

Woolgoolga to Ballina Pacific Highway upgrade

Threatened Gliders Monitoring Program
Construction Phase

Annual Report 2017

Version 2.0 (*FINAL Report*)



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Woolgoolga to Ballina Pacific Highway Upgrade

Threatened Gliders Monitoring Program
Construction Phase

Annual Report 2017



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Ecological

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Version 2.0 – FINAL Report

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Cover Photo: Squirrel glider (*Petaurus norfolcensis*) during mid-glide phase (Photograph: Sandpiper Ecological).

Disclaimer:

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1. Introduction

1.1 Background

The Woolgoolga to Ballina (W2B) Pacific Highway Upgrade received State approval under Part 5.1 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) on 24 June 2014 and Federal approval under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) on 14 August 2014. The Threatened Glider Management Plan (TGMP) (Roads and Maritime Services, version 2.1, April 2015) was developed to meet the requirements of State Ministerial Condition of Approval (MCoA) D8 and components of MCoA D2. None of the glider species addressed in the plan are listed under the EPBC Act.

The TGMP identifies potential impacts of the upgrade on two threatened glider species - squirrel glider (*Petaurus norfolcensis*) and yellow-bellied glider (*P. australis*) - collectively referred to as 'threatened gliders'. Both species are listed as vulnerable by the NSW *Biodiversity Conservation Act 2016* (BC Act) and inhabit open forests and woodlands throughout the ranges and coastal areas of north-east NSW although the yellow-bellied glider is largely absent from highly fragmented alluvial floodplains and coastal heathlands (TGMP). Numerous records of both species occur within 10km of the project alignment (Roads and Maritime 2015).

The TGMP proposes several mitigation measures aimed at ensuring the continued viability of squirrel glider (SqG) and yellow-bellied glider (YbG) populations in the project area. Such measures aim to:

- Minimise fragmentation and loss of habitat.
- Provide functional crossing opportunities (including crossing structures).
- Maintain connectivity for daily movements and gene flow.
- Minimise edge effects.

To assess the effectiveness of the proposed mitigation measures, the TGMP details a comprehensive monitoring program. A component of the program is glider population monitoring. The stated objective of glider population monitoring is:

"To establish if there is a difference in occupational abundance of threatened gliders or activity levels before, during and after the project."

To achieve this objective, the TGMP states that population monitoring will occur at:

- Impact sites: mitigated sites such as widened medians and crossing structures within 100m of the road edge.
- Control sites: unmitigated sites within 100m of the road edge.
- Reference sites: sites >300m from the project.

The TGMP directs that baseline monitoring will occur before (i.e. no disturbance), during (i.e. disturbance) and after (i.e. mitigation in place) construction and that the level of occupational will be compared between these periods for impact, control and reference sites. Monitoring will be conducted every three months (four times annually) to sample for seasonal variability.

To determine the effectiveness of mitigation measures, Table 8.1 of the TGMP describes Performance Indicators and Corrective Actions for threatened glider population monitoring. A single trigger for corrective action is described for the threatened glider population monitoring:

"Decline in the after-construction occupancy rates of squirrel glider or yellow-bellied glider at impact sites over three consecutive monitoring sessions."

Table 8.1 further describes several Corrective Actions in the event of declines in post-construction occupation abundance. As the current report covers the period of construction phase, albeit different stages of construction, performance indicators and corrective actions do not form part of the discussion.

1.2 Scope

Sandpiper Ecological was engaged by Jacobs in January 2017 to undertake the W2B threatened glider monitoring program. The population monitoring component of the project scope included:

- Conduct year 1-4 population monitoring.
- Conduct year 5 and 6 population monitoring (provisional items).
- Provide threatened glider monitoring annual reports.

The current report refers to construction phase threatened glider population surveys conducted in sections 1 and 2 (Year 2/3) and 3, 6, 7 (Year 1) during the four quarters of 2017 (Year 1). Quarter 1 data for sections 1 and 2 were provided by Lewis Ecological. They follow on from construction phase surveys conducted during 2016 in sections 1 and 2 (three quarters; Lewis Ecological unpub. data) and sections 3, 6 and 7 (one quarter; Sandpiper 2016b). Pre-construction surveys were completed during 2014 in sections 1 and 2 (Sandpiper 2014) and during 2015/16 in sections 3, 6 and 7 (Sandpiper 2016a).

2. Methods

2.1 Study area

The study area included sections 1, 2, 3, 6 and 7 (focal sections) of the W2B Pacific Highway upgrade, between Woolgoolga and Tabbimoble and habitat within 1km of the project alignment (impact and control sites) and habitat surrounding reference site areas up to 4km from the project alignment (Figure 1a-f). The study area is located within the north coast bioregion and experiences a largely sub-tropical climate (NSW NPWS 2003).

The five focal sections of the W2B alignment featured 31 impact sites, 26 control sites and 19 reference sites. The location and identification for each site is described in Table 1. Each site consisted of a 500m-long transect positioned within dry open forest habitat or a combination of dry open forest and moist open forest or swamp forest. Transects were mostly located on existing tracks or management trails.

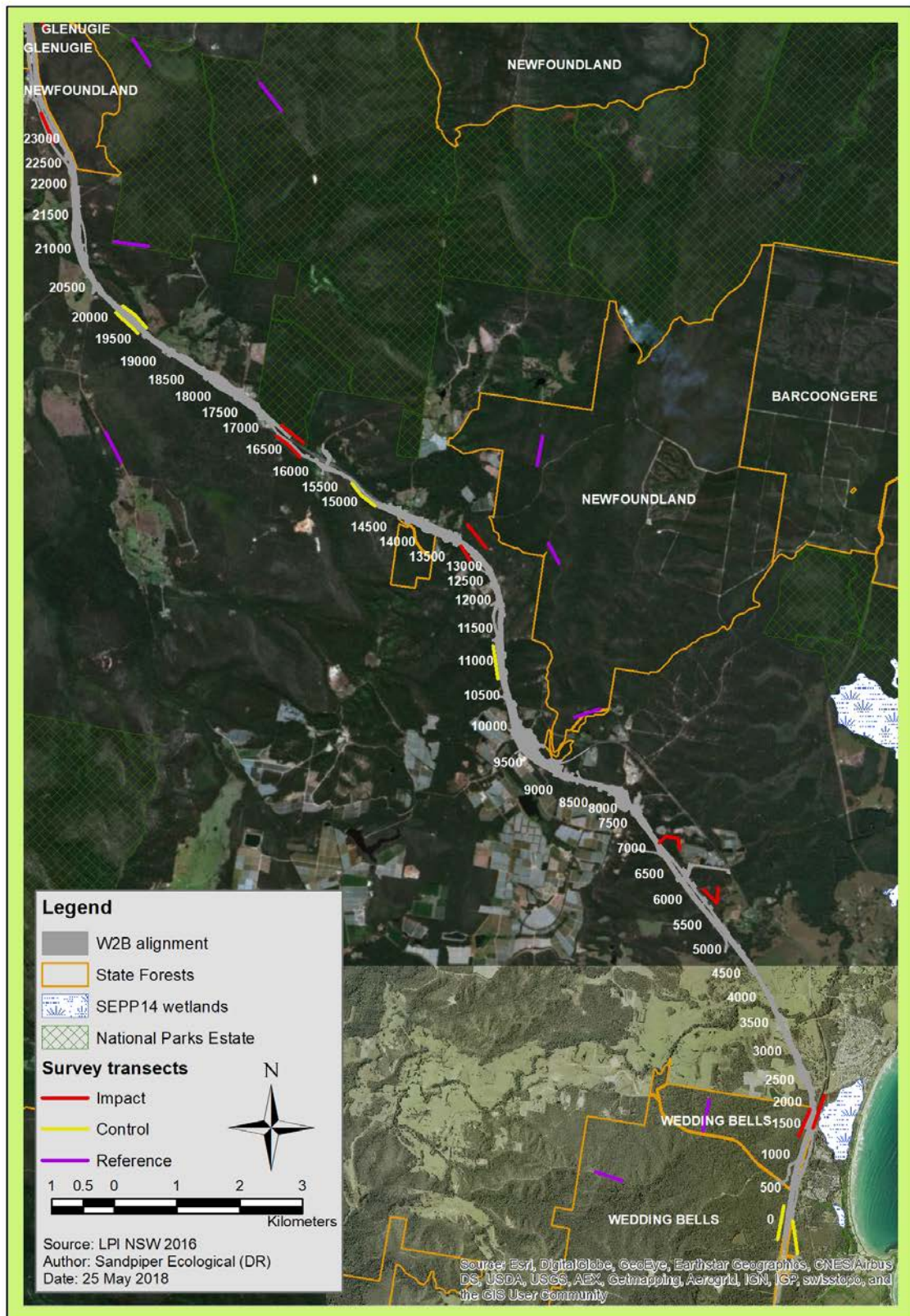


Figure 1a: Threatened glider impact, control and reference transects across the W2B alignment.

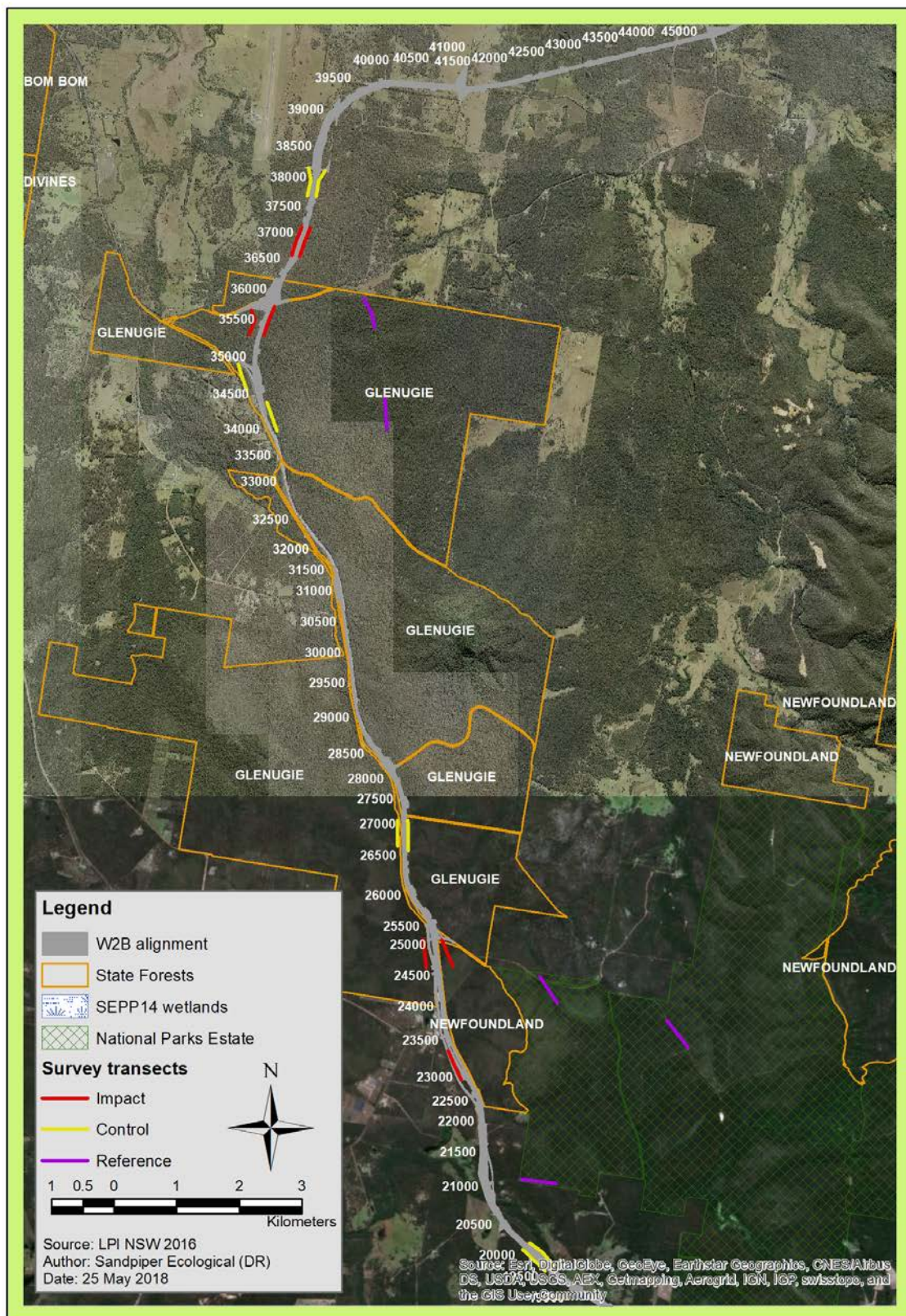


Figure 1b: Threatened glider impact, control and reference transects across the W2B alignment.

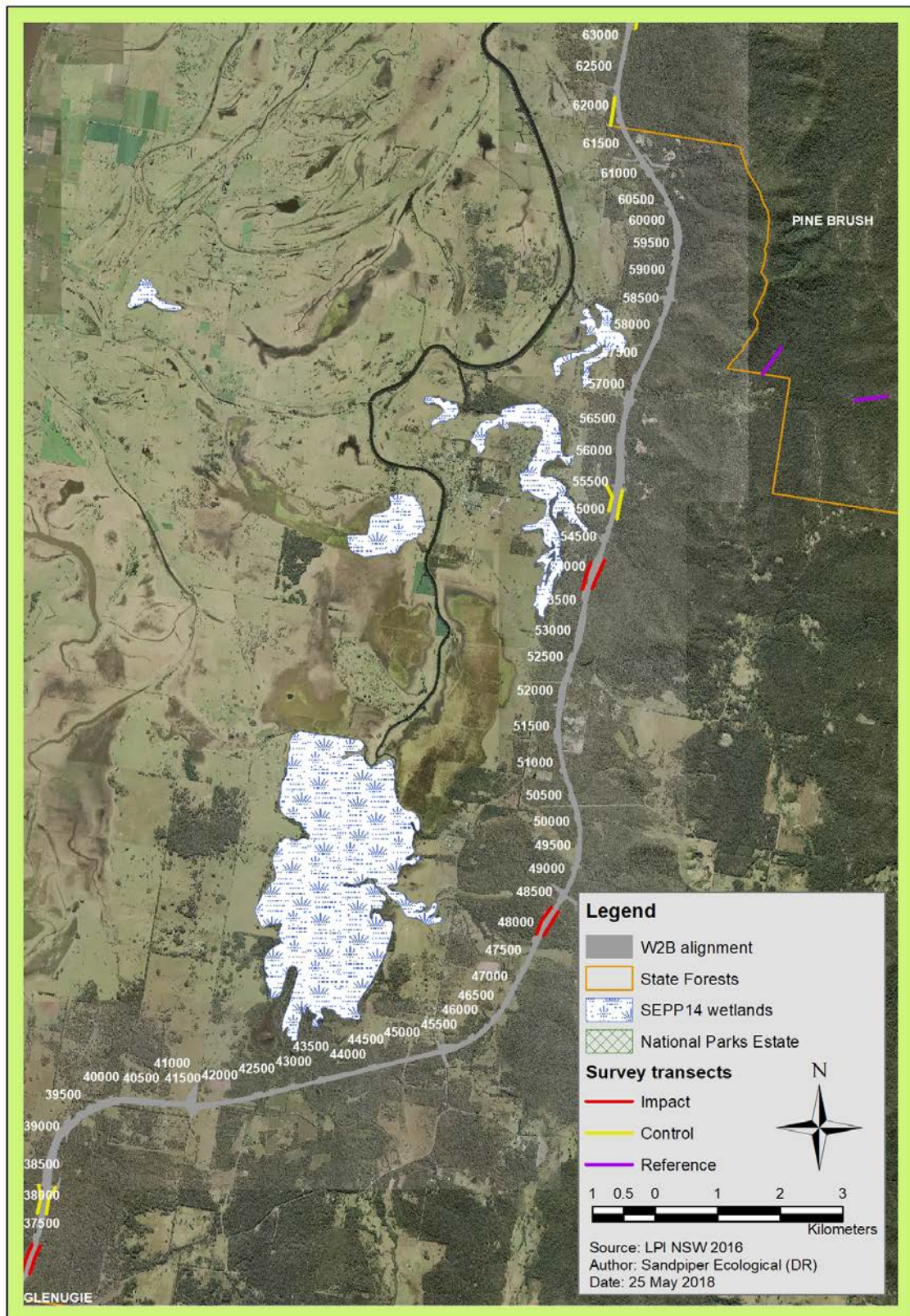


Figure 1c: Threatened glider impact, control and reference transects across the W2B alignment.

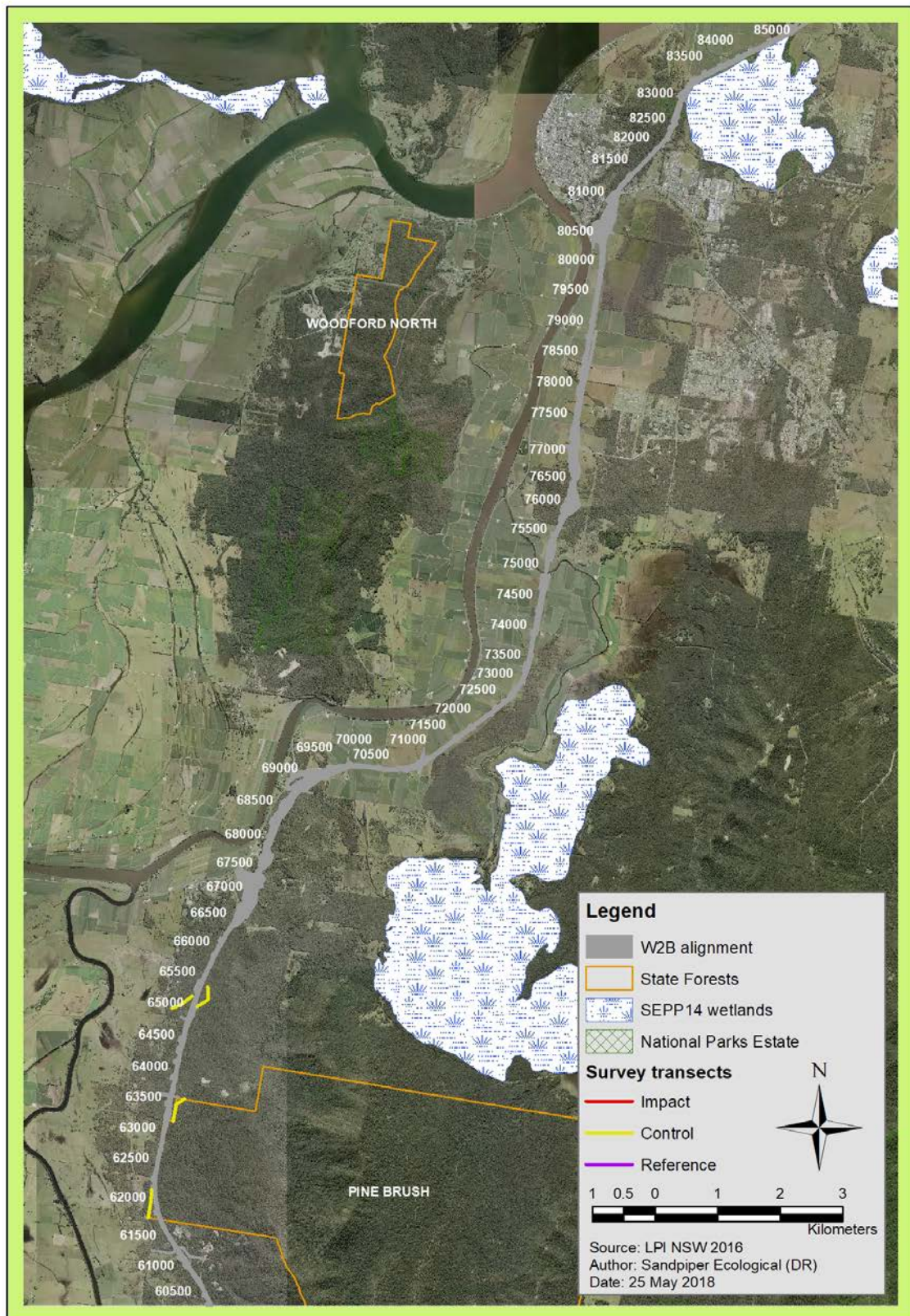


Figure 1d: Threatened glider impact, control and reference transects across the W2B alignment.

