by	GG records from the early 2000s found along boundary with the large SPZ to the south, with recent records in the SPZ to the east. Imagery indicates suitable GG habitat found across most of coupe and forest in large SPZ. Harvesting will affect individual gliders if present and impact will depend on them moving to retained forest, most likely the SPZs. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p159	N/a	Agreed Map CB 7.17F shows Gallipoli coupe bordered to the east, south and west with a large area of continuous SPZ. To the north, the coupe is bordered by an area of forest logged by clearfelling between 1995 and 1997. There is a reserve 1.3km (approx.) to the north east of the coupe as the crow flies and no connecting SPZ.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
								unlogged buffers of at least 50m radius and fire barriers to prevent damage during harvesting and post logging burning operations. CB 4.2.1 p92			
Nolans Gully	Goliath 297-505-0001 10.1 Scheduled	CFE 21ha nett 43.1ha gross	**2**: LW (13-14 Sep 2017), CB 2.3 p65 at [267-268] **6**: VDR CB 4.1.1 p35 **7**: Smith CB 4.2.1 p106	N/a	N/a	N/a	Forest Types/Structure: These coupes are mapped as Ash Forest with small amounts (about 20%) Mixed Species in all but Shrek. All of the coupes have some pre 1860 Ash Forest which is extremely rare and critically important to Greater Gliders and Leadbeater's Possum. Most of Shrek (about 80%), about 50% of Junior and a small amount (about 15%) of Infant and Goliath is mapped as Old Growth. Site inspections showed habitat in areas mapped as regrowth in Goliath and Infant to have a low density scattered living large old trees (2/ha) in the overstorey. This habitat can be classified as uneven-aged old growth Ash which is very rare and critically important as a fire and old growth refuge for both the Greater Glider and Leadbeaters possum. Suitable habitat for both species was evident on all coupes. Greater Glider Abundance and Habitat: Greater gliders have been recorded on all coupes including 2 locations on Junior, 7 on Goliath, 3 on Shrek and 1 on Infant. The Greater Glider model predicts a moderate density of Greater Gliders on all coupes except Junior. The low prediction for Junior (0.2/ha) was due to poor access to the coupe which	Significance of Impact. A very high impact on Greater Gliders is likely if the site is logged due to the unusual and extensive occurrence of senescent old growth Ash trees and the large area of pre-1860 Ash. Under the Regrowth Retention Harvesting prescription (All areas of pre1900 or Old Growth Ash forests are reserved and individual trees are protected from harvesting by legislation) and under the Code of Practice (2.2.2.9 Modify coupe size and rotation periods to maintain a diversity of forest structures throughout the landscape.) all areas mapped as pre-1860 should be protected from harvesting. In my opinion all remaining other areas in these coupes should be protected from logging because they contain a low density of scattered old growth trees with hollows that should, in conjunction with mapped old growth, provide a high quality feeding environment for Greater Gliders as well as an important long term fire refuge. Key Finding: …Given the rarity of this forest type, and the need to increase the level of its protection from the current 2% or less to around 33%, any logging in any of these coupes (or in any other similar coupes in surrounding	Three glider 2017 records on boundary shared with Shrek coupe. These records are in an area retained from harvest. Other GGs likely to be present elsewhere in coupe based on imagery. 1850s mixed species age class and GG habitat class 1 is in area scheduled for harvest. GGs in harvest area likely to be affected by harvesting. Impact will depend on affected GGs moving to retained forest. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p143 *Evidence given on view* Trees on boundary of Shrek and Goliath coupes in proximity to Greater Glider detection numbers 10, 11 & 12 on pg 35 of Dr Van de Ree's report (CB 4.1.1) are very old, senescent Ash forests. VT VT28.17 From the area in which a Greater Glider was detected at record number 14 on pg 35 of Dr Van de Ree's report (CB 4.1.1), the Greater Glider could glide downhill about 100m. On the flat, it would be probably 70 to 80m. VT34.30-36.7	Collectively assessed as Minor impact severity on local populations as a result of having a combined net harvest area of 81ha. CB 5.1.1 p172-173	Agreed Map CB 7.18F shows that Goliath and Shrek were lightly and moderately affected by the 2009 fires, and Infant was lightly affected. It shows the coupe group surrounded to the north-east, north-west and south by forest logged by clearfelling or seed tree retention between 1971 and 2013. It also shows a SPZ bordering the eastern side of Shrek, Infant and Goliath.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
							was restricted to an area of 1939 regrowth Ash. Greater Glider density is likely to be much higher on the part of the coupe mapped as pre1860 forest. Mapped Greater Glider High Quality Habitat Class 1 occurs on about 10-20% of forest in all four coupes, but does not coincide well with mapped pre 1860 forest on Shrek and Infant. CB 4.2.1 p93 *Evidence given on view* Trees on boundary of Shrek and Goliath coupes in proximity to Greater Glider record numbers 10, 11 & 12 on pg 35 of Dr Van de Ree's report (CB 4.1.1) are very old, senescent Ash forests. VT28.17 That area is an example of an uneven aged forest. It has older trees that survived the 1939 fires (the bigger pre-1900 ones) and 1939 regrowth. This kind of forest is now really rare and only exists in tiny little patches. VT29.5-9 If pre-1900 trees are left unlogged, but the surrounding area is clear-felled, the Greater Gliders in the area will be lost. This kind of structure is now so rare in the Central Highlands in the Ash that we need to preserve it in its entirety in a patch large enough to sustain a viable small population of Greater Gliders. VT29.26-30.2	areas) would have to be considered entirely contrary to the requirements of the Code and requirements for protection of Leadbeater's Possum. CB 4.2.1 p93			
	Shrek 297-509-0001 10.2 Scheduled	CFE 11ha nett 23.2ha gross	**4**: LW (8-9 Jul 2017), CB 2.3 p64 at [259-260] **5**: LW (2-3 Jul 2018), CB 2.3 p64 at [262] **7**: VDR CB 4.1.1 p35 **5**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Three glider 2017 records on boundary shared with Goliath coupe. Other GGs likely to be present elsewhere in coupe based on imagery. GGs in harvest area will be affected by harvesting. Impact will depend on affected GGs moving to retained forest. If validated in the fieldthe 1850 ash stands will be retained by prescription and this should limit any effects from harvest impacts. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p144		
	Infant 297-509-0002 10.3 Scheduled	CFE 31ha nett 38ha gross	**2**: LW (2-3 Jul 2018), CB 2.3 p64 at [262] **1**: LW (17-18 Aug 2017), CB 2.3 p65 at [264-265] **3**: VDR CB 4.1.1 p35 **1**: Smith CB 4.2.1 p106	N/a	11 Jul 2013 CFE: CB 8.30 p4 No reference to Greater Glider.	N/a			Three 2017 GG records located in the northwest sector of coupe on the boundary of the LBP SPZ with other GG records located immediately north of coupe. GGs likely to be present elsewhere in coupe based on imagery. GGs in harvest area likely to be affected by harvesting and will likely move to the reserve and SPZ on the western boundary of the coupe, to the SPZ east of the coupe and to retained forest surrounding the harvest area. The impact on the local population is likely to be minor. Impact on Greater Glider – Minor CB 5.1.1 p144-145		

