Transport for
New South Wales

Pacific Highway Upgrade Woolgoolga to Ballina 3-11

Threatened Gliders Monitoring Program, Year Six (2022)

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Pacific Highway upgrade: Woolgoolga to Ballina (W2B)

Sections 3-11 Threatened Glider Monitoring – Year Six Annual Report (2022)

Final Report
August 2023

Sandpiper Ecological Surveys

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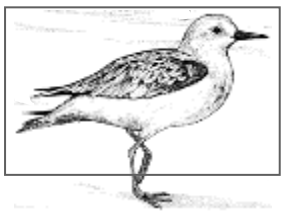

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Cover Photo: Squirrel glider on glide pole #4, Woolgoolga to Ballina Pacific Highway Upgrade.

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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 2018) 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 (RMS 2018). Numerous records of both species occur within 10km of the W2B alignment (RMS 2018).

The TGMP details a comprehensive monitoring program. The components of the monitoring program include:

1. Glider population monitoring.
2. Arboreal crossing structures and widened medians monitoring.
3. Road mortality monitoring.
4. Nest box monitoring.
5. Habitat revegetation monitoring.

The following report addresses components 1 – 3 of the monitoring program. Earlier phases of components 1 - 3 of the monitoring program have been reported on previously (refer Sandpiper Ecological 2014, 2015, 2016, 2018a, 2019, 2020a, 2021, 2022).

1.1.1 Scope

Sandpiper Ecological was engaged by Jacobs in January 2017 to undertake the W2B threatened glider monitoring program. The current annual report addresses glider population monitoring, arboreal crossing structures/widened medians and road mortality monitoring in sections 3-11 during year two of the operational phase (Q4 2021 and Q1-Q3 2022) and the start of year three (Q4 2022). The report builds upon previous glider monitoring completed at W2B (refer Sandpiper 2018a, 2019, 2020a, 2021) and earlier baseline and construction phase monitoring (refer Sandpiper 2014, 2015, 2016).

1.2 Glider population monitoring

The TGMP states that the 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 directs 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 details that glider population monitoring will occur before (i.e., pre-disturbance), during (i.e., during disturbance) and after (i.e., post-disturbance/operation phase when mitigation is in place) construction and that the occupation rates (i.e., presence/absence) will be compared between these periods for impact, control and reference sites.

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 performance indicator is stated for the threatened glider population monitoring:

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

In the event of a decline in post-construction occupational abundance (i.e., rate), the following *Corrective Actions* are described:

a. Review monitoring methods, considering further monitoring and assessment should there be a decline in population abundance.
b. Consider potential for natural variation to be responsible for decline in population numbers /density.
c. Review location of arboreal crossing structures and consider adding new structures.
d. Investigate habitat adjoining the highway and consider improving habitat condition and connectivity.
e. Post three years of monitoring and implementation of corrective actions, if connectivity measures cannot be demonstrated to be effective at successfully mitigating the barrier and fragmentation impact to glider species, the residual impact to connectivity shall be offset. This is in accordance with MCoA D2.

1.3 Arboreal crossing structures and widened medians monitoring

The TGMP states that the objective of arboreal crossing structures and widened medians monitoring is:

> *"To establish the level of use of various crossing structures (i.e., glide poles, widened medians and rope bridges) by squirrel glider and yellow-bellied glider."*

Monitoring locations include connectivity structures targeted for threatened gliders listed in Table 8.4 of the TGMP and include rope bridges, glide poles and widened medians. As different sections of the W2B upgrade were constructed independently, crossing structure deployment occurred at different times. To streamline data collection monitoring of all arboreal crossing structures within sections 3-11 commenced at the same time (RMS 2018). This enables meaningful and robust data comparisons and reduce the potentially confounding effects of differing stages of construction.

To determine the effectiveness of crossing structures and widened medians, Table 8.2 of the TGMP outlines performance indicators and corrective actions. A single Performance Indicator is stated for crossing structures and widened medians monitoring:

1. No evidence of use of arboreal crossing structures and widened medians by threatened gliders post-construction.

In the event of no evidence of use, the following *Corrective Actions* are described:

a. *Review location and type of connectivity structures installed and implement provisional measures in consultation with EPA which may include but not limited to the installation of more glide poles or rope bridges, particularly where known mortality hotspots occur.*
b. *Consider more strategic planting of habitat or the installation of additional glide poles, informed by the long-term population monitoring data.*
c. *Post three years of monitoring and implementation of corrective actions, if connectivity measures cannot be demonstrated to be effective at successfully mitigating the barrier and fragmentation impact to glider species, the residual impact to connectivity shall be offset. This is in accordance with MCoA D2.*

1.4 Road mortality monitoring

Monitoring of threatened glider mortalities on the road will occur adjacent to all arboreal crossing structures and the widened medians in relevant project sections and at established control sites (RMS 2018). The monitoring program will measure correlations between connectivity structures and glider road mortalities. A higher mortality at impact sites compared to control sites may indicate that the mitigation measure is ineffective for road mortality prevention or reduction.

The stated objective of road mortality monitoring is:

> *"Record the incidence of glider-vehicle collisions at mitigated (impact) and unmitigated (control) sites, to establish if there is a positive effect (i.e., decrease in glider mortality) associated with crossing structures. This is to meet MCoA D8(g)."*

To determine the effectiveness of connectivity structures in preventing or reducing glider road mortality, Table 8.3 of the TGMP outlines Performance Indicators (1 & 2) and their respective *Corrective Actions (a, b, ... etc*.). They are as follows:

1. Higher mortality rate at impact sites or no significant difference in mortality rates for threatened gliders between impact and control sites.

    a. *Review reported usage level of crossing structure by threatened gliders.*
    b. *Corrective actions may include but not limited to the installation of more glide poles or rope bridges to known mortality hotspots.*
    c. *Crossing structures also serve as 'insurance' in the case of stochastic events such as fire or disease, which may occur at long time intervals. Further the cost of decommissioning and relocating a rope bridge or glide pole array is likely to be comparable to the cost of installing a new structure. Therefore, existing glide poles/rope bridges will be retained.*
    d. *Should road kill data indicate a road-kill hot-spot for gliders where there is limited crossing structures RMS will investigate the feasibility of installing additional crossing structures*
    e. *Post three years of monitoring and implementation of corrective actions, if connectivity measures cannot be demonstrated to be effective at successfully mitigating the barrier and fragmentation impact to glider species, the residual impact to connectivity shall be offset. This is in accordance with MCoA D2.*

2. High number of incidental records of threatened glider mortality away from crossing structures.

    a. *Identify a hot spot.*
    b. *Review options for mitigation, i.e., crossing structure, signage, lowering speed limit.*
    c. *Consider implementation of crossing structure at identified hot-spot or other methods to reduce mortality (e.g. signage, review design of structure in that locality, additional plantings to encourage gliders away from road and to crossing structure).*

2. Methods

2.1 Study area

The study area includes sections 3-11 of the W2B Pacific Highway upgrade, spanning from Glenugie to Wardell, as well as the habitat situated within a 1km radius of the project alignment (impact and control sites). Additionally, the study encompasses the surrounding habitat of reference sites that are up to 4km from the project alignment, as shown in Figures 1-5. The sample sites consist mainly of dry sclerophyll forest, with small pockets of swamp sclerophyll forest. The study area falls within the north coast bioregion and is characterised by a predominantly sub-tropical climate (NSW NPWS 2003).

In sections 3-11, glider population surveys were conducted at 48 sites – 20 impact, 18 control, 10 reference (Table 1). Impact sites adjoined crossing structures and vegetated medians. Control sites were positioned in forest habitat largely equivalent to impact sites and a minimum 500m but mostly >1000m from impact sites. Reference sites were in equivalent forest habitat >1-4km from either impact or control sites. Monitoring of aerial crossings was carried out at a total of 17 locations, consisting of eight rope bridges and eight glide poles or glide pole arrays (Table 2 and 4). In addition, one vegetated median located in Section 7 at Tabbimoble was also monitored.

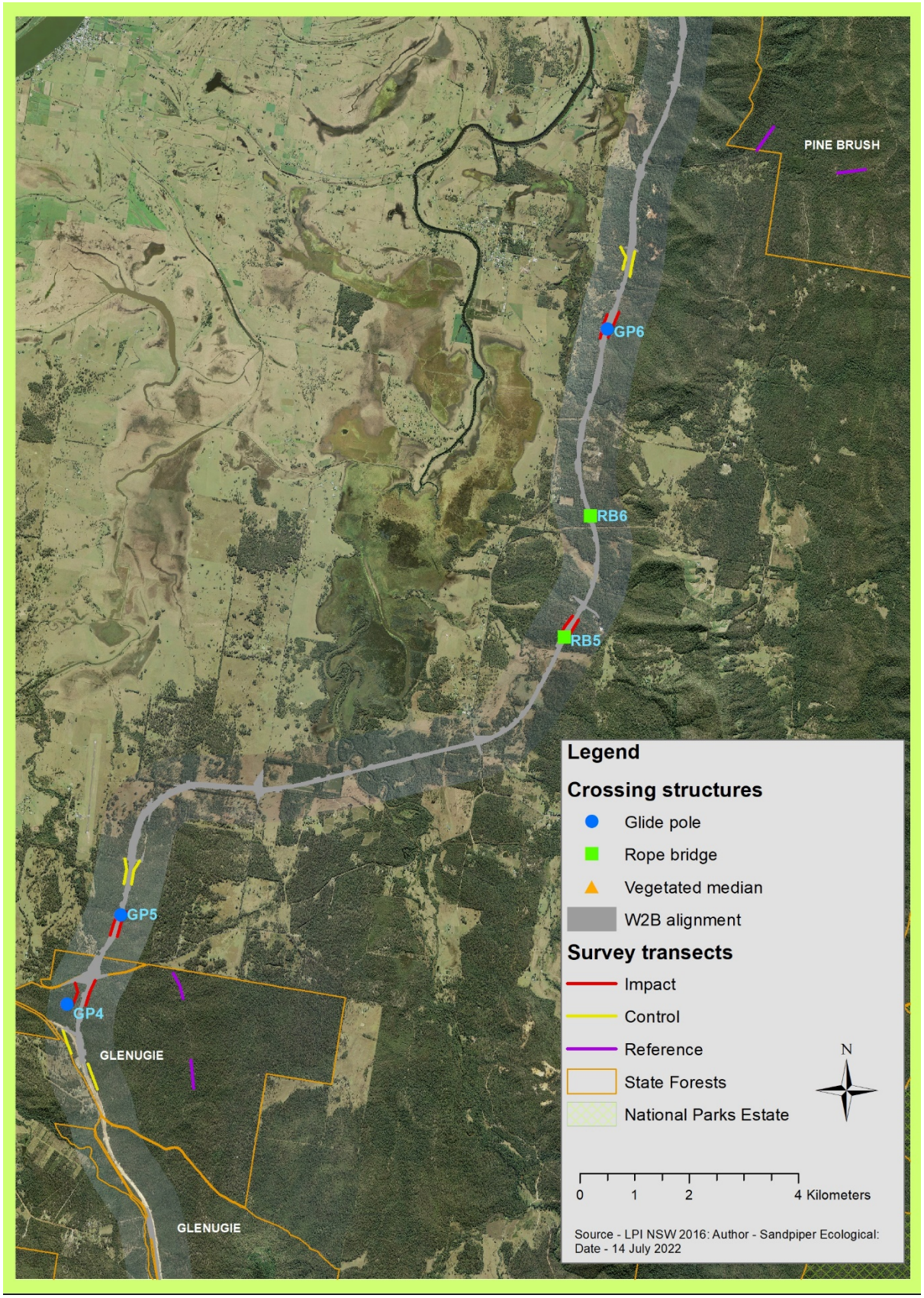


Figure 1: Threatened glider impact, control and reference sites and aerial crossing structures in section 3-11 of the W2B alignment.

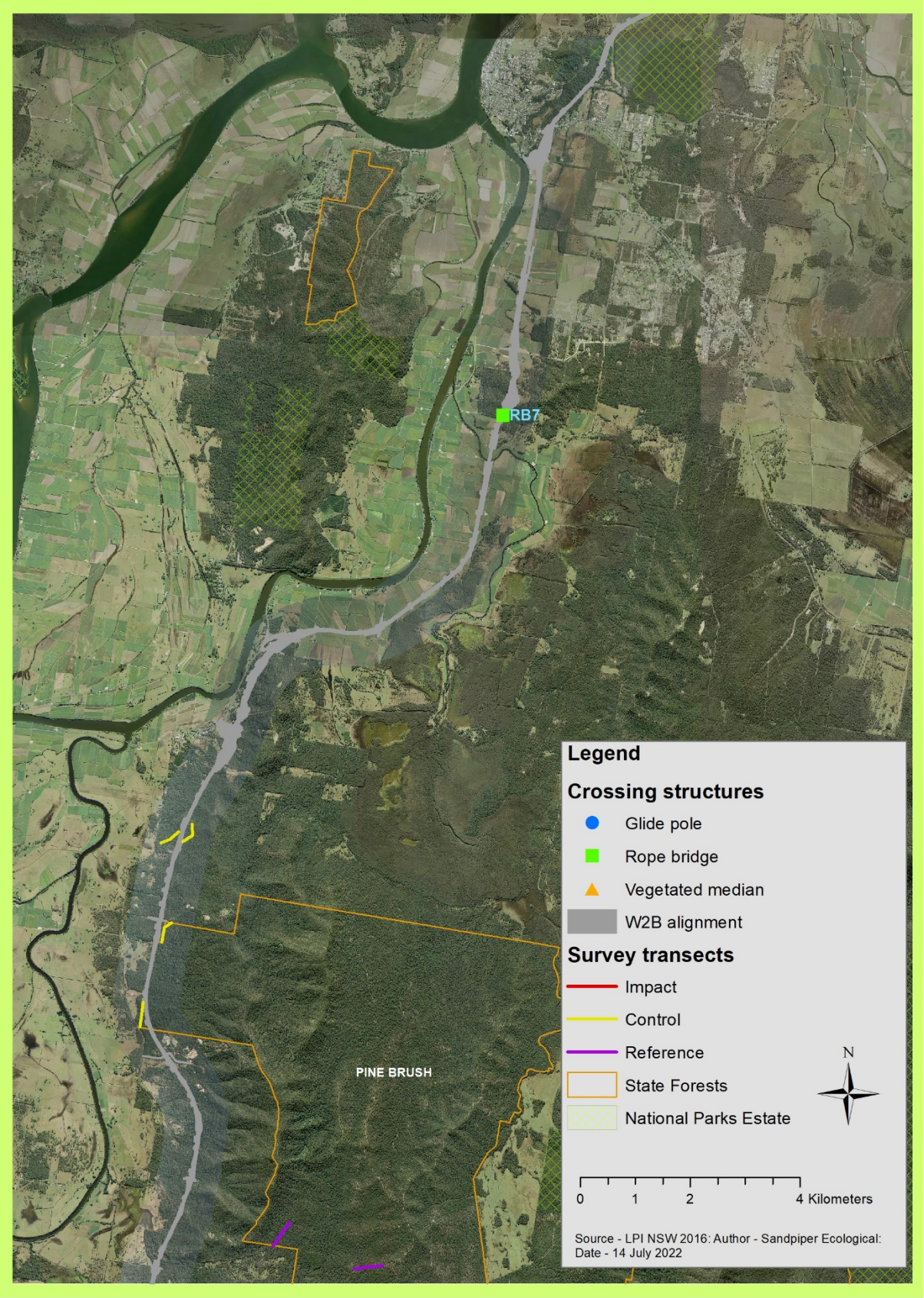


Figure 2: Threatened glider impact, control and reference sites, and aerial crossing structures in sections 3-11 of the W2B alignment.