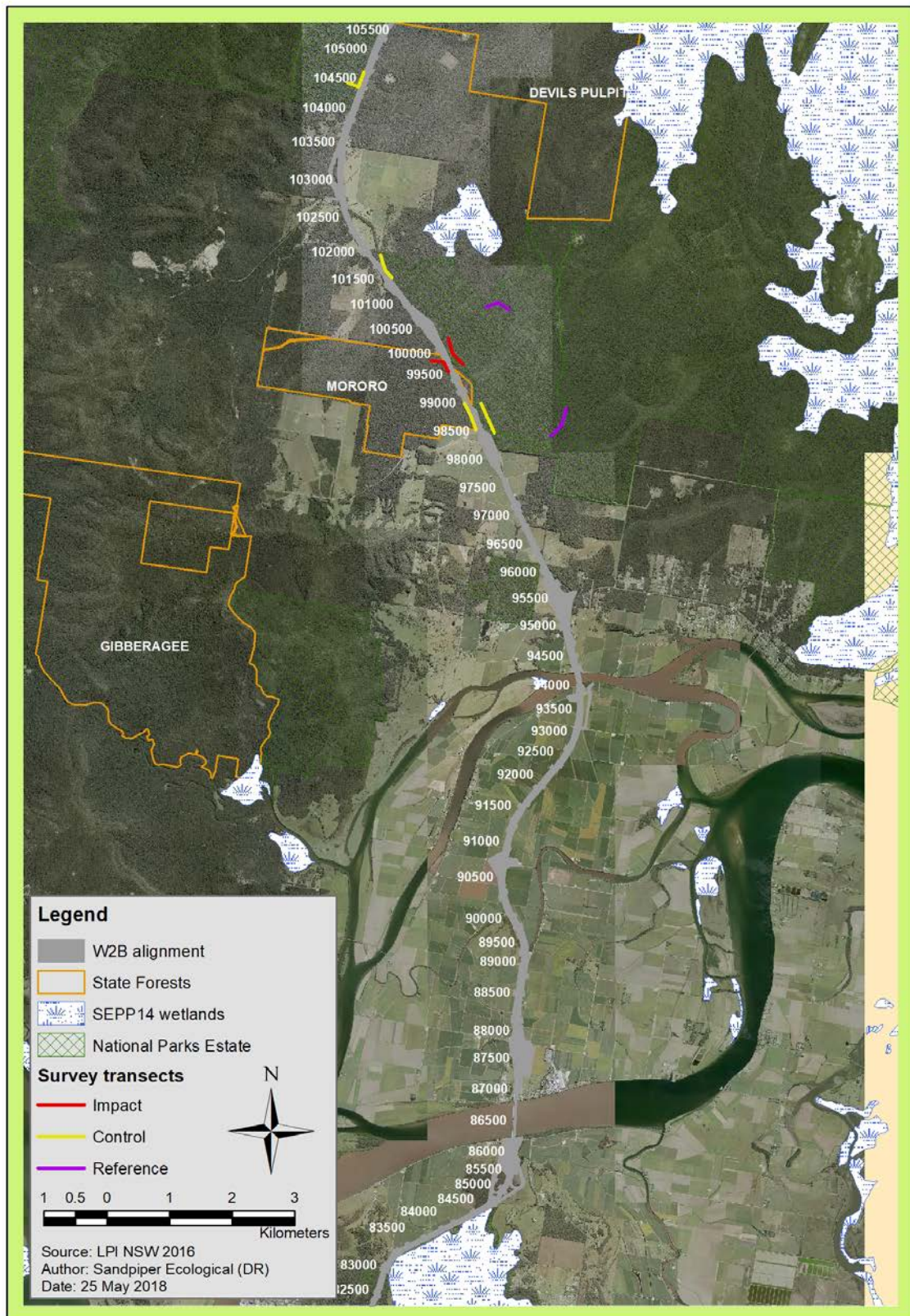


Figure 1e: Threatened glider impact, control and reference transects across the W2B alignment.

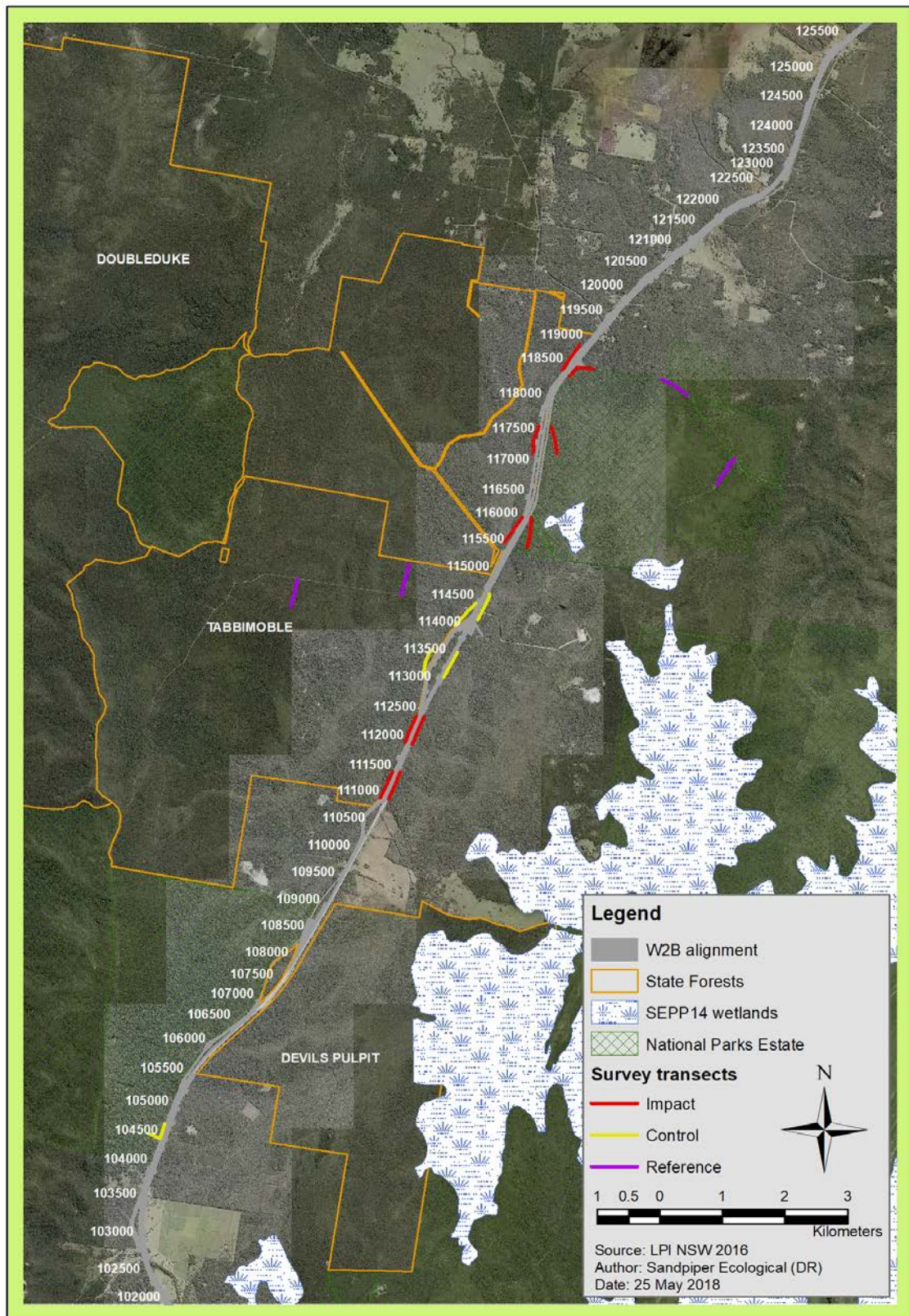


Figure 1f: Threatened glider impact, control and reference transects across the W2B alignment.

Table 1: Location of impact, control and reference transects positioned in sections 1, 2, 3, 6 and 7 of the W2B Upgrade.

Section	Site Name	Transect ID	Approximate chainage at centre of transect		
			Impact	Control	Reference
1	C1 Control	C1-c-east	-	100	-
		C1-c-west	-	100	-
1	C1 Reference	C1-r-north	-	-	1500
		C1-r-south	-	-	500
1	C1 Impact	C1-i-east	1900	-	-
		C1-i-west	1900	-	-
1	M1 Impact	M1-i	6000	-	-
1	S2 Impact	S2-i	7300	-	-
1	M1/S2 Reference	M1/S2-r	-	-	9000
1	M1/S2 Control	M1/S2-c	-	11200	-
1	C2 Impact	C2-i-east	13100	-	-
		C2-i-west	13100	-	-
1	C2 Reference	C2-r-north	-	-	13200
		C2-r-south	-	-	13200
1	C2 Control	C2-c	-	15000	-
2	C3 Impact	C3-i-east	16000	-	-
		C3-i-west	16000	-	-
2	C3 Control	C3-c-east	-	19600	-
		C3-c-west	-	19600	-
2	C3 Reference	C3-r-east	-	-	20900
		C3-r-west	-	-	20300
2	M2 Impact	M2-i	23200	-	-
2	S3 Impact	S3-i-east	25000	-	-
		S3-i-west	25000	-	-
2	S3/M2 Reference	S3/M2-r-e	-	-	25200
		S3/M2-r-w	-	-	25200
2	S3/M2 Control	S3/M2-c-e	-	27000	-
		S3/M2-c-w	-	27000	-
3	Glenugie South	GS-east	35700	34050	-
		GS-west	35700	34750	-
3	Glenugie North	GN-east	37050	38000	-
		GN-west	37050	38000	-
3	Glenugie Reference	G-r-north	-	-	35800
		G-r-south	-	-	33950
3	Tucabia South	TucS-east	48250	55250	-
		TucS-west	48250	55350	-
3	Tucabia Mid	TucM-east	-	63500	-
		TucM-west	-	61850	-
3	Tucabia North	TucN-east	54050	65300	-
		TucN-west	54050	65100	-
3	Tucabia Reference	Tuc-r-north	-	-	57900
		Tuc-r-south	-	-	57200
6	Mororo	Mor-east	99600	98500	-
		Mor-west	99600	98600	-
6	Mororo Reference	Mor-r-north	-	-	100100
		Mor-r-south	-	-	98100
6 & 7	Tabbimoble South	TabS-east	111350	101400	-
		TabS-west	111350	104550	-
7	Tabbimoble Mid	TabM-east	112350	113550	-
		TabM-west	112350	113550	-
7	Tabbimoble North	TabN-east	115950	114550	-
		TabN-west	115950	114550	-

Section	Site Name	Transect ID	Approximate chainage at centre of transect		
			Impact	Control	Reference
7	Tabbimoble Veg Median	TabVM-east	117400	-	-
		TabVM-west	117400	-	-
7	Tabbimoble Land Bridge	TabLB-east	118850	-	-
		TabLB-west	118850	-	-
7	Tabbimoble Nature Reserve Reference	TabNR-r-nth	-	-	118700
		TabNR-r-sth	-	-	117300
7	Tabbimoble Double Duke State Forest Reference	TabDD-r-north	-	-	114750
		TabDD-r-south	-	-	114300
Total Transects			31	26	19

2.2 Spotlight and call-playback surveys

Spotlight and call playback surveys were conducted in each of four quarters during 2017 – 20 February to 8 March (Q1), 1-25 May (Q2), 18 July to 3 August (Q3) and 11-20 December (Q4). Each transect was surveyed on two non-consecutive nights during each survey period. Two to three experienced ecologists conducted the surveys concurrently on nearby transects (i.e. one observer/transect) and the order and allocation of transects was rotated to avoid bias. Impact transects M1-I (Q2 - Q4), GS-ie and GS-iw (Q1 - Q4) were not surveyed due to access restrictions.

Spotlight surveys were of 30 minutes' duration and preceded by yellow-bellied glider (YbG) call playback. Playback included a five-minute listening period, five minutes of playback followed by spotlighting. Surveys began at least 45-60 minutes after sunset and were mostly completed within six hours after sunset. Surveys were conducted between third quarter and first quarter moon phases to avoid the period around the full moon. Weather conditions were generally fine during surveys with occasions of moderate winds and/or light showers. Full details of survey weather conditions and effort are provided in Tables A1-4, Appendix A.

On occasions during surveys when an individual could not be confidently distinguished between a squirrel glider (SqG) and a sugar glider (*P. breviceps*), it was recorded as squirrel/sugar. To determine the likelihood of each of these records being a squirrel glider, all survey data for all periods (including pre-construction) for each of these transects was reviewed. If squirrel gliders only were detected on that transect on other occasions or on more occasions than sugar gliders, the record was scored as 'probable' squirrel glider and included as a 'presence' record. If squirrel gliders were not detected on that transect on another occasion(s) or sugar gliders only were detected on other occasions the record was scored as 'possible' squirrel glider and not included as a 'presence' record.

2.3 Data analysis

Despite the differing stages of construction, 2017 survey data for all sites were treated as 'construction phase' data. For each survey period, data for the two samples were pooled to determine presence/absence of YbG and SqG for each transect. The number of present or 'occupied' transects for each species for each survey period were then summed and expressed as a proportion of total sites for that treatment (i.e. impact, control, reference).

For the comparison between pre-construction and construction phase, data from previous construction phase surveys in section 1 and 2 (autumn 2016, winter 2016, spring 2016) and section 3, 6 and 7 (spring 2016) were included in the analysis. The occupancy rate of yellow-bellied glider and squirrel glider for each treatment for each survey period (quarter) was then tabulated according to phase of construction. In total, all focal sections were surveyed in four periods during pre-construction. During construction sections 3, 6 and 7 were surveyed in four periods and sections 1 and 2 surveyed in seven periods/quarters.

The occupancy rates for pre-construction and construction for each treatment were then compared using the non-parametric Mann-Whitney U-test. Data were not transformed. All transects were assumed to be independent although this may not be the case for all paired impact and control transects due to their proximity. The Mann-Whitney effectively tests the null hypothesis that there is no difference in rates of occupation between the phases of construction. All data analyses were performed on SYSTAT 13.1 (Systat Software Inc.).

3. Results

3.1 Impacts site detections

YbG and/or SqG were detected on 15 of the 31 impact transects during 2017 surveys, including six in section 3, four in section 1, three in section 7 and one each in sections 2 and 6 (Table 2). Both species were detected on four of the 31 impact sites – Mor-ie (section 6), TucS-ie and TucS-iw (section 3) and C3-iw (section 1). The paired TucS transects (section 3) featured the most threatened glider detections with a detection of either or both species in all four quarters (Table 2). Most detections on ‘occupied’ transects were of a single individual and the most individuals recorded in a single survey was five SqG on TucS-ie (section 3).

YbG were detected on 8 of the 31 impact transects during 2017 surveys including four transects in section 3, two in section 1 and one each in section 6 and section 2 (Table 2). YbG were not detected on section 7 impact transects during 2017 surveys. Site detections mostly occurred in a single season except at TucS transects and GN transects (section 3), M2-i (section 2) and C3-iw (section 1) where detections were made in two or more seasons (Table 2). The mean occupancy rate for the four quarters was $12.4\% \pm 4.7\%$ (sd) and included a range of 7.1 – 17.9%.

SqG were detected on 11 of the 31 impact transects during 2017 surveys including four transects in section 3, three transects each in section 7 and section 1 and one in section 6 (Table 2). SqG were not detected on section 2 impact transects during 2017 surveys. Site detections mostly occurred in a single season except at TabLB-ie, TucN-ie, TucS-ie, TucS-iw and C3-iw where detections were made in two or more seasons. The mean occupancy rate for the four quarters was $15.9\% \pm 4.3\%$ (sd) and a range of 10.7 – 20.7%.

Table 2: Impact transects where threatened gliders were detected, maximum number of individuals and occupancy rates for quarterly surveys in sections 7 (10 transects), section 6 (2 transects), section 3 (8 transects), section 2 (3 transects) and section 1 (8 transects) during 2017. YbG = yellow-bellied glider; SqG = squirrel glider; e = east, w = west, n = north, s = south, na = no access.

Transect ID	Q1		Q2		Q3		Q4	
	YbG	SqG	YbG	SqG	YbG	SqG	YbG	SqG
<u>Section 1</u>								
C3-iw		1	1			1	1	
C2-ie						1		
S2-i								1
M1-i	1		na	na	na	na	na	na
<u>Section 2</u>								
M2-i					1		2	
<u>Section 3</u>								
TucN-ie		2				1		
TucN-iw				1				
TucS-ie		1	1		2	5	1	1
TucS-iw	1	1					2	1
GN-ie	1				1			
GN-iw					1		1	
GS-ie	na	na	na	na	na	na	na	na
GS-iw	na	na	na	na	na	na	na	na
<u>Section 6</u>								
Mor-ie				1	1			
Mor-iw								
<u>Section 7</u>								
TabLB-ie		1		1				1
TabLB-iw		1						
TabVM-ie						1		
<i>Occupancy Rate</i>	<i>10.3%</i>	<i>20.7%</i>	<i>7.1%</i>	<i>10.7%</i>	<i>14.3%</i>	<i>17.9%</i>	<i>17.9%</i>	<i>14.3%</i>

3.2 Control site detections

YbG and/or SqG were detected on 11 of the 26 control sites during 2017 surveys, including four in section 3, two each in sections 7, 6 and 1 and one in section 2 (Table 3). No transects featured detections of both species. Most detections on 'occupied' transects were of a single individual except for one occasion when two SqG were detected on TucM-cw (section 3).