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	Junior 297-511-0002 10.4 Scheduled	CFE 18ha nett 32.1ha gross	**2**: LW (17-18 Aug 2017), CB 2.3 p65 at [264-265] **2**: VDR CB 4.1.1 p35 **2**: Smith CB 4.2.1 p106	N/a	N/a	N/a	The tree in which a Greater Glider was detected at record number 14 on pg 35 of Dr Van de Ree's report (CB 4.1.1) is pre-1900, about 1.3m diameter and close to 60m tall. VT33.5-34.17 This area is an example of the kind of structure that Greater Gliders like. They feed in the canopy and they would generally glide off a lower branch below the upper canopy. They glide at an angle of about 30 to 40 degrees off the horizontal. That means they can travel sideways about 1.2 times the height they fall. So in this area they would comfortably be able to land on any of the trees. It's an ideal structure for them to move around. They could glide around 60m from here because you've got no regrowth or understorey but, in a more layered forest or one with an understorey, they would have a lot shorter travel distance. T34.19-35.31		Nearest GG records are 300m north of coupe associated with the northern SPZ. GGs are likely to be present elsewhere in coupe based on imagery. GGs in harvest area likely to be affected by harvesting. Nearly half the coupe is retained as forest. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p145		
Noojee	Skerry's Reach 462-504-0004 9.36 Logged	CFE 22ha nett 33.8ha gross	**8**: LW (6-7 Feb 2018), CB 2.3 p59 at [234-236] Reported 7 Feb 2018, CB 2.3 p60 at [240] **6**: VDR CB 4.1.1 p36 **6**: Smith CB 4.2.1 p106	2 Feb 2018 19 Mar 2018	31 Jan 2018 CFE: CB 8.17 p3 "Coupe Overlay has identified modelled Greater Glider High Quality Habitat Class 1 within the coupe boundary along the south eastern boundary of the coupe. If Greater Glider High Quality Habitat is confirmed within 75m of the planned harvest area boundary, endeavour to retain	An Ash coupe in which 13.12 ha nett of 33.8 ha gross was harvested by CFE CB 3.6.21A Agreed map 19C depicts detections of Greater Glider occurred outside the coupe boundary in the Yarra Ranges National Park. CB 3.4 at [431(b)], p165	Forest Type/Structure: Mapped as mostly Mixed Species 1939 regrowth with about 15% Ash (Loch stock and Epiphanie) or 1939 regrowth and about 50% 1970's Ash (Skerrys Reach). Site inspection revealed a mixture of Ash and Mixed species with some scattered living old growth trees and dead stags, particularly on Epiphanie. On Skerrys and Loch Stock the habitat was structurally dense in patches highly suitable for Leadbeater's Possum. The lower portion of Epiphanie	Significance of Impacts: High. Before logging this coupe was structurally complex with scattered old growth, two ages of regrowth and dead stags. This type of habitat supported both Greater Glider's and Leaadbeaters Possums and had long term refuge conservation potential. Clearfelling is not appropriate or consistent with the Code in the Mixed Species portion of the forest. Clearfelling will eliminate Greater Gliders on the site and they are not likely to return even after 40 years, because insufficient large	Nine GG records from 2017 located on northern boundary with national park (majority appear in the national park) and associated with mixed species forest. Imagery of coupe and surrounding forest shows suitable glider habitat to be variable and patchy. Individuals affected by harvest event would have moved into retained forest. Likely minimal impact of harvest event on local GG population. A lack of habitat trees in	Collectively assessed as Minor impact severity on local population. CB 5.1.1 p172-173 CB 5.4.1 p42	Agreed Map CB 7.19F shows Skerry's Reach bordered on the west and Lock Stock and Epiphanie bordered on the east by forest logged by clearfelling between 1979 and 1999.