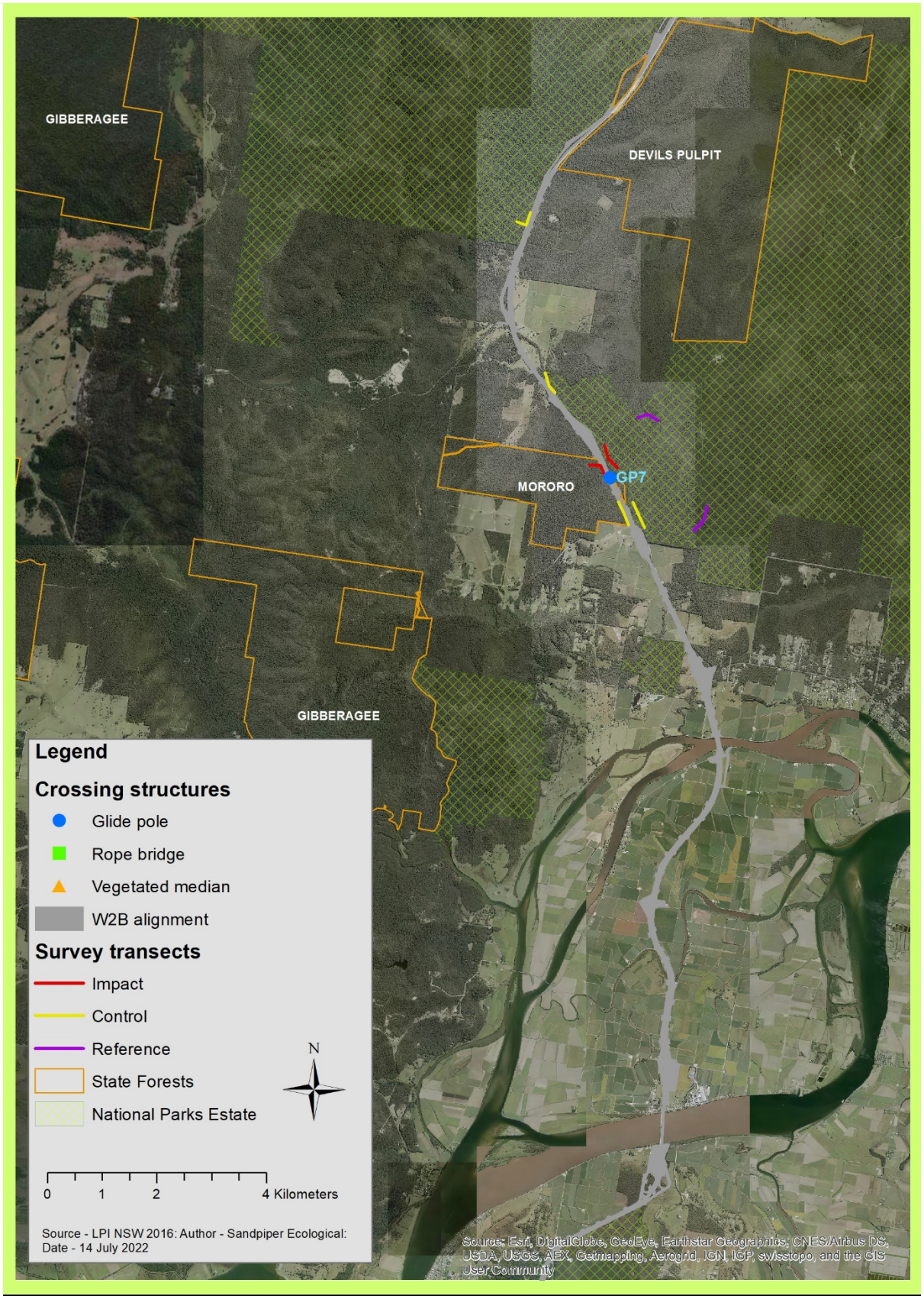


Figure 3: Threatened glider impact, control and reference sites, and aerial crossing structures in sections 3-11 of the W2B alignment.

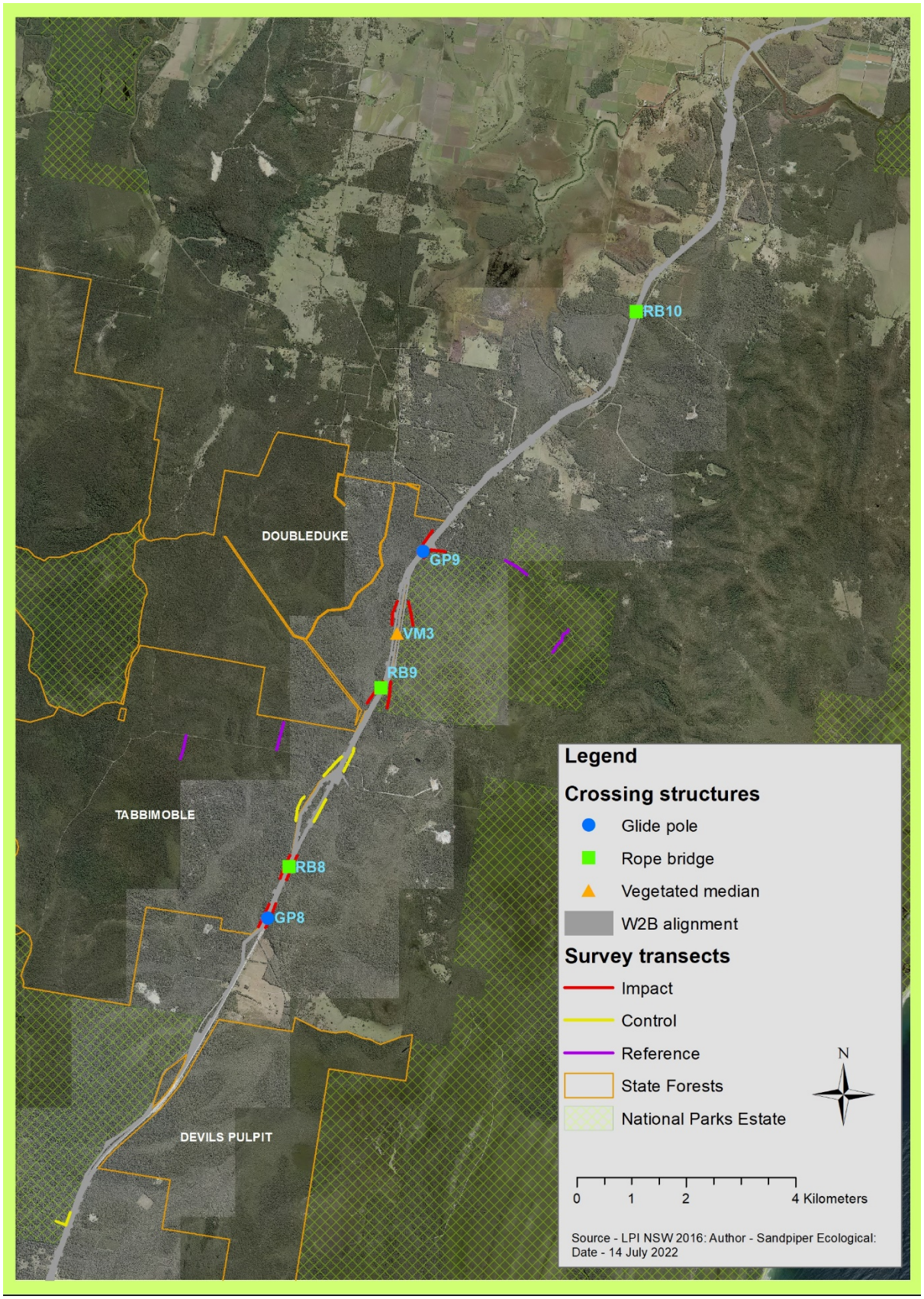


Figure 4: Threatened glider impact, control and reference sites, and aerial crossing structures in sections 3-11 of the W2B alignment.

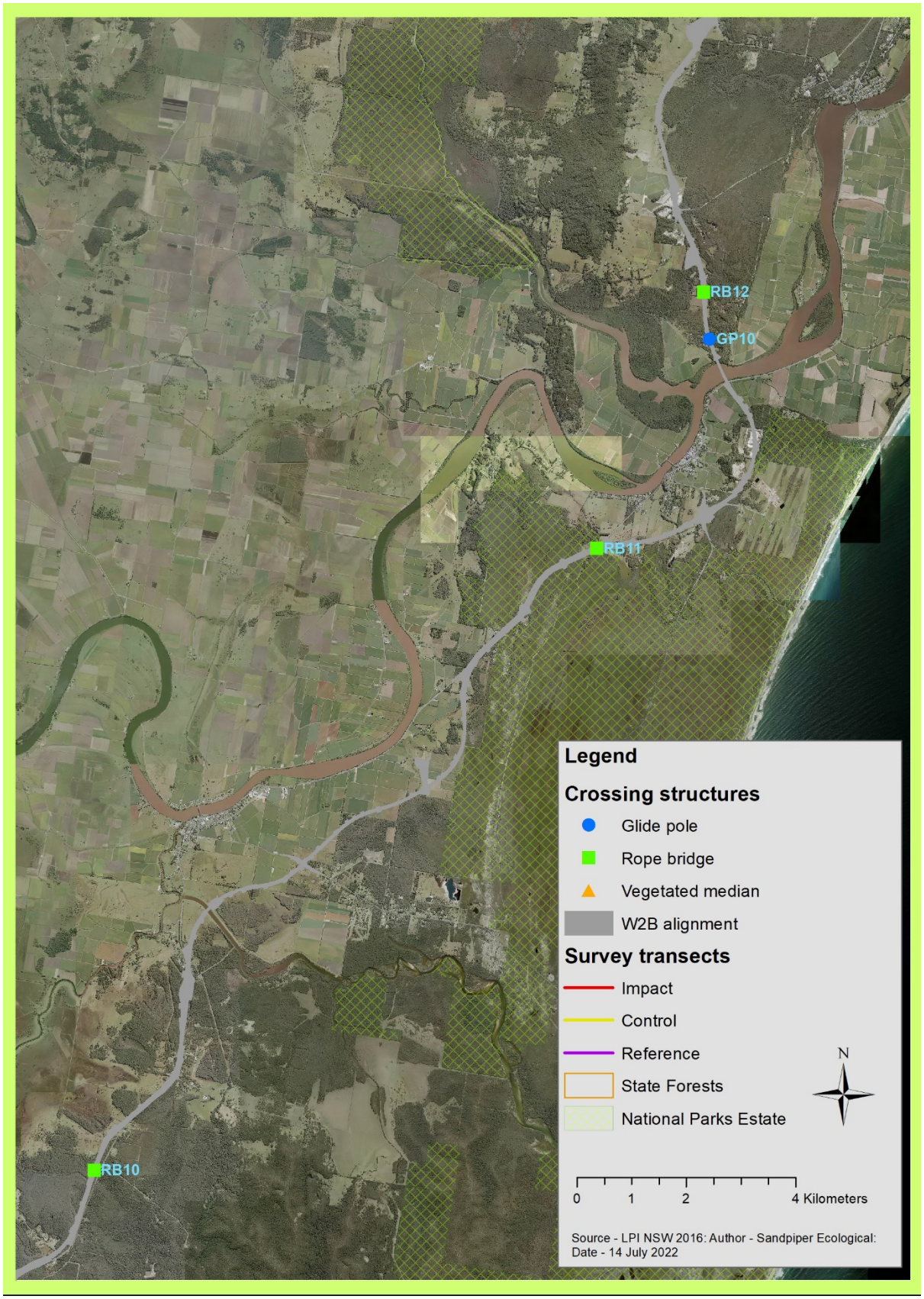


Figure 5: Location of aerial crossing structures within sections 3-11 of the W2B alignment.

Table 1: Location of impact, control and reference glider population monitoring sites positioned in sections 3-11 of the W2B Upgrade. RB = rope bridge; GP = glide pole; VM = vegetated median.

Section	Site Name	Transect ID	Approximate chainage at centre of transect		
			Impact	Control	Reference
3	Glenugie South (GP4)	GS-east	35700	34050	-
		GS-west	35700	34750	-
3	Glenugie North (GP5)	GN-east	37050	38000	-
		GN-west	37050	38000	-
3	Glenugie Reference	G-r-north	-	-	35800
		G-r-south	-	-	33950
3	Tucabia South (RB5)	TucS-east	48250	55250	-
		TucS-west	48250	55350	-
3	Tucabia Mid	TucM-east	-	63500	-
		TucM-west	-	61850	-
3	Tucabia North (GP6)	TucN-east	54050	65300	-
		TucN-west	54050	65100	-
3	Tucabia Reference	Tuc-r-north	-	-	57900
		Tuc-r-south	-	-	57200
6	Mororo (GP7)	Mor-east/north	99600	98500	100100
		Mor-west/south	99600	98600	98100
6 & 7	Tabbimoble South (GP8)	TabS-east	111350	101400	-
		TabS-west	111350	104550	-
7	Tabbimoble Mid (RB8)	TabM-east	112350	113550	-
		TabM-west	112350	113550	-
7	Tabbimoble North (RB9)	TabN-east	115950	114550	-
		TabN-west	115950	114550	-
7	Tabbimoble Veg Median	TabVM-east	117400	-	-
		TabVM-west	117400	-	-
7	Tabbimoble Land Bridge (GP9)	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			20	18	10

2.2 Glider population monitoring

Glider population surveys were conducted at monitoring sites in S3-11 which were established during baseline surveys (Sandpiper 2015, 2016a; Table 1). Each site featured a 500m-long transect mostly positioned on existing tracks or management trails. Impact and control transects' were parallel to and within 100m of the highway alignment, whereas reference transects were >1km from the highway alignment. Transects were located within dry open forest habitat or a combination of dry open forest and moist open forest or swamp forest.

Spotlight and call playback surveys were conducted at each site quarterly. Operational phase monitoring for sections 3-11 began in Q4 2020, with Q4 2020 and the first three quarters of 2021 being treated as year one. Q4 of 2021 marked the beginning of the second year of the operational phase, with Q1, Q2, and Q3 of 2022 completing the survey period for year two. Q4 of 2022 marked the start of the third year of operational phase monitoring. The survey periods relevant to the following report were as follows: Q1 (7/3-12/4/2022), Q2 (31/5-6/6/2022), Q3 (19/9-4/10/2022), and Q4 (15/12/22- 17/1/23).

Each transect was surveyed on two non-consecutive nights during each period. Two to four experienced ecologists conducted the surveys concurrently on nearby transects (i.e., one observer/transect). The order and allocation of transects was changed each survey to avoid bias and to ensure each transect was surveyed during the early part of the evening at least once during the survey period. Several transects were at times inaccessible due to flooding, poor road conditions, tree fall and presence of campers. Transects were typically revisited when conditions had improved.

Spotlight surveys were of 30 minutes' duration and preceded by yellow-bellied glider call playback. Playback included a five-minute listening period, five minutes of playback followed by spotlighting with a hand-held 200+ lumen torch. Surveys began at least 30-45 minutes after sunset and were completed within six hours. Where possible, surveys were conducted between the 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 (i.e. moves large branches) and/or light showers. Surveys were postponed if strong wind or rain was forecast.

On occasions during surveys when an individual could not be confidently identified as either a squirrel glider or 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 the subject 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 other occasion(s) or if sugar gliders were previously detected on more occasions the record was scored as 'probable' sugar glider.

2.3 Arboreal crossing structures and widened medians monitoring

2.3.1 Rope bridges

In sections 3-11 rope bridges were located at Tucabia (RB5 and RB6), Shark Creek (RB7), Tabbimobile (RB8 and RB9), New Italy (RB10), Broadwater (RB11) and Laws Point (RB12) (Table 2). Rope bridges were ladder mesh design and featured 10 mm diameter silver rope woven into a 100 mm wide grid pattern for a total width of 400 mm. The exception was RB12 which consisted of a 550 mm x 200 mm rope cage made from 10 mm diameter silver rope. The mesh design included two 20mm-thick ropes running the entire length (Plate 1).

Rope bridges were slung between 3 mm wire rope and supported by 10 mm wire rope. Bridge ends were at the height of mid-upper canopy of adjoining forest and situated 2-8m from the canopy. Lengths of 25mm diameter silver rope extended from the bulkhead to adjacent trees (Plate 1). Rope bridge monitoring entailed camera surveillance of the rope bridge surface at each end to determine use by arboreal fauna.

Table 2: Rope bridge locations, sections 3-11, of the W2B upgrade.

Site	Chainage (Section)	Location of cam/s	Location Name	Easting	Northing
RB12	147350 (10)	Roadside	Laws Pt Rope	542498	6793628
RB11	140600 (9)	Roadside	Edge of Broadwater NP	540545	6788936
RB10	124610 (7)	Roadside	New Italy	531347	6777559
RB9	116000 (7)	Roadside	Tabbimoble north	526672	6770680
RB8	112300 (7)	Roadside	Tabbimoble mid	524991	6767407
RB7	75820 (4)	Roadside	Shark Ck	519398	6735146
RB6	50430 (3)	Roadside	Tucabia Mid	512165	6713339
RB5	48050 (3)	Roadside	Tucabia South (Mitchells Rd)	511684	6711127

Plate 1: Rope bridges were suspended >10m above the road surface and supported by poles adjacent to the forest edge. A camera was fitted to the bulkhead at each end of the bridge. Black core-flute was cable tied to the underside of the rope ladder at each end during year 1 to reduce the incidence of false-triggering caused by traffic.

An arborist installed wireless 4G Swift Enduro cameras on rope bridges in sections 3-11 between 26 May and 7 July 2021 (Plate 2). Wireless cameras were installed to minimise the number of aerial climbs required to download and maintain cameras, thereby improving safety. Cameras were installed on brackets attached to the bulkhead at each end of the 12 rope bridges and were oriented along the bridge. A 1 m sheet of corflute was attached to the bottom of each bridge to reduce the incidence of false triggers. Wireless cameras were equipped with a 16 or 32GB SD card. A small solar panel with inbuilt battery was attached to each camera, and all cameras were fitted with 12 NiMh rechargeable batteries as a back-up during cloudy conditions. The cameras' active period was set from 2000-0500hrs EST from 1 January to 31 December 2022.

On rope bridges cameras were initially set at medium sensitivity to reduce the incidence of false triggering caused by passing traffic. Sensitivity was reduced to low at a small number of sites where a high incidence of false triggers occurred (e.g. RB11). Upon activation, each camera sent up to three photographs to a central email address, with no delay between triggers. The number of images sent was dependent on wireless signal strength with only one image sent if signal strength was low. Video was not used on wireless cameras due to concern about signal strength and battery capacity. Images from the previous night were reviewed daily, false triggers discarded immediately and active images saved for further review. Consequently, the number of images taken was not recorded for cameras in S3-11 other than during maintenance inspections.