YbG were detected on two of the 26 control transects during 2017 – TabM-cw (section 7) and Mor-ce (section 6) (Table 2). YbG were not detected on section 1, 2 or 3 control transects during 2017 surveys. Site detections occurred in either one or two quarters (Table 3). The mean occupancy rate for the four quarters was 3.9% ± 4.4% (sd) and a range of 0 – 7.7%.

SqG were detected on nine of the 26 control transects during 2017 surveys including four transects in section 3, two in section 1 and one each in sections 2, 6 and 7 (Table 3). Site detections occurred in either one or two quarters (Table 3). The mean occupancy rate for the four quarters was 13.5% ± 3.9% (sd) and included a range of 7.7 – 15.5%.

Table 3: Control transects where threatened gliders were detected, maximum number of individuals and occupancy rates for quarterly surveys in sections 7 (4 transects), section 6 (4 transects), section 3 (10 transects), section 2 (4 transects) and section 1 (4 transects) during 2017. YbG = yellow-bellied glider; SqG = squirrel glider; e = east, w = west, n = north, s = south, na = no access.

Transect ID	Q1		Q2		Q3		Q4	
	YbG	SqG	YbG	SqG	YbG	SqG	YbG	SqG
<u>Section 1</u>								
C2-c		1				1		
S2/M1-c				1				1
<u>Section 2</u>								
C3-cw								1
<u>Section 3</u>								
TucN-cw						1		
TucM-cw				2				
TucS-cw		1						1
GN-cw		1						
<u>Section 6</u>								
Mor-ce	1		1					
Mor-cw		1						
<u>Section 7</u>								
TabM-ce				1				
TabM-cw	1		1					
<i>Occupancy Rate</i>	7.7%	15.4%	7.7%	15.5%	0	7.7%	0	15.5%

3.3 Reference site detections

YbG and/or SqG were detected on 15 of the 19 reference transects during 2017 surveys, including four in section 1, three each in sections 2, 3 and 7 and two in section 6 (Table 4). Both species were detected on three transects – Mor-rn (section 6), TucR-n (section 3) and C3-re (section 2). Most detections on ‘occupied’ transects were of a single individual and the most individuals recorded in a single survey was three YbG on C3-re (section 1).

YbG were detected on 8 of the 19 reference transects during 2017 surveys including four transects in section 1, two in section 2 and one each in sections 3 and 6 (Table 4). YbG were not detected on section 7 reference transects during 2017 surveys. Site detections most commonly occurred in two or more seasons. The mean occupancy rate for the four quarters was $23.7\% \pm 6.8\%$ (sd) and included a range of 15.8 – 31.6%.

SqG were detected on 10 of the 19 reference transects during 2017 surveys including three transects each in section 3 and 7 and two transects each in sections 2 and 6 (Table 4). SqG were not detected on section 1 impact transects during 2017 surveys. Site detections mostly occurred in a single quarter except at Tuc-rn where detections were made in all four quarters. The mean occupancy rate for the four quarters was $21.1\% \pm 10.5\%$ (sd) and a range of 15.8 – 36.8%.

Table 4: Reference transects where threatened gliders were detected, maximum number of individuals and occupancy rates for quarterly surveys in sections 7 (4 transects), section 6 (2 transects), section 3 (4 transects), section 2 (4 transects) and section 1 (5 transects) during 2017. YbG = yellow-bellied glider; SqG = squirrel glider; e = east, w = west, n = north, s = south, na = no access.

Transect ID	Q1		Q2		Q3		Q4	
	YbG	SqG	YbG	SqG	YbG	SqG	YbG	SqG
<u>Section 1</u>								
C2-rn	1		1		2		4	
C2-rs	1							
S2/M1-r	1						1	
C1-rn					1		1	
<u>Section 2</u>								
S3/M2-re						1		
C3-re			2		3		2	1
C3-rw			2		1		1	
<u>Section 3</u>								
Tuc-r-n		2		1		2	1	1
Tuc-r-s				1		2		
G-r-n				1				
<u>Section 6</u>								
Mor-rn	1			1	1			
Mor-rs		1		1				
<u>Section 7</u>								
TabNR-rn				1				
TabNR-rs								2
TabDD-rs		1		2				
<i>Occupancy Rate</i>	<i>21.1%</i>	<i>15.8%</i>	<i>15.8%</i>	<i>36.8%</i>	<i>26.3%</i>	<i>15.8%</i>	<i>31.6%</i>	<i>15.8%</i>

3.4 Comparison between pre-construction and construction phase occupancy

The graphic presentation of mean occupation rates (\pm sd) for YbG and SqG show varying data responses between the two stages of construction (Figures 2, 3). Mean occupation rates for YbG were higher at impact and reference sites during construction compared to pre-construction although the reference site data featured large standard deviations. Conversely, control site data demonstrated a small decline during construction (Figure 2). No treatment was shown to be significantly different between construction stages at a 95% confidence interval although reference site data showed a weakly significant rise (Table 5).

Mean occupation rates for SqG were marginally higher during construction phase for control sites and marginally lower for impact and reference sites (Figure 3). As for YbG data, no treatment was shown to be significantly different between construction stages at a 95% confidence interval (Table 5).

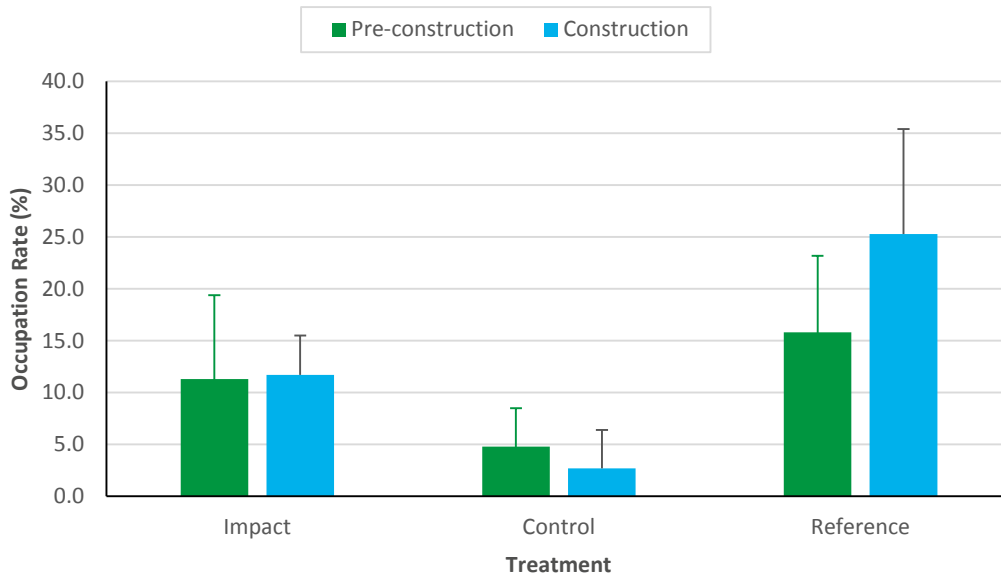


Figure 2: Comparison between yellow-bellied glider pre-construction and construction phase mean occupation rates (\pm sd) at impact, control and reference sites.

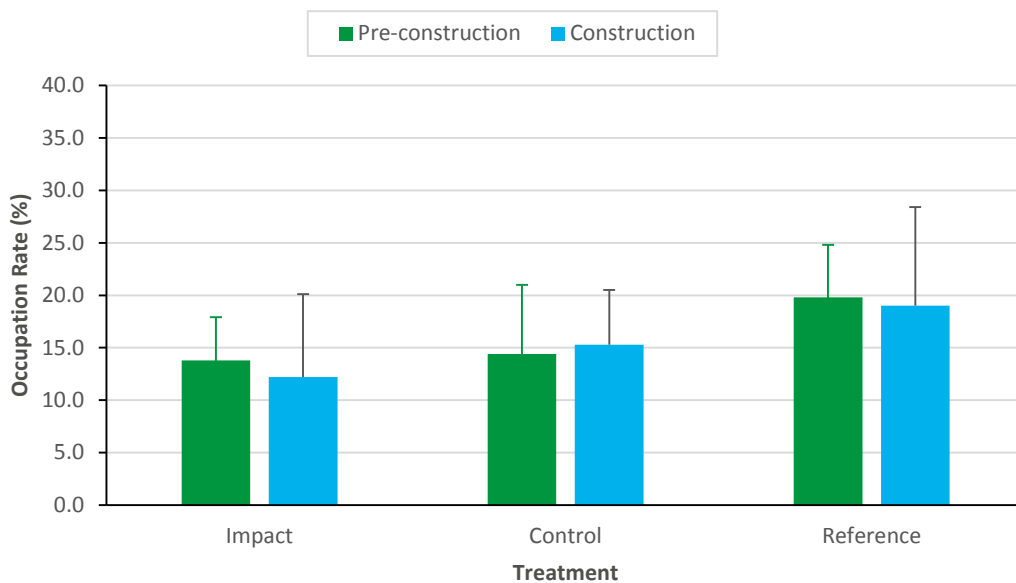


Figure 3: Comparison between squirrel glider pre-construction and construction phase mean occupation rates (\pm sd) at impact, control and reference sites.

Table 5: Results of Mann-Whitney U-Tests comparing pre-construction to construction phase occupation rates for each treatment.

Treatment	Yellow-bellied glider		Squirrel glider	
	U-stat	P value	U-stat	P value
Impact	13	0.849	14	0.996
Control	18.5	0.359	10.5	0.502
Reference	5.5	0.104	17.5	0.486

3.5 Construction and vegetation clearing progress

Construction was progressively completed in sections 1 and 2 during the latter half of 2017 and clearing of these sections was completed in 2016. Within section 3, mainline clearing was completed by the time of Q4 survey (December 2017) except for the alignment adjacent impact transects GSi-e&w (approximate chainage 35500) south of 8-mile Lane where clearing has been delayed. Mainline clearing was progressively completed during 2017 in section 6. Mainline clearing was not completed in section 7 during 2017 apart from a small area at ch.11450 adjacent control transect TabN-cw. Clearing progress at each transect during quarterly surveys is detailed in Appendix B.

4. Discussion

4.1 Distribution of YbG and SqG records

Construction phase data for the 2017 monitoring period shows varied rates of threatened glider occupation across sites and site types, which is largely consistent with pre-construction baseline data and previous construction phase surveys (Sandpiper 2014, 2016a, 2016b; Lewis Ecological unpub. data). YbG were detected on 25.8% of impact transects during 2017 with most records occurring in sections 1 and 3. At control sites, YbG were detected on 7.7% of transects and only in sections 6 and 7. Reference sites featured the highest rate of detections with YbG recorded on 42.1% of transects and most records occurring in sections 1 and 2. While YbG were recorded across all sections, they were not recorded on section 7 impact or reference transects or section 1, 2 or 3 control transects.

SqG were similarly more frequently detected on reference transects (52.6% of 19 transects) compared to impact (35.5% of 31 transects) or control (34.6% of 26 transects). Overall for 2017, SqG were detected at more impact, control and reference transects than YbG. SqG occurred most frequently in sections 1, 3 and 7 but were absent from lower/flats of section 1 and the middle area of section 7.

The patchy distribution of threatened glider records is likely a reflection of habitat quality and level of disturbance/landscape modification. Indeed, reference sites are largely located in higher quality, less disturbed habitat away from the highway alignment whereas impact and control sites are in roadside habitats featuring varying levels of disturbance and modification. Impact sites are also near threatened glider records and commonly feature marginally better habitat quality than control transects. Furthermore, SqG feature much smaller home ranges and higher population densities than YbG in areas they inhabit (Sharpe & Goldingay 2010; Goldingay & Kavanagh 1991) which likely leads to higher encounter rates of SqG in suitable habitat.

4.2 Comparison of pre-construction and construction phase occupation rates

The comparison between pre-construction and construction data revealed weak trends in rates of site occupation between pre-construction and construction phases and no statistically significant difference at 95% confidence interval. Interestingly, the direction of the trends was the inverse for YbG and SqG. That is, YbG demonstrated a rise at impact and reference sites and decline at control sites during construction but the opposite was the case for SqG. Whereas the lack of inferential power necessarily limits what can be deduced from these weak trends during this stage of construction and monitoring, several observations on the effect of clearing and construction on glider populations are worth noting.

The disruptive effects of clearing and construction activity may impact on individual gliders and populations in different ways and at different spatial scales (McAlpine et al. 2006; Rhodes et al. 2014). For example, the proportion of an individual's home range that was cleared will affect the severity of the impact. This effect may be more pronounced for SqG who feature home ranges in the order of 4-6 ha (van der Ree and Bennett 2003;

Sharpe and Goldingay 2007) compared to YbG who utilise much larger home ranges in the order of 25-84 ha (Goldingay & Jackson 2004), particularly if clearing consumes a large proportion of an individual's home range. However, because YbG favour the more productive forest areas (Goldingay & Kavanagh 1991) and require large forest areas in the order of 18 – 35 000 ha to support viable populations (Goldingay & Possingham 1995) they are similarly vulnerable to disturbance and habitat alteration. This may be further compounded for either species by loss of key food and denning resources and the loss of connectivity between habitat resources either side of the highway corridor. Indeed, the spatially patchy distribution of SqG and YbG across the W2B alignment means that the impacts of clearing will not be evenly spread across the highway corridor.

The intent of the W2B threatened glider monitoring program is to determine whether the disruptive effects of the W2B highway upgrade have been adequately ameliorated by mitigation at impact sites. The combined dataset of all five focal sections and the adequacy of the baseline data should enable a robust assessment. In the interim, construction phase data will provide insight on trends in occupation rates and enable greater understanding of changes between pre-construction and post-construction.

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Appendix A – Survey Effort and Weather Conditions

Table A1: Survey effort and weather data for Q1 2017 construction phase threatened glider monitoring.

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
TabLB-ie	20/2/2017	2	BT	23.9	71	40	nil	nil	3/4	2118	2149
	6/3/2017	3	GM	23.7	72	0	mlb	Nil	1/4	2214	2245
TabLB-iw	20/2/2017	2	NP	23.9	71	40	nil	nil	3/4	2118	2149
	6/3/2017	3	BT	23.7	72	0	mlb	Nil	1/4	2214	2245
TabNR-rn	20/2/2017	1	BT	23.9	71	40	nil	nil	3/4	2021	2050
	6/3/2017	4	GM	23.7	72	0	mlb	Nil	1/4	2307	2340
TabNR-rs	20/2/2017	1	NP	23.9	71	40	nil	nil	3/4	2021	2050
	6/3/2017	4	BT	23.7	72	0	mlb	Nil	1/4	2307	2340
TabVM-ie	20/2/2017	3	BT	23.8	77	20	nil	nil	3/4	2202	2233
	6/3/2017	5	GM	22.7	70	0	mlb	Nil	1/4	2404	2438
TabVM-iw	20/2/2017	3	NP	23.8	77	20	nil	nil	3/4	2202	2233
	6/3/2017	5	BT	22.7	70	0	mlb	Nil	1/4	2404	2438
TabN-ie	20/2/2017	4	BT	23.8	77	20	nil	msb	3/4	2245	2317
	6/3/2017	6	GM	22.7	70	0	mlb	Nil	1/4	2455	0128
TabN-iw	20/2/2017	4	NP	23.8	77	20	nil	msb	3/4	2245	2317
	6/3/2017	6	BT	22.7	70	0	mlb	Nil	1/4	2455	0128
TabN-ce	20/2/2017	6	BT	24.1	78	20	nil	msb	3/4	2429	2459
	6/3/2017	2	GM	24.7	60	5	msb	Nil	1/4	2110	2143
TabN-cw	20/2/2017	6	NP	24.1	78	20	nil	msb	3/4	2429	2459
	6/3/2017	2	BT	24.7	60	5	msb	Nil	1/4	2110	2143
TabDD-rn	20/2/2017	5	BT	24.1	78	20	nil	msb	3/4	2342	2413
	6/3/2017	1	GM	24.7	60	5	msb	Nil	1/4	2010	2042
TabDD-rs	20/2/2017	5	NP	24.1	78	20	nil	msb	3/4	2342	2413
	6/3/2017	1	BT	24.7	60	5	msb	Nil	1/4	2010	2042
TabM-ce	21/2/2017	1	BT	24.1	65	100	msb	<24 hr	3/4	2012	2044
	8/3/2017	5	GM	20.4	73	20	msb	nil	1/4	2402	2433
TabM-cw	21/2/2017	1	NP	24.1	65	100	msb	<24 hr	3/4	2012	2044
	8/3/2017	5	BT	20.4	73	20	msb	nil	1/4	2402	2433
TabM-ie	21/2/2017	3	BT	23.5	73	100	nil	<24 hr	3/4	2155	2226
	8/3/2017	4	GM	20.4	73	20	msb	nil	1/4	2320	2341
TabM-iw	21/2/2017	3	NP	23.5	73	100	nil	<24 hr	3/4	2155	2226
	8/3/2017	4	BT	20.4	73	20	msb	nil	1/4	2320	2341
TabS-ie	21/2/2017	2	BT	24.1	65	100	msb	<24 hr	3/4	2101	2133
	8/3/2017	6	GM	20.4	73	20	msb	nil	1/4	0102	0104
TabS-iw	21/2/2017	2	NP	24.1	65	100	msb	<24 hr	3/4	2101	2133
	8/3/2017	6	BT	20.4	73	20	msb	nil	1/4	0102	0104
TabS-ce	21/2/2017	4	BT	23.5	73	100	nil	<24 hr	3/4	2255	2326
	8/3/2017	3	GM	22.1	69	5	MLB	nil	1/4	2211	2242
TabS-cw	21/2/2017	4	NP	23.5	73	100	nil	<24 hr	3/4	2255	2326