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					additional live, large, hollow-bearing trees that occur within 75m of forest that is likely to be retained for at least the next 20 years. This may include stream or other coupe buffers and any permanently reserved areas." CB 8.17 p20 Coupe diary entries: 2 Feb 2018: "Habitat has been retained outside marked bdry, additional hollow bearing habitat > 1 m {diameter) to be retained where possible. Jim to select [seed tree] and habitat trees. No tree, stag or spar to remain within 1 tree length of bdry or road'. CB 3.4 p111 at [260] 16 Feb 2018: "Checked on habitat tree and Tree Geebung, good selection of habitat trees." CB 3.4 p165 at [429] 21 Feb 2018: "I Had a look with Jim on suitable habitat trees, doing a good job of selecting large hollow bearing trees". CB 3.4 p111 at [260] No Greater Gliders identified on coupe plan map, p26-27.	The post-harvest map depicts areas of habitat trees reserved along the eastern and western boundaries of the coupe. CB 3.4 at [431(c)], p165 Agreed map 19C and the post-harvest map depict two 200m THEZ on the south west boundary of the coupe, from which harvesting was excluded. CB 3.4 at [431(d)], p165 The post-harvest map also depicts a new THEZ south of the coupe, part of which overlays a portion of the coupe which was harvested after the THEZ creation. CB 3.4 at [431(e)]	was found to have been logged. Greater Glider Habitat and Abundance. All sites were structurally suitable for Greater Glider with an abundance of trees in the 40-80 diameter size class. Habitat trees were scarce in the site plot on Skerry's giving a low predicted Glider abundance (0.3), but aerial photography indicates that there were large areas of apparent un-even aged old growth on the coupe before logging and 6 Greater Gliders were recorded in the latter areas. Habitat trees including old growth were moderately abundant on Epiphanie and Loch Stock giving high predicted densities (1.4-1.5 /ha) consistent with actual Greater Glider records (5 on Loch stock and 7 on Ephiphanie). Greater Glider High Quality Habitat Class1 was only mapped on a tiny (1% area of Skerry's) again indicating that this model is not reliable for predicting Greater Glider Occurrence. Compliance with Code: Poor, low numbers of habitat trees, habitat trees not recruited in areas without old growth or dead stags. Habitat trees not scattered throughout the logging coupe. Large trees (1.2m diameter) not retained as recruitment trees. Timber Harvesting in Mixed Species Forests does not	recruitment trees have been retained to provide future tree hollows. A number of stumps on the site exceeded 120 cm diameter and would have made ideal recruitment habitat trees if retained and not felled. CB 4.2.1 p95	harvested area will limit recolonization resulting in longer term impact. Impact on Greater Glider – Minor CB 5.1.1. p128		It shows a linear SPZ to the west of the coupe group and a National Park bordering the northern side of Skerry's Reach.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
	Epiphanie 462-504-0009 10.32 Scheduled	STR 24ha nett 35ha gross	**12**: LW (7-8 Oct 2017), CB 2.3 p57 at [224-225] Reported 12 Oct 2017, CB 2.3 p58 at [230] **6**: VDR CB 4.1.1 p36 **8**: Smith CB 4.2.1 p106	N/a	31 Oct 2017 STR: CB 8.31, p 4 "Third party report, alleged Greater Glider sightings within coupe. See Species Observations spatial layer for locations. Prioritise the largest, live, hollow-bearing trees for habitat retention . Additional habitat trees may be retained within 75m of the coupe boundary where practicable and safe to do so." CB 8.31 p21 No Greater Gliders identified on coupe plan map, p22-23.	N/a	comply with the Code of Practice. It does not use silvicultural systems that suit the ecological requirements of the forest type. In order to be consistent with the Code silviculture in Mixed Species forests would need to be low intensity (<33% basal area removal), regeneration would be by soil disturbance or low intensity burns, rotations would be longer (80-160) years, and retained habitat trees would be better protected. CB 4.1.2 p95		Two recent GG records associated with Loch Stock coupe. Imagery indicates suitable GG habitat found across most of coupe and forest not harvested. Harvesting will affect individual gliders and impact will depend on them moving to retained forest. Retention of habitat trees scattered through harvest area and retention of large habitat trees around coupe boundary will reduce period of impact. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p161 Later revised to Minor impact severity based on Dr van der Ree's report dated 31 Oct 2018 CB 5.4.1 p42		
	Loch Stock 462-504-0008 10.32A Scheduled	CFE 14ha nett 19.6ha gross	**8**: LW (7-8 Mar 2018), CB 2.3 p62 at [249-250] Reported 15 Mar 2018, CB 2.3 p63 at [254] **12**: VDR CB 4.1.1 p36 **8**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Two recent GG records on north-western boundary of coupe in forest to be retained. Imagery indicates suitable GG habitat found across most of coupe and forest not harvested. Harvesting will affect individual gliders and impact will depend on them moving to retained forest. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p161 Later revised to Minor impact severity based on Dr		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
									van der Ree's report dated 31 Oct 2018 CB 5.4.1 p42		
Snobbs Creek	Dry Spell 288-505-0001 10.39 Scheduled	CFE 12ha nett 37.4ha gross	**7**: LW (6-7 Jul 2018), CB 2.3 p 84 at [376] **7**: VDR CB 4.1.1 p38 **6**: Smith CB 4.2.1 p106	N/a	N/a	VF finalised a habitat assessment in the coupe on 26 March 2018, in the knowledge that Greater Gliders had been observed in or adjacent to the coupe. Following the habitat assessment, a number of habitat protection measures were planned. CB 3.2 at [79-81], p20 The habitat protection measures are: an area covering the north and east of the entire coupe boundary has been reserved and areas of Zone 1A along the ridge of the coupe will be excluded from harvesting. CB 3.2 at [107], p26 VF will conduct its operations in accordance with the management actions identified on the Biodiversity Inspection Map CB 3.2 at [108], p26	Forest Type/Structure: Creek Hill coupe occurs along a road edge and is mapped as predominantly 1939 regrowth Mixed Species on the lower half and predominantly 1939 Ash on the upper half. Dry Spell is mapped as predominantly 1939 regrowth Ash with some Mix Species on the boundary. Site inspection showed Creek Hill to be uneven-aged Old growth with a great abundance of senescent trees with hollows. Many of these hollows were in stems of small diameter (< 100 cm). At the inspection site Dry Spell was found to be regrowth Ash with some dead stags to provide hollows. Aerial photography shows that most of Dry Creek Hill is within an area of irregular large canopy forests consistent with old growth and similar apparent old growth occurs on about 25% of Dry Spell in the general area where Greater Gliders have been recorded. Greater Glider Habitat and Abundance Greater Gliders are predicted to occur in great abundance (2.3 /ha) in Dry Creek Hill due to the large number of hollows and mature forest structure and this is consistent with the 13 reported Greater Glider record locations. Greater Gliders were predicted by the model (this study) to be only	Significance of Habitat and Logging Impacts. Mixed Species forest in Dry Creek Hill has such a high abundance of trees with hollows and Greater Gliders that it warrants special protection from any logging. It would also be extremely unsightly as there is no room for a visual road side screen. CB 4.2.1 p97	Two 1989 GG records west of coupe within 1km of coupe with recent records within 2km east of coupe. Imagery indicates suitable glider habitat in coupe and surrounding forest. Harvesting will affect individual gliders if present and impact will depend on them moving to retained forest. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p165-166	N/A	Agreed Map CB 7.22F shows the western tip of Dry Creek Hill is bordered by a linear SPZ and Reserve. It shows a National Park 600m (approx.) from the eastern tip of Dry Creek Hill and 1km (approx.) from the eastern boundary of Dry Spell, as the crow flies, with no connecting SPZs.