During the second year of monitoring, two camera maintenance inspections were conducted. The first inspection took place from August 1-4, during which all cameras were inspected. The inspection involved downloading SD cards, checking camera position, installing camera brackets, replacing some solar panels, installing high-gain antennae at sites with poor wireless connectivity, changing batteries and replacing damaged cameras (Table 3). The second inspection occurred on October 12 and focused on cameras across three bridge sites with high incidence of false triggers, lack of recent activation, or poor camera orientation (Table 3). Cameras were inspected at the start of year three to obtain data on (year two) survey effort. Details from this inspection will be included in the year three report.

In sections 3-11 the period of activity is based on the number of days active from 1 January to 31 December 2022 (Table 3). Obtaining accurate information on days active is difficult as most cameras were only occasionally triggered despite being functional. Of the eight monitored rope bridges, six had at least one

camera active for the entire monitoring period. Monitoring effort was reduced by damage to cameras on five occasions (water ingress, or dislodgement), flat batteries on two occasions, memory card errors on one occasion, and camera malfunction on one occasion (Table 3). All damaged cameras were replaced. Cameras E24, E17, E9, W8, E6, and W5 were active for the entire monitoring period. For further details on maintenance inspections, refer to Appendix C Table C1.

Table 3: Rope bridge camera activity periods during the 2022 monitoring period at sections 3-11. D = Damaged. M = Malfunction. F = Flat batteries. SD = Card error.

Structure	Position	Cam ID	No. Active days
RB 5	East	E 23	171[D]
	West	W 22	177[M]
RB 6	East	E 24	365
	West	W 25	241[F]
RB 7	East	E 17	365
	West	W 18	172[SD]
RB 8	East	E 10	152
	West	W 12	151[D]
RB 9	East	E 9	365
	West	W 13	204[D]
RB 10	East	E 7	173[D]
	West	W 8	365
RB 11	East	E 3	231[F]
	West	W 27	152[D]
RB 12	East	E 6	365
	West	W 5	365

Plate 2: Location of camera attachment on glide poles in S3-11. Each structure contained a wireless 4G Enduro camera with a solar panel.

2.3.2 Glide poles

Glide poles were installed at various locations along the roadside and median of the highway at sections 3-11 including Glenugie South (GP4), Glenugie North (GP5), Mororo (GP7), Tabbimoble South (GP8) Tabbimoble North (GP9), and Laws Point (GP10) (Table 4). The poles were made of CCA-treated hardwood timber, approximately 450mm in diameter at breast height and tapered to approximately 330mm near the top. Each pole was fitted with a 500mm diameter metal predator shield and a single arm made of 90 x 100 mm thick hardwood, mounted perpendicular to the highway 300mm from the top of the pole (Plate 2). Cameras were initially installed on the east and west glide poles at sites GP4, GP5, GP7, GP9, and GP10, and on median poles at GP5, GP6, GP8, and GP9 (Table 5).

During the maintenance inspection in August 2022, it was decided that accessing the median without traffic control was hazardous to workers and subsequently the median cameras at GP5 and GP9 were replaced with cameras on the east and west roadside poles in October 2022. Median cameras at GP6 and 8 were replaced in August 2022 and will be left insitu until year three of monitoring. Cameras were mounted on a flat 600-900 mm long metal bar attached to the glide arm. In most cases cameras were positioned 100-200 mm beyond the end of the glide pole arm and offset to it, exceptions were GP5 and 9 which were positioned on the glide arm approximately 1m from the pole (Plate 2). Installation dates, inspections, and monitoring periods followed the same procedures as described for rope bridges in Section 2.3.1.

Table 4: Glide pole locations at W2B sections 3-11.

Label	No. Poles in Array	Chainage (Section)	Location of cameras	Location Name	Easting	Northing
GP 10	2	146480 (10)	Roadside	Laws Pt Poles (roadside poles)	542607	6792765
GP 9	3	118620 (7)	Median/road	Tabbimoble north (Minyamai Rd)	527449	6773170
GP 8	1	111300 (7)	Median	Tabbimoble south	524605	6766463
GP 7	2	99320 (6)	Roadside	Mororo	522443	6756232
GP 6	1	53920 (3)	Median	Tucabia North (Bostock Rd)	512478	6716758
GP 5	3	37200 (3)	Median/roadside	Glenugie North (Old 6mile Lane)	503569	6706040
GP 4	2	35420 (3)	Roadside	Glenugie South (8mile Lane)	502590	6704406

Five out of the seven glide poles (GP4, GP6, GP7, GP8, and GP10) had at least one active camera throughout the monitoring period (Table 5). Monitoring effort was reduced by camera damage on four occasions, delayed installation (4 cameras) due to safety concerns, and a card error on one occasion (Table 3). The median camera at GP5, which could not be safely accessed, is likely to have been inactive due to an absence of images recorded in 2022 monitoring period (Table 5). All damaged cameras were replaced, including those that were flooded (E19) or had sensors damaged by birds (M14, E30, W37). Cameras W20, M26, W16, M11, E701, and W1 remained active for the entire monitoring period. For more information on maintenance inspections, see Appendix C, Table C2.

Table 5: Glide pole camera activity periods during the 2022 monitoring year in sections 3-11. D = Damaged. M = Malfunction. F = Flat batteries. SD = Card error. UK = unknown

Site	% of the period with a camera active	Pole ID	Cam ID	No. Active days	Comments
GP 4	100.00%	East	E 19	152[D]	Flooded
		West	W 20	365	
GP 5	22.19%	Median	M 21	0[UK]	Likely inactive
		East	E 31	81	Installed 12/10/22
		West	S 000	81	Installed 12/10/22
GP 6	100.00%	Median	M 26	365	
GP 7	100.00%	East	E 15	214[SD]	
		West	W 16	365	
GP 8	100.00%	Median	M 11	365	
GP 9	9.86%	Median	M 14	0[D]	Removed from sample – bird damage
		East	E 30	0[D]	Installed 12/10/22 - Bird damage
		West	W 27	36[D]	Installed 12/10/22 - Bird damage
GP10	100.00%	East	E 701	365	
		West	W 1	365	

2.3.3 Vegetated medians

One vegetated median (VM3) at Tabbimoble was monitored during year two operation monitoring in sections 3-11 of W2B. The vegetated median is located at the centre of the north and southbound carriageways, spanning approximately 1350 meters (Chainages 116200-117600) and consists of dry sclerophyll open forest. Carriageway corridor widths east and west of the median range between 30-60m, and roadside tree heights are approximately 20-30 m.

Four camera traps were installed in the Tabbimoble median to detect the presence of gliders (Table 6). Two camera traps (TVM1 and TVM2) were installed in the Tabbimoble median on 21 January 2021 as part of year one operational monitoring (Table 6). Two additional cams were installed on 27 September 2022 (TVM3) and 29 November 2022 (TVM4) late in year two monitoring to improve coverage of the median. Camera traps were positioned at feasible glide crossing locations and featured a Swift Enduro camera, mounted to a 150 mm x 500 mm x 10 mm timber board, oriented towards a capped 250 mm x 100 mm diameter PVC pipe (Plate 3). The PVC pipe was perforated by numerous holes and filled with creamed honey and a sponge. The camera array was attached to a metal bracket and mounted to subject trees approximately 6m above ground level (Plate 3). A dilute mixture of honey and water was sprayed up the tree trunk above the camera trap as an extra attractant.

Cameras were checked on 14 April 2022, 24 May, 27 September, 29 November and 1 March 2023 to refresh batteries and change SD cards. Monitoring effort was reduced at TVM1 and TVM2 due to water ingress of the camera housing (Table 6). TVM1 incurred water ingress on two occasions, 14/4/2022 and 27/9/22 and TVM1 on 14/4/2022 (Table 6). Cameras TVM3 and TVM4 were active for the entire period from when they were installed. For more information on maintenance inspections, see Appendix C, Table C3.


Plate 3: Vegetated median camera trap set up.

Table 6: Tabbimoble median camera activity periods during the 2022 monitoring year in sections 3-11. D = Damaged.

Structure	Cam ID	No. Active days	Comments
Tabbimoble (VM3)	TVM1	198[D]	Flooded two occasions
	TVM2	236[D]	Flooded
	TVM3	96	Installed 27/9/2022
	TVM4	33	Installed 29/11/2022

2.4 Road mortality monitoring

Car-based road mortality surveys were conducted during each of the four quarters of year 5 monitoring. Car-based surveys entailed a driver and passenger (observer) travelling both the northbound and southbound of sections 3-11. The survey vehicle featured a 'Vehicle Frequently Stopping' sign on the tailgate, a flashing light and travelled at 80-90 km/h in the left-hand lane. Surveys involved the passenger scanning the road surface and road shoulder for animal carcasses. When a carcass was observed, the location was recorded using Motion X-GPS application and the species recorded into a handheld voice recorder. If a potential threatened glider was identified, the vehicle would pull over at the nearest safe location and the passenger would walk back to inspect the carcass behind the guard rail/wire rope. The location of each carcass was later recorded into an excel spreadsheet and referred to in subsequent surveys to avoid double-counting. Car-based surveys were substituted for walking-based surveys during year three due to safety concerns with walking along the edge of the highway (refer Sandpiper 2020a). Surveys were completed on 13/1/2022 (Q1), 14/04/2022 (Q2), 17/08/2022 (Q3) and 29/11/2022 (Q4).

2.6 Data analysis

2.6.1 Population survey data

For each survey quarter, data for the two samples were pooled to determine presence/absence of yellow-bellied glider and squirrel glider for each transect. The number of present or 'occupied' transects for each species for each survey period/quarter were then summed and expressed as a proportion of total sites (i.e. occupancy rate) for that treatment (i.e., impact, control, reference).

The occupancy rate of yellow-bellied glider and squirrel glider for each treatment for each survey quarter was then tabulated according to phase of construction. A mean (± SD) of all samples (i.e., survey quarters) was calculated for each treatment type for the three construction phases: pre-construction, construction and operation.

A Fisher's Exact Test was performed to determine the association between pre-construction and operation phase occupation rate of yellow-bellied glider and squirrel glider at impact sites. The test examines the relationship between proportions (i.e., presence/absence) of categorical variables (i.e., pre-construction and operation) and is appropriate for small sample sizes (McDonald 2014). Presence/absence data (i.e., 0 or 1) were organised in columns according to phase of construction. The null hypothesis was that the proportion of present/absent records do not differ between treatments. Data analyses were performed on SYSTAT 13.1 (Systat Software Inc.).

2.6.2 Rope bridge and glide pole camera data

Rope bridge and glide pole camera images were uploaded to a desktop computer and viewed using Windows Photo Viewer. Data recorded included: site, sample period, time of detection, species, crossing types, and the movement type for glide poles (i.e., explore arm, climb pole, launch east, launch west), where discernible. An ecologist reviewed all images, with reference to standard field guides (e.g., Menkhorst & Knight 2003; Pizzey & Knight 2007). A hierarchical approach was adopted for species identification, which included: species, genus or group.

For rope bridge pictures/footage, the road crossing likelihood was also scored according to the following criteria:

- *Complete crossing* - animal moves past camera in either direction and does not return within 10 minutes.

- *Incomplete crossing* - animal either moves away from camera but returns within 10 minutes, or exhibits no directional movement along the bridge, or shows only exploratory movement, or glides from end of bridge after moving past camera.

According to these definitions, a ‘complete crossing’ does not require complementary evidence of the same crossing event from both cameras. Instead, it is inferred from display of strong directional movement and no evidence of return movement, albeit this can be difficult to interpret for the feathertail glider (*Acrobates spp*.) due to their erratic and rapid movements. The absence of images/footage at the other end of the bridge is presumed to be an instance of detection evasion and is consistent with other investigations of arboreal crossing structure use (see Goldingay *et al.* 2013; Soanes *et al.* 2015).

For glide pole footage, any animal detection on median-positioned glide poles was scored as a highway crossing. On occasions when the glide launch was captured, the direction of highway crossing was also recorded. Determining glides from still images is more difficult than video and glides were inferred based on movement direction and the lack of subsequent images. When detections did not include images/footage of glide launch, a crossing was inferred based on the reasoning that while an individual may glide to the central pole and return to the same side, it likely represents a very small proportion of detections. There is no habitat in the centre of the carriageway where GP5, GP6, GP8 and GP9 are located and, therefore, no apparent reason for gliders to repeatedly access the glide pole without completing a crossing. This is consistent with analyses of glide pole monitoring records from the Hume Highway, which were supported by radio-tracking data (see Soanes *et al.* 2015) and previous glide pole monitoring for the Sapphire to Woolgoolga Pacific Highway upgrade (Sandpiper Ecological 2018b).

Glider detections on the east and west of GP4, GP5, GP7, GP9 and GP10, located on the edge of the forest, may not necessarily indicate road crossings but rather movements along the forest edge (Goldingay *et al.* 2019). Complete crossings were only recorded for gliders launching off the arm towards the median, leading to a likely conservative estimate of gliders crossing the alignment.

In order to assess the level of successful aerial structure use and enable comparisons between sites, the number of complete crossings per week was used. Sites (i.e., GP4 combined poles east and west or RB1 east and west) acted as replicates and data was pooled by combining the number of complete crossing and dividing them by the total active camera days and presented in relation to specific monitoring periods (Year 1 versus Year 2), or taxa (feathertail glider versus sugar glider).

2.7 Vegetated median data

The camera trap videos were uploaded to a desktop computer and reviewed by an ecologist using Windows viewer. Data collected from the videos included the site, date, time, and number of detections for each species recorded. A detection was scored when an individual species was initially observed on video. A new detection was only scored after a 10-minute interval between videos of the same species or the appearance of a new species. This approach increased the likelihood of detecting a new individual and reduced counting the same individual multiple times. An ecologist reviewed all images to identify the species, using standard field guides (e.g., Menkhorst & Knight 2003; Pizzey & Knight 2007) as references.

In order to assess the extent of vegetated median use and enable comparisons with other monitoring programs, the number of detections per week was used as the standard measure for glider use of the medians. Data was pooled by combining the number of detections and dividing them by camera effort (number of active weeks) and presented in relation to specific monitoring periods (Year 1 versus Year 2), taxa (feathertail glider or squirrel glider), and vegetated median sites (Dirty Creek versus Tabbimoble).

2.7 Survey limitations and constraints

Environmental conditions, such as a severe drought in 2019 and an extended La-Nina event from 2020 to 2022, have influenced the population monitoring program at sections 3-11. Additionally, severe bushfires occurred in late 2019, impacting sections 6 (Mororo) and 7 (Tabbimoble) of the study area. Local flooding also occurred in 2020 and 2022, restricting access to survey sites and vegetated median cameras. Moreover, the frequent occurrence of cloudy days may have restricted the solar charging of aerial camera structures at some sites, and the high proportion of rainy nights in 2022 may have affected glider activity. Persistent, heavy rain also contributed to internal water damage of several aerial crossing cameras.

3. Results

3.1 Weather and rainfall patterns 3-11

Rainfall in the study area has fluctuated considerably over time (Figure 6). Annual rainfalls totals have ranged from a minimum of 397.2 mm in 2019 to a maximum of 1826.2 mm in 2022, compared to the average annual rainfall of 1025.5 mm (Figure 6). Rainfall totals have been above average in six years (2013, 2015, 2017, 2020, 2021, and 2022) and below the average in five years (2014, 2016, 2018, and 2019) (Figure 6). The most notable drop occurred from 2018 to 2019, when it decreased by more than half (from 855.2 mm to 397.2 mm) and was the lowest recorded annual rainfall on record for the Bushgrove station (Figure 6). The most notable increase occurred from 2019 to 2020, when it almost quadrupled (from 397.2 mm to 1575 mm).

The study area continued to experience a recovery from the severe drought and wildfires that occurred in 2019, as La Nina conditions prevailed during 2022 monitoring (Table 7). The annual rainfall in 2022 (year two operation phase) was 78% above the average of 1025.5 mm (Figure 6 and 7).