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
	8/3/2017	3	BT	22.1	69	5	MLB	nil	1/4	2211	2242
MOR-ie	21/2/2017	5	BT	23.5	73	100	nil	<24 hr	3/4	2350	2421
	8/3/2017	2	GM	20.7	87	90	MLB	nil	1/4	2113	2142
MOR-iw	21/2/2017	7	NP	24.1	72	70	nil	<24 hr	3/4	0128	0157
	23/2/2017	6	BT	20.8	83	0	nil	nil	3/4	2447	0117
MOR-ce	21/2/2017	6	BT	23.5	73	100	nil	<24 hr	3/4	2442	0115
	8/3/2017	1	GM	20.7	87	90	MLB	nil	1/4	2014	2046
MOR-cw	21/2/2017	7	BT	24.1	72	70	nil	<24 hr	3/4	0128	0157
	23/2/2017	6	NP	20.8	83	0	nil	nil	3/4	2447	0117
MOR-rn	21/2/2017	5	NP	23.5	73	100	nil	<24 hr	3/4	2350	2421
	8/3/2017	2	BT	20.7	87	90	MLB	nil	1/4	2113	2142
MOR-rs	21/2/2017	6	NP	23.5	73	100	nil	<24 hr	3/4	2442	0115
	8/3/2017	1	BT	20.7	87	90	MLB	nil	1/4	2014	2046
TucN-ce	23/2/2017	5	BT	20.8	83	0	nil	nil	3/4	2343	2414
	8/3/2017	5	GM	22	70	60	Msb	Nil	1/4	2430	2458
TucN-cw	23/2/2017	5	NP	20.8	83	0	nil	nil	3/4	2343	2414
	8/3/2017	5	BT	22	70	60	Msb	Nil	1/4	2430	2458
TucM-ce	23/2/2017	4	BT	21.6	77	0	nil	nil	3/4	2255	2326
	8/3/2017	4	GM	22	70	60	Msb	Nil	1/4	2328	2358
TucM-cw	23/2/2017	4	NP	21.6	77	0	nil	nil	3/4	2255	2326
	8/3/2017	4	BT	22	70	60	Msb	Nil	1/4	2328	2358
Tuc-r-n	23/2/2017	3	BT	21.6	77	0	nil	nil	3/4	2158	2229
	8/3/2017	5	GM	18.89	63	0	msb	nil	1/4	2455	0128
Tuc-r-s	23/2/2017	3	NP	21.6	77	0	nil	nil	3/4	2158	2229
	8/3/2017	5	BT	18.89	63	0	msb	nil	1/4	2455	0128
TucS-ce	23/2/2017	2	BT	24	62	0	nil	nil	3/4	2114	2147
	8/3/2017	2	GM	22.1	67	100	mlb	nil	1/4	2115	2146
TucS-cw	23/2/2017	2	NP	24	62	0	nil	nil	3/4	2114	2147
	8/3/2017	2	BT	22.1	67	100	mlb	nil	1/4	2115	2146
TucN-ie	23/2/2017	1	BT	24	62	0	nil	nil	3/4	2019	2050
	8/3/2017	3	GM	22.1	67	100	mlb	Light	1/4	2210	2245
TucN-iw	23/2/2017	1	NP	24	62	0	nil	nil	3/4	2019	2050
	8/3/2017	3	BT	22.1	67	100	mlb	Light	1/4	2210	2245
TucS-ie	22/2/2017	5	BT	21.6	71	50	Msb	nil	3/4	2426	2458
	8/3/2017	1	GM	22.2	64	100	mlb	nil	1/4	2013	2045
TucS-iw	22/2/2017	5	NP	21.6	71	50	Msb	nil	3/4	2426	2458
	8/3/2017	1	BT	22.2	64	100	mlb	nil	1/4	2013	2045
GN-ce	22/2/2017	3	BT	22.3	68	50	Msb	nil	3/4	2215	2244
	7/3/2017	2	GM	20.1	65	0	msb	nil	1/4	2101	2133
GN-cw	22/2/2017	3	NP	22.3	68	50	Msb	nil	3/4	2215	2244
	7/3/2017	2	BT	20.1	65	0	msb	nil	1/4	2101	2133
GN-ie	22/2/2017	4	BT	22.3	68	50	Msb	nil	3/4	2258	2330
	7/3/2017	1	GM	20.1	65	0	msb	nil	1/4	2014	2046

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
GN-iw	22/2/2017	4	NP	22.3	68	50	Msb	nil	3/4	2258	2330
	7/3/2017	1	BT	20.1	65	0	msb	nil	1/4	2014	2046
GS-ie	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
GS-iw	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
GS-ce	22/2/2017	2	BT	24	60	80	nil	nil	3/4	2125	2156
	7/3/2017	3	GM	20.1	65	0	msb	nil	1/4	2214	2247
GS-cw	22/2/2017	2	NP	24	60	80	nil	nil	3/4	2125	2156
	7/3/2017	3	BT	20.1	65	0	msb	nil	1/4	2214	2247
G-r-n	22/2/2017	1	BT	24	60	80	nil	nil	3/4	2019	2051
	7/3/2017	4	BT	18.8	70	0	msb	nil	1/4	2313	2347
G-r-s	22/2/2017	1	NP	24	60	80	nil	nil	3/4	2019	2051
	7/3/2017	4	GM	18.8	70	0	msb	nil	1/4	2313	2347

Table A2: Survey effort and weather data for Q2 2017 construction phase threatened glider monitoring. Include a key to abbreviations

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
TabLB-ie	15/5/2017	2	BT	18	72	80	Msb	Lt shwr	3/4	1838	1910
	17/5/2017	5	NP	16.5	75	10	Nil	Nil	0/4	2130	2205
TabLB-iw	15/5/2017	2	NP	18	72	80	Msb	Lt shwr	3/4	1838	1910
	17/5/2017	5	BT	16.5	75	10	Nil	Nil	0/4	2130	2209
TabNR-rn	15/5/2017	1	BT	18	72	20	Nil	Nil	3/4	1755	1825
	17/5/2017	4	NP	16.5	75	10	Nil	Nil	0/4	2020	2103
TabNR-rs	15/5/2017	1	NP	18	72	20	Nil	Nil	3/4	1755	1825
	17/5/2017	4	BT	16.5	75	10	Nil	Nil	0/4	2020	2103
TabVM-ie	15/5/2017	3	BT	15.9	88	20	Nil	>shwr	3/4	1930	2001
	17/5/2017	6	NP	19.1	69	20	Nil	Nil	0/4	2215	2300
TabVM-iw	15/5/2017	3	NP	15.9	88	20	Nil	>shwr	3/4	1930	2001
	17/5/2017	6	BR	19.1	69	20	Nil	Nil	0/4	2215	2300
TabN-ie	15/5/2017	4	BT	15.9	88	20	Nil	>shwr	3/4	2010	2042
	17/5/2017	7	NP	17.9	76	20	Nil	Nil	2/4	2305	2345
TabN-iw	15/5/2017	4	NP	15.9	88	20	Nil	>shwr	3/4	2010	2042
	17/5/2017	7	NP	17.9	76	20	Nil	Nil	2/4	2305	2345
TabN-ce	15/5/2017	5	BT	16.2	84	10	Nil	>shwr	3/4	2055	2125
	17/5/2017	3	NP	16.9	81	20	Nil	Nil	0/4	1935	2015
TabN-cw	15/5/2017	5	NP	16.2	84	10	Nil	>shwr	3/4	2055	2125
	17/5/2017	3	BT	16.9	81	20	Nil	Nil	0/4	1935	2015
TabDD-rn	15/5/2017	6	BT	16.2	84	10	Nil	>shwr	3/4	2142	2211
	17/5/2017	2	NP	16.9	81	20	Nil	Nil	0/4	1835	1914
TabDD-rs	15/5/2017	6	NP	16.2	84	10	Nil	>shwr	3/4	2142	2211
	17/5/2017	2	BT	16.9	81	20	Nil	Nil	0/4	1835	1917
TabM-ce	16/5/17	2	BT	19.6	55	10	Nil	Nil	3/4	1847	1922
	18/5/17	6	NP	18.4	89	100	Nil	Light	0/4	2230	2300
TabM-cw	16/5/17	2	NP	19.6	55	10	Nil	Nil	3/4	1847	1922
	18/5/17	6	BT	18.4	89	100	Nil	Light	0/4	2230	2300
TabM-ie	16/5/17	1	BT	19.6	55	10	Nil	Nil	3/4	1800	1835
	18/5/17	5	NP	18.9	81	100	Nil	Light	0/4	2141	2212
TabM-iw	16/5/17	1	NP	19.6	55	10	Nil	Nil	3/4	1800	1835
	18/5/17	5	BT	18.9	81	100	Nil	Light	0/4	2140	2210
TabS-ie	15/5/2017	7	BT	16.2	84	10	Nil	>shwr	3/4	2223	2255
	17/5/2017	1	NP	20	67	10	Nil	Nil	0/4	1755	1830
TabS-iw	15/5/2017	7	NP	16.2	84	10	Nil	>shwr	3/4	2223	2255
	17/5/2017	1	BT	20	67	10	Nil	Nil	0/4	1755	1830
TabS-ce	16/5/17	3	BT	16	62	Nil	Nil	Nil	3/4	1945	2017
	18/5/17	4	NP	18.9	81	100	Nil	Light	0/4	2035	2107
TabS-cw	16/5/17	3	NP	16	62	Nil	Nil	Nil	3/4	1945	2017
	18/5/17	4	BT	18.9	81	100	Nil	Light	0/4	2035	2107
MOR-ie	16/5/17	4	BT	17	81	Nil	Nil	Nil	3/4	2050	2122
	18/5/17	1	NP	18.8	77	100	Nil	Nil	0/4	1755	1830
MOR-iw	16/5/17	6	BT	17	81	Nil	Nil	Nil	3/4	2225	2300
	18/5/17	3	NP	19	80	100	Nil	Nil	0/4	1950	2020
MOR-ce	16/5/17	5	NP	17	81	Nil	Nil	Nil	3/4	2145	2217
	18/5/17	2	BT	18.8	77	100	Nil	Nil	0/4	1855	1930
MOR-cw	16/5/17	6	NP	17	81	Nil	Nil	Nil	3/4	2225	2300
	18/5/17	3	BT	19	80	100	Nil	Nil	0/4	1950	2020
MOR-rn	16/5/17	4	NP	17	81	Nil	Nil	Nil	3/4	2050	2122
	18/5/17	1	BT	18.8	77	100	Nil	Nil	0/4	1755	1830

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
MOR-rs	16/5/17	5	BT	17	81	Nil	Nil	Nil	3/4	2145	2216
	18/5/17	2	NP	18.8	77	100	Nil	Nil	0/4	1855	1930
TucN-ce	1/5/2017	1	BT	19	77	10	Nil	Nil	1/4	1811	1842
	3/5/2017	5	NP	17.8	83	100	Msb	Nil	1/4	2138	2209
TucN-cw	1/5/2017	1	NP	19	77	10	Nil	Nil	1/4	1811	1842
	3/5/2017	5	BT	17.8	83	100	Msb	Nil	1/4	2140	2211
TucM-ce	1/5/2017	2	BT	19	77	10	Nil	Nil	1/4	1914	1945
	3/5/2017	4	NP	18.5	73	100	Msb	Light spit	1/4	2041	2116
TucM-cw	1/5/2017	2	NP	19	77	10	Nil	Nil	1/4	1914	1945
	3/5/2017	4	BT	18.5	73	100	Msb	Light spit	1/4	2042	2120
Tuc-r-n	1/5/2017	3	BT	17.3	91	20	Msb	Nil	1/4	2013	2045
	3/5/2017	3	NP	18.8	73	95	Msb	Nil	1/4	1944	2017
Tuc-r-s	1/5/2017	3	NP	17.3	91	20	Msb	Nil	1/4	2013	2045
	3/5/2017	3	BT	18.8	73	95	Msb	Nil	1/4	1945	2016
TucS-ce	1/5/2017	4	BT	17.3	91	20	Msb	Nil	1/4	2115	2147
	3/5/2017	2	NP	19.3	78	100	Msb	Nil	1/4	1853	1925
TucS-cw	1/5/2017	4	NP	17.3	91	20	Msb	Nil	1/4	2115	2147
	3/5/2017	2	BT	19.3	78	100	Msb	Nil	1/4	1853	1925
TucN-ie	1/5/2017	5	BT	14.5	95	5	Nil	Nil	1/4	2204	2236
	3/5/2017	1	NP	19.3	78	100	Msb	Nil	1/4	1800	1835
TucN-iw	1/5/2017	5	NP	14.5	95	5	Nil	Nil	1/4	2204	2236
	3/5/2017	1	BT	19.3	78	100	Msb	Nil	1/4	1800	1835
TucS-ie	2/5/2017	3	BT	17.9	88	20	Nil	Nil	1/4	2010	2142
	4/5/2017	1	NP	18.5	69	95	Nil	Nil	1/4	1755	1835
TucS-iw	2/5/2017	3	NP	17.9	88	20	Nil	Nil	1/4	2010	2142
	4/5/2017	1	BT	18.5	69	95	Nil	Nil	1/4	1755	1835
GN-ce	2/5/2017	1	BT	17.9	88	20	Nil	Nil	1/4	1842	1911
	4/5/2017		NP	17	80	100	MLB	Nil	1/4	1905	1940
GN-cw	2/5/2017	1	NP	17.9	88	20	Nil	Nil	1/4	1842	1911
	4/5/2017		BT	17	80	100	MLB	Nil	1/4	1905	1940
GN-ie	2/5/2017	2	BT	17.9	88	20	Nil	Nil	1/4	1801	1830
	4/5/2017		NP	17	80	100	MLB	Nil	1/4	1950	2024
GN-iw	2/5/2017	2	NP	17.9	88	20	Nil	Nil	1/4	1801	1830
	4/5/2017		BT	17	80	100	MLB	Nil	1/4	1950	2024
GS-ie	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
GS-iw	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
GS-ce	2/5/2017	5	BT	16.3	95	10	Nil	Nil	1/4	2225	2259
	4/5/2017		NP	16.4	80	100	Msb	Nil	1/4	2231	2303
GS-cw	2/5/2017	5	NP	16.3	95	10	Nil	Nil	1/4	2225	2259
	4/5/2017		BT	16.4	80	100	Msb	Nil	1/4	2227	2300
G-r-n	2/5/2017	4	NP	16.3	95	10	Nil	Nil	1/4	2131	2203
	4/5/2017		BT	16.4	80	100	Msb	Nil	1/4	2135	2210
G-r-s	2/5/2017	4	BT	16.3	95	10	Nil	Nil	1/4	2131	2203
	4/5/2017		NP	16.4	80	100	Msb	Nil	1/4	2135	2210
S3/M2-ce	21/5/2017	1	BT	18.9	87	20	Nil	Nil	3/4	1828	1900
	23/5/2017	3	NP	18.1	88	10	Nil	Nil	0/4	1915	1944
S3/M2-cw	21/5/2017	1	NP	18.9	87	20	Nil	Nil	3/4	1828	1900
	23/5/2017	3	BT	18.1	88	10	Nil	Nil	0/4	1915	1944
S3/M2-re	21/5/2017	2	BT	18.9	87	20	Nil	Nil	3/4	1919	1950

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
	23/5/2017	4	NP	16	94	10	Nil	Nil	0/4	2001	2032
S3/M2-rw	21/5/2017	2	NP	18.9	87	20	Nil	Nil	3/4	1919	1950
	23/5/2017	4	BT	16	94	10	Nil	Nil	0/4	2001	2032
S3-ie	21/5/2017	3	BT	17.3	95	20	Msb	Nil	3/4	2013	2044
	23/5/2017	5	NP	16	94	10	Nil	Nil	0/4	2055	2124
S3-iw	21/5/2017	3	NP	17.3	95	20	Msb	Nil	3/4	2013	2044
	23/5/2017	5	BT	16	94	10	Nil	Nil	0/4	2055	2124
M2-i	21/5/2017	4	NP	17.3	95	20	Msb	Nil	3/4	2111	2142
	24/5/2017	2	BT	21	72	10	Msb	Nil	0/4	1840	1910
C3-re	21/5/2017	4	BT	17.3	95	20	Msb	Nil	3/4	2111	2142
	24/5/2017	3	NP	21	72	10	Msb	Nil	0/4	1840	1910
C3-rw	21/5/2017	5	BT/NP	17.3	95	20	Msb	Nil	3/4	2150	2212
	24/5/2017	1	BT/NP	21	72	10	Msb	Nil	0/4	1755	1815
C3-ce	21/5/2017	6	BT	17.3	95	20	Msb	Nil	3/4	2228	2357
	24/5/2017	4	NP	17.9	81	10	Msb	Nil	0/4	1935	2005
C3-cw	21/5/2017	6	NP	17.3	95	20	Msb	Nil	3/4	2228	2357
	24/5/2017	4	BT	17.9	81	10	Msb	Nil	17.9	1935	2005
C3-ie	22/5/2017	3	BT	17.5	93	20	Msb	>shwr	3/4	1935	2006
	24/5/2017	5	NP	17.9	81	10	Msb	Nil	0/4	2020	2055
C3-iw	22/5/2017	3	NP	17.5	93	20	Msb	>shwr	3/4	1935	2006
	24/5/2017	5	BT	17.9	81	10	Msb	Nil	0/4	2020	2100
C2-c	22/5/2017	2	BT/NP	18	93	100	Nil	Lt shwr	3/4	1856	1914
	25/5/2017	1	BT/NP	14.5	78	5	Nil	Nil	0/4	1755	1814
C2-rn	22/5/2017	1	NP	18	93	100	Nil	Lt shwr	3/4	1811	1843
	24/5/2017	6	BT	16.6	88	10	Nil	Nil	0/4	2125	2256
C2-rs	22/5/2017	1	BT	18	93	100	Nil	Lt shwr	3/4	1811	1843
	24/5/2017	6	NP	16.6	88	10	Nil	Nil	0/4	2125	2256
C2-ie	23/5/2017	6	NP	16	94	10	Nil	Nil	0/4	2150	2222
	25/5/2017	2	BT	14.5	78	5	Nil	Nil	0/4	1820	1851
C2-iw	23/5/2017	6	BT	16	94	10	Nil	Nil	0/4	2150	2222
	25/5/2017	2	NP	14.5	78	5	Nil	Nil	0/4	1820	1851
S2/M1-c	22/5/2017	4	BT/NP	17.5	93	20	Msb	>shwr	3/4	2020	2038
	24/5/2017	7	BT/NP	16.6	88	10	Nil	Nil	0/4	2215	2235
S2/M1-r	23/5/2017	1	BT/NP	18.1	88	10	Nil	Nil	0/4	1755	1815
	25/5/2017	3	BT/NP	13.2	81	5	Nil	Nil	0/4	1910	1926
S2-i	23/5/2017	2	BT/NP	18.1	88	10	Nil	Nil	0/4	1825	1844
	25/5/2017	4	BT/NP	13.2	81	5	Nil	Nil	0/4	1935	1952
M1-i	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
C1-ie	23/5/2017	7	BT	16	94	10	Nil	Nil	0/4	2244	2316
	25/5/2017	5	BT	13.2	81	5	Nil	Nil	0/4	2010	2042
C1-iw	23/5/2017	7	NP	16	94	10	Nil	Nil	0/4	2244	2316
	25/5/2017	5	BT	13.2	81	5	Nil	Nil	0/4	2010	2042
C1-rn	22/5/2017	5	NP	17.5	93	20	Msb	>shwr	3/4	2121	2150
	25/5/2017	7	BT	10.9	87	Nil	Msb	Nil	0/4	2155	2225
C1-rs	22/5/2017	5	BT	17.5	93	20	Msb	>shwr	3/4	2121	2150
	25/5/2017	7	NP	10.9	87	Nil	Msb	Nil	0/4	2155	2225
C1-ce	22/5/2017	6	NP	17.5	93	20	Msb	>shwr	3/4	1	2241
	25/5/2017	6	BT	13.2	81	5	Nil	Nil	0/4	2101	2132
C1-cw	22/5/2017	6	BT	17.5	93	20	Msb	>shwr	3/4	2210	2241
	25/5/2017	6	NP	13.2	81	5	Nil	Nil	0/4	2101	2132

Table A3: Survey effort and weather data for Q3 2017 construction phase threatened glider monitoring.