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
	Dry Creek Hill 288-506-0001 10.40 Scheduled	Road alignment – improvement 17ha nett 73.9ha gross	**21**: LW (1-2 Feb 2018), CB 2.3 p82 at [366-367] **5**: LW (3-4 Feb 2018), CB 2.3 p82 at [369] Reported 9 Feb 2018, CB 2.3 p83 at [372] **24**: VDR CB 4.1.1 p38 **15**: Smith CB 4.2.1 p106	N/a	20 Mar 2017 Road alignment – improvement, CB 8.32, p4 & CB 8.32A p5 No reference to Greater Glider	N/a	moderately abundant on Dry Spell (0.4/ha) due to a lack of living senescent trees at the inspection site. There are a large number of Greater Glider Records in Dry Spell indicating that they are able to forage in areas of dense uniform advanced regrowth Ash and that trees with hollows must be more abundant than apparent at the survey site. No Greater Glider High Quality Habitat Class1 was mapped on the coupes. CB 4.2.1 p97		Two 1989 GG records in coupe with a recent record 600m east of coupe. Imagery indicates suitable glider habitat in coupe. Harvesting will affect individual gliders and they will move to retained forest. The impact on the local population is likely to be limited given linear shape of coupe. Impact on Greater Glider – Limited CB 5.1.1 p166 Impact severity not revised after reviewing Dr van der Ree's report dated 31 Oct 2018. Severity of impact can be managed through managing and planning changes to road alignment where concentrations of gliders occur and managing distributions of tall trees and habitat trees along roads CB 5.4.1 p42		
South Noojee	Backdoor 462-512-0002 10.35 Scheduled	CFE 36ha nett 55ha gross	**1**: LW (29 Oct 2017), CB 2.3 p74 at [319-320] **2**: LW (11-12 Nov 2017), CB 2.3 p74-75 at [322-323] **3**: LW (30 Nov -1 Dec 2017), CB 2.3 p75 at [324-325] **2**: LW (4-5 Jan 2018),	N/a	27 Apr 2018 Silviculture system not stated, CB 8.33 & 8.33A, p3 "Greater Glider species observation record within coupe boundary. No detection based requirements exist for Greater Gliders within Central Highlands FMA". "Habitat areas have been identified within the coupe and excluded from the Harvest Unit. Largest,	VF finalised a habitat assessment in the coupe on 27 March 2018 (approx.), in the knowledge that Greater Gliders had been observed in or adjacent to the coupe. Following the habitat assessment, a number of habitat protection measures were planned. CB 3.2 at [79-81], p20	Forest Type/Structure: Mapped as predominantly 1939 regrowth Ash (Backdoor) and a mixture of 1939 Ash and Mixed Species and a small amount of Pre-1860 Mixed Species on Lodge. Site inspection of Backdoor revealed an uneven-aged structure with scattered living senescent old growth trees with hollows. Road access to Lodge was blocked and site inspection was limited to the southern boundary (by 200m walk in). This southern part of Lodge was regrowth Ash without tree hollows. Aerial photography indicates that the upper portion of Lodge	Significance of Habitat and Logging Impacts: Ash forest with an overstorey of scattered living senescent trees with hollows such as that on Backdoor is now so scarce in the Central Highlands that it warrants full protection from any logging disturbance in order to comply with the Code of Practice and requirements for protection of Leadbeater's Possum. CB 4.2.1 p98 [This] statement [regarding significance of habitat and logging impacts] relates to the Greater Glider as well as Leadbeater's Possum because	No GG records in coupe or surrounding coupes. Surrounding forests. Eleven observed GGs identified in coupe plan (FOR.002.001.0008_0030). Imagery indicates glider habitat in coupe and surrounding forests. GG habitat areas identified within the coupe and excluded from harvest area (FOR.002.001.0008_0023 and 29). Harvesting will affect individual gliders with five of the observed GGs in harvest area and the others are in or on the boundary of retained forest. The impact on the local population is	N/A	Agreed Map CB 7.23F shows the Backdoor coupes bordered to the south by a linear SPZ and two reserves to the south of the coupe group with no connecting SPZ.