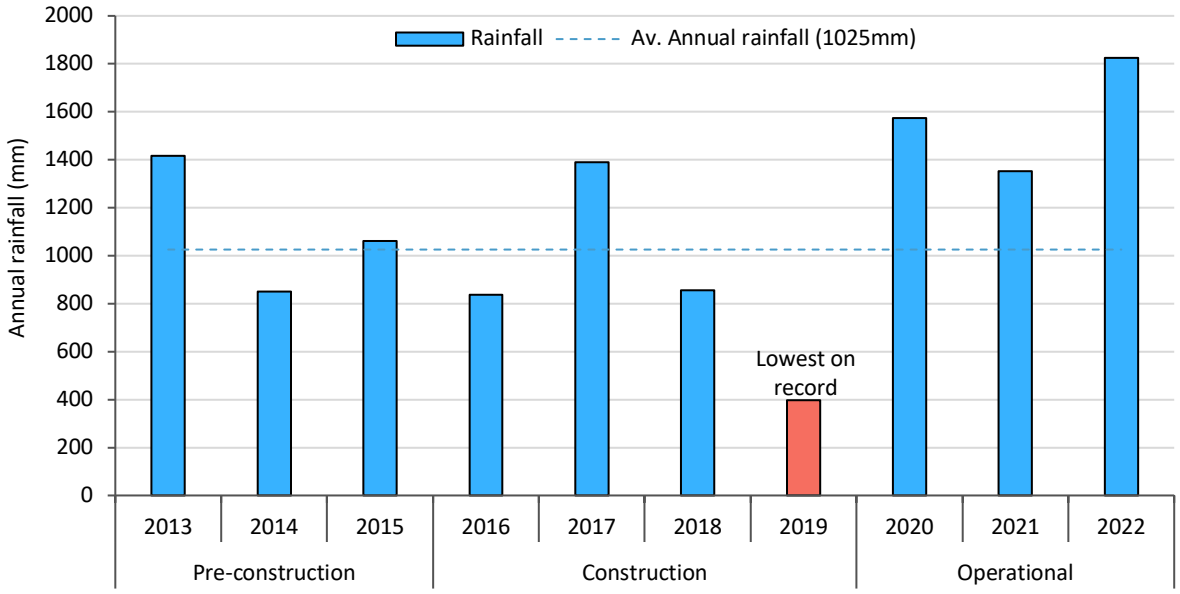


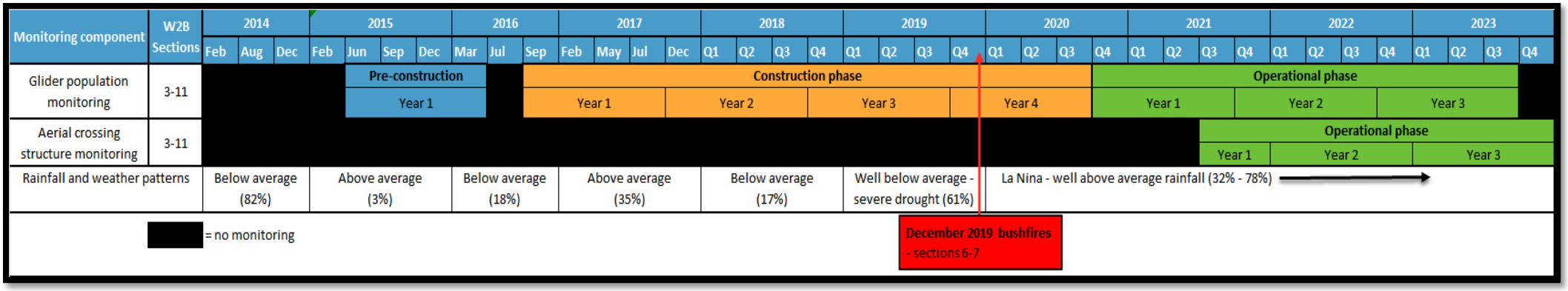
Figure 6: Total annual rainfall in the study area from 2012 to 2022. Data source: Bushgrove (BoM,station no. 58006).

3.2 Population monitoring sections 3-11

Yellow-bellied glider occupancy has declined over time across all treatments (impact, control and reference), with a more pronounced decline at the impact sites (Figure 7). Impact sites had the highest occupancy in year 1 of construction (13%, 2017) and the lowest in year 4 of construction and year 1 of operation (1%) with no records in year two and three of operation (Figure 7). Occupancy at control sites also peaked in year 1 of construction (7%) and declined to nil in late construction and year 2 and 3 of operation, with three records in year 1 of operation (Figure 7). Reference sites had the highest occupancy in pre-construction (10%) and remained stable during construction (8-9%), then decreased to 3% in year 4 of construction with no records during operational monitoring (Figure 7).

A Fisher Exact Test comparing presence/absence of yellow-bellied glider at impact site between pre-construction and operation year 2 identified a significant difference (P = 0.003). The cumulative tally of sites with yellow-bellied gliders in pre-construction was nine compared to nil in year two of operation.

Table 7: Timing of monitoring components at W2B 3-11 in relation to rainfall patterns and bushfire. Rainfall expressed as deviation (%) from the mean annual rainfall (1025.5 mm) for Bushgrove station (BoM station no. 58006).



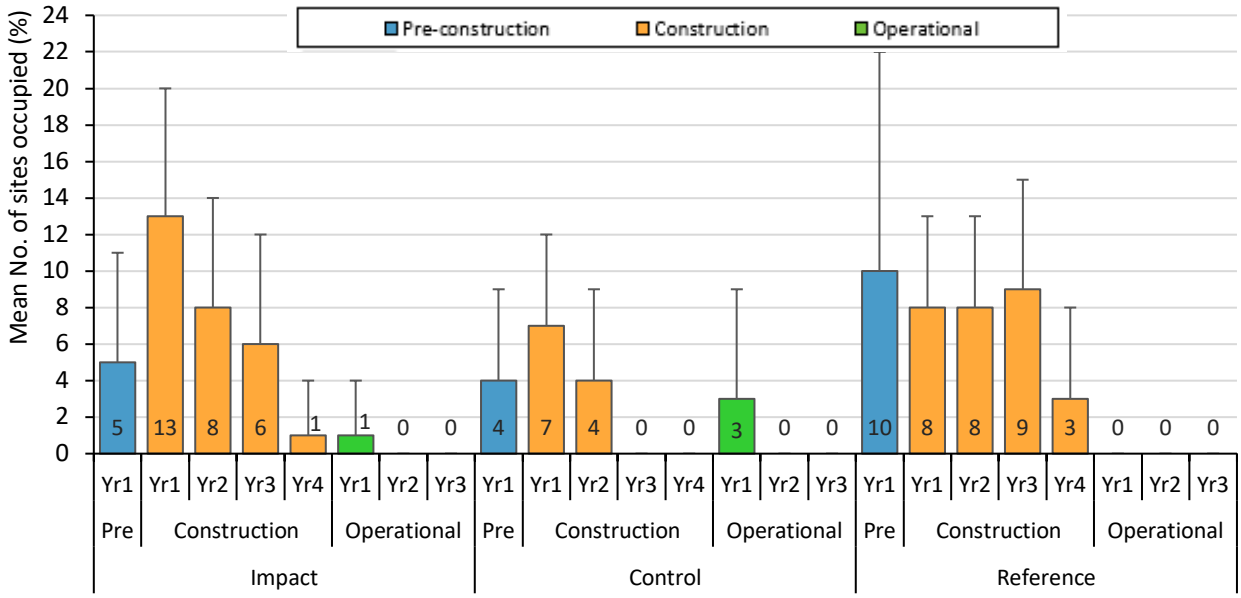


Figure 7: Mean + SD occupation rates for yellow-bellied glider at impact, control, and reference sites in sections 3-11 during pre-construction, construction, year one and two of the operation phase and one-quarter of year three (i.e., Q4 2022). Pre = pre-construction.

The annual occupancy rates of squirrel gliders have varied over time across all treatments, (Figure 8). During the pre-construction phase, occupancy rates were similar among treatments, ranging from 18% to 28%, with the highest rate recorded at reference sites (Figure 8). During the construction phase, occupancy rates tended to increase at the impact and reference sites and remained similar or slightly lower at control sites (Figure 8). Occupancy rates at impact and reference sites peaked during construction, with the highest occupancy occurring in year 1 for the reference sites (40%) and year 3 for the impact sites (33%). In contrast, the control sites had the highest occupancy rates during the pre-construction phase (18%) (Figure 8).

Occupancy rates declined in year one (Q4 2020 – Q3 2021) of operational monitoring with rates of 1%, 3%, and 10% at the impact, control, and reference sites respectively (Figure 8). However, in year 2 of operation, all treatments experienced a substantial increase in occupancy rates, which were highest at impact sites (26%), followed by control (17%) and reference sites (14%) (Figure 8). All treatments recorded a greater than 40% increase in squirrel glider occupancy rates (Figure 8).

Occupancy rates at impact sites exceeded pre-construction and construction levels, were comparable at the control sites, and were lower in reference sites during year 2 monitoring (Figure 8). Early monitoring in year 3 (Q4 2022) suggests some evidence of increasing occupancy at reference sites (Figure 8).

A Fisher Exact Test comparing presence/absence of squirrel glider at impact site between pre-construction and operation year 2 did not identify a significant difference (P = 1.000). The cumulative tally of sites with squirrel gliders during the baseline was 15 compared to 16 in year two of operation.

Full details of population survey effort and fauna detections for all surveys are presented in Appendix A.

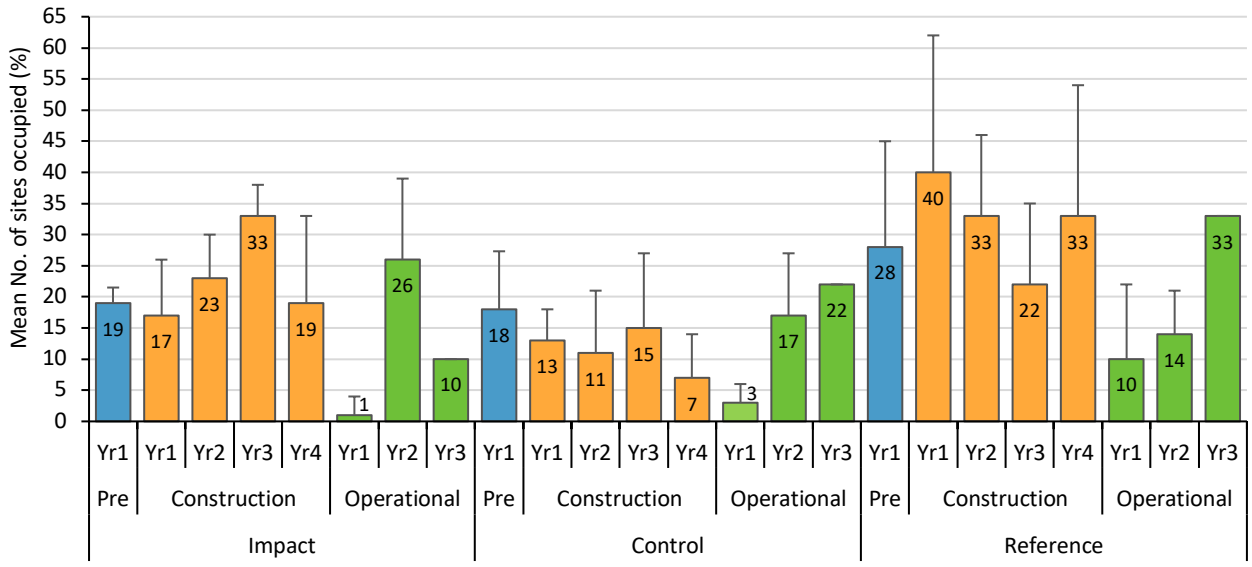


Figure 8: Mean ± SD occupation rates for squirrel glider at impact, control, and reference sites in sections 3-11 during pre-construction, construction, year one and two of the operation phase and one-quarter of year three (i.e., Q4 2022). Pre = pre-construction. The legend is the same as Figure 7.

3.3 Arboreal crossing structures and widened medians monitoring

3.3.1 Rope bridges

In 2022, arboreal mammals were detected on 72 occasions across the 12 rope bridge sites at sections 3-11 during 4,014 nights of camera monitoring (Table 8). Most detections were recorded at RB 9 (n = 29), followed by RB10 (n = 16), RB7 (9), RB5 (8), RB8 (4), RB12 (3), and RB6 (3) (Table 8). Site RB 11 had no detections. The overall mean weekly detection rate was 0.12 ± 0.12 SD (Table 8).

Squirrel gliders were confirmed to complete a crossing on two occasions at RB9 with a mean weekly rate of 0.003 ± 0.01 SD across all sites (Table 8). Incomplete crossings by squirrel glider were also recorded at RB9 on two occasions and on one occasion at RB8 (Table 8). *Petaurus* spp. (i.e., either sugar glider or squirrel glider) were recorded at RB5, 7, 9 and 10 (Table 8).

In order of use, other species recorded on rope bridges were feathertail glider (42 detections), Unid mammal (14), *Petaurus* spp. (9), sugar glider (1), ringtail possum (1), short-eared brushtail possum (1) and brush-tailed phascogale (1) (Table 8). Records of 'unidentified mammal' typically consisted of individuals either on or immediately in front of the camera and the only visible distinguishing feature was fur. Brush-tailed phascogale is listed as vulnerable under the NSW *Biodiversity Conservation Act 2016* (*BC* Act). Yellow-bellied gliders were not detected by rope bridge cameras. Further details of rope bridge detections are presented in Appendix B.

Table 8: Rope bridge detections and the number of complete crossings per week by fauna in year two monitoring at sections 3-11. Weekly crossing rate is shown in parenthesis. cc = complete crossing; ic = incomplete crossing and * denotes threatened species.

Rope bridge no. (sum of weeks cams active)	Total detections	Brush-tailed phascogale*		Feathertail glider		*Petaurus spp.*		Ringtail possum		Short-eared brushtail possum		Squirrel glider*		Sugar glider		Unid mammal	
		CC	IC	CC	IC	CC	IC	CC	IC	CC	IC	CC	IC	CC	IC	CC	IC
RB5 (49.72)	8 (0.03)	1 (0.02)	-	2 (0.04)	-	1 (0.02)	2 (0.04)	-	-	-	-	-	-	-	-	1 (0.02)	1 (0.02)
RB6 (86.57)	3 (0.12)	-	-	3 (0.03)	-	-	-	-	-	-	-	-	-	-	-	-	-
RB7 (76.71)	9 (0.09)	-	-	-	-	-	2 (0.03)	-	1 (0.01)	-	-	-	-	-	-	-	6 (0.08)
RB8 (43.28)	4 (0.36)	-	-	-	-	-	-	-	-	-	1 (0.02)	-	1 (0.02)	1 (0.02)	-	-	1 (0.02)
RB9 (81.28)	29 (0.21)	-	-	15 (0.18)	6 (0.07)	-	2 (0.02)	-	-	-	-	2 (0.02)	2 (0.02)	-	-	-	2 (0.02)
RB 10 (76.85)	16 (0.21)	-	-	12 (0.16)	2 (0.03)	1 (0.01)	1 (0.01)	-	-	-	-	-	-	-	-	-	-
RB11 (54.71)	0 (0)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RB12 (104.28)	3 (0.13)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1 (0.01)	2 (0.02)
Grand Total (573.4)	72 (0.13)	1 (0.002)	-	32 (0.056)	8 (0.014)	2 (0.003)	7 (0.012)	-	1 (0.002)	-	1 (0.002)	2 (0.003)	3 (0.005)	1 (0.002)	-	2 (0.003)	12 (0.021)
Mean weekly rate ± SD	0.12 ± 0.12	0.003 ± 0.01	0 ± 0	0.052 ± 0.08	0.012 ± 0.03	0.004 ± 0.01	0.013 ± 0.02	0 ± 0	0.002 ± 0	0 ± 0	0.003 ± 0.01	0.003 ± 0.01	0.006 ± 0.01	0.003 ± 0.01	0 ± 0	0.004 ± 0.01	0.021 ± 0.03

The mean number of complete crossings per week (cc/week) in 2022 (0.07 ± 0.09 SD) was higher than that recorded in 2021 (0.02 ± 0.03 SD) (Figure 8). Feathertail, squirrel, and sugar gliders were not recorded during 2021 monitoring, while records of greater than 0.003 cc/week were observed for all species in 2022 monitoring (Figure 8). Feathertail gliders had the highest overall rate of 0.05 cc/week (± 0.8 SD), while other species/groups such as unid mammal, *Petaurus* spp., sugar glider, and brush-tailed phascogale recorded comparatively low rates of complete crossings (Figure 9).

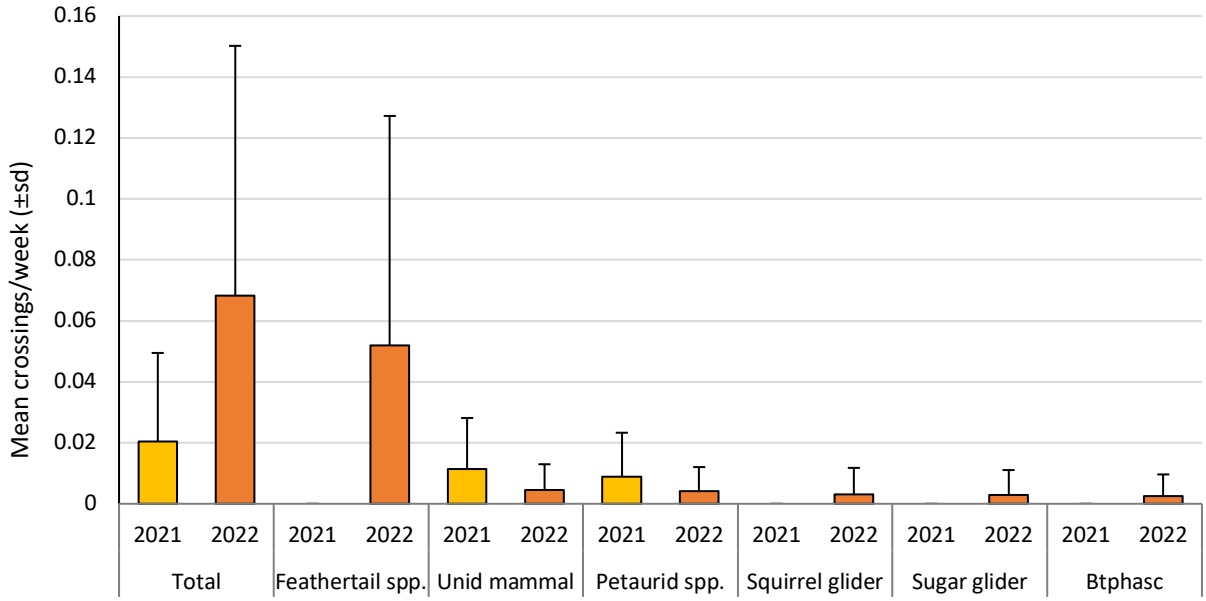


Figure 9: Comparison of mean ± SD weekly rope bridge complete crossings for 2021 (year one) and 2022 (Year two) of operational monitoring at sections 3-11, W2B. Total = total number of complete crossings. Unid = unidentifiable. Btphasc = Brush-tailed phascogale.