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
TabLB-ie	31/7/17	2	NP	18.2	75	0	MLB	Nil	1/4	1851	1925
	2/8/17	5	GM	13.4	63	0	Nil	Nil	1/4	2110	2145
TabLB-iw	31/7/17	2	GM	18.2	75	0	MLB	Nil	1/4	1857	1930
	2/8/17	5	NP	13.4	63	0	Nil	Nil	1/4	2110	2145
TabNR-rn	31/7/17	1	GM	19	74	0	MLB	Nil	1/4	1807	1837
	2/8/17	6	NP	13.5	61	20	Nil	Nil	1/4	2151	2230
TabNR-rs	31/7/17	1	NP	19	74	0	MLB	Nil	1/4	1807	1837
	2/8/17	6	GM	13.5	61	20	Nil	Nil	1/4	2151	2230
TabVM-ie	31/7/17	3	NP	17	78	0	Msb	Nil	1/4	1950	2025
	2/8/17	7	GM	13.2	61	20	Nil	Nil	1/4	2245	2325
TabVM-iw	31/7/17	3	GM	17	78	0	Msb	Nil	1/4	1950	2025
	2/8/17	7	NP	13.2	61	20	Nil	Nil	1/4	2245	2325
TabN-ie	31/7/17	4	NP	16.6	81	0	Msb	Nil	1/4	2035	2110
	2/8/17	4	GM	14.2	61	0	Nil	Nil	1/4	2025	2100
TabN-iw	31/7/17	4	GM	16.6	81	0	Msb	Nil	1/4	2035	2110
	2/8/17	4	NP	14.2	61	0	Nil	Nil	1/4	2025	2100
TabN-ce	31/7/17	5	NP	16.3	81	0	Msb	Nil	1/4	2130	2204
	2/8/17	3	GM	14.2	61	0	Nil	Nil	1/4	1940	2015
TabN-cw	31/7/17	5	GM	16.3	81	0	Msb	Nil	1/4	2130	2204
	2/8/17	3	NP	14.2	61	0	Nil	Nil	1/4	1940	2015
TabDD-rn	31/7/17	6	NP	16.3	81	0	Msb	Nil	1/4	2215	2250
	2/8/17	2	GM	16.5	62	0	Nil	Nil	1/4	1855	1928
TabDD-rs	31/7/17	6	GM	16.3	81	0	Msb	Nil	1/4	2215	2250
	2/8/17	2	NP	16.5	62	0	Nil	Nil	1/4	1855	1928
TabM-ce	1/8/17	2	NP	14.6	68	0	Nil	Nil	1/4	1900	1935
	3/8/17	6	GM	15.4	79	80	Nil	Nil	1/4	2225	2300
TabM-cw	1/8/17	2	GM	14.6	68	0	Nil	Nil	1/4	1900	1935
	3/8/17	6	NP	15.4	79	80	Nil	Nil	1/4	2225	2300
TabM-ie	1/8/17	1	NP	14.6	68	0	Nil	Nil	1/4	1810	1847
	3/8/17	5	GM	15.2	81	0	Nil	Nil	1/4	2147	2217
TabM-iw	1/8/17	1	GM	14.6	68	0	Nil	Nil	1/4	1810	1847
	3/8/17	5	NP	15.2	81	0	Nil	Nil	1/4	2147	2217
TabS-ie	31/7/17	7	NP	14.9	83	0	Nil	Nil	1/4	2300	2340
	2/8/17	1	GM	16.5	62	0	Nil	Nil	1/4	1805	1840
TabS-iw	31/7/17	7	GM	14.9	83	0	Nil	Nil	1/4	2300	2340
	2/8/17	1	NP	16.5	62	0	Nil	Nil	1/4	1805	1840
TabS-ce	1/8/17	3	NP	15.3	57	0	Nil	Nil	1/4	2000	2035
	3/8/17	4	GM	14.6	89	0	Nil	Nil	1/4	2055	2128
TabS-cw	1/8/17	3	GM	15.3	57	0	Nil	Nil	1/4	2000	2035
	3/8/17	4	NP	14.6	89	0	Nil	Nil	1/4	2055	2128
MOR-ie	1/8/17	4	GM	15	61	0	Nil	Nil	1/4	2100	2140
	3/8/17	2	NP	16.8	79	60	Nil	Nil	1/4	1910	1950
MOR-iw	1/8/17	6	NP	12.5	79	0	Nil	Nil	1/4	2245	2322
	3/8/17	3	GM	14.6	89	0	Nil	Nil	1/4	2010	2045
MOR-ce	1/8/17	5	GM	13.5	66	0	Nil	Nil	1/4	2150	2230
	3/8/17	1	NP	16.8	79	60	Msb	Nil	1/4	1818	1859
MOR-cw	1/8/17	6	GM	12.5	79	0	Nil	Nil	1/4	2245	2322
	3/8/17	3	NP	14.6	89	0	Nil	Nil	1/4	2010	2045
MOR-rn	1/8/17	4	NP	15	61	0	Nil	Nil	1/4	2100	2140
	3/8/17	2	GM	16.8	79	60	Nil	Nil	1/4	1910	1950
MOR-rs	1/8/17	5	NP	13.5	66	0	Nil	Nil	1/4	2150	2230

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
	3/8/17	1	GM	16.8	79	60	Msb	Nil	1/4	1818	1859
TucN-ce	25/7/17	1	NP	13.5	64	0	Nil	Nil	0/4	1805	1840
	27/7/17	5	GM	8.3	93	0	Nil	Nil	0/4	2140	2216
TucN-cw	25/7/17	1	GM	13.5	64	0	Nil	Nil	0/4	1805	1840
	27/7/17	5	NP	8.3	93	0	Nil	Nil	0/4	2140	2216
TucM-ce	25/7/17	2	NP	13.5	64	0	Nil	Nil	0/4	1855	1930
	27/7/17	4	GM	9.2	92	0	Nil	Nil	0/4	2055	2126
TucM-cw	25/7/17	2	GM	13.5	64	0	Nil	Nil	0/4	1855	1930
	27/7/17	4	NP	9.2	92	0	Nil	Nil	0/4	2055	2126
Tuc-r-n	25/7/17	3	GM	9.4	84	0	Nil	Nil	0/4	2000	2030
	27/7/17	3	NP	12.4	81	0	Nil	Nil	0/4	1950	2030
Tuc-r-s	25/7/17	3	NP	9.4	84	0	Nil	Nil	0/4	2000	2030
	27/7/17	3	GM	12.4	81	0	Nil	Nil	0/4	1950	2030
TucS-ce	25/7/17	4	NP	8.2	90	0	Nil	Nil	0/4	2049	2135
	27/7/17	2	GM	12	73	0	Nil	Nil	0/4	1850	1930
TucS-cw	25/7/17	4	GM	8.2	90	0	Nil	Nil	0/4	2049	2135
	27/7/17	2	NP	12	73	0	Nil	Nil	0/4	1850	1926
TucN-ie	25/7/17	5	NP	7.6	94	0	Nil	Nil	0/4	2150	2232
	27/7/17	1	GM	12	73	0	Nil	Nil	0/4	1800	1835
TucN-iw	25/7/17	5	GM	7.6	94	0	Nil	Nil	0/4	2150	2232
	27/7/17	1	NP	12	73	0	Nil	Nil	0/4	1800	1835
TucS-ie	24/7/17	3	NP	12.5	76	0	Msb	Nil	0/4	2020	2109
	26/7/17	5	GM	9.6	73	0	Nil	Nil	0/4	2210	2308
TucS-iw	24/7/17	3	GM	12.5	76	0	Msb	Nil	0/4	2020	2109
	26/7/17	5	NP	9.6	73	0	Nil	Nil	0/4	2210	2308
GN-ce	24/7/17	2	NP	15.4	62	0	Msb	Nil	0/4	1852	1927
	26/7/17	3	GM	12	65	0	Nil	Nil	0/4	2007	2042
GN-cw	24/7/17	2	GM	15.4	62	0	Msb	Nil	0/4	1852	1927
	26/7/17	3	NP	12	65	0	Nil	Nil	0/4	2007	2042
GN-ie	24/7/17	1	NP	15.4	62	0	Msb	Nil	0/4	1802	1839
	26/7/17	4	GM	11.5	65	0	Nil	Nil	0/4	2050	2140
GN-iw	24/7/17	1	GM	15.4	62	0	Msb	Nil	0/4	1802	1839
	26/7/17	4	NP	11.5	65	0	Nil	Nil	0/4	2050	2140
GS-ie	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
GS-iw	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
GS-ce	24/7/17	5	NP	9.2	90	0	Nil	Nil	0/4	2250	2335
	26/7/17	1	GM	19	33	0	Nil	Nil	0/4	1800	1840
GS-cw	24/7/17	5	GM	9.2	90	0	Nil	Nil	0/4	2250	2335
	26/7/17	1	NP	19	33	0	Nil	Nil	0/4	1800	1840
G-r-n	24/7/17	4	NP	9.2	90	0	Nil	Nil	0/4	2157	2235
	26/7/17	2	GM	17.1	39	0	Nil	Nil	0/4	1900	1935
G-r-s	24/7/17	4	GM	9.2	90	0	Nil	Nil	0/4	2157	2235
	26/7/17	2	NP	17.1	39	0	Nil	Nil	0/4	1900	1935
S3/M2-ce	20/7/17	1	NP	16.9	29	Nil	Nil	Nil	0/4	1755	1830
	23/7/17	4	GM	11	67	Nil	Nil	Nil	0/4	2045	2118
S3/M2-cw	20/7/17	1	GM	16.9	29	Nil	Nil	Nil	0/4	1755	1830
	23/7/17	4	NP	11	67	Nil	Nil	Nil	0/4	2045	2118
S3/M2-re	20/7/17	2	NP	13	45	Nil	Msb	Nil	0/4	1850	1928
	23/7/17	6	GM	12	49	Nil	Nil	Nil	0/4	2225	2306
S3/M2-rw	20/7/17	2	GM	13	45	Nil	Msb	Nil	0/4	1850	1928

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
	23/7/17	6	NP	12	49	Nil	Nil	Nil	0/4	2225	2306
S3-ie	19/7/17	7	NP	9.8	59	20	Msb	Nil	0/4	1020	2300
	23/7/17	5	GM	8.3	79	0	Msb	Nil	0/4	2130	2214
S3-iw	19/7/17	7	GM	9.8	59	20	Msb	Nil	0/4	1020	2300
	23/7/17	5	NP	8.3	79	0	Msb	Nil	0/4	2130	2214
M2-i	19/7/17	6	GM	12.9	46	20	Nil	Nil	0/4	2120	2154
	23/7/17	3	NP	9.6	79	0	Nil	Nil	0/4	1935	2012
C3-re	19/7/17	6	NP	12.9	46	20	Nil	Nil	0/4	2123	2202
	23/7/17	3	GM	9.6	79	0	Nil	Nil	0/4	1935	2015
C3-rw	19/7/17	5	NP/GM	12.9	46	20	Nil	Nil	0/4	2053	2109
	23/7/17	2	NP/GM	10	67	0	Nil	Nil	0/4	1900	1922
C3-ce	19/7/17	4	NP	13.4	45	20	Nil	Nil	0/4	2000	2037
	21/7/17	6	GM	7	89	0	Nil	Nil	0/4	2120	2200
C3-cw	19/7/17	4	GM	13.4	45	20	Nil	Nil	0/4	2000	2037
	21/7/17	6	NP	7	89	0	Nil	Nil	0/4	2120	220
C3-ie	19/7/17	3	NP	14.1	44	20	Msb	Nil	0/4	1915	1946
	21/7/17	5	GM	7.6	88	0	Nil	Nil	0/4	2030	2110
C3-iw	19/7/17	3	GM	14.1	44	20	Msb	Nil	0/4	1915	1946
	21/7/17	5	NP	7.6	88	0	Nil	Nil	0/4	2030	2110
C2-c	19/7/17	2	NP/GM	13.8	43	20	MLB	Nil	0/4	1845	1903
	21/7/17	4	NP/GM	7.9	85	0	Nil	Nil	0/4	2000	2022
C2-rn	19/7/17	1	GM	13.8	43	20	MLB	Nil	0/4	1757	1830
	21/7/17	3	NP	9.9	75	9	Nil	Nil	0/4	1900	1943
C2-rs	19/7/17	1	NP	13.8	43	20	MLB	Nil	0/4	1757	1830
	21/7/17	3	GM	9.9	75	9	Nil	Nil	0/4	1905	1940
C2-ie	20/7/17	3	NP	12	45	0	Msb	Nil	0/4	2000	2030
	23/7/17	1	GM	11.4	67	0	Nil	Nil	0/4	1800	1840
C2-iw	20/7/17	3	GM	12	45	0	Msb	Nil	0/4	2000	2030
	23/7/17	1	NP	11.4	67	0	Nil	Nil	0/4	1800	1840
S2/M1-c	18/7/17	6	NP/GM	13.3	89	20	MLB	Nil	0/4	2230	2251
	21/7/17	2	NP/GM	12.3	64	0	Nil	Nil	0/4	1825	1847
S2/M1-r	18/7/17	5	NP/GM	14.4	86	20	Nil	Nil	0/4	2145	2211
	21/7/17	1	NP/GM	12.3	64	0	Nil	Nil	0/4	1755	1815
S2-i	18/7/17	4	NP/GM	14.4	86	20	Nil	Nil	0/4	2110	2130
	20/7/17	4	NP/GM	12.2	40	0	Msb	Nil	0/4	2045	2104
M1-i	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
C1-ie	18/7/17	3	NP	17.2	80	50	Nil	Nil	0/4	2022	2100
	20/7/17	5	GM	7.6	86	Nil	Msb	Nil	0/4	2115	2149
C1-iw	18/7/17	3	GM	17.2	80	50	Nil	Nil	0/4	2025	2103
	20/7/17	5	NP	7.6	86	Nil	Msb	Nil	0/4	2115	2149
C1-rn	18/7/17	2	GM	18.8	76	70	Nil	Nil	0/4	1933	2005
	20/7/17	7	NP	4.7	93	Nil	Msb	Nil	0/4	2300	2340
C1-rs	18/7/17	2	NP	18.8	76	70	Nil	Nil	0/4	1933	2005
	20/7/17	7	GM	4.7	93	Nil	Msb	Nil	0/4	2300	2340
C1-ce	18/7/17	1	GM	18.8	76	70	Nil	Nil	0/4	1833	1905
	20/7/17	6	NP	6.7	90	Nil	Msb	Nil	0/4	2200	2240
C1-cw	18/7/17	1	NP	18.8	76	70	Nil	Nil	0/4	1833	1905
	20/7/17	6	GM	6.7	90	Nil	Msb	Nil	0/4	2200	2243

Table A4: Survey effort and weather data for Q4 2017 construction phase threatened glider monitoring.

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
TabLB-ie	11/12/17	4	MJ	21	69	Nil	Nil	Nil	LQ	2325	2355
	13/12/17	2	GM	21	78	Nil	Nil	Nil	LQ	2115	2145
TabLB-iw	11/12/17	4	GM	21	69	Nil	Nil	Nil	LQ	2325	2355
	13/12/17	2	MJ	21	78	Nil	Nil	Nil	LQ	2115	2145
TabNR-rn	11/12/17	5	MJ	21	69	Nil	Nil	Nil	LQ	0020	0106
	13/11/17	1	GM	22	75	Nil	Nil	Nil	LQ	2030	2100
TabNR-rs	11/12/17	5	GM	21	69	Nil	Nil	Nil	LQ	0020	0106
	13/12/17	1	MJ	22	75	Nil	Nil	Nil	LQ	2030	2100
TabVM-ie	11/12/17	6	MJ	18.5	81	Nil	Nil	Nil	LQ	0125	0155
	13/12/17	3	GM	21	88	Nil	Nil	Nil	LQ	2200	2230
TabVM-iw	11/12/17	6	GM	18.5	81	Nil	Nil	Nil	LQ	0125	0155
	13/12/17	3	MJ	21	88	Nil	Nil	Nil	LQ	2200	2230
TabN-ie	11/12/17	7	MJ	18.5	81	Nil	Nil	Nil	LQ	215	245
	13/12/17	3	GM	21	80	Nil	Nil	Nil	LQ	2255	2325
TabN-iw	11/12/17	7	GM	18.5	81	Nil	Nil	Nil	LQ	215	245
	13/12/17	3	MJ	21	80	Nil	Nil	Nil	LQ	2255	2325
TabN-ce	11/12/17	2	MJ	21	66	Nil	Nil	Nil	LQ	2140	2210
	13/12/17	4	GM	21	88	Nil	Nil	Nil	LQ	2335	0005
TabN-cw	11/12/17	2	GM	21	66	Nil	Nil	Nil	LQ	2140	2210
	13/12/17	4	MJ	21	88	Nil	Nil	Nil	LQ	2335	0005
TabDD-rn	11/12/17	3	MJ	21	66	Nil	Nil	Nil	LQ	2230	2300
	13/12/17	5	GM	21	88	Nil	Nil	Nil	LQ	0015	0045
TabDD-rs	11/12/17	3	GM	21	66	Nil	Nil	Nil	LQ	2230	2300
	13/12/17	5	MJ	21	88	Nil	Nil	Nil	LQ	0015	0045
TabM-ce	11/12/17	1	MJ	21	66	<5	MSB	Nil	LQ	2045	2115
	13/12/17	7	GM	21	88	Nil	Nil	Nil	LQ	0100	0130
TabM-cw	11/12/17	1	GM	21	66	<5	MSB	Nil	LQ	2045	2115
	13/12/17	7	MJ	21	88	Nil	Nil	Nil	LQ	0100	0130
TabM-ie	11/12/17	2	NP	22	69	29	Nil	Nil	LQ	2105	2135
	13/12/17	7	NP	22.5	76	0	Nil	Nil	LQ	0030	0100
TabM-iw	11/12/17	1	NP	22	69	29	Nil	Nil	LQ	2030	2100
	13/12/17	8	NP	22.5	76	0	Nil	Nil	LQ	0103	0135
TabS-ie	11/12/17	3	NP	22	69	29	Nil	Nil	LQ	2142	2213
	13/12/17	6	NP	22.8	75	0	Nil	Nil	LQ	2355	0025
TabS-iw	11/12/17	4	NP	22	69	29	Nil	Nil	LQ	2215	2245
	13/12/17	5	NP	22.8	75	0	Nil	Nil	LQ	2315	2350
TabS-ce	11/12/17	6	NP	22	68	20	Nil	Nil	LQ	2335	0005
	13/12/17	3	NP	23.1	76	0	Nil	Nil	LQ	2150	2225
TabS-cw	11/12/17	5	NP	22	68	20	Nil	Nil	LQ	2250	2326
	13/12/17	4	NP	23.1	76	0	Nil	Nil	LQ	2230	2305
MOR-ie	12/12/17	2	NP	22.3	75	0	Nil	Nil	LQ	2022	2057
	13/12/17	7	NP	22.5	89	0	MSB	Nil	LQ	0050	0121
MOR-iw	12/12/17	1	GM	22.2	75	Nil	Nil	Nil	LQ	2025	2100
	13/12/17	6	MJ	22	91	Nil	Nil	Nil	LQ	0130	0200
MOR-ce	11/12/17	8	NP	21.6	72	0	Nil	Nil	LQ	0055	0126
	13/12/17	1	NP	23.3	74	0	Nil	Nil	LQ	2020	2050
MOR-cw	12/12/17	1	MJ	22.2	75	Nil	Nil	Nil	LQ	2025	2100
	14/12/17	6	GM	22	91	Nil	Nil	Nil	LQ	0130	0200
MOR-rn	12/12/17	1	NP	22.3	75	0	Nil	Nil	LQ	2105	2136
	13/12/17	8	NP	22.5	89	0	MSB	Nil	LQ	0128	0200
MOR-rs	11/12/17	7	NP	21.6	72	0	Nil	Nil	LQ	0017	0048