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			CB p75 at [327-328] **1**: LW (13-14 Feb 2018), CB p75 at [330-331] Reported 20 Mar 2018, CB 2.3 p76 at [334] **5**: LW (31 Mar 2018), CB p77 at [338-339] **13**: VDR CB 4.1.1 p37 **7**: Smith CB 4.2.1 p106		live, hollow-bearing trees have been prioritised for habitat retention" CB 8.33 p23 & CB 8.33A p24 Coupe plan map on p30 (CB 8.33) and p31 (CB 8.33A) marks locations of a number of lay witness GG detections, per VDR CB 4.1.1, p37. All except 2 GG are located within or bordering the harvest unit.	The habitat protection measures are: a visual buffer will be excluded from harvesting, a habitat reserve in the north west of the coupe containing larger trees with hollows has been retained, stream buffers are in place, habitat trees, seed trees, and a SPZ bordering the coupe will be excluded from harvesting. CB 3.2 at [96], p24 VF will conduct its operations in accordance with the management actions identified on the Biodiversity Inspection Map. CB 3.2 at [97], p24	is likely to be mostly uneven-aged old growth Mixed Species. Greater Glider Habitat and Abundance: Backdoor is predicted by the model to have abundant Greater Gliders (1.5/ha) and this is consistent with the large number of actual Glider Records (6). Lodge is predicted to have low quality habitat in regrowth Ash due to lack of hollows. There are two location record of Greater Gliders in Lodge both in the area of apparent and old growth Mixed Species evident on aerial photographs. No Greater Glider High Quality Habitat Class1 was mapped on the coupes. CB 4.2.1 p98	both of these species occur in uneven-aged Ash forests. Living old growth senescent Ash trees are now so rare in the Central Highlands that they require protection under the Code as a) habitat trees, b) Ash trees originating pre-1900, and c) rare examples of uneven-aged Ash forest structure required "to maintain a diversity of forest structures throughout the landscape." They are especially important to Leadbeater's Possum because this species is primarily found in uneven-aged Ash forests with an overstorey of scattered large old trees with hollows. The Greater Glider is also found in uneven-aged Mixed Species forests. Second Smith, CB 4.3 p6	likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p163		
	Lodge 463-501-0005 10.36 Scheduled	CFE 36ha nett 57.1ha gross	**3**: LW (25-26 Feb 2018), CB p77 at [341-342] **2**: VDR CB 4.1.1 p37 **2**: Smith CB 4.2.1 p106	N/a	N/a	N/a			No GG records in coupe or surrounding coupes. Eleven observed GGs identified in the Backdoor coupe plan (FOR.002.001.0008_0030). Imagery indicates glider habitat in coupe and surrounding forests. Harvesting will affect individual gliders and impact will depend on them moving to retained forest, the type of forest retained, and the strategy applied to habitat tree retention. The impact on the local population is likely to be limited.		

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									Impact on Greater Glider – Limited CB 5.1.1 p164		
Starlings Gap	Smyth Creek 345-504-0003 10.23 Scheduled	STR 31ha nett 47.6ha gross	**3**: LW (21-22 Jun 2017), CB 2.3 p42 at [137-138] **1**: LW (22-23 Aug 2017), CB 2.3 p42 at [140-141] **4**: VDR CB 4.1.1 p39 **6**: Smith CB 4.2.1 p106	N/a	27 Apr 2016 Seed Tree, CB 11.105, p3 "Greater Glider species record from 1995 located in driveway. Species will not be affected by harvesting." CB 8.34 p19 "Greater Glider record is within 200m of the coupe boundary. The Glider has been added to the DEPI Advisory List of Threatened Species. Record from spotlighting in 1995." CB 8.34 p22 Coupe plan map on p31 marks location of several Greater Glider records from VBA, per Agreed Map 7.24C.	N/a	Forest Type/ Structure: Smyth is mapped as mostly 1939 regrowth Mixed Species. Site inspection showed the coupe to be dominated by uneven-aged old growth Mixed Species. Hairy Hyde is mapped as a mixture of 1939 Mixed Species regrowth and mostly 1939 Ash regrowth. Site inspection showed the Mixed species portion to be uneven-aged old growth with abundant living old senescent trees with hollows. Black Sands Road is mapped as part 1939 regrowth Ash and part 1939 (and younger) regrowth Mixed Species. Site inspections showed the site to be dominated by uneven-aged Mixed Species with scattered living senescent trees with hollows and dead stags. Starlings Gap is mapped as predominantly regrowth 1939 Ash but aerial photography shows a distinct uneven aged old-growth structure across about 50% of the area. Greater Glider Habitat and Abundance: Exceptionally high densities of trees with hollows were observed on Smyth creek and Hairy Hyde resulting in exceptionally high predicted glider densities (3.1 and 2.9/ha). Greater Gliders have been reported at 5 locations on each of these coupes. Moderate to high densities of Gliders were predicted on Blacks Sands due to a moderate abundance of	Significance of Habitat and Logging Impacts. Habitat on all three Mixed Species dominated coupes contains critical and important living old growth Greater Glider habitat trees. These trees have survived past fires for 100's of years and should be retained as refuge habitat for Greater Gliders. This is also true of any old growth Ash forest on Starlings Gap. CB 4.2.1 p99	Fourteen recent GG records in or on the boundary of the coupe. Eight of the records located in LBP SPZ or forest to be retained. Imagery indicates suitable GG habitat found across most of coupe and surrounding unharvested forest. Harvesting will affect individual gliders and impact will depend on them moving to retained forest. The impact on the local population is likely to be minor. Impact on Greater Glider – Minor CB 5.1.1 p156	Collectively assessed as Minor impact severity on local population, even though most of these coupes were classed as Limited impact severity, because the combined net harvest area totalled 101ha. CB 5.1.1 p172-173	Agreed Map CB 7.24F shows Smyth Creek and Starlings Gap surrounded to the north, east and west by forest logged by clearfelling or seed tree retention between 1977 and 2015. Areas of SPZ overlap with the eastern tip of Smyth Creek and the southern end of Starlings Gap, and a reserve borders the southernmost tip of Starling Gap. It shows pockets of forest clear felled between 1992 and 2013 to the north, east and south of Hairy Hyde and Black Sands Road, with an area of SPZ bordering the eastern tip of
	Starlings Gap 345-504-0005 10.24 Scheduled	CFE 13ha nett 39.9ha gross on 2017 TRP, 39ha gross on 2019 TRP	**1**: LW (11-12 Feb 2017), CB 2.3 p41 at [132-133] **3**: LW (30 Jun 2018), CB 2.3 p41 at [135] **2**: VDR CB 4.1.1 p39 **1**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Ten recent GG records in or on the boundary of the coupe. Six records are in forest protected by SPZs and conservation reserve with the remaining four occurring in forest shown as not being harvested(FOR.002.052.0010_0023). Imagery indicates suitable GG habitat found across most of coupe and surrounding unharvested forest. Harvesting will affect individual gliders and impact will depend on them moving to retained forest. The impact on the local		