3.3.2 Glide poles

Arboreal mammals were detected on 410 occasions during 2754 nights of camera monitoring across 11 glide poles located at seven sites (Table 8). Site GP10 had the most detections with 281 (cc/week = 2.7), followed by GP7 with 69 (cc/week = 0.94) and GP8 with 29 (cc/week = 0.56) (Table 8). No arboreal fauna were recorded at GP9 during year two monitoring (Table 8). The mean weekly detection rate for sections 3-11 was 0.74.1 ± 0.19 SD (Table 8).

The majority (77%) of arboreal mammal detections were incomplete crossings at a rate of 0.473/week ± 0.812 SD (Table 9). Complete crossings made up the remaining 23% of detections, with an overall rate of 0.187/week ± 0.239 SD (Table 9). A total of 96 complete crossings were recorded across five of the seven sites, including gliders and two unidentified mammals (likely gliders) at GP8 (Table 8). GP10 had the highest number of records (n = 53, cc/week = 2.7), followed by GP8 (n = 29, cc/week = 0.56), and GP7 (n = 9, cc/week = 0.11), with records also at GP6 (n = 4, cc/week = 0.08) and GP4 (n = 1, cc/week = 0.01) (Table 8). No complete crossings were recorded at GP9 or GP5 (Table 8).

Squirrel gliders were recorded on eight of the 13 monitored glide poles, with a total of 38 detections (Table 8, Plate 4). The highest number of detections occurred at GP7 west (9 detections), followed by GP4 east (7 detections) and GP7 west (7 detections; Table 8). Of these instances, squirrel gliders were observed crossing the alignment on nine occasions, with the highest number of crossings occurring at median pole GP8 (n = 4, cc/week = 0.08) (Table 8). Complete crossings were also observed at median pole GP6 (n = 2), GP7 in both an easterly (n = 1) and westerly (n = 1) direction, and GP4 once in an easterly direction (Table 8). The weekly

crossing rates for squirrel gliders ranged between 0.02 and 0.8 cc/week across the monitored poles where they were recorded, with an average of 0.021 ± 0.028 cc/week over the entire monitoring period (Table 8).

Feathertail gliders were the most frequently detected species (316 detections in total or 77% of records) and were recorded crossing the alignment on 38 occasions using six glide poles at four sites: GP6 median, GP7 east and west, GP8 median, and GP10 east and west (Table 8). No feathertail gliders were recorded at GP4, GP5 or at GP9 (Table 8). Among the four sites where feathertail gliders were detected, GP10 west had the highest number of detections (n = 260), followed by GP10 east (n = 15) (Table 8). Accurate identification of glides was difficult with still images. Complete crossing rates by feathertail gliders varied between 0.04 (GP6) and 0.94 (GP10) cc/week with an average of 0.129 ± 0.179 SD for the entire period.

Sugar gliders were the least frequently detected species, with a total of 15 detections (Plate 4). They were observed crossing the alignment twice, at GP10 east and GP8 median, with a weekly crossing rate of 0.02 cc/week at both locations (Table 9). Across all sites, the mean crossing rate for sugar gliders was 0.006 ± 0.008 SD (see Table 9). For more detailed information on glide pole detections refer to Appendix C.

The overall rate of complete crossings per week by arboreal fauna (cc/week/site) increased by 90% in 2022 (0.19 ± 0.23 SD) compared to 2021 (0.10 ± 0.11 SD) (Figure 10). This increase was accompanied by a rise in the crossing rate of feathertail gliders, from 0.03 ± 0.8 SD in 2021 to 0.13 ± 0.8 SD in 2022 (Figure 10). No sugar gliders were recorded during 2021 monitoring, but in 2022, they had a crossing rate of 0.01 ± 0.8 SD (Figure 10). The crossing rates of *Petaurus* spp. increased slightly from 0.05 ± 0.09 SD in 2021 to 0.06 ± 0.09 SD in 2022 (Figure 10). On the other hand, the records of complete crossings by squirrel gliders remained relatively stable between 2021 and 2022 monitoring (Figure 10).

Plate 4: Squirrel glider (left) and sugar glider (right) recorded at the same position on glide pole #7. Note the difference in body and tail size and shape.

Table 9: Glide pole detections and weekly crossing rates by fauna in during year two monitoring at sections 3-11. Weekly crossing rate is shown in parenthesis. Mean weekly crossing rates summarised at bottom of table (n = 7). C = complete crossings. IC = incomplete crossings.

Site	Detections	CC	IC	Side	Camera period (weeks)	Feathertail glider		*Petaurus spp.*		Squirrel glider		Sugar glider		Mammal spp.	
						C	IC	C	IC	C	IC	C	IC	C	IC
GP4	16 (0.22)	1 (0.01)	15 (0.2)	East	21.71	-	1 (0.05)	-	1 (0.05)	1 (0.05)	7 (0.32)	-	-	-	-
				West	52.14	-	1 (0.02)	-	-	-	5 (0.1)	-	-	-	-
GP5	2 (0.69)	-	2 (0.09)	East	11.57	-	-	-	-	-	1 (0.09)	-	-	-	-
				West	11.57	-	-	-	1 (0.09)	-	-	-	-	-	-
				Median	0	-	-	-	-	-	-	-	-	-	-
GP6	4 (0.08)	4 (0.08)	-	Median	52.14	2 (0.04)	-	-	-	2 (0.04)	-	-	-	-	-
GP7	78 (0.94)	9 (0.11)	69 (0.83)	East	30.57	4 (0.13)	10 (0.33)	-	11 (0.36)	1 (0.03)	6 (0.2)	-	7 (0.23)	-	-
				West	52.14	3 (0.06)	10 (0.19)	-	11 (0.21)	1 (0.02)	8 (0.15)	-	4 (0.08)	-	2 (0.04)
GP8	29 (0.56)	29 (0.56)	-	Median	52.14	10 (0.19)	-	12 (0.23)	-	4 (0.08)	-	1 (0.02)	-	2 (0.04)	-
GP9	-	-	-	East	0	-	-	-	-	-	-	-	-	-	-
				West	5.14	-	-	-	-	-	-	-	-	-	-
GP10	281 (2.7)	53 (0.51)	228 (2.19)	East	52.14	49 (0.94)	211 (4.05)	1 (0.02)	-	-	1 (0.02)	1 (0.02)	1 (0.02)	-	1 (0.02)
				West	52.14	2 (0.04)	13 (0.25)	-	-	-	-	-	1 (0.02)	-	-
Total	410	96	314	-	393.4	70	246	13	24	9	28	2	13	2	3
Mean weekly rate	0.741	0.187	0.473	-	-	0.129		0.056		0.021		0.006		0.009	
± SD	± 0.927	± 0.239	± 0.812	-	-	±0.179		±0.086		±0.028		±0.008		±0.014	

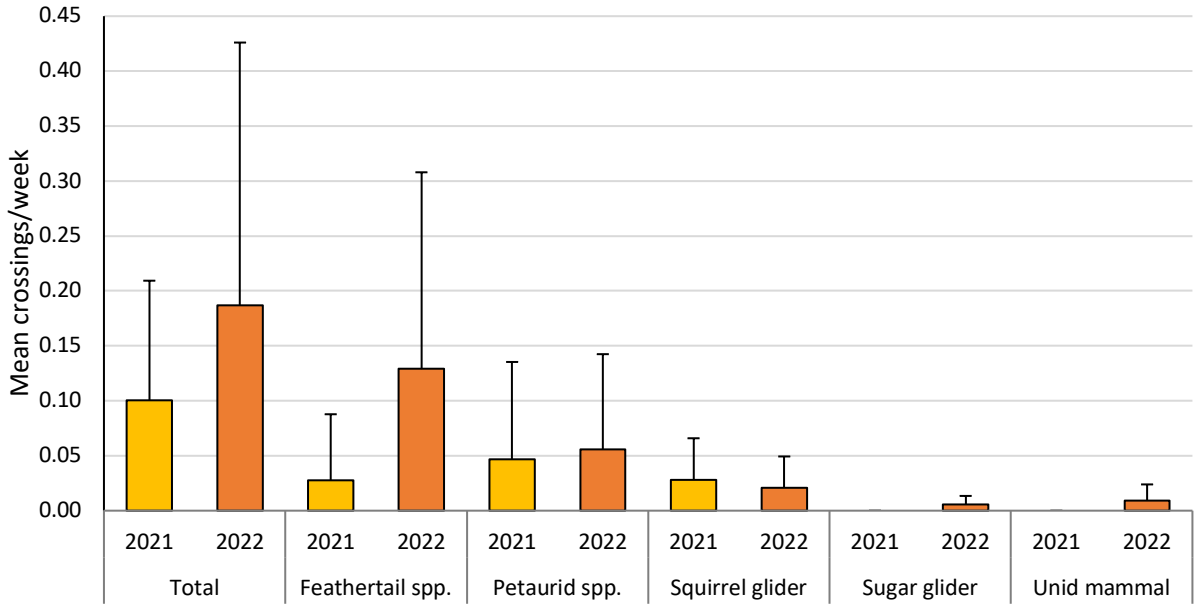


Figure 10: Comparison of mean ± SD weekly glide pole complete crossings for 2021 (year one) and 2022 (Year two) of operational monitoring at sections 3-11, W2B. Unid mammal = Unidentified mammal. Total = total complete crossings.

3.3.3 Vegetated medians

Arboreal mammals were detected on 100 occasions using camera traps in the vegetated median at Tabbimoble (Table 10). The most frequently recorded species were the squirrel glider (44 records), feathertail glider (39 records), and sugar glider (7 records) (Table 10). *Petaurus* spp. (small petaurid) and *Antechinus* spp. were also detected 6 and 4 times, respectively (Table 10). The yellow-bellied glider was not detected.

Between 2021 to 2022, the detection rates of all species decreased, except for *Petaurus* spp. (Figure 11). The detection rate of squirrel gliders decreased marginally from 0.34 ± 0.14 SD in 2021 to 0.25 ± 0.10 SD in 2022. Similarly, the detection rate of feathertail and sugar gliders declined from 0.27 ± 0.10 and 0.066 ± 0.01 in 2021 to 0.22 ± 0.14 and 0.02 ± 0.12 in 2022 (Figure 11).

Table 10: Vegetated median camera detections at Tabbimoble during 2022 monitoring. Tab VM1 = most southern camera, Tab VM 4 = most northern median. Tab = Tabbimoble median.

Camera location	No. Active days	Squirrel glider	Feathertail glider	Sugar glider	Small petaurid	*Antechinus* spp.	Total per cam
Tab VM1	198	20	11	3	2	1	37
Tab VM2	236	17	23	4	2	2	48
Tab VM3	96	7	5		2	1	15
Tab VM4	33	0	0	0	0	0	0
Totals	563	44	39	7	6	4	100

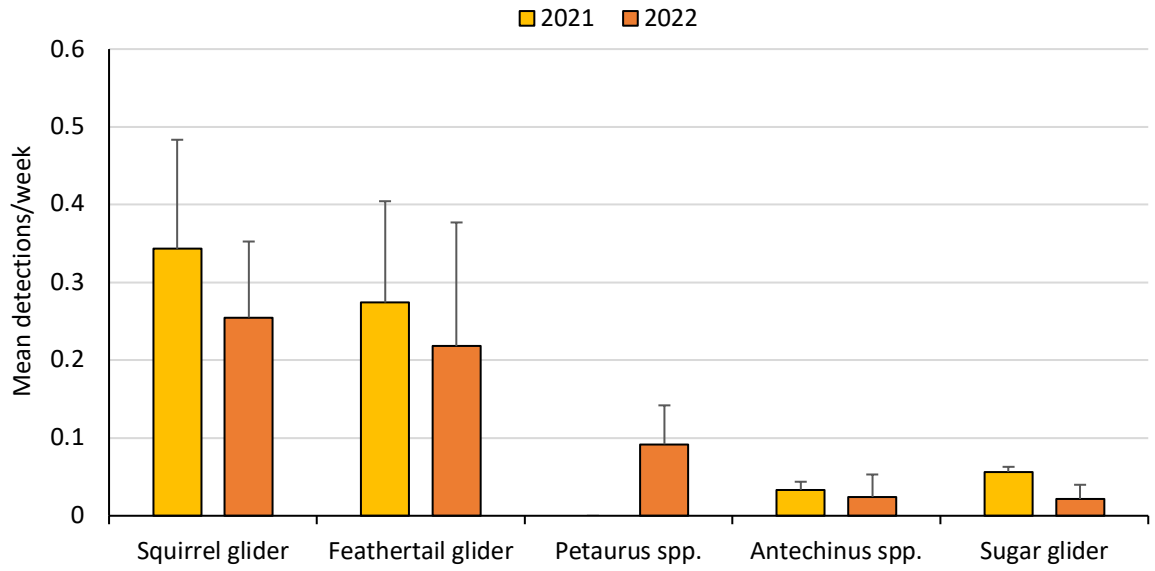


Figure 11: Comparison of mean ± SD fauna detections for 2021 (year one) and 2022 (Year two) camera trap monitoring at the Tabbimoble vegetated median, W2B.

3.4 Road mortality

No threatened gliders or arboreal mammals were recorded during road-kill surveys in 2022.

4. Discussion

Results of the 2022 monitoring year are discussed with reference to the performance indicators described in the TGMP.

4.1 Population monitoring

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

Based on findings from year two operational monitoring, the mean occupancy rate of yellow-bellied gliders in sections 3-11 has undergone a substantial decline from pre-construction levels and was consistent with year one operational monitoring. No yellow-bellied gliders were recorded across all treatments during year two operational monitoring, indicating a 100% decline from pre-construction levels. This trend continued in the first quarter of year three and indicates that a population decline after three consecutive years is likely.

Population monitoring during the first three years of construction indicated a potential minor decline in yellow-bellied glider occupancy at both impact and control sites compared to pre-construction levels. In contrast, reference sites remained stable. Yellow-bellied glider occupancy began to decline during the third to fourth year of construction (2018-20) and a continued substantial decline occurred during operational phase monitoring (2020-2022). A similar pattern of decline in yellow-bellied glider occupancy has been observed at other regional highway monitoring projects, including WC2NH, W2B sections 1 and 2, and Devil's Pulpit (Sandpiper Ecological 2021; Sandpiper Ecological 2022; Geolink 2021).

The yellow-bellied glider is vulnerable to habitat loss and fragmentation due to their specialised diet, low and variable breeding potential, large and exclusive home ranges, variable social system, and short life-span

(Goldingay & Kavanagh 1991, 1993; Goldingay 1992). Possible construction impacts contributing to population decline in S3-11 include reduced availability and quality of foraging and denning habitat, increased population isolation, and noise disruption (Sandpiper 2023). Whilst some localised impact of construction is likely the section 3-11 alignment primarily adjoined the existing highway corridor and/or was situated along the edge of forest and cleared land. The fourth year of construction phase monitoring showed that the population decline was not limited to the immediate vicinity of the alignment (i.e., impact and control sites) but extended 3-5km from the alignment to encompass reference sites. The decline at reference sites continued into the first year of operational monitoring. The findings suggest that while construction may have had a localised impact on yellow-bellied glider occupancy near the alignment, broader landscape factors contributed to the decline recorded towards the end of construction and into operation.

The decline in yellow-bellied glider occupancy rates are attributed to a severe drought that affected a significant portion of New South Wales from late 2018 to the end of 2019 and corresponded with year three of the construction phase in sections 3-11. Severe wildfires in sections 6 and 7 of W2B occurred towards the end of the drought in November and December 2019. The Brushgrove weather station, located centrally in sections 3-11, recorded historically low levels of rainfall during this period, potentially diminishing the availability of food resources for yellow-bellied gliders, which are vulnerable to fluctuations in climatic conditions (Goldingay 1992). While previous studies have shown that droughts do not have a lasting impact on yellow-bellied glider populations in eastern Australia (Henry, 1986), the intensity of the drought, in combination with the occurrence of bushfires, may have exacerbated impacts on glider populations (Lunney 1987; Bilney et al. 2022).

The December 2019 wildfire in sections 6-7 effected 20 out of 48 transects, with several sites experiencing a complete loss of canopy. Severe bushfires, such as occurred in 2019, are likely to have a profound effect on yellow-bellied glider populations through an immediate decline in food and continued scarcity in subsequent months (Smith 1982; Legge *et al.* 2021), reduction in habitat connectivity (Collins *et al.* 2021) and an immediate decline in the number of hollow-bearing trees (Eyre *et al.* 2010), which are critical for the species' survival in eastern Australia (Goldingay 2021).