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
	13/12/17	2	NP	23.3	74	0	Nil	Nil	LQ	2105	2140
TucN-ce	12/12/17	2	GM	21.9	73	Nil	Nil	Nil	LQ	2145	2225
	14/12/17	5	MJ	22	89	Nil	Nil	Nil	LQ	0015	0045
TucN-cw	12/12/17	2	MJ	21.9	73	Nil	Nil	Nil	LQ	2145	2225
	14/12/17	5	GM	22	89	Nil	Nil	Nil	LQ	0015	0045
TucM-ce	12/12/17	3	NP	21.9	75	0	Nil	Nil	LQ	2220	2259
	14/12/17	6	NP	22.9	85	Nil	MLB	Nil	LQ	2345	0016
TucM-cw	12/12/17	4	NP	21.9	75	0	Nil	Nil	LQ	2302	2333
	14/12/17	5	NP	22.9	85	Nil	MLB	Nil	LQ	2302	2334
Tuc-r-n	12/12/17	3	MJ	21.9	73	Nil	Nil	Nil	LQ	2255	2328
	14/12/17	4	GM			Nil	MMB	Nil	LQ	2315	2345
Tuc-r-s	12/12/17	3	GM	21.9	73	Nil	Nil	Nil	LQ	2255	2328
	14/12/17	4	MJ			Nil	MMB	Nil	LQ	2315	2345
TucS-ce	12/12/17	4	GM	21.2	78	Nil	Nil	Nil	LQ	2355	0025
	14/12/17	3	MJ	22	77	Nil	MMB	Nil	LQ	2220	2250
TucS-cw	12/12/17	4	MJ	21.2	78	Nil	Nil	Nil	LQ	2355	0025
	14/12/17	3	GM	22	77	Nil	MMB	Nil	LQ	2220	2250
TucN-ie	12/12/17	5	NP	21.9	75	0	Nil	Nil	LQ	2347	0020
	14/12/17	4	NP	23.1	87	0	MLB	Nil	LQ	2217	2247
TucN-iw	12/12/17	6	NP	21.9	75	0	Nil	Nil	LQ	0025	0100
	14/12/17	3	NP	23.1	87	0	MLB	Nil	LQ	2143	2215
TucS-ie	12/12/17	7	NP	20.5	83	0	Nil	Nil	LQ	0105	0135
	14/12/17	2	NP	23.4	84	0	MLB	Nil	LQ	2102	2134
TucS-iw	12/12/17	8	NP	20.5	83	0	Nil	Nil	LQ	0140	0212
	14/12/17	1	NP	23.4	84	0	MLB	Nil	LQ	2028	2100
GN-ce	12/12/17	5	MJ	21.2	78	Nil	Nil	Nil	LQ	0055	0125
	14/12/17	1	GM	22	76	Nil	MSB	Nil	LQ	2050	2120
GN-cw	12/12/17	6	MJ	21.2	78	Nil	Nil	Nil	LQ	0130	0205
	14/12/17	2	GM	22	76	Nil	MSB	Nil	LQ	2125	2155
GN-ie	12/12/17	5	GM	21.2	78	Nil	Nil	Nil	LQ	0055	0125
	14/12/17	1	MJ	22	76	Nil	MSB	Nil	LQ	2050	2120
GN-iw	12/12/17	6	GM	21.2	78	Nil	Nil	Nil	LQ	0130	0205
	14/12/17	2	MJ	22	76	Nil	MSB	Nil	LQ	2125	2155
GS-ie	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
GS-iw	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
GS-ce	17/12/17	1	MJ	23	72	Nil	Nil	Nil	LQ	2050	2120
	19/12/17	4	GM	23	82	5	Nil	Nil	LQ	2315	2345
GS-cw	17/12/17	1	GM	23	72	Nil	Nil	Nil	LQ	2050	2120
	19/12/17	4	MJ	23	82	5	Nil	Nil	LQ	2315	2345
G-r-n	17/12/17	2	NP	24.4	76	90	Nil	Nil	LQ	2120	2150
	19/12/17	5	NP	23.8	80	20	Nil	Nil	NM	2342	0013
G-r-s	17/12/17	1	NP	24.4	76	90	Nil	Nil	NM	2040	2117
	19/12/17	4	NP	23.8	80	20	Nil	Nil	NM	2308	2338
S3/M2-ce	17/12/17	2	MJ	23	72	Nil	Nil	Nil	NM	2150	2220
	19/12/17	3	GM	23	81	15	MSB	Nil	NM	2225	2300
S3/M2-cw	17/12/17	2	GM	23	72	Nil	Nil	Nil	NM	2150	2220
	19/12/17	3	MJ	23	81	15	MSB	Nil	NM	2225	2300
S3/M2-re	17/12/17	4	NP	23	73	90	Nil	Nil	NM	2255	2326
	19/12/17	6	NP	22.8	84	20	Nil	Nil	NM	0038	0113
S3/M2-rw	17/12/17	3	NP	23	73	90	Nil	Nil	NM	2212	2247

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
	19/12/17	7	NP	22.8	84	20	Nil	Nil	NM	0118	0148
S3-ie	17/12/17	3	MJ	23	74	Nil	Nil	Nil	NM	2240	2310
	20/12/17	5	GM	22	82	5	MSB	Nil	NM	0005	0040
S3-iw	17/12/17	3	GM	23	74	Nil	Nil	Nil	NM	2240	2310
	20/12/17	5	MJ	22	82	5	MSB	Nil	NM	0005	0040
M2-i	17/12/17	5	NP	23	74	90	Nil	Nil	NM	2337	0015
	19/12/17	3	NP	24.1	78	29	Nil	Nil	NM	2156	2236
C3-re	17/12/17	6	NP	22.9	75	90	Nil	Nil	NM	0025	0107
	19/12/17	2	NP	24.6	76	30	Nil	Nil	NM	2111	2146
C3-rw	17/12/17	7	NP	22.9	75	90	Nil	Nil	NM	0113	0144
	19/12/17	1	NP	24.6	76	30	Nil	Nil	NM	2025	2102
C3-ce	17/12/17	4	MJ	23	75	Nil	Nil	Nil	NM	2340	0010
	20/12/17	6	GM	22	82	5	MSB	Nil	NM	0100	0130
C3-cw	17/12/17	4	GM	23	75	Nil	Nil	Nil	NM	2340	0010
	20/12/17	6	MJ	22	82	5	MSB	Nil	NM	0100	0130
C3-ie	18/12/17	5	MJ	23	75	Nil	Nil	Nil	NM	0030	1300
	19/12/17	2	GM	24	77	40	MSB	Nil	NM	2130	2200
C3-iw	18/12/17	5	GM	23	75	Nil	Nil	Nil	NM	0030	01300
	19/12/17	2	MJ	24	77	40	MSB	Nil	NM	2130	2200
C2-c	18/12/17	1	NP	24.5	66	80	Nil	Nil	NM	2025	2055
	20/12/27	4	NP	23.8	80	100	Nil	Nil	NM	2240	2311
C2-rn	18/12/17	6	GM	23	75	Nil	Nil	Nil	NM	0130	0200
	19/12/17	1	MJ	24	77	40	MSB	Nil	NM	2030	2110
C2-rs	18/12/17	6	MJ	23	75	Nil	Nil	Nil	NM	0130	0200
	19/12/17	1	GM	24	77	40	MSB	Nil	NM	2030	2110
C2-ie	18/12/17	1	MJ	23	67	Nil	MSB	Nil	NM	2020	2050
									NM		
C2-iw	18/12/17	1	GM	23	67	Nil	MSB	Nil	NM	2020	2050
									NM		
S2/M1-c	18/12/17	2	NP	24.5	66	80	Msb	Nil	NM	2105	2140
	20/12/17	3	NP	23.3	80	60	MLB	Nil	NM	2150	2233
S2/M1-r	18/12/17	3	NP	24	59	80	Msb	Nil	NM	2145	2225
	20/12/17	1	NP	23.8	80	100	Nil	Nil	NM	2030	2100
S2-i	18/12/17	4	NP	23.9	64	90	Nil	Nil	NM	2240	2310
	20/12/17	2	NP	23.8	80	100	Nil	Nil	NM	2105	2140
M1-i	na	na	na	na	na	na	na	na	na	na	na
	na	na	na	na	na	na	na	na	na	na	na
C1-ie	18/12/17	8	MJ	24	63	Nil	Nil	Nil	New moon	2130	2200
	20/12/17	3	GM	23	85	10	Nil	Nil		2255	2325
C1-iw	18/12/27	8	GM	24	63	Nil	Nil	Nil	New moon	2130	2200
	20/12/17	3	MJ	23	85	10	Nil	Nil		2255	2325
C1-rn	18/12/17	9	GM	24	63	Nil	Nil	Nil	New moon	2215	2245
	20/12/17	2	MJ	23	81	20	Nil	Nil		2200	2235
C1-rs	18/12/17	9	MJ	24	63	Nil	Nil	Nil	New moon	2215	2245
	20/12/17	2	GM	23	81	20	Nil	Nil		2200	2235
C1-ce	18/12/17	10	GM	24	63	Nil	Nil	Nil	New moon	2315	2345
	20/12/17	1	MJ	23	81	Nil	MSB	nil		2100	2140
C1-cw	18/12/17	10	MJ	24	63	Nil	Nil	Nil	New moon	2315	2345

Transect	Date	Order	Observer	Temp	Humidity	Cloud %	Wind	Rain	Moon	Start	Finish
	20/12/17	1	GM	23	81	Nil	MSB	nil		2100	2140

Appendix B – 2017 Threatened Glider Survey Fauna Detections & Clearing Progress

Table B1: Results of Q1 2017 spotlighting and call playback surveys. YbG = yellow-bellied glider; SqG = squirrel glider; SuG = sugar glider; GG = greater glider; FtG = Feathertail Glider; CBP = common brushtail possum; SeBP = short-eared brushtail possum; CRP = common ringtail possum; PO = powerful owl; MO = masked owl; BB = boobook owl; ON = owlet nightjar; WtN = white-throated nightjar; TF = tawny frogmouth; GhFF = grey-headed flying fox; LRFF = little red flying fox. HM = heard movement, HC = heard call; HL = heard glide-land on tree; SE = saw eyeshine; SG = saw glide; SM = saw movement. Easting/Northing = centre point of transect.

Transect	Date	Fauna	Comments	Flowering	Clearing progress
TabLB-ie	20/2/2017	SqG, GHFF	HC.480e20s	p b'wood	nil
	6/3/2017	Nil		b'butt	
TabLB-iw	20/2/2017	GHFF		p b'wood , B'butt	nil
	6/3/2017	SqG, GHFF	se150n40e, forage in flwr P b'wood		
TabNR-rn	20/2/2017	ONj, GHFF, MO	MO.hc(3x),20e40n	p b'wood	Na
	6/3/2017	SuG	hc,50n60nw		
TabNR-rs	20/2/2017	ONj, GHFF		p b'wood	na
	6/3/2017	ONj, GHFF		B'butt	
TabVM-ie	20/2/2017	GHFF		p b'wood , B'butt	nil
	6/3/2017	GHFF			
TabVM-iw	20/2/2017	GHFF		p b'wood , B'butt	nil
	6/3/2017	GG	se,150s40e		
TabN-ie	20/2/2017	SuG, GHFF, LRFF	SuG.se450s10e	p b'wood , B'butt	nil
	6/3/2017	BtP, TF, GHFF	BtP.hm@500s2e		
TabN-iw	20/2/2017	CRP, GHFF, ONj	CRP:hm.400s15e	p b'wood , B'butt	nil
	6/3/2017	BtP	hm250s10w		
TabN-ce	20/2/2017	GHFF		p b'wood , B'butt	nil
	6/3/2017	Nil			
TabN-cw	20/2/2017	FtG, GHFF	FtG.sm50s2e	p b'wood , B'butt	Adjacent road corridor cleared
	6/3/2017	GHFF			
TabDD-rn	20/2/2017	SuG, GHFF	SuG.sm450n10	p b'wood , B'butt	Na
	6/3/2017	Nil			
TabDD-rs	20/2/2017	FtGx2; Tfx2	FtG.sg.200s4w, sm.220s2e	p b'wood , B'butt	na
	6/3/2017	SqG, BO	hm,400s10w	Grey box	
TabM-ce	21/2/2017	nil		Nil	nil
	8/3/2017	nil			
TabM-cw	21/2/2017	YbG, ONj	hc,520s60w (=pb@2016; sunset 1928)	p b'wood	Nil
	8/3/2017	nil			
TabM-ie	21/2/2017	nil		b butt	nil
	8/3/2017	NIL			
TabM-iw	21/2/2017	nil		b butt	nil
	8/3/2017	GHFF			
TabS-ie	21/2/2017	GHFF		p b'wood , B'butt	Nil
	8/3/2017	Nil			
TabS-iw	21/2/2017	CBP, FtG	FtG.sm,200n3e; CBP.se,450n20e	p b'wood , B'butt	nil
	8/3/2017	FtG	sm150n20w		
TabS-ce	21/2/2017	CBP, GHFF	se,300s30e	p b'wood	nil
	8/3/2017	nil			

Transect	Date	Fauna	Comments	Flowering	Clearing progress
TabS-cw	21/2/2017	LRFF, GHFF		p b'wood	nil
	8/3/2017	GHFF			
MOR-ie	21/2/2017	SuG, GHFF	se,200s30e	p b'wood , B'butt	nil
	8/3/2017	GHFF, TF			
MOR-iw	21/2/2017	GHFF		p b'wood , B'butt	nil
	23/2/2017	SuG, GHFF	hc50e40n	p b'wood	na
MOR-ce	21/2/2017	YbG, GHFF	hc,520s70e (>pb@2443, sunset 1928)	p b'wood , B'butt	nil
	8/3/2017	BFF			
MOR-cw	21/2/2017	SqG, FtG, GHFF	SqG,sm300n20w; FtG,sg300n15w	p b'wood , B'butt	nil
	23/2/2017	FtG, GHFF	Sg50n5e	p b'wood	na
MOR-rn	21/2/2017	FtG, GHFF, LRFF	Sm,805w	p b'wood , B'butt	Na
	8/3/2017	YbG	hc30e50n(>pb@2114)		
MOR-rs	21/2/2017	SqG, FtG, GG, GHFF	SqG.hc250n35e; FtG.sm150n3e; GG.se200n10w	p b'wood , B'butt	Na
	8/3/2017	GHFF			
TucN-ce	23/2/2017	GHFF		p b'wood	road corridor cleared
	8/3/2017	GHFF, LRFF			
TucN-cw	23/2/2017	CBP, GHFF	hm10n10e	p b'wood	road corridor cleared
	8/3/2017	CBP, LRFF	se200n30w		
TucM-ce	23/2/2017	LRFF		p b'wood	road corridor cleared
	8/3/2017	CBP x2, LRFF	CBP,hm1005e, se500s2e		
TucM-cw	23/2/2017	LRFF, GHFF, ONj		p b'wood	road corridor cleared
	8/3/2017	FtG, LRFF	sm,300s10e		
Tuc-r-n	23/2/2017	SqG x2; BO, ONj	SqG.hc10n40e, hc250n20e	Nil	na
	8/3/2017	LRFF, GHFF	SqG.hc50sw of tsect >survey	p b'wood	
Tuc-r-s	23/2/2017	GHFF, ONj, TF		Nil	na
	8/3/2017	FtG, CBP, ONj, GHFF, LRFF	FtG.sm250e10n; CBP,hm200e50s	p b'wood	
TucS-ce	23/2/2017	LRFF		p b'wood	road corridor cleared
	8/3/2017	LRFF			
TucS-cw	23/2/2017	SqG; LRFF	se300s5w	p b'wood	road corridor cleared
	8/3/2017	LRFF			
TucN-ie	23/2/2017	SqG x2; FtG, LRFF, GHFF	SqG.se200n20e, 450n10e; FtG.sm350n10w	p b'wood	Cleared 95% of road corridor
	8/3/2017	GG, LRFF	se,480s30w		
TucN-iw	23/2/2017	LRFF, GHFF		p b'wood	Cleared 95% of road corridor
	8/3/2017	CBP, LRFF			
TucS-ie	22/2/2017	BtP, GG, SqG, GHFF, LRFF	SqG.hc510s20e; BtP.sm250s10w; GG.se400s20e	p b'wood	road corridor cleared
	8/3/2017	LRFF			
TucS-iw	22/2/2017	BtP, YbG, SqG/SuG, ONj, GHFF, LRFF	SqG/SuG.sg450s5e; BtP.hm100s5e; YbG.hc550s(>pb @2445)	p b'wood	road corridor cleared
	8/3/2017	CBP, LRFF	se,100n40w		
GN-ce	22/2/2017	SuG	hc,20s40e	grey box	100m @N end
	7/3/2017	SuG, GHFF	SuG,hc200n50se;		

Transect	Date	Fauna	Comments	Flowering	Clearing progress
GN-cw	22/2/2017	FtG, SqG	SqG.hc,120s20w; FtG.Sm,70s5e	grey box	100m @N end
	7/3/2017	SuG, GHFF, LRFF	hc50n60w		
GN-ie	22/2/2017	GG	Se.300s10e	grey box	nil
	7/3/2017	PO, YbG, GHFF, LRFF	YbG,hc500n80se (>pb@2040,>PO call); PO,hc250n50e		
GN-iw	22/2/2017	FtG x2, ONj	Sm,100s10w. Hm500s5w	grey box	nil
	7/3/2017	CBP, GHFF, LRFF	se20n40w		
GS-ie	na	na	na	na	na
	na	na	na	na	na
GS-iw	na	na	na	na	na
	na	na	na	na	na
GS-ce	22/2/2017	nil		nil	nil
	7/3/2017	Nil			
GS-cw	22/2/2017	FtG x2	Sm,200s10& 270s5e	nil	nil
	7/3/2017	Nil			
G-r-n	22/2/2017	ONj, WtNj		Nil	na
	7/3/2017	LRFF			
G-r-s	22/2/2017	ONj, WtNj	29 roosting little lkeets in spot gum	Nil	na
	7/3/2017	LRFF			

Table B2: Results of Q2 2017 spotlighting and call playback surveys. YbG = yellow-bellied glider; SqG = squirrel glider; SuG = sugar glider; GG = greater glider; FtG = Feathertail Glider; CBP = common brushtail possum; SeBP = short-eared brushtail possum; CRP = common ringtail possum; PO = powerful owl; MO = masked owl; BB = boobook owl; ON = owl nightjar; WtN = white-throated nightjar; TF = tawny frogmouth; GhFF = grey-headed flying fox; LRFF = little red flying fox. HM = heard movement, HC = heard call; HL = heard glide-land on tree; SE = saw eyeshine; SG = saw glide; SM = saw movement. Easting/Northing = centre point of transect.