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							hollows (6/ha) and abundant large tree stems. Greater Gliders have been observed at 3 locations on Black Sands. Greater Gliders have been reported at two locations on Starlings Gap but more could be expected based on apparent old growth structure on aerial photographs. No Greater Glider High Quality Habitat Class1 was mapped on Black Sands, Hairy Hyde, and Starlings Gap and less than 1% was mapped on Smyth Creek. CB 4.2.1 p99		population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p156-157		Black Sands Road.
	Hairy Hyde 345-505-0006 10.25 & 9.20 Scheduled	CFE 34 ha nett 46.3ha gross	**2**: LW (15-16 Aug 2017), CB 2.3 p42 at [143-144] **3**: LW (3-4 Jul 2018), CB 2.3 p43 at [146] **5**: VDR CB 4.1.1 p39 **5**: Smith CB 4.2.1 p106	21 May 2016 30 June 2016	19 May 2016 STR: CB 8.35, p4 "Greater Glider species record from 1995 located within 500m south of coupe boundary. No protection requirements for special management of the species. No further action required." CB 8.35 p18 "Greater Glider record is within 500m of the coupe boundary. The Glider has been added to the DEPI Advisory List of Threatened Species. Record from spotlighting in 1995. No protection requirements for special management of the species. No further action required." CB 8.35 p21	N/a			Recent records of GG in neighbouring coupe Blacksands Road. Imagery indicates suitable GG habitat found across most of the coupe. Harvesting will affect individual gliders and impact will depend on them moving to retained forest. The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p157		
	Blacksands Road 345-505-0009 10.26 Scheduled	STR 14ha nett 18.3ha gross	**3**: LW (17-18 Sep 2017), CB 2.3 p43 at [148-149] **3**: VDR CB 4.1.1 p39 **3**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Two recent records of GG in coupe and area to be harvested. Imagery indicates suitable GG habitat found across most of the coupe. Harvesting will affect individual gliders and impact will depend on them moving to retained forest. The impact on the local population is likely to be limited.		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
									Impact on Greater Glider – Limited CB 5.1.1 p157-158		
Sylvia Creek and Kalatha Creek	Gun Barrel 297-526-0001 10.5 Scheduled	CFE 10ha nett 31.7ha gross	**0**: LW **0**: VDR **0**: Smith	N/a	20 Sep 2011 CFE CB 8.36, p5 No reference to Greater Glider.	N/a	Forest Type/Structure: Mapping shows all of these coupes to be Ash Forest of varying ages with pre 1860 forest on about 30% of Imperium, 25% of Utopia and 40 % of Gun Barrel. The balance of areas are mapped as 1939 or younger regrowth. Aerial photographs indicate that uneven-aged old growth is extensive on all coupes including South Col which is mapped entirely as 1939 or earlier regrowth. Inspection of South Col (below) showed abundant large living trees with hollows in the overstorey. Greater Glider Habitat and Abundance: Greater Glider High Quality Habitat Class 1 is mapped on about 40% of Gun Barrel and about 25% of Utopia and is absent from the other coupes. Greater Gliders have been recorded on all coupes except Gun Barrel in moderate numbers (4 on Imperium, 2 on South Col and 2 on Utopia). The survey inspection site for Utopia was in 1969 regrowth which lacked hollows. Imperium was inspected in 1860 Ash forest which contain scattered old growth trees with hollows (about 1/ha) but old growth trees with hollows were more abundant (4/ha) on the immediate southern boundary of the coupe. Gun Barrell was	Significance of Habitat and Logging Impacts. Mapping, aerial photographs and site inspection shows that all of these coupes include substantial areas of pre 1900 Ash trees and forest. Ash forest with trees older than 120 years are a critically scarce resource in the Central Highlands that warrant full protection from harvesting. Under the Code of Practice and Regrowth Retention Harvesting policy "All areas of pre 1900 or Old Growth Ash forests are reserved and individual trees are protected from harvesting by legislation" . In order to fully protect critical old growth in these coupes it will be essential to undertake ground surveys that map the occurrence of all old trees (pre 1900) with or without hollows and to protect these by unlogged buffers of at least 50 m radius. Under current harvesting practice which does not require mandatory, intensive (whole of coupe) pre-logging wildlife and habitat surveys, most of the critical and important Greater Glider habitat on these coupes is at risk of being clearfelled and destroyed permanently. Key Finding: Existing forest structural (age Class) mapping and Greater Glider High Quality Habitat Mapping is	GG records over 1km northeast of coupe. Unclear where harvesting will take place on coupe as coupe map reports 23ha and not 10ha. Thus, difficult to assess impact. Have assumed that much of the 1850s ash and modelled GG habitat class 1 is retained through field verification. Any GGs in the harvest area are likely to be affected by harvesting and impact will depend upon what is retained as forest. Impacts likely to be small because of the scale of the harvest event (10ha). The impact on the local population is likely to be limited. Impact on Greater Glider – Limited CB 5.1.1 p145-146	Collectively assessed as Minor impact severity on local population as their combined net harvest area was 63ha. CB 5.1.1 p172-173 To assess impact, it is necessary to take into consideration the harvesting methods that are going to be used in each coupe, as well as fire history. T515.33-41	Agreed Map CB 7.25F shows South Col surrounded to the east and west by forest logged by clearfelling between 1990 and 1996. The northern border of the coupe adjoins a large area of SPZ. Gun Barrell, Imperium and Utopia adjoin SPZ, with patches of forest logged by clearfelling between 1983 and 2006 to the north, east and south of the coupe group.
	Imperium 297-530-0001 10.6 Scheduled	CFE 34ha nett 44.5 ha gross	Imperium and Utopia: **7**: LW (1-2 Sep 2017), CB 2.3 p66 at [271-272] Imperium only: **3**: VDR CB 4.1.1 p40 **5**: Smith CB 4.2.1 p106 Utopia only: **2**: VDR CB 4.1.1 p40	N/a	N/a	N/a			Twelve GG records located along the SPZ adjacent to the coupe's western boundary with another two records located on the southern boundary. GGs are likely to be present elsewhere in coupe based on imagery. GGs in harvest area likely to be affected by harvesting. Impact will depend upon what is retained as forest and management of potential live hollow bearing trees. Much of the forest near where GGs have been recorded will likely be retained under code prescriptions. Stand		