The latest monitoring data showed no improvement in yellow-bellied glider occupancy rates despite favourable La Nina conditions in years one and two of operation. The absence of a positive population-level response in 2021 and 2022 suggests that the yellow-bellied glider population is at such a low population threshold that it will take considerable time to recover, and recovery may depend on emigration. There does not appear to be a single causal factor that has impacted yellow-bellied gliders and the observed decline in occupancy is attributed to the cumulative effects of clearing, barrier effect, drought, and fire.

Monitoring suggests that the combined effects of construction, drought and wildfire has had a greater and longer-lasting impact on yellow-bellied gliders than other sympatric glider species such as squirrel and sugar gliders. This is likely due to yellow-bellied gliders low fecundity and slower population recovery (Goldingay & Kavanagh 1993).

Squirrel glider occupancy also declined across all treatments towards the end of the construction phase, with a more substantial decline following drought and bushfires in year one of operation (2021) (Figure 8). Squirrel glider populations in the study area were likely impacted by similar mechanisms as discussed for the yellow-bellied glider. However, their higher fecundity has likely enabled populations to recover more quickly. The substantial decline in occupancy recorded in year one of operation was likely due to the combined effects of drought and bushfire on food availability as noted by Sharpe (2004).

Encouragingly, year two operational phase results indicate a recovery in the squirrel glider population, with occupancy rates surpassing pre-construction levels at impact sites. The recovery of the squirrel glider population can be attributed to favourable La Nina weather conditions, which resulted in increased flowering

events that likely improved foraging conditions (Sharpe & Goldingay 1998). Previous studies have shown that successive years of abundant flowering can increase the mean reproductive output of squirrel gliders from 1.8 to 2.7 individuals per year on the north coast of New South Wales (Sharpe & Goldingay 2010). An increase in reproductive output aligns with the La Nina that began immediately post-fire in 2020 and continued through 2022. In addition, several alignment crossings by squirrel gliders were recorded in 2021 and 2022 which would have assisted population recovery on both sides of the alignment. Furthermore, it is important to note that average dispersal ages in eastern Australia are 10-12 months (Quin 1995), further supporting the relationship between glider occupancy, favourable environmental conditions and the timing of the La Nina.

The data indicates that there was no discernible impact of the project on squirrel glider populations at sections 3-11, with trends at impact and control sites closely resembling those at reference sites. In contrast to the yellow-bellied glider, the occupancy rates of squirrel gliders at control sites has remained relatively stable, and even increased at impact sites during the third year of construction phase monitoring (Figure 8). These results suggest that the decline in squirrel glider populations during early operational monitoring was mainly due to the drought and bushfire that occurred in 2018/19.

4.2 Use of rope bridges, glide poles and vegetated median

4.2.1 No evidence of use of arboreal crossing structures and widened medians by threatened gliders post-construction

Aerial crossings

Use of aerial crossings increased substantially in year two of the operational phase. This increase is likely due to improved camera setup and increased abundance of small petaurid gliders. In 2022, squirrel glider, sugar glider, feathertail glider, brush-tailed phascogale and short-eared brushtail possum were recorded using aerial crossings in sections 3-11 of the W2B upgrade. At rope bridges the combined mean weekly crossing rate of 0.07 ± 0.09 SD was double that of year one operational phase, and the result is primarily due to frequent crossings by feathertail gliders at RB9 and 10. *Petaurus* spp. were also recorded at RB5 and RB10, and an unidentified mammal was recorded at RB5, RB10, and RB12.

Squirrel gliders were recorded making two complete crossings at RB9 in year two, with a mean weekly crossing rate of 0.006 ± 0.01 SD recorded. Complete crossing rates by squirrel glider in sections 3-11 were lower than recorded in sections 1 and 2 of W2B and at the Hume Highway. Mean crossings in sections one and two ranged from 0.05 to 0.22/week over the three years of monitoring (Sandpiper 2022) and rates of up to 5.9 crossings/week were recorded on the Hume Highway (Soanes *et al.* 2015). The low number of complete crossings in sections 3-11 is partly due to the use of pictures as opposed to video which is easier to confirm movement intent. Limited wireless connectivity in sections 3-11 has meant that only pictures can be transmitted.

The low occupancy rate of squirrel gliders in year one of operation (see Figure 8) also likely contributed to lower-than-expected crossings. Whilst squirrel glider occupancy increased in year two of operation a lag between occupancy and crossings is expected due to the time it takes for juveniles to become independent and disperse, which may be at 12-18 months old (NSW Scientific Committee 2008). Given the present trend in occupancy use of crossing structures should continue to increase in year three of the operational phase. Crossings in sections 3-11 are comparable to that reported for the Glenugie Pacific Highway upgrade (i.e., 0.01 – 0.14 visits/week, Sandpiper Ecological 2017). Differences in habitat use may explain differences in the frequency of rope bridge use between the Hume and Pacific highways. Along the Hume Highway, gliders rely on roadside vegetation, which means crossings likely present as nightly foraging. Conversely, the W2B upgrade passes through large sections of forest, and crossings are likely to be dispersal or breeding related.

There are no confirmed records of yellow-bellied gliders using rope bridges on the Pacific Highway with the only confirmed interaction being a single record of an incomplete crossing at Devils Pulpit in 2018 (Geolink 2019). Brush-tailed phascogale was recorded making a complete crossing at RB5, which is consistent with results from monitoring on the nearby Glenugie upgrade (Sandpiper 2015).

Glide poles showed continued use by squirrel gliders, feathertail gliders and sugar gliders during the 2022 monitoring year. Visitation was substantially higher than for 2021, largely due to frequent visits by feathertail glider. Improved environmental conditions leading to high juvenile recruitment and dispersal of individuals is the likely reason for increased glide poles use which broadly tracks the population trends of squirrel gliders in 2021 and 2022.

The average weekly rate of squirrel glider crossings in sections 3-11 in 2022 was 0.021, which is lower than the rates recorded in sections 1 and 2 in 2020 and 2021 (0.08 and 0.06, respectively) (Sandpiper Ecological 2021). Furthermore, this rate is considerably lower than the rates reported for squirrel gliders on the Hume Highway (2.6 crossings/week, Soanes *et al.* 2015) and the Sapphire to Woolgoolga (S2W) Pacific Highway upgrade (0.23 crossings/week, Sandpiper Ecological 2018b). Notably, it is important to acknowledge that previous studies at S2W and the Hume highway may have recorded a complete crossing based on detections on roadside poles, which may not necessarily indicate road crossings but rather movements along the forest edge (Goldingay *et al.* 2019). Therefore, the results from sections 3-11 likely present a conservative estimate of glider crossings.

The camera performance and glider activity may have been limited by other factors as well. For instance, cloudy days could have reduced the solar charging of aerial cameras at some sites, and rainy nights could have affected glider behaviour. Moreover, heavy rain caused water damage to some cameras. Increased detections after the August maintenance inspection suggest that the camera setup was improved, although ongoing maintenance is warranted to improve functionality.

Vegetated medians

The Tabbimoble vegetated median continued to be used by squirrel glider, sugar glider, feathertail glider, and *Antechinus* spp. Results are consistent with previous studies on squirrel glider and sugar glider use of vegetated highway medians (Taylor & Rohweder 2013; Sandpiper Ecological 2018b; van der Ree et al. 2010) and squirrel gliders using land-bridges with glide poles to cross a dual carriageway (Taylor & Goldingay 2012). However, despite several previous studies confirming complete crossings, Geolink (2021) discovered that radio-tracked squirrel gliders frequently accessed a vegetated median at Devils Pulpit across one carriageway only with no radio-tracked individuals making a complete crossing. While there are several possible explanations for this outcome, it indicates that the mere presence of gliders in the median is not sufficient evidence of complete crossings.

The vegetated median at Tabbimoble covers a forested area of 10.38ha and has the potential to support resident squirrel and sugar gliders, which typically have home ranges of about 6ha on the NSW north coast (Sharpe & Goldingay 2007). Squirrel gliders were observed making two complete crossings at RB9, which intersects and is connected with the Tabbimoble median. A second (unmonitored) rope bridge, divided into two sections, is located 100m north of RB9 with a central pole in the Tabbimoble median. This bridge is likely to also facilitate crossing opportunities for squirrel gliders from the roadside or within the median across the alignment. The available data indicates that the median at a minimum is serving as a stepping-stone for individual gliders.

4.3 Road mortality

4.3.1 Higher mortality rate at impact sites or no significant difference in mortality rates for threatened gliders between impact and control sites.

No target species of glider were recorded during road mortality surveys in sections 3-11 of W2B during 2022.

4.3.2 High number of incidental records of threatened glider mortality away from crossing structures.

No incidental records of glider road mortality were recorded in 2022.

5. Recommendations

Table 11: Recommendations of the year six threatened glider population and crossing structure surveys.

Number	Recommendation	TfNSW response
1	Continue population and crossing structure monitoring in year three of operation.	Agreed

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Appendix A – Population survey effort, weather and fauna detections

Table A1: Survey effort, weather conditions and fauna detections Q1 2022 threatened glider population monitoring. Msb = wind moves small branches; MLB = wind moves large branches. Ns = not surveyed. SqG = squirrel glider; SuG = sugar glider; YbG = yellow-bellied glider; GG = greater glider; FtG = feathertail glider; BtPhas = brush-tailed phascogale; CBtP = common brushtail possum; SeBtP = short-eared brushtail possum; CRP = common ringtail possum; TF = tawny frogmouth; PO = powerful owl; SO = sooty owl; MO = masked owl; BbO = boobook owl; ON = owlet nightjar; WtN = white-throated nightjar; 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.

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TabLB-ie	8/03/2022	5	FM	23	95	0/8	Nil	Nil	32	2342	0012	Nil	Nil	Nil
	23/03/2022	4	LA	23.4	89	8/8	Nil	Nil	70.9	2143	2213	FtG SG 320s5w	Nil	Nil
TabLB-iw													**Wet**	
													Gate locked not TfNSW	
TabNR-rn	8/03/2022	6	FM/LA	23	95	0/8	Nil	Nil	32	0017	0032	Nil	Nil	scribbly gum
	23/03/2022	4	AE	22	88	8/8	nil	nil	70.9	22:40	23:10	nightjar hc	nil	nil
TabNR-rs	8/03/2022	5	LA	23	95	0/8	Nil	Nil	32	2345	0015	FTG SM 100n20e, Ftg SM 290n10w	**wallum froglet calling**	scribbly gum, M. quin
	23/03/2022	3	AE	23	85	8/8	nil	nil	70.9	21:00	22:30	nightjar hc and owl spp. hc	nil	Blackbutt
TabVM-ie	8/03/2022	7	FM	23	95	0/8	Nil	Nil	32	0045	0115	Nil	Nil	Nil
	23/03/2022	5	LA	23.3	83	8/8	Nil	Nil	70.9	2216	2246	**Pet spp. 230s20w**	Nil	Nil
TabVM-iw													**Wet**	

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
													Gate locked not TfNSW	
TabN-ie	8/03/2022	7	LA	23	95	0/8	Nil	Nil	32	0041	0112	Nil	Nil	Nil
	23/03/2022	5	AE	22	88	8/8	nil	nil	70.9	22:25	22:55	nil	nil	nil
TabN-iw	8/03/2022	5	LA/FM	23	95	0/8	msb	Nil	32	2321	2336	**Pet spp. SG 400n2w (prob SqG)**	Nil	Nil
	23/03/2022	3	LA	23.4	89	8/8	Nil	Nil	70.9	2049	2119	TF	Nil	Callistemon salignus, Melaleuca
TabN-ce	5/04/2022	4	AE	22	89	2	nil	nil	30%	8:50	9:20	**SqG 200n on transect se**	Nil	Nil
	23/03/2022	6	LA	23.3	83	8/8	MsB	Nil	70.9	2255	2324	Nil	Nil	Blackbutt, melaleuca
TabN-cw	8/03/2022	3	LA	24	94	0/8	Nil	Nil	32	2152	2222	Rtp se 30n20w	Nil	Blackbutt
	23/03/2022	2	AE	23	85	8/8	ml	nil	70.9	20:10	20:40	nil	nil	Blackbutt
TabDD-rn	8/03/2022	4	LA	24	94	0/8	Nil	Nil	32	2239	2309	FTG SG 300n20e	Nil	Blackbutt
	23/03/2022	1	AE	23	85	8/8	ml	nil	70.9	19:25	19:55	nil	nil	Blackbutt
TabDD-rs	8/03/2022	4	FM	24	94	0/8	Nil	Nil	32	2245	2315	Nil	Nil	Nil
	23/03/2022	2	LA	23.4	89	8/8	Nil	Nil	70.9	2012	2042	FtG SG 0s25e	Nil	Blackbutt, Scribbly gum corymbia
TabM-ce	5/04/2022	4	LA	22	89	2/8	nil	nil	30%	2027	2103	Sug se 150n30e, FtG sm 470n10w	**Nil**	Corymbia
	23/03/2022	7	LA	23.3	83	8/8	MsB	Nil	70.9	2328	2358	Nil	Nil	Blackbutt, spotted gum

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TabM-cw	8/03/2022	3	FM	23	95	0/8	Nil	Nil	32	2155	2225	Nil	Nil	Blackbutt
	23/03/2022	1	LA	23.4	89	4/8	Nil	Nil	70.9	1931	2031	FtG SG 0s25e	Nil	Blackbutt, Scribbly gum corymbia
TabM-ie	8/03/2022	8	LA	23	95	0/8	Nil	Nil	32	0137	0207	**SqG SG 80n5w**, ONJ	NiL	scribbly gum, melaleuca quin., red bloodwood?
	23/03/2022	6	AE	22	88	4/8	nil	nil	70.9	23:05	23:35	nil	nil	Spotted gum
TabM-iw	8/03/2022	2	LA	24	94	0/8	Nil	Nil	32	2103	2133	Nil	Nil	Nil
	23/03/2022	8	AE	22	88	4/8	nil	nil	70.9	00:45	1:15	nil	nil	nil
TabS-ie	8/03/2022	8	FM	23	95	0/8	Nil	Nil	32	0140	0220	FtG sm 280n5w	Nil	Nil
	23/03/2022	7	AE	22	88	4/8	nil	nil	70.9	23:55	0:25	SuG hc start of transect 10m SE	nil	wattle
TabS-iw	8/03/2022	2	FM	23	95	0/8	Nil	Nil	32	2104	2134	Sug 5n5w	Nil	Blackbutt
	23/03/2022	9	LA	23.3	83	8/8	MsB	Very light	70.9	0013	0043	FtG 500n10e	Nil	Blackbutt, spotted gum
TabS-ce	8/03/2022	9	FM	23	95	0/8	Nil	Nil	32	0230	0300	Nil	Nil	Melaleuca quin
	5/04/2022	5	AE	22	89	2	nil	nil	30%	2144	2216	Nil		Nil
TabS-cw	8/03/2022	1	LA	24	94	0/8	Nil	Nil	32	2003	2033	Nil	Nil	Nil

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
	5/04/2022	3	LA	22	89	2/8	nil	nil	30%	1913	1943	CBTP se 5n15w	**Nil**	Spotted gum
MOR-ie	5/04/2022	1	LA	22	89	2/8	nil	nil	30%	1805	1835		**Nil**	Nil
	12/04/2022	3	Ae/LA	22.7	72	2/8	RL	Nil	67	1922	1937	GHFF	Nil	Blackbutt, corymbia
MOR-iw	8/03/2022	9	LA	23	95	0/8	Nil	Nil	32	227	0257	nil	NiL	scribbly gum, melaleuca quin., red bloodwood?
	5/04/2022	5	LA	22	89	2/8	nil	nil	30%	2147	2217	GHFF	**Nil**	Blackbutt
MOR-ce	5/04/2022	1	AE	22	89	2	nil	nil	30%	6:05	6:35	Onj hc, grey haeded flying fox sm	**Nil**	stringybark
	12/04/2022	4	Ae/LA	22.7	72	2/8	RL	Nil	67	2001	1916	GHFf	Nil	Blackbutt, corymbia
MOR-cw	8/03/2022	1	FM	23	95	0/8	Nil	Nil	32	2000	2030	Nil	Nil	Blackbutt
	5/04/2022	3	AE	22	83	2			30%	19:50	20:20	flying fox hc	nil	nil
MOR-rn	5/04/2022	2	LA	22	89	2/8	nil	nil	30%	1805	1835	FtG sug 150n10w, Sug HC 310n60e, **GG se 200n40e**	**Nil**	Nil
	12/04/2022	2	Ae/LA	22.7	72	2/8	RL	Nil	67	1857	1915	SuG HC 470n60w	Nil	Nil
MOR-rs	5/04/2022	2	AE	22	89	2	nil	nil	30%	6:55	7:25	sug hc 100s 20e	**Nil**	Blackbutt spotted gum
	12/04/2022	1	Ae/LA	22.7	72	2/8	Nil	Nil	67	18:26	1842	SuG HC 20n40w, **small pet SG 320n** 15w. Owl spp.	Nil	Nil