Transect	Date	Fauna	Comments	Flowering	Clearing progress
TabLB-ie	15/5/2017	SqG	Sg.100e10n	Nil	nil
	17/5/2017	Nil		Nil	
TabLB-iw	15/5/2017	CRP	Se300n20e	Nil	nil
	17/5/2017	CRP	Se150n30e	Nil	
TabNR-rn	15/5/2017	SqG	Hc.450e50n	Nil	Na
	17/5/2017	FtG	Hm. 350e2s	Nil	
TabNR-rs	15/5/2017	Nil		Nil	na
	17/5/2017	OnJ		Nil	
TabVM-ie	15/5/2017	Nil		Nil	nil
	17/5/2017	FtG, SuG, BbK	FtG. Sm.300s0. SuG. Se.450s5e. BbK. Se.370s3e	Nil	
TabVM-iw	15/5/2017	Nil		Nil	nil
	17/5/2017	Nil		Nil	
TabN-ie	15/5/2017	Nil		Nil	nil
	17/5/2017	Nil		Nil	
TabN-iw	15/5/2017	Nil		Nil	nil
	17/5/2017	TF		Nil	
TabN-ce	15/5/2017	Nil		Nil	nil
	17/5/2017	Nil		Nil	
TabN-cw	15/5/2017	TF		Nil	Adjacent road corridor cleared
	17/5/2017	Nil		Nil	
TabDD-rn	15/5/2017	ONj		Nil	Na
	17/5/2017	CBtP	SE. 400n10w	Nil	
TabDD-rs	15/5/2017	ONj		Nil	na
	17/5/2017	SqG x 2	SqG x 2 HM. 450s40e	1 b'butt	
TabM-ce	16/5/17	SqG	Hm.100s5w		nil
	18/5/17	FtG	SG. 250s1w		
TabM-cw	16/5/17	YbG, GG	YbG.hc(>pb).520s80w; GG.se400s10w	Nil	Nil
	18/5/17	SuG	Se.250s20w		
TabM-ie	16/5/17	FtG	SM, 50n5e	Nil	nil
	18/5/17	Nil			
TabM-iw	16/5/17	GG	SE, 230n15e	Nil	nil
	18/5/17	GG	SE.150n30w		
TabS-ie	15/5/2017	Nil		Nil	Nil
	17/5/2017	Nil			
TabS-iw	15/5/2017	Nil		Nil	nil
	17/5/2017	16.5	75	10	Nil
TabS-ce	16/5/17	Nil			nil

Transect	Date	Fauna	Comments	Flowering	Clearing progress
	18/5/17	Nil			
TabS-cw	16/5/17	Nil			nil
	18/5/17	RTP	SE.300n10e		
MOR-ie	16/5/17	SqG, FtG	SqG.se350s10w; FtG.sm350s10w	B'butt X1	nil
	18/5/17	Nil			
MOR-iw	16/5/17	Nil			nil
	18/5/17	Nil			na
MOR-ce	16/5/17	SuG x 2, FtG x 3	SuG1. HC.220s30e, SuG2. HC.500s25e. FtG1. SM. 200s1w., FtG2. SG. 300s10e., FtG3. SG. 400s7e.	B'butt X1	nil
	18/5/17	YBG, FtG x 2	YBG. HC.20s80w. FtG1. SM.100s10e. FtG2. SM. 200s10e		
MOR-cw	16/5/17	Nil			nil
	18/5/17	RTP	RTP se,250n10w; (YbG heard over other side of road. Prob Same individ as at MOR-ce)		na
MOR-rn	16/5/17	TF		Nil	Na
	18/5/17	SqG	Hm, 20e10n		
MOR-rs	16/5/17	GG, CBtP	GG. SE100s50e, CBtP. SE200s40e		Na
	18/5/17	SqG, SuG x 2	SqG. HC.50n30w. SuG1. HC.100n.50w. SuG2. HC.450n20W.		
TucN-ce	1/5/2017	Nil		Coastal banksia	road corridor cleared
	3/5/2017	CBtP, Tfx2	CBtP SE.100e20n		
TucN-cw	1/5/2017	ONj ,TF			road corridor cleared
	3/5/2017	ONj			
TucM-ce	1/5/2017	BO			road corridor cleared
	3/5/2017	TF, GHFF			
TucM-cw	1/5/2017	Nil			road corridor cleared
	3/5/2017	SqGx2	HM.200n10w,2nd. HC350n40w		
Tuc-r-n	1/5/2017	SuG	Hc.100N50e		na
	3/5/2017	SuG/SqG, SuG	SuG/SqG. SE450n10e, SuG.500n5w		
Tuc-r-s	1/5/2017	BtP, SqG, FtGx2	SqG.hc50e40n, FtG. Sm,250e10s; BtP.sm,270e5n		na
	3/5/2017	CBtP	Se250e80n		
TucS-ce	1/5/2017	Nil		Coastal banksia	road corridor cleared
	3/5/2017	GHFF			
TucS-cw	1/5/2017	CBP	Se,250S30w	Coastal banksia	road corridor cleared
	3/5/2017	Nil			
TucN-ie	1/5/2017	FtG	Sm,70s10e	Coastal banksia	road corridor cleared
	3/5/2017	Nil			
TucN-iw	1/5/2017	SqG	Hc,550s	Coastal banksia	road corridor cleared

Transect	Date	Fauna	Comments	Flowering	Clearing progress
	3/5/2017	SqG	HC, 600s		
TucS-ie	2/5/2017	YbG, MO	Hc(<pb),250n70e	Nil	road corridor cleared
	4/5/2017	YbG, GGx2	YbG HC(<pb >45min SS) 10s50e, GG1.SE.400s30e, GG2.SE.450s5e		
TucS-iw	2/5/2017	CBP	Hc500n30w		road corridor cleared
	4/5/2017	SEBtP	HC.550s		
GN-ce	2/5/2017	ONj			100m @N end
	4/5/2017	TF, GG	GG.SE.450s10e		
GN-cw	2/5/2017	Nil			100m @N end
	4/5/2017	Nil			
GN-ie	2/5/2017	Nil			nil
	4/5/2017	Nil			
GN-iw	2/5/2017	CBPx2; PO	Se,50n30w, 100n20e	Nil	nil
	4/5/2017	GGx2	GGx2.SE.20s40w		
GS-ie	na	na	na	na	na
	na	na	na	na	na
GS-iw	na	na	na	na	na
	na	na	na	na	na
GS-ce	2/5/2017	Nil			nil
	4/5/2017	Nil			
GS-cw	2/5/2017	FtGx2	Sm.150n2e; Sg.250n5w		nil
	4/5/2017	CBtP	SE.400s20w		
G-r-n	2/5/2017	SqG, ONj	Hc200n120e		na
	4/5/2017	Nil			
G-r-s	2/5/2017	Nil			na
	4/5/2017	Nil			
S3/M2-ce	21/5/2017	Nil		Nil	Cleared/paved
	23/5/2017	Nil			
S3/M2-cw	21/5/2017	Nil		Nil	Cleared/paved
	23/5/2017	Nil			
S3/M2-re	21/5/2017	FtG, SuG	FtG.sm100n10e; SuG.se250n10e	Nil	Na
	23/5/2017	TF		Nil	
S3/M2-rw	21/5/2017	ONj		Nil	Na
	23/5/2017	Nil			
S3-ie	21/5/2017	Nil		Nil	Cleared/paved
	23/5/2017	FtG	Sm.150s15w		
S3-iw	21/5/2017	FtG	Sm.30s10e	Nil	Cleared/paved
	23/5/2017	Nil			
M2-i	21/5/2017	Nil		lbk	Na
	24/5/2017	Nil			
C3-re	21/5/2017	TF		Nil	Na

Transect	Date	Fauna	Comments	Flowering	Clearing progress
	24/5/2017	YbG x2; CBP x3	YbG.1.hc,20e20s; 2.hc,50e30s; CBP.1.se250e25s, 2.se320e35n; 3.se440e30n		
C3-rw	21/5/2017	Nil		Nil	Na
	24/5/2017	YbG x2	1.hc,250n80e (58min >ss); 2.hc,350n60e		
C3-ce	21/5/2017	Nil		B.integifolia	Cleared/paved
	24/5/2017	FtG	Sm,380s10w		
C3-cw	21/5/2017	Nil		Scribbly gum	Cleared/paved
	24/5/2017	Nil			
C3-ie	22/5/2017	Nil		B'butt x3, B integ.	Previously Cleared/paved
	24/5/2017	Nil			
C3-iw	22/5/2017	SuG, FtG	SuG,Se370n6e (in nest box); FtG.sm500n12e	B'butt x2; B integ.	Cleared/paved
	24/5/2017	YbG, CBtP, SEbtPx2, FtG	YbG.HC.400N10w. CBp.se10n15e. Sebtp x2. Se10n10w. FtG. Se.300n10w	Blckbutt	
C2-c	22/5/2017	Nil		B.integifolia	Previously Cleared/paved
	25/5/2017	FtG	Sm.250s8w		
C2-rn	22/5/2017	GG, YbG	GG.se170n2e; YbG,hc1n130e	Nil	Na
	24/5/2017	GG, FtG	GG,se150n15e; FtG,sm200n10e		
C2-rs	22/5/2017	Nil		Nil	Na
	24/5/2017	ONj			
C2-ie	23/5/2017	Nil		B'butt	Cleared/paved
	25/5/2017	TF			
C2-iw	23/5/2017	Nil		B'butt	Cleared/paved
	25/5/2017	Nil			
S2/M1-c	22/5/2017	SqG	Se130n30w	Grey ibark	Cleared
	24/5/2017	FtG	Sm,150n7e	lbk	
S2/M1-r	23/5/2017	Nil		B'butt x1	Na
	25/5/2017	FtG, GHFF	Sm.200e5n		
S2-i	23/5/2017	Nil	Forest cleared from last 50m of tsect		Cleared/paved
	25/5/2017	GHFF			
M1-i	na	na	na	na	na
	na	na	na	na	na
C1-ie	23/5/2017	GHFF		Pbk	Cleared/paved
	25/5/2017	CRP	Se300n40e		
C1-iw	23/5/2017	GHFF		Pbk	Cleared/paved
	25/5/2017	Nil			
C1-rn	22/5/2017	Nil		B'butt x2	Na
	25/5/2017	ONj			
C1-rs	22/5/2017	Nil		B'butt	Na
	25/5/2017	ONj			
C1-ce	22/5/2017	CBP, GHFF	se70n20e	Scribbly gum	Service Road cleared/widened

Transect	Date	Fauna	Comments	Flowering	Clearing progress
	25/5/2017	CBP, GHFF			
C1-cw	22/5/2017	FtG	Sm10n10w		Previously Cleared/paved
	25/5/2017	GHFF			

Table B3: Results of Q3 2017 spotlighting and call playback surveys. YbG = yellow-bellied glider; SqG = squirrel glider; SuG = sugar glider; GG = greater glider; FtG = Feathertail Glider; CBP = common brushtail possum; SeBP = short-eared brushtail possum; CRP = common ringtail possum; PO = powerful owl; MO = masked owl; BB = boobook owl; ON = owlet nightjar; WtN = white-throated nightjar; TF = tawny frogmouth; GhFF = grey-headed flying fox; LRFF = little red flying fox. HM = heard movement, HC = heard call; HL = heard glide-land on tree; SE = saw eyeshine; SG = saw glide; SM = saw movement. Easting/Northing = centre point of transect.

Transect	Date	Fauna	Comments	Flowering	Clearing progress
TabLB-ie	31/7/17	Nil		White Stringybark (some)	Nil
	2/8/17	Nil			
TabLB-iw	31/7/17	Nil		Nil	Nil
	2/8/17	GG, GHFF, GBCockatoo feeding sign	GG.SE.450n40w, GBC.70n2w		
TabNR-rn	31/7/17	CRtPx2	SE.490e12s		
	2/8/17	Nil			
TabNR-rs	31/7/17	Nil			
	2/8/17	Nil			
TabVM-ie	31/7/17	FtGx3	FtG1.SE.100s5e, FtG2.SM.150s2e, FtG3.SG.300s5w	White Stringybark	
	2/8/17	SqG, GHFF	SE.20s12w		
TabVM-iw	31/7/17	Nil			
	2/8/17	MOx2	MO1.HC.460s35e, MO2.HC.460s10w		
TabN-ie	31/7/17	GHFF		White Stringybark (one)	
	2/8/17	GHFF			
TabN-iw	31/7/17	GHFF		White Stringybark (one)	
	2/8/17	GHFF, FtG	SG.180s10e	White Stringybark (2)	
TabN-ce	31/7/17	Nil			
	2/8/17	GHFF			4-5m strip cleared on road edge
TabN-cw	31/7/17	GHFF		White Stringybark	
	2/8/17	GHFF, FtG	SE.250s20w	White Stringybark	
TabDD-rn	31/7/17	SuG, CBtP, GHFF	SuG.HC.250n40w, CBtP.SE.400n45w	White Stringybark	
	2/8/17	GHFF		White Stringybark (some)	
TabDD-rs	31/7/17	Nil			
	2/8/17	GHFF		White Stringybark (some)	
TabM-ce	1/8/17	GBCockatoo feed sign	2s0w		
	3/8/17	Nil			
TabM-cw	1/8/17	Nil			
	3/8/17	Nil			
TabM-ie	1/8/17	Nil			
	3/8/17	Nil			
TabM-iw	1/8/17	Nil			
	3/8/17	GG, GHFF	SE.180n30w		
TabS-ie	31/7/17	Nil			
	2/8/17	Nil			
TabS-iw	31/7/17	Nil			
	2/8/17	Nil			
TabS-ce	1/8/17	Nil			
	3/8/17	GHFF			

Transect	Date	Fauna	Comments	Flowering	Clearing progress
TabS-cw	1/8/17	GHFF			
	3/8/17	GHFF			
MOR-ie	1/8/17	GHFF			
	3/8/17	YbG, GHFF	HC.200n70w (>pb, 1928)	White Stringybark	
MOR-iw	1/8/17	GHFF		WhiteStringybark (some)	
	3/8/17	GHFF			
MOR-ce	1/8/17	GHFF		White Stringybark (some)	
	3/8/17	GHFF			
MOR-cw	1/8/17	Nil			
	3/8/17	Nil			
MOR-rn	1/8/17	SuG	HC.540s.10w		
	3/8/17	YbG, GHFF	HC.400e80s (>pb, 1935)	White Stwringybark	
MOR-rs	1/8/17	CBtP, SuG, GHFF, OnJ	CBtP.SE.100n55e, SuG.HC.490n35e	White Stringybark	
	3/8/17	GHFF			
TucN-ce	25/7/17	GHFF			Complete
	27/7/17	TF			Complete
TucN-cw	25/7/17	SqG	HM.200n38e		Complete
	27/7/17	Nil			Complete
TucM-ce	25/7/17	CBtP	SE.300s10w		Complete
	27/7/17	CBtP	SE.400s2e		Complete
TucM-cw	25/7/17	Nil			Complete
	27/7/17	Nil			Complete
Tuc-r-n	25/7/17	Nil	Van parked halfway		N/A
	27/7/17	PO, SqGx2, SuG, OnJ	PO.HC.650n30w, SqG1.HC10n30e, SqG2.HC.250n.30w, SuG.SE.200n5e		N/A
Tuc-r-s	25/7/17	SqGx2	SqG1: 400e10s, SqG2: -60w10n		N/A
	27/7/17	CBtP	HM.455e1s		N/A
TucS-ce	25/7/17	TF			Complete
	27/7/17	CRtP	SE.350s3e		Complete
TucS-cw	25/7/17	Nil			Complete
	27/7/17	Nil			Complete
TucN-ie	25/7/17	SqG	HC.550n50e	Banksia int.	Complete
	27/7/17	Nil			Complete
TucN-iw	25/7/17	OnJ			Complete
	27/7/17	CBtP, SuG, FtGx2, OnJ	CBtP.SE.2.3w, SuG.SM470n.20w, FtG1.SG.250n2w, FtG2.Sg.500n.5e	Banksia int.	Complete
TucS-ie	24/7/17	YbGx2, SqGx5(min), FtGx2, TF, BBk	YbGx2.HC.570n70e (>pb, 2040), SqG1.HC.0n30e, SqG2&3.HC/SE.450n65e, SqG4&5.HC.510n10e, FtG1.HM.300n1e, FtG2.SM400n.5w., BBk.HC100n90e.	Blackbutt (some)	Complete
	26/7/17	SqG, YbG, GG	SqG.HC.-70s10e, YbG.HC.50s90e (>pb 2220), GG.SE.110s.10e (YbG & SqG heard from western tran >100m away)		Complete
TucS-iw	24/7/17	Nil			Complete
	26/7/17	CBtP	SE.200s3e		Complete
GN-ce	24/7/17	GG	SE.490s40e		80% cleared