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Coupe group location	Coupe name, no. & 2FASOC paragraph, Logged or scheduled	TRP[i]: Silv system & nett/ gross area	GGs in or bordering coupe per lay witness[ii] Dr van der Ree[iii] & Dr Smith[iv]	Harvest commence & complete dates[v]	Coupe Plan date, silviculture system & Greater Glider content	Mr Paul's statements re silv system, nett/gross area and coupe	Dr Smith's observations regarding GG habitat and habitat trees	Dr Smith's opinion re impact	Dr Davey's opinion re impact for coupe	Dr Davey's opinion re impact for coupe group	Agreed Map depicting records, 2009 fire & logging history
			2: Smith CB 4.2.1 p106				inspected in an area of 1969 regrowth that had some dead trees with hollows. CB 4.2.1 p101	unreliable for predicting the occurrence of Greater Gliders and their habitat. This can only reliably be done by ground surveys searching for and recording the location of old growth (pre1900) trees and by undertaking actual spotlight surveys for Greater Gliders. Surveys may be limited to those parts of coupes found on aerial photographs to have larger and or/irregular canopies consistent with older forest, but any such API (aerial photo interpretation) should be precautionary and should only exclude areas with tight uniform canopies consistent with uniform young (< 40 year) regrowth. And even in the latter area searches may be necessary for sub-canopy dead stags in areas with persistent dead trees. CB 4.2.1 p101	identified as 1850s ash is in area to be harvested. If verified in the field it would be retained. The impact on the local population is likely to be limited. Impact on Greater Glider – Minor CB 5.1.1 p146-147		
	Utopia 297-530-0002 10.7 Scheduled	CFE 19ha nett 35.4ha gross		N/a	N/a	N/a			Recent records of GGs located 250-400m southwest of coupe. Imagery indicates likely occurrence of GGs in coupe. Proportion of modelled GG habitat class 1 and 1850s ash in the northern sector of the coupe is in harvest area. GGs in harvest area likely to be affected by harvesting. Impact will depend upon the quality of GG habitat retained as forest. The impact on the local population is likely to be minor. Impact on Greater Glider – Minor CB 5.1.1 p147		
	South Col 298-509-0001 10.11 Scheduled	CFE 29ha nett 32.4ha gross	**3**: LW (1-2 Jul 2017), CB 2.3 p66-67 at [274] **2**: LW (9-10 Sep 2017), CB 2.3 p67 at [276] **1**: VDR CB 4.1.1 p40 **2**: Smith CB 4.2.1 p106	N/a	N/a	N/a			Eight GG records located in the northeastern LBP SPZ and SPZ north of the coupe with three of these records located within the coupe. Map FOR.002.053.0017 indicates presence of good GG habitat. Small stand of large trees and pre-1900 ash trees would be retained by prescription. GGs in harvest area likely to be affected by harvesting with likely limited impact on local population given distribution of SPZs.		

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									Impact on Greater Glider – Limited CB 5.1.1 p149		
Torbreck (North & South)	Bhebe 312-503-0002 10.20 Scheduled	CFE 20ha nett 37.7ha gross	**6**: LW (30 Jun – 1 Jul 2017), CB 2.3 p71 at [300] **3**: VDR CB 4.1.1 p42 **5**: Smith CB 4.2.1 p106	N/a	N/a	N/a	Forest Type and Structure: Mapping shows Farm Spur and Skupani to be 1939 regrowth Mixed Species, Splinter to be 1939 Mixed Species and Ash, and Bhebhe to be about 75% 1939 Ash and the remainder 1939 Mixed Species. Ground inspections and aerial photography show substantial parts of these coupes to be uneven-aged old growth with large numbers (8-11/ha) of large old senescent trees with hollows in the overstorey. Greater Glider Habitat and Abundance: Greater Gliders are predicted by the model to be very abundant (1.6 -2.2/ha) in all coupes. The actual number of Greater Gliders recorded in the coupes was high from 5 in Bhebhe to 11 in Farm Spur. No Greater Glider High Quality Habitat Class1 was mapped on any coupes. CB 4.2.1 p103	Significance of Habitat and Logging Impacts: Mapping, aerial photographs and site inspection shows that all of these coupes include substantial areas of uneven-aged old growth forest. All the parts of these coupes dominated by old growth or scattered (> 1 per hectare) living old trees with hollows can be considered critical and important for Greater Gliders. Under the current harvesting practice Greater Gliders present in these habitats could be killed and the habitat permanently lost due to intensive harvesting on short rotations. … Until such time as Age Class mapping is improved and completely re-done, to reflect ecological forest characteristics, it will be necessary to undertake detailed surveys for old and senescent trees in all coupes in the Central Highlands prior to any timber harvesting in order to prevent loss of significant hollow and old growth habitat components critical and important to the survival of the Greater Glider and Leadbeater's Possum. CB 4.2.1 p103	Nine GG records within the coupe in the stands of mixed forest. Six are in harvest area with three on the boundary of harvest area. Imagery indicates suitable GG habitat found across coupe. Harvesting will affect individual gliders and impact will depend on what forest is retained. The impact on the local population is likely moderate given the number of GG records and suitability of habitat in harvest area. Impact on Greater Glider – Moderate CB 5.1.1 p154	N/a	Agreed Map CB 7.26F shows Bhebhe and Farm Spur Gum were lightly affected by the 2009 fires. Patches of forest logged by clearfelling or seed tree retention between 1989 and 2004 lie to the south-west of both coupes. It shows a SPZ 225m to the south of Farm Spur Gum, with no connecting SPZ. Agreed Map CB 7.27F shows Splinter and Skupani were lightly, moderately and severely affected by the 2009 fires. There are large patches of forest logged be
	Farm Spur Gum 312-002-0006 10.21A Scheduled	STR 20ha nett 25.5ha gross	**8**: LW (2-3 Jul 2017), CB 2.3 p69 at [289-290] **14**: LW (6-7 Nov 2017), CB 2.3 p70 at [292-293] Reported 7 Nov 2017, CB 2.3 p70 at [296] **16**: VDR CB 4.1.1 p42 **11**: Smith CB 4.2.1 p106	N/a	26 Mar 2018, CB 8.37; 27 Mar 2018, CB 8.37A, p 22 STR: CB 8.37, p5 & CB 8.37A p6 "There are a number of Greater Glider species observation within coupe boundary. No detection based requirements exist for Greater Gliders within the Central Highlands FMA. Prioritise the largest, live, hollow bearing trees for habitat retention. Additional habitat trees may be retained within 75m of the coupe boundary	VF finalised a habitat assessment in the coupe on 1 December 2017, in the knowledge that Greater Gliders had been observed in or adjacent to the coupe. Following the habitat assessment, a number of habitat protection measures were planned. CB 3.2 at [79-81], p20 The habitat protection measures are: modelled Leadbeater's			Fifteen GG records around the coupe's eastern and southern boundary with some occurring in the coupe (17 records in FOR.001.020.0012). The coupe plan indicates large live hollow-bearing trees to be prioritised for habitat tree retention. Imagery indicates suitable GG habitat found across most of coupe and surrounding forests. Harvesting will affect individual gliders. Impact will depend on them moving to retained forest and the distribution of the local population, particularly the numbers of GGs found in SPZ 312/02 to the south		