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TucN-ce	7/03/2022	5	LA	18.7	91	8/8	Nil	Nil	2%	2253	2323	Nil	Nil	Nil
	22/03/2022	3	AE	18.7	93	0/0	Nil	Nil	80.4%	21:18	21:50	nil	nil	nil
TucN-cw	7/03/2022	5	AE	18.7	91	8	nil	Nil	2%	10:50	11:30	Nil	Nil	Nil
	22/03/2022	3	LA	20.2	87	0/0	Nil	Nil	80.4%	2122	2152	CBTP 30e40s	**Recent clearing**	Nil
TucM-ce	7/03/2022	4	AE/LA	20	100	8	nil	light rain	2%	2227	2243	Nil	Nil	Nil
	22/03/2022	2	LA	20.2	87	0/0	Nil	Nil	80.4%	2039	2059	Nil	Nil	Nil
TucM-cw	7/03/2022	3	AE/LA	20	100	8	nil	light rain	2%	2205	2220	Nil	Nil	melaleuca quin
	22/03/2022	2	AE	18.7	93	0/0	Nil	Nil	80.4%	20:35	21:05	nil	nil	nil
Tuc-r-n	12/04/2022	5	LA	19.7	89	2/8	Nil	Nil	67	2108	2148	Nil	Nil	Nil
	22/03/2022	1	AE	20.2	87	0/0	Nil	Nil	80.4%	19:45	20:15	sug HC 250n15e	Nil	Blackbutt
Tuc-r-s	22/03/2022	1	LA	20.2	87	0/0	Nil	Nil	80.4%	1950	2020	Nil	Nil	Spotted gum
	12/04/2022	5	AE	19.7	89	2/8	Nil	Nil	67	2108	2148	Nil	Nil	Nil
TucS-ce	7/03/2022	6	LA	18.7	91	8/8	Nil	Nil	2%	2333	1203	Sug Se 25s5e, Cbtp 240s15e	Nil	Nil
	22/03/2022	4	AE	18.7	93	0/0	Nil	Nil	80.4%	22:15	22:45	nil	nil	nil
TucS-cw	7/03/2022	6	AE	18.7	91	8/8	nil	nil	2%	23:33	12:03	Nil	Nil	stringy bark spp.
	22/03/2022	4	LA	20.2	87	0/0	Nil	Nil	80.4%	2208	2238	CBTP se 180s15w	Nil	Nil
TucN-ie	22/03/2022	5	LA	18.7	93	0/0	Nil	Nil	80.4%	2255	2325	FtG sm 130n20e, **SqG se 420n15e**	Nil	Nil
	5/04/2022	2	FM	22	86	0/0	RL	Nil	30	1850	1920	Sug se 350n5e	Male adult	Nil

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TucN-iw	5/04/2022	1	FM	22	86	0/0	RL	Nil	30	1925	1955	Nil	Nil	Nil
	22/03/2022	5	AE	18.7	93	0/0	Nil	Nil	80.4%	23:00	23:30	nil	nil	nil
TucS-ie	7/03/2022	2	LA	20	100	8	nil	light rain	2%	2059	2129	Nil	Nil	nil
	22/03/2022	6	AE	18.7	93	0/0	Nil	Nil	80.4%	23:55	00:30	SE 100s from start ComBTP SEBTP	both in the same tree	Blackbutt
TucS-iw	7/03/2022	2	AE	20	100	8	nil	light rain	2%	2059	2129	Nil	Nil	nil
	22/03/2022	6	LA	18.7	93	0/0	Nil	Nil	80.4%	23:55	00:30	Nil	Nil	Blackbutt
GN-ce	7/03/2022	7	LA	18.7	91	0/8	Nil	Nil	2%	0022	0052	**GG se 475s35e**	Nil	Spotted gum, blackbutt
	22/03/2022	7	LA	18.7	93	0/0	Nil	Nil	80.4%	0042	0112	CBTP se 180s15e	Nil	Blackbutt
GN-cw	7/03/2022	7	AE	18.7	91	0/8	Nil	Nil	2%	0023	0054	Nil	Nil	Spotted gum, blackbutt
	22/03/2022	8	LA	18.7	93	0/0	Nil	Nil	80.4%	115	0145	CBTP se 20e10n, FtG sm 390s5w	Nil	Blackbutt
GN-ie	7/03/2022	8	AE	18.7	91	8/8	Nil	showers	2%	0105	0135	Nil	Nil	Spotted gum, blackbutt
	22/03/2022	8	AE	18.7	93	0/0	Nil	Nil	80.4%	1:15	1:45	nil	nil	nil
GN-iw	7/03/2022	8	LA	18.7	91	8/8	Nil	showers	2%	0105	0135	Ftg sg140s15w	Nil	Spotted gum, blackbutt
	22/03/2022	7	AE	18.7	93	0/0	Nil	Nil	80.4%	00:45	00:15	nil	nil	nil
GS-ie	7/03/2022	9	AE	18.7	91	8/8	Nil	Nil	2%	0140	210	**SqG sm30s10e**	Nil	Spotted gum

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
	5/04/2022	3	FM	22	90	0/0	Nil	Nil	30	2030	2100	CbtP se 250n25e	Nil	Spotted gum
GS-iw	7/03/2022	9	LA	18.7	91	8/8	Nil	Nil	2%	0140	210	Nil	Nil	Spotted gum
	5/04/2022	4	FM	22	90	0/0	Nil	Nil	30	2105	2135	**SqG sm 100s5e**	Female adult	Spotted gum
GS-ce	7/03/2022	1	AE LA	20	89	4/8	Nil	Nil	2%	2025	2040	Nil	Nil	Nil
	5/04/2022	5	FM	22	92	6/8	Nil	Nil	30	2210	2240	TF	Nil	Nil
GS-cw	7/03/2022	1	AE LA	20	89	4/8	Nil	Nil	2%	2025	2040	Nil	Nil	Nil
	5/04/2022	5	FM	22	92	6/8	Nil	Nil	30	2255	2325	TF	Nil	Nil
G-r-n	22/03/2022	9	LA AE	18.7	93	0/0	Nil	Nil	80.4%	0210	0225	GHFF	Nil	Blackbutt
	5/04/2022	6	LA AE	22	89	8/8	Nil	Nil	30%	2317	2333	FTG sm 40s20e	Nil	Blackbutt
G-r-s	22/03/2022	10	LA AE	18.7	93	0/0	Nil	Nil	80.4%	0210	0225	GHFF	Nil	Blackbutt
	5/04/2022	7	LA AE	22	89	8/8	Nil	Nil	30%	2343	2358	Nil	Nil	Blackbutt

able A2: Survey effort, weather conditions and fauna detections Q2 2022 threatened glider population monitoring. Msb = wind moves small branches; MLB = wind moves large branches. Ns = not surveyed. SqG = squirrel glider; SuG = sugar glider; YbG = yellow-bellied glider; GG = greater glider; FtG = feathertail glider; BtPhas = brush-tailed phascogale; CBtP = common brushtail possum; SeBtP = short-eared brushtail possum; CRP = common ringtail possum; TF = tawny frogmouth; PO = powerful owl; SO = sooty owl; MO = masked owl; BbO = boobook owl; ON = owlet nightjar; WtN = white-throated nightjar; 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.

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TabLB-ie	30/05/2022	6	LA	15	85	8/8	MLB	Light rain		2121	2151	Nil	Nil	Nil
	1/06/2021	3	NM	15.4	39	6	Msb	Nil	4%	1935	2005	Nil	Nil	Nil
TabLB-iw	30/05/2022	5	NM	13.9	91	5	MLB	Sprinkle	New moon	2040	2110	Nil	**Nil**	Nil
	1/06/2022	3	LA	15.5	38	0/8	MSB	Nil	4%	1922	1952	Nil	**Nil**	Nil
TabNR-rn	6/06/2022	1	LA	16.4	49	0/8	Nil	Nil	39%	1802	1832		Nil	Nil
	2/06/2022	7	NM	13.3	58	2	Nil	Nil	8%	2205	2235	Nil	Nil	Nil
TabNR-rs	2/06/2022	6	LA	13.8	57	2	RL	Nil	8%	2132	1002	Small petaurid SE 70s30w	**Nil**	Nil
	6/06/2022	1	NM	16.6	47	6	Rl	Nil	39%	1800	1830	Nil	Nil	Nil
TabVM-ie	30/05/2022	6	NM	13.9	91	3	MLB	Nil	New moon	2120	2150	Nil	Nil	Nil
	1/06/2022	5	LA	15.5	38	0/8	RL	Nil	4%	2031	2101	**Nil**	Nil	Nil
TabVM-iw													**No access - boggy/gate**	
													No access - boggy/gate	
TabN-ie	30/05/2022	7	LA	13.2	85	0/8	Nil	Nil	New moon	2203	2233	Small pet. SG 90s0e	Nil	Nil
	1/06/2021	4	NM	15.4	39	6	Msb	Nil	4%	2010	2040	Nil	Nil	Nil
TabN-iw	30/05/2022	5	LA	15	85	8/8	MLB	Light rain	New moon	2045	2115	**Nil**	Nil	Nil
	1/06/2022	2	LA	15.5	38	0/8	MSB	Nil	4%	1842	1912	Nil	Nil	Nil
TabN-ce	1/06/2022	4	LA	15.5	38	0/8	RL	Nil	4%	1957	2027	**Nil**	Nil	Nil
	6/06/2022	2	NM/LA	16.6	47	6	Rl	Nil	39%	1848	1903	Nil	Nil	Nil
TabN-cw	30/05/2022	3	LA	15	85	4/8	MSB	Nil	New moon	1920	1950	Nil	Nil	Nil
	1/06/2021	2	NM	15.4	39	6	Msb	Nil	4%	1854	1924	Nil	Nil	Nil
TabDD-rn	30/05/2022	4	NM	13.9	91	5	MLB	Nil	New moon	2000	2030	Nil	Nil	Nil

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
	1/06/2022	1	LA	15.5	38	0/8	RL	Nil	4%	1754	1824	Nil	Nil	Nil
TabDD-rs	30/05/2022	4	LA	15	85	4/8	MLB	Nil	New moon	2001	2031	Nil	Nil	Nil
	1/06/2022	1	NM	15.4	39	7	MSB	Nil	4%	1754	1824	Nil	Nil	Nil
TabM-ce	30/05/2022	8	NM	12.7	78	3	MSB	Nil	New moon	2240	2310	Nil	**Nil**	Nil
	1/06/2021	5	NM	13.4	45	6	RL	Nil	4%	2055	2125	SqG,hm,425n10e	Nil	Nil
TabM-cw	30/05/2022	2	LA	15	85	4/8	MSB	Nil	New moon	1842	1912	Nil	Nil	Nil
	2/06/2022	5	LA	13.8	57	2	RL	Nil	8%	2051	2121	CBTP Se 120s40w	Nil	Nil
TabM-ie	30/05/2022	7	NM	12.7	78	3	MSB	Nil	New moon	2202	2232	Nil	Nil	Nil
	1/06/2022	6	LA	12.5	47	8/8	RL	Nil	4%	2106	2136	SqG HM 70n10e, SqG/SUG SE 390n5w	Nil	Spotted gum
TabM-iw	30/05/2022	3	NM	13.8	91	5	MLB	Nil	New moon	1925	1955	Nil	Nil	Nil
	2/06/2021	6	NM	13.8	57	2	RL	Nil	8%	2125	2155	Nil	Nil	Nil
TabS-ie	30/05/2022	8	LA	13.2	85	0/8	Nil	Nil	New moon	2242	2312	Nil	Nil	Nil
	1/06/2022	6	NM	12.5	46	4	RL	Nil	4%	2140	2210	Nil	Nil	Nil
TabS-iw	30/05/2022	2	NM	16.7	77	5	MLB	Nil	New moon	1845	1915	Nil	Nil	Nil
	6/06/2022		LA/NM	16.4	49	0/8	Nil	Nil	39%	1740	1755	Nil	Nil	Nil
TabS-ce	30/05/2022	9	NM	12.7	78	3	MSB	Nil	New moon	2324	2354	Nil	Nil	Nil
	1/06/2022	7	LA	12.5	47	8/8	RL	Nil	4%	2145	2215	Nil	Nil	Nil
TabS-cw	30/05/2022	1	LA	15	85	8/8	RL	Light	New moon	18:00	18:30	Nil	Nil	Smooth bark spp.
	2/06/2021	5	NM	13.8	57	2	RL	Nil	8%	2049	2119	Nil	**Nil**	Nil
MOR-ie													**No access - boggy**	
													No access - boggy	
MOR-iw	30/05/2022	9	LA	13.2	85	0/8	Nil	Nil	New moon	2326	2356	Nil	Nil	Nil
	1/06/2022	7	NM	11.9	49	4	RL	Nil	4%	2220	2250	Nil	**Nil**	Nil
MOR-ce	1/06/2022		NM/LA	12.2	47	5	Rl	Nil	4%	2316	1331	Nil	**Nil**	Nil

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
	6/06/2021	5	NM/LA	13.7	63	5	Rl	Nil	39%	2032	2047	SuG,se,312n0	Nil	Nil
MOR-cw	30/05/2022	1	NM	16.7	77	5	Msb	Spit	New moon	1800	1830	Nil	Nil	Nil
	1/06/2022	8	LA	12.5	47	8/8	Nil	Nil	4%	2221	2251	Nil	Nil	Nil
MOR-rn	1/06/2022		NM/LA	12.2	47	5	Rl	Nil	4%	2347	0002	Nil	**N**	Nil
	6/06/2022	2	LA/NM	16.4	49	0/8	Nil	Nil	39%	1945	2000		Nil	Nil
MOR-rs	1/06/2021		Nm/LA	12.2	47	5	Rl	Nil	0.04	2320	2335	SuG,hc,40n50w, OnJ		
	6/06/2021	4	NM/LA	13.7	63	5	Rl	Nil	39%	2007	2022	GHff	Nil	Nil
TucN-ce	2/06/2022	4	NM	12.5	86	2	Rl	Nil	8%	1940	2010	Nil	N	Nil
	6/06/2022	6	LA	13.4	45	0/8	RL	Nil	39%	2311	2341	SqG 305e15s, Possible YbG HC 290e150s	unlikely	Nil
TucN-cw	2/06/2022	4	LA	12.5	86	2	Nil	Nil	8%	1945	2015	TF	Nil	Nil
	6/06/2022	9	NM	12	56	5	Rl	Nil	39%	2310	2340	Nil	**Nil**	Nil
TucM-ce	2/06/2022	3	LA	12.5	86	2	Nil	Nil	8%	1902	1932	Nil	Nil	Nil
	6/06/2022	5	LA	13.4	45	0/8	RL	Nil	39%	2232	2303	Nil	Nil	Nil
TucM-cw	2/06/2022	3	NM	12.5	86	2	Nil	Nil	8%	1858	1928	Nil	Nil	Nil
	6/06/2022	8	NM	12	56	5	Nil	Nil	39%	2234	2304	Nil	Nil	Nil
Tuc-r-n	2/06/2022	2	NM/LA	12.5	86	2	Nil	Nil	8%	1830	1845	TF,si	Nil	Nil
	6/06/2022	7	NM/LA	12	56	5	Nil	Nil	39%	1825	1840	Nil	Nil	Nil
Tuc-r-s	2/06/2022	1	NM/LA	12.5	86	2	Nil	Nil	8%	1800	1815	**SqG**,se,FtG,sm,0m2m n in same tree		FtG in flowering blackbutt
	6/06/2022	6	NM/LA	12	56	5	Nil	Nil	39%	2140	2155	Nil	Nil	Nil
TucS-ce	31/05/2022	7	NM	15.9	50%	4	Msb	Nil	New moon	2225	2255	Nil	Nil	Nil
	5/06/2022	1	LA	13.8	63	8/8	RL	Nil	30%	1800	1830	Nil	Nil	Nil
TucS-cw	31/05/2022	7	LA	16.7	85	4/8	MSB	Nil	New moon	2222	2252	CBTP SE 300s0e, SeBP SE 420s10w	Nil	Nil
	5/06/2022	1	NM	12.8	92	7	Msb	Nil	30%	1800	1830	Nil	Nil	Nil
TucN-ie	31/05/2022	6	LA	16.7	85	4/8	MSB	Nil	New moon	2138	2208	CBTP SE 240n30e	Nil	Nil
	5/06/2022	3	NM	12.8	92	5	MLB	Nil	30%	1930	2000	Nil	Nil	Nil