Transect	Date	Fauna	Comments	Flowering	Clearing progress
	26/7/17	BBk	SE.50s10w (perched on gate at arrival)		80% cleared
GN-cw	24/7/17	BBk	HC.380s80w		80% cleared
	26/7/17	Nil			80% cleared
GN-ie	24/7/17	YbG, CBtP, OnJ	YbG HC.80n10w (<pb, 1744 (pr), 1756 (d) 32min, 48min >ss), CBtP.SE.-20s1e.		2/3 clear. Clearing in progress, YbG at clearing front.
	26/7/17	GG	SE.380s5w (GG between transects)		2/3 clear. Clearing in progress.
GN-iw	24/7/17	Nil			2/3 clear. Clearing in progress.
	26/7/17	GG, YbG	GG.SE.200s35w, YbG.HC.570s60w (>pb, 2114)		2/3 clear. Clearing in progress.
GS-ie	na	na	na	na	
	na	na	na	na	
GS-iw	na	na	na	na	
	na	na	na	na	
GS-ce	24/7/17	Nil			Bunting installed, no clearing.
	26/7/17	Nil			
GS-cw	24/7/17	Nil			
	26/7/17	CBtPx3	CBtP1.SE.250n35e, CBtP2.SE.400n40w, CBtP3.SE.150n40w		
G-r-n	24/7/17	FtG	SG.400n.5w		N/A
	26/7/17	Nil			N/A
G-r-s	24/7/17	Nil			N/A
	26/7/17	Rufous Bettong	SE.200n1w		N/A
S3/M2-ce	20/7/17	SuG	SM.450n20e		
	23/7/17	Nil			
S3/M2-cw	20/7/17	Nil			
	23/7/17	Nil			
S3/M2-re	20/7/17	SqG, GG	SqG.SE.380n30e, GG.SE.50n45e		
	23/7/17	SuG	HC.10n100e		
S3/M2-rw	20/7/17	Nil			
	23/7/17	Nil			
S3-ie	19/7/17	Nil			
	23/7/17	Nil			
S3-iw	19/7/17	Nil			
	23/7/17	FtGx2	FtG1.SG.0s20e, FtG2.SM.150s15e		
M2-i	19/7/17	Nil			
	23/7/17	YbG	HC.100s95e (>pb, 1945)		
C3-re	19/7/17	YbGx3, SuG	YBG x 2 HC.10e40s, YbG HC.20e65n (>pb. During, 2123), SuG.HC.300e40s		
	23/7/17	YbGx2	YbG1.HC.10e10s, YbG2.HC.20e50n (during pb, 1950)		
C3-rw	19/7/17	FtG	HM. 250s12e		
	23/7/17	YbG, CBtP	YbG.HC.470s.45e (during pb, 1912), SE.420s30e		
C3-ce	19/7/17	Nil			
	21/7/17	Nil			
C3-cw	19/7/17	Nil		Scribbly Gum (some)	
	21/7/17	CBtP	SE.200n35w		

Transect	Date	Fauna	Comments	Flowering	Clearing progress
C3-ie	19/7/17	FtGx2	FtG1.SM.200s0e, FtG2.SG.400s2w	Banksia int., Blackbutt (some)	
	21/7/17	GHFF			
C3-iw	19/7/17	CBtP, GHFF	SE.150n10e	Blackbutt	
	21/7/17	SqG, GHFF	SE.5n5e	Blackbutt	
C2-c	19/7/17	FtG	SM.300n6w	Banksia int. tallow	Easement freshly slashed.
	21/7/17	SqG, GHFF	HM.250n5w	Banksia int. tallow.	
C2-rn	19/7/17	Nil			
	21/7/17	YbGx2, GGx3	YbG1.HC.80n35e, YbG2.HC.200n30w (>pb, 1905) GG1.SE.450n20w, GG2&3.SE.500n40e. YbG2 glided over path calling in air.		
C2-rs	19/7/17	Nil			
	21/7/17	Nil		Spotted Gum (some)	
C2-ie	20/7/17	CBtP	SE.10s25e	NbarkSbark, blackbutt, tallow (minor)	
	23/7/17	SqG	SE.530s30e		
C2-iw	20/7/17	Nil			
	23/7/17	FtG	SM.15s3w		
S2/M1-c	18/7/17	FtG, SuG	FTG.SE.200n6e, SuG.SE.500n2w	Ironbark	
	21/7/17	Nil			
S2/M1-r	18/7/17	GG, OnJ, GHFF	GG.SE.120e35n (W->E)	Blackbutt (some)	
	21/7/17	Nil			
S2-i	18/7/17	CBtPx2, FtGx2 (A. with back young)	CBtPx2.SE.10e2s. FtGx2.20e2n (W->E)		
	20/7/17	CBtPx2	CBtP1.SE.10e8s. CBtP2.250e2s (W->E)	Spotted Gum	
M1-i	na	na	na	na	
	na	na	na	na	
C1-ie	18/7/17	Nil			
	20/7/17	Nil			
C1-iw	18/7/17	Nil			
	20/7/17	Nil			
C1-rn	18/7/17	GHFF	Very recent burn, embers still burning.	Blackbutt (some)	
	20/7/17	YbG, GHFF	HC.380n70w (>pb, 2320)		
C1-rs	18/7/17	FtG	HM.400e1n. (W->N) Fox making strange noises.		
	20/7/17	Nil	Very recent burn, smoke, embers still alight.		
C1-ce	18/7/17	GHFF		Blackbutt (some)	
	20/7/17	CBtP, GHFF	SE.10n25e	FRG (some)	
C1-cw	18/7/17	GHFF		Blackbutt (some)	
	20/7/17	Nil			

Table B4: Results of Q4 2017 spotlighting and call playback surveys. YbG = yellow-bellied glider; SqG = squirrel glider; SuG = sugar glider; GG = greater glider; FtG = Feathertail Glider; CBP = common brushtail possum; SeBP = short-eared brushtail possum; CRP = common ringtail possum; PO = powerful owl; MO = masked owl; BB = boobook owl; ON = owlet nightjar; WtN = white-throated nightjar; TF = tawny frogmouth; GhFF = grey-headed flying fox; LRFF = little red flying fox. HM = heard movement, HC = heard call; HL = heard glide-land on tree; SE = saw eyeshine; SG = saw glide; SM = saw movement. Easting/Northing = centre point of transect.

Transect	Date	Fauna	Comments	Flowering	Clearing progress
TabLB-ie	11/12/17	pr SqG SM@215N20E, GHFF (HC)		Red mahogany	Nil
	13/12/17	GGFF (HC, SM), 2xFtG SM@380N3W		Red mahogany	Nil
TabLB-iw	11/12/17	GHFF (HC)		Angophora, red mahogany	Nil
	13/12/17	GGFF (HC), SEBtP HM@500N10E		Angophora, red mahogany	Nil
TabNR-rn	11/12/17	GHFF (HC), CRtP, SE@100E2N, BO (HC), OnJ (HC)		Angophora, red mahogany	Nil
	13/11/17	ONj (HC), GHFF (HC)		Red mahogany	Nil
TabNR-rs	11/12/17	GHFF (HC), SqGx2, SqG1 SM@6N5E, SqG2 SM@450N10E, OnJ (HC)		Red mahogany,	Nil
	13/12/17	WtNj (HC), GHFF (SM)		Red mahogany, Angophora	Nil
TabVM-ie	11/12/17	GHFF (SF), GG (SE)		Red mahogany	Nil
	13/12/17	GHFF (HC, SE)		Red mahogany	Nil
TabVM-iw	11/12/17	GHFF (SF, (HC)		Red mahogany	Nil
	13/12/17	GHFF		Angophora, red mahogany	Nil
TabN-ie	11/12/17	GHFF (HC)		Red mahogany	Nil
	13/12/17	GHFF (HC)		Red mahogany	Nil
TabN-iw	11/12/17	GHFF (HC)		Red mahogany	Nil
	13/12/17	GHFF (HC)		Red mahogany	Nil
TabN-ce	11/12/17	GHFF (SF),		Angophora	Nil
	13/12/17	GHFF (HC)		Angophora, red mahogany	Nil
TabN-cw	11/12/17	GHFF (HC), GG SE@170N15W		Angophora, red mahogany, Scribbly gum	Clearing Westside of hwy
	13/12/17	GHFF (HC, SF)		Angophora, red mahogany, Scribbly gum	Clearing Westside of hwy
TabDD-rn	11/12/17	GGFF (HC)		Angophora, Scribbly gum	Nil
	13/12/17	GHFF (HC)		Angophora	Nil
TabDD-rs	11/12/17	GGFF (HC), OnJ (HC)		Angophora	Nil
	13/12/17	GGFF (HC)		Red mahogany	Nil
TabM-ce	11/12/17	Nil		Angophora	Nil
	13/12/17	Nil		Angophora	Nil
TabM-cw	11/12/17	OnJ (HC)	Dog tracks	Red mahogany	Nil
	13/12/17	GHFF (HC)		Red mahogany	Nil
TabM-ie	11/12/17	TF, HC@490N10E		Nil	Nil
	13/12/17	SuG SE@420N5W, GHFF			
TabM-iw	11/12/17	GG SE@300N30W		2 x White Stringybark	Nil
	13/12/17	GG.SE@50S30W			
TabS-ie	11/12/17	OnJ (HC)		White Mahogany	Nil
	13/12/17	Nil			

Transect	Date	Fauna	Comments	Flowering	Clearing progress
TabS-iw	11/12/17	CRtP SE@290N15W, GHFF (HC), OnJ (HC)		White Mahogany	Nil
	13/12/17	TF, GHFF, OnJ			
TabS-ce	11/12/17	Nil		Nil	100% complete
	13/12/17	SuG/SqG SE@120N10E	Either sub SqG or SuG. No white tail tip		
TabS-cw	11/12/17	Nil		Nil	100% complete
	13/12/17	Nil			
MOR-ie	12/12/17	FtG SM@10S3E, OnJ, GHFF		Mahogany x 2	NA
	13/12/17	GHFF			
MOR-iw	12/12/17	GHFF (SF), FtG SM@175N5W		Red mahogany	Clearing adjacent to transect
	13/12/17	3xBtPhas SM/SE@300N/250N10W, GG SE460N10W, GHFF SM		6	
MOR-ce	11/12/17	SEBtP HM@10N2E		Nil	100% complete
	13/12/17	SEBtP.SE@350N12W			
MOR-cw	12/12/17	CRtP SE@100N10W		Nil	Nil
	14/12/17	Nil		Nil	
MOR-rn	12/12/17	OnJ (HC)		Mahogany x 3	100% complete
	13/12/17	OnJ, GHFF			
MOR-rs	11/12/17	OnJ (HC)		Nil	NA
	13/12/17	SuG HC@400N40E, CBtP. SE@480N45E, OnJ, TF			
TucN-ce	12/12/17	OnJ (HC)		Angophora	Alignment cleared
	14/12/17	ONJ (HC)		Angophora	Alignment cleared
TucN-cw	12/12/17	OnJ (HC)	Cat	Angophora	Alignment cleared
	14/12/17	BtPhas SM@235N10W	Po. 2x BtPhas	Angophora	Alignment cleared
TucM-ce	12/12/17	CRtP.SE@490S30W, CBtP. SE@250S45W, OnJ, TF, FF sp.		Mahogany, Angophora	Complete
	14/12/17	Nil			
TucM-cw	12/12/17	CBtPx3. CBtP1.HM@20S5W, CBtP2&3.SE@500S45E, OnJ, TF		Angophora	Complete
	14/12/17	CBtPx 4, CBtP 1&2 SE@50N10E, CBtP3&4 SM@400N40E, WTNJ (SE) Stephens BS E:512941, N: 6724137	WTNJ roosting in alignment. SBS crossing alignment		
Tuc-r-n	12/12/17	YBG (>pb) SE@120N5E, TF (HC)		Nil	Nil
	14/12/17	SuG/SqG? SM@80N5W			
Tuc-r-s	12/12/17	OnJ (HC)		Ironbark and angophora	Nil
	14/12/17	TF (SP)			
TucS-ce	12/12/17	OnJ (HC)		Nil	Alignment cleared
	14/12/17	Nil			
TucS-cw	12/12/17	OnJ (HC) 2x Bbk Bbk1.HC@500S200w, Bbk2.HC@500S300W		Angophora	Alignment cleared
	14/12/17	Pr SqQ SM@330N6W			
TucN-ie	12/12/17	GG.SE@450S5W, BBK HC.250S100W, BO.HC300S80E, OnJ, TF.		Angophora	Complete
	14/12/17	CBtP HM@80N10W			
TucN-iw	12/12/17	OnJ,TF.		Angophora	Complete

Transect	Date	Fauna	Comments	Flowering	Clearing progress
	14/12/17	Nil			
TucS-ie	12/12/17	YBG HC (>pb)650S20E, SqG.SE490S10E, GG.SE450S10W, WTNJ (HC), OnJ, BBK, TF, CBTp.SE@400S5E		Angophora	Complete
	14/12/17	GGx2, GG1 SE@50N9W, GG2 SE@450N3W			
TucS-iw	12/12/17	GG.SE@.50N10W, SqG. SG.150N2E, OnJ	SqG had half a tail	Angophora	Complete
	14/12/17	YbG x 2 HC@450S80W, SEBtPx1 SE@470S8E, CBTp x 1 SM@500S15E			
GN-ce	12/12/17	Bbk (HC)		Nil	Alignment cleared
	14/12/17	Bbk (HC), GG.SE@115N10E			
GN-cw	12/12/17	GG (SE) 80N15E. Lit. brevipalmata (several) (HC) 300N	On alignment extending to west.	Nil	Alignment cleared
	14/12/17	GTFrog (HC)			
GN-ie	12/12/17	GHFF (HC)		Spotted gum	Alignment cleared
	14/12/17	Bbk (HC), ONJ (HC), GHFF (HC), GTFrog (HC)			
GN-iw	12/12/17	GHFF (HC)		Nil	Alignment cleared
	14/12/17	YBG HC<PB>PB@0N20W, GHFF (HC)			
GS-ie	na	na	na	na	
	na	na	na	na	
GS-iw	na	na	na	na	
	na	na	na	na	
GS-ce	17/12/17	GHFF (HC)		Spotted gum	Nil
	19/12/17	GHFF (HC)		Spotted gum	
GS-cw	17/12/17	TFmouth (HC), GHFF (HC)		Spotted gum	Nil
	19/12/17	TFmouth (HC), GHFF (HC) CBTp (SM) @ 0N10E		Spotted gum	
G-r-n	17/12/17	GHFF, TF		Nil	NA
	19/12/17	RBettong HM@5S25W, CBTpx2 CBTp1 SE@-20S5W, CBTp2 SE@250S10W, OnJ	Probably 2 Bettong		
G-r-s	17/12/17	CBTpx1 SE@400N10W, OnJ		Nil	NA
	19/12/17	RBettong SM@490Sontran, GHFF, OnJ	Saw Bettong during drive to Tran		
S3/M2-ce	17/12/17	GHFF (HC)		Ironbark	Highway operative sthbound
	19/12/17	Nil		Ironbark	
S3/M2-cw	17/12/17	GHFF (HC), FtG SM@110N0E(on transect)		Ironbark, spotted gum	Nil
	19/12/17	GHFF (HC), GTFrog (HC)		Ironbark	
S3/M2-re	17/12/17	OnJ		Nil	NA
	19/12/17	GG SE@150W30S, OnJ, TF			
S3/M2-rw	17/12/17	FtGx2 SG, SM @50S10E, BO HC@75S60W, SuG SE@110S5E, OnJ	FtG feeding in mahogany	Mahogany sp	NA
	19/12/17	BO HC@250S100W, OnJ, WTNJ			
S3-ie	17/12/17	GHFF, R bettong SM@30N100E		Red mahogany, ironbark	Highway operative sthbound
	20/12/17	GHFF (HC)		Red mahogany, ironbark	

Transect	Date	Fauna	Comments	Flowering	Clearing progress
S3-iw	17/12/17	GHFF (HC)		Ironbark	Nil
	20/12/17	GHFF (HC) OnJ (HC)		Ironbark	
M2-i	17/12/17	SuG/SqG SE@70S30E, YbG x 2 (>pb) YbG1 HC@120S30E, YbG2 Hland@300S35E, FtGx2, FtG1 SM@290S30E, FtG2 SM@450S35E,, OnJ, UnID eyeshine (prob CBtP) 100S100E	All animals except UnID eyeshine were in median.YbG glided E->M.	Ironbark sp.	Complete
	19/12/17	YbGx2 HC 130N30E (>pb), FtG SE@240N35E, SuG/SqG SM@350N35E			
C3-re	17/12/17	SuG/SqG SM@300E3S, YbG HC@400E70S (>pb)	Juvenile SuG/SqG	Mahogany sp	NA
	19/12/17	YbGx2, YbG 1 HC@180E60N, YbG2 HC@180E40S, CBtPx2 CBtP1 SE@370E10N, CBtP2 SE@480E10N,TF			
C3-rw	17/12/17	BO HC@600S20E, CBtP SE@400S7W, OnJ		Mahogany sp. Angophora	NA
	19/12/17	YbG HC@200S60E (>pb, 50min after SS), OnJ, UnID eyeshine 210S90W	UnID ES down personal driveway		
C3-ce	17/12/17	CRtP SE@150N20W, CBTP SE@100N30W	One eyed CBTP	Red mahogany	
	20/12/17	OnJ (HC)		Red mahogany	
C3-cw	17/12/17	Nil		Red mahogany	
	20/12/17	SqG (SE) 80N10W, GHFF (HC)		Red mahogany	
C3-ie	18/12/17	FtG SM@280N5W, OnJ (HC)		Red mahogany	
	19/12/17	Nil		Nil	
C3-iw	18/12/17	YBG HC@280N5E>PB		Nil	
	19/12/17	FtG (SM) @150N2W		Ironbark	
C2-c	18/12/17	GHFF (SF)			
	20/12/27	Nil			
C2-rn	18/12/17	YBG SM@260N2W, FtG SE@265N0 (on transect), SuG HC@250N40E, GG SE@15N25W, WtNj (HC), ONj (HC), B Owl (HC)		Ironbark	
	19/12/17	2x? YBG (HC) @200N40E @220N30E @350N30W @440N100E FtG (SE) @300N0 OnJ (HC) TF(Sm)		Ironbark	
C2-rs	18/12/17	ONj (HC), B owl (HC)		Ironbark	
	19/12/17	OnJ (HC)			
C2-ie	18/12/17	FtG SM@220N5E; FtG SM@270SE, GHFF (SM)		Needlebark stringy bark	Highway operative
C2-iw	18/12/17	GHFF (SM)		Red mahogany	Highway operative
S2/M1-c	18/12/17	Nil			
	20/12/17	SuG SE@190N7W, Pr SqG SE@300N20W			
S2/M1-r	18/12/17	YbG HC@270E70N (<pb), FtG SM@-5W1S, OnJ, BO HC 600E100N			
	20/12/17	MO HC@300E60N, OnJ	MO Flew over		

Transect	Date	Fauna	Comments	Flowering	Clearing progress
S2-i	18/12/17	SqG SE@300S15W, FtG SG@300S15W, CBtP SE@310S5E, BO HC 700S40W		Spotted Gum	Complete
	20/12/17	Nil			
M1-i	na	na	na	na	
	na	na	na	na	
C1-ie	18/12/17	Nil		Nil	
	20/12/17	Ni		Nil	
C1-iw	18/12/27	Nil		Nil	
	20/12/17	RtP (SE) @ 250N5W			
C1-rn	18/12/17	ONj		Spotted gum	
	20/12/17	YBG HC@500N70E>PB FtG (SM) @80N5W GHFF (HC)		Spotted gum	
C1-rs	18/12/17	SuG HC@300N200W, ONj (HC)		Ironbark	
	20/12/17	SuG HC@300N5W, ONj (HC)		Nil	
C1-ce	18/12/17	Nil		Nil	
	20/12/17	2x CBTP (SE) @ 400N5E & 495N5W GHFF (HC)		Nil	
C1-cw	18/12/17	Nil		Ironbark	
	20/12/17	NIL		Nil	