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					where practicable and safe to do so." CB 8.37 p19, CB 8.37A p20 Coupe plan map on p24 (CB 8.37) marks locations of a number of lay witness GG detections. All GG are located within or bordering the harvest unit (CB 8.37, pp 23-24).	possum habitat not part of the TRP will be excluded from harvesting, a general habitat reserve will be retained in the coupe, a number of isolated pre 1900 Ash trees are marked for protection and a number of hollow bearing trees are marked for exclusion. CB 3.2 at [91] VF will conduct its operations in accordance with the management actions identified on the Biodiversity Inspection Map CB 3.2 at [92], p22			The impact on the local population is likely to be minor, but if GG distribution is more restricted than assumed, harvest impact will trend towards being moderate because the number of GGs in the coupe provides a sizable breeding population to enable recovery of fire affected populations. Impact on Greater Glider – Minor CB 5.1.1 p154-155		clearfelling and seed tree retention between 1985 and 2009 to the north and west of the coupes. It shows an area of SPZ bordering the western side of Splinter.
	Skupani 312-007-0014 10.18 Scheduled	CFE 33ha nett 46.8ha gross	Skupani and Splinter **14**: LW (5-6 Nov 2017), CB 2.3 p72 at [304-305] Skupani **7**: VDR CB 4.1.1 p43 Splinter **9**: VDR CB 4.1.1 p43	N/a	N/a	N/a			Two GG records on boundary with Splinter coupe. Based on imagery suitable GG habitat generally found in lower elevations of coupe (800-880m). While harvesting affects individual gliders the impact on the local population is likely limited. Impact on Greater Glider – Limited CB 5.1.1 p153		
	Splinter 312-508-0002 10.19 Scheduled	CFE 13ha nett 16.8ha gross		N/a	N/a	N/a			Thirteen GG records within or at the edge of the coupe. Nine records occur in harvest area. Imagery indicates suitable GG habitat found across coupe. Harvesting will affect individual gliders and these gliders will likely move to areas of retained		

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									forest. The impact on the local population is likely to be minor. Impact on Greater Glider – Minor CB 5.1.1 p153-154		

i On both 2017 & 2019 TRPs, unless otherwise stated: CB 6.6 & 6.8A.

ii References are to the Affidavit of Mr McKenzie only. Where detections were observed by other lay witnesses and recounted by Mr McKenzie, those detections are also deposed to directly by the relevant observer in the First Affidavit of Mr Lincoln, and the Affidavits of Mr Nisbet and Mr Wainwright (CB 2.4, 2.5 and 2.7).

iii The lay witnesses' Greater Glider video, photo and GPS records were reviewed by Dr Van der Ree for the purposes of species identification and mapping. Dr van der Ree presented the results by way of maps depicting all records with accompanying table specifying the GPS waypoint number, date and time contained in the record, the species identified and number of individuals (if any) for each record, see Third van der Ree Report, CB 4.1.1, p21-43. The Lay Witness counts presented here per coupe represent those records for which Dr van der Ree provided a Greater Glider species identification of 50% confidence or higher. Detections which border 2 coupes are counted for both coupes.

iv The Agreed Maps depict Greater Glider records contained in the Victorian Biodiversity Atlas (**VBA**), managed by DELWP. DELWP included some (not all) of the Applicant's lay witnesses' Greater Glider detections in the VBA (see Third McKenzie Affidavit, CB 2.9), consequently some GG records appear in both Dr van der Ree's report and the Agreed Maps. Dr Smith reviewed both Dr van der Ree's report and the Agreed Maps, and counted the number of GGs in each coupe as "the sum of all records post 1997 in a coupe that were more than about 50m apart, including those on the coupe boundary, and including double counts for locations where 2 gliders were reported at the same location in the survey data presented by Dr. Van der Ree ... Where a location record occurred on the boundary of two different coupes it was included in counts of both coupes. If a location record from the VBA … appeared within approximately 50m of a location previously counted in the report of Van der Ree it was not included", see Smith (2), CB 4.3, p8. With respect to records in Dr van der Ree's report, Dr Smith relied only on those Greater Glider records for which Dr van der Ree provided species identification with 75% accuracy or higher (Smith (1), CB 4.2.1, p46).

v Second Paul Affidavit, CB 3.4 p68-69, unless otherwise stated.