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TucN-iw	31/05/2022	6	NM	15.9	50%	7	Msb	Nil	New moon	2145	2215	**Pet spp,** se, 130n20w. FtG, se, 365n,25e	Nil	FtG in flowering ironbark
	5/06/2022	3	LA	13.8	63	8/8	RL	Nil	30%	1932	2002	CBTP 380n30w	Nil	Nil
TucS-ie	31/05/2022	5	NM	16.1	50%	7	Msb	Nil	New moon	2058	2138	Nil	Nil	Nil
	5/06/2022	2	NM	12.8	92	7	Msb	Nil	30%	1852	1922	Nil	Nil	Nil
TucS-iw	31/05/2022	5	LA	16.7	85	4/8	MSB	Nil	New moon	2053	2123	Nil	Nil	Nil
	5/06/2022	2	LA	13.8	63	8/8	RL	Nil	30%	1852	1922	Small petaurid x2 SE 50n10w	Heads sticking out of hollows	Blackbutt
GN-ce	31/05/2022	4	LA	16.7	85	4/8	MSB	Nil	New moon	2006	2036	**Nil**	Nil	Nil
	5/06/2022	4	LA	13.8	63	8/8	RL	Nil	30%	2031	2101	Nil	Nil	Nil
GN-cw	31/05/2022	4	NM	16.1	50%	7	Msb	Nil	New moon	1950	2020	Nil	Nil	Nil
	5/06/2022	4	NM	10.9	96	4	Rl	Nil	30%	2033	2103	Nil	Nil	Nil
GN-ie	31/05/2022	3	LA	16.7	85	4/8	MSB	Nil	New moon	1932	2002	GG SE 370s80e	Nil	Nil
	5/06/2022	5	NM	11	94	4	Rl	Nil	30%	2110	2140	Nil	Nil	Nil
GN-iw	31/05/2022	3	NM	16.1	50%	7	Msb	Nil	New moon	1910	1930	Nil	Nil	Nil
	5/06/2022	5	LA	13.8	63	0/8	Nil	Nil	30%	2104	2134	Nil	Nil	Nil
GS-ie	31/05/2022	2	LA	16.7	85	4/8	MSB	Nil	New moon	1841	1911	**Nil**	Nil	Nil
	5/06/2022	6	NM	11	94	4	Rl	Nil	30%	2150	2220	Nil	Nil	Nil
GS-iw	31/05/2022	2	NM	16.2	46	2	MSB	Nil	New moon	1830	1900	Nil	Nil	Nil
	5/06/2022	6	LA	13.8	63	0/8	Nil	Nil	30%	2150	2220	**Nil**	Nil	Nil
GS-ce	31/05/2022	1	LA	16.7	85	8/8	RL	Nil	New moon	18:00	18:30	Nil	Nil	Nil
	5/06/2022	7	LA	13.8	63	0/8	Nil	Nil	30%	2233	1103	Nil	Nil	Nil
GS-cw	31/05/2022	1	NM	16.2	0.46	2	Msb	Nil	New moon	1750	1820	Nil	Nil	Nil
	5/06/2022	7	NM	11	94	4	Rl	Nil	30%	2230	2300		Nil	Nil
G-r-n													No access - boggy	

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
													No access - boggy	
G-r-s													No access - boggy	
													No access - boggy	

Table A3: Survey effort, weather conditions and fauna detections Q3 2022 threatened glider population monitoring. Msb = wind moves small branches; MLB = wind moves large branches. Ns = not surveyed. SqG = squirrel glider; SuG = sugar glider; YbG = yellow-bellied glider; GG = greater glider; FtG = feathertail glider; BtPhas = brush-tailed phascogale; CBtP = common brushtail possum; SeBtP = short-eared brushtail possum; CRP = common ringtail possum; TF = tawny frogmouth; PO = powerful owl; SO = sooty owl; MO = masked owl; BbO = boobook owl; ON = owlet nightjar; WtN = white-throated nightjar; 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.

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TabLB-ie	20/09/2022	4	DR	17	82	Nil	Nil	Nil	Nil	2048	2120	2 x FtG, sm, se		Stringybark
	26/9/22	5	LA	18.4	93	6/8	Nil	Nil	0%	2125	2155	Nil	Nil	Nil
TabLB-iw	4/10/22	2	DR	16	75	Nil	Nil	Nil	50	2018	2042	FtG, sm		
	26/9/22	4	LA	18.3	87	6/8	Nil	Nil	0%	2043	2117	Nil	Nil	Nil
TabNR-rn	20/09/2022	5	DR	17	82	Nil	RL	Nil	Nil	2130	2204	**SqG se, MO hc, ONJ hc**		
	26/9/22	6	LA/FM	18.4	93	6/8	Nil	Nil	0%	2209	2224	Masked owl HC	Nil	Melaleuca stypheloides
TabNR-rs	20/9/22	5	LA	18.1	74	0/8	Nil	RL	30.9%	2118	2148	Nil	Nil	Nil
	26/9/22	5	FM	18.4	93	6/8	Nil	Nil	0%	2125	2155	FtG se 250s0e	Nil	Nil
TabVM-ie	20/09/2022	6	DR	17	81	Nil	Nil	Nil	Nil	2215	2245	**SqG se, GG se**		
	26/9/22	7	FM	18.4	93	6/8	Nil	Nil	0%	2235	2305	**SqG SM 125s5e**	Nil	Nil
TabVM-iw														Tree blocking road
	4/10/22	1	DR	17	72	Nil	RL	Nil	50	2135	2204	Nil		Tree blocking road
TabN-ie	20/9/22	6	LA	18.1	74	0/8	Nil	Nil	30.9%	2208	2248	**SqG SM 120s10e**	Nil	Nil
	26/9/22	7	LA	18.4	93	6/8	Nil	Nil	0%	2235	2305	Nil	Nil	Mahogany
TabN-iw	20/9/22	4	LA	18.1	74	2/8	Nil	Nil	30.9%	2032	2102	Nil	Nil	Nil
	26/9/22	4	FM	18.3	87	6/8	Nil	Nil	0%	2043	2117	Nil	Nil	Nil
TabN-ce	4/10/22	2	GR	15.8	84	Nil	Nil	Nil	68%	2029	2059	Nil	Nil	Nil
	26/9/22	8	FM	18.4	93	6/8	Nil	Nil	0%	2235	2305	Nil	Nil	Nil
TabN-cw	20/09/2022	2	DR	17	78	25	Nil	Nil	Nil	1908	1940	FtG, sm		Tallowwood
	26/9/22	2	LA	18.3	87	1/8	Nil	Nil	0%	1857	1926	FtG se 120s0e		White mahogany spp.
TabDD-rn	20/09/2022	3	DR	17	78	25	Nil	Nil	Nil	1949	2021	Nil		
	26/9/22	3	FM	18.3	87	1/8	Nil	Nil	0%	1938	2008	Nil	Nil	Nil
TabDD-rs	20/9/22	3	LA	18.1	74	2/8	Nil	Nil	30.9%	1951	2021	Nil	Nil	Nil
	26/9/22	3	LA	18.3	87	1/8	Nil	Nil	0%	1938	2008	Nil	Nil	Nil

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TabM-ce	4/10/22	2	LA	15.8	84	Nil	Nil	Nil	68%	2034	2104	Nil	Nil	
	26/9/22	9	LA	18.4	93	6/8	Nil	Nil	0%	0014	0044	Nil	Nil	Mahogany
TabM-cw	20/9/22	2	LA	18.1	74	2/8	Nil	Nil	30.9%	1903	1933	Small pet SE 410s30e	Nil	Nil
	26/9/22	2	FM	18.3	87	1/8	Nil	Nil	0%	1857	1923	Cbtp SE 400s20w	Nil	Nil
TabM-ie	4/10/22	3	LA/GR	15.8	84	Nil	Nil	Nil	68%	2120	2135	Nil	L. Brevipalmata	
	26/9/22	8	LA	18.4	93	6/8	Nil	Nil	0%	2311	2341	Sug HM 30n10w	Nil	Mahogany
TabM-iw	20/9/22	1	LA	18.1	74	2/8	Nil	Nil	30.9%	1820	1850	FtG SM 270s5w	Nil	Nil
	26/9/22	1	LA	18.3	87	1/8	Nil	Nil	0%	1820	1850	Nil	Nil	Ironbark
TabS-ie	4/10/22	3	DR	16	75	Nil	Nil	Nil	50	2100	2130	Nil		
	26/9/22	9	FM	18.4	93	6/8	Nil	Nil	0%	2317	2357	Nil	Nil	Nil
TabS-iw	20/09/2022	1	DR	19	75	50	Nil	Prev hr	Nil	1825	1854	**SqG, se**	May have exited NB	
	26/9/22	1	FM	18.3	87	1/8	Nil	Nil	0%	1820	1850	Nil	Nil	Nil
TabS-ce	26/09/2022	7	DR	17	94	Nil	Nil	Nil	Nil	2256	2325	Nil		
	4/10/2022	4	LA	15.8	84	Nil	Nil	Nil	68%	2154	2224	Nil	Nil	Ironbark
TabS-cw	26/09/2022	6	DR	17	93	Nil	Nil	Nil	Nil	2210	2242	Nil		
	4/10/2022	1	LA	15.8	84	Nil	Nil	Nil	68%	1935	2005	TF, ONJ HC		
MOR-ie	26/09/2022	1	DR	20	73	50	RL	Nil	Nil	1820	1850	Nil		
	4/10/2022	1	DR	20	73	50	RL	Nil	Nil	1820	1850	Nil		
MOR-iw	26/09/2022	8	DR	17	93	Nil	Nil	Nil	Nil	2332	2404	OnJ hc		
	4/10/2022	5	LA	15.8	84	Nil	Nil	Nil	68%	2231	2301	Nil	Nil	Mahogany spp.
MOR-ce	26/9/21	4	DR	18	90	Nil	Nil	Nil	Nil	2040	2111	**SqG se**		
	4/10/2022	5	DR	15	81	Nil	Nil	Nil	50	2317	2348	SB echidna, Tawny frogmouth, owlet nightjar		
MOR-cw	26/09/2022	5	DR	17	93	Nil	Nil	Nil	Nil	2120	2150	Nil		
	4/10/2022	1	GR	15.8	84	Nil	Nil	Nil	68%	1931	2001	**Small pet SE 250n15w**		
MOR-rn	26/09/2022	2	DR	20	73	25	RL	Nil	Nil	1906	1937	SuG hc, OnJ hc, TF hc		
	4/10/2022	3	GR	15.8	84	Nil	Nil	Nil	68%	2223	2253	SuG HC 350n20E, Tyto spp., ONJ HC, TF HC		
MOR-rs	26/09/2022	3	DR	18	90	Nil	Nil	Nil	Nil%	1955	2028	GG se,		
	4/10/22	4	GR	15.8	84	Nil	Nil	Nil	68%	2318	2348	GG SE 5N5E		

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TucN-ce	19/09/2022	6	DR	13	79	Nil	Nil	Nil	Nil	2216	2248	LnB hc		Tallowwood
	21/09/2022	1	DR	18	87	100	RL	Drizzle	Nil	1819	1853	CBTP x 2 hm, TF		Tallowwood
TucN-cw	19/09/2022	5	DR	13	79	Nil	Nil	Nil	Nil	2143	2212	LnB hc		Tallowwood
	21/09/2022	2	DR	18	87	100	RL	Nil	Nil	1858	1928	Nil		Tallowwood
TucM-ce	19/09/2022	4	DR	14	76	Nil	RL	Nil	Nil	2056	2127	LnB hc		Tallowwood
	21/09/2022	3	DR	18	87	100	RL	Nil	Nil	2138	2210	Nil		Tallowwood
TucM-cw	19/09/2022	3	DR	16	74	Nil	RL	Nil	Nil	2006	2038	LnB hc		
	21/09/2022	4	DR	18	87	100	RL	Shower	Nil	2225	2255	Nil		
Tuc-r-n	19/09/2022	2	DR	16	72	Nil	MLB	Nil	Nil	1915	1945	Nil		Acacia
	21/09/2022	6	DR	17	88	100	Nil	Nil	Nil	2158	2230	TF se		
Tuc-r-s	19/09/2022	1	DR	18	72	Nil	MSB	Nil	Nil	1830	1900	CBTP se; ONJ hc		Acacia
	21/09/2022	5	DR	17	92	100	Nil	Showers	Nil	2120	2150	SuG hc, TF se		
TucS-ce	19/9/22	1	FM	17.8	69	0/8	Nil	Nil	39%	1823	1853	CBTP 50s20w, 2 x CBTP (1 juv) 400s20e, **small petaurid 20s,20w**	Nil	Nil
	21/9/22	7	FM	16.8	86	8/8	Nil	Showers	22%	2303	2333	CBTP se 300s20e	Nil	Nil
TucS-cw	19/9/22	1	LA	17.8	69	0/8	Nil	Nil	39%	1823	1853	2 x cbtp (1juv) 250s10w, yellow footed antechinus 300s5e	Nil	Ni
	21/9/22	6	LA	16.8	86	8/8	Nil	Showers	22%	2303	2333	**SqG SM 320s10e**	Nil	Nil
TucN-ie	19/9/22	2	FM	17.8	69	0/8	Nil	Nil	39%	1921	1951	CBTP 250n0me, TF	Nil	Nil
	21/9/22	7	LA	16.8	86	8/8	Nil	Showers	22%	2222	2252	CBTP se 420n50e	Nil	Tallowwood, spotted gum, acacia
TucN-iw	19/9/22	2	LA	17.8	69	0/8	Nil	Nil	39%	1921	1951	Nil	Nil	Nil
	21/9/22	6	FM	16.8	86	8/8	Nil	Showers	22%	2222	2252	FtG 450n10s	Nil	Nil
TucS-ie	19/9/22	3	FM	17.8	69	0/8	Nil	Nil	39%	1921	1951	GG 400n30e	Nil	Nil
	21/9/22	5	LA	16.8	86	8/8	Nil	Showers	22%	2143	2213	Nil	Nil	Nil
TucS-iw	19/9/22	3	LA	17.8	69	0/8	Nil	Nil	39%	1921	1951	GG 320n10e	Nil	Tallowwood
	21/9/22	5	FM	16.8	86	8/8	Nil	Showers	22%	2143	2213	CBTP se 50n20w	Nil	Nil
GN-ce	19/9/22	4	FM	17.8	69	0/8	Nil	Nil	39%	2115	2145	Nil	Nil	Nil
	21/9/22	4	FM	17.5	86	8/8	Nil	Nil	22%	2025	2055	Bbo hc	Nil	Nil

Transect	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
GN-cw	19/9/22	4	LA	17.8	69	0/8	Nil	Nil	39%	2115	2145	Nil	Nil	Spotted gum
	21/9/22	3	FM	17.5	86	8/8	Nil	Nil	22%	1952	2022	Nil	Nil	**BtPHasc recorded 50 m north of transect**
GN-ie	19/9/22	5	LA	14.9	76	0/8	Nil	Nil	39%	2159	2229	Nil	Nil	Nil
	21/9/22	4	LA	17.5	86	8/8	Nil	Nil	22%	2025	2055	Nil	Nil	Blackbutt
GN-iw	19/9/22	5	FM	14.9	76	0/8	Nil	Nil	39%	2159	2229	**Koala 410s10e**	**Koala: S 503392 N 6705773, male**	Nil
	21/9/22	3	LA	17.5	86	8/8	Nil	Nil	22%	1952	2022	SuG se 90s20e	Nil	1 x ironbark with SuG
GS-ie	19/9/22	6	LA	14.9	76	0/8	Nil	Nil	39%	2245	2315	Nil	Nil	Nil
	21/9/22	2	FM	17.5	86	8/8	Nil	Light rain	22%	1901	1931	Sug se 20s10e	Male sug	Spotted gum
GS-iw	19/9/22	6	FM	14.9	76	0/8	Nil	Nil	39%	2245	2315	**Nil**	**Nil**	Nil
	21/9/22	2	LA	17.5	86	8/8	Nil	Light rain	22%	1901	1931	Nil	Nil	Spotted gum, iron bark
GS-ce	19/9/22	7	LA	14.9	76	0/8	Nil	Nil	39%	2335	0005	Nil	Nil	Nil
	21/9/22	1	LA	17.5	86	8/8	Nil	Light rain	22%	1820	1850	Nil	Nil	Nil
GS-cw	19/9/22	7	FM	14.9	76	0/8	Nil	Nil	39%	2335	0005	**Nil**	**Nil**	Nil
	21/9/22	1	FM	17.5	86	8/8	Nil	Light rain	22%	1820	1850	2 x CBTP se 50s40w	1 x juv	Nil
G-r-n														Road inaccessible (rutted)
G-r-s														Road inaccessible (rutted)

Table A4: Survey effort, weather conditions and fauna detections Q4 2022 threatened glider population monitoring. Msb = wind moves small branches; MLB = wind moves large branches. Ns = not surveyed. SqG = squirrel glider; SuG = sugar glider; YbG = yellow-bellied glider; GG = greater glider; FtG = feathertail glider; BtPhas = brush-tailed phascogale; CBtP = common brushtail possum; SeBtP = short-eared brushtail possum; CRP = common ringtail possum; TF = tawny frogmouth; PO = powerful owl; SO = sooty owl; MO = masked owl; BbO = boobook owl; ON = owlet nightjar; WtN = white-throated nightjar; 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.

Transect	Survey	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TabLB-ie	**1**	18/12/2022	4	GR	19	82	8/8	RL	Nil	29	2306	2336	Nil		
TabLB-ie	2	20/12/22	3	GR	21.2	69	5/8	MSB	Nil	12	2202	2232	HC Sug, ONJ	Nil	Nil
TabLB-iw	**1**	17/01/2023	2	DR	19	79	1/8	RL	Nil	Nil	2117	2150	Nil	Log over road	
TabLB-iw	2	20/12/22	1	LA	21.2	69	5/8	MSB	Nil	12	2037	2107	Nil	Nil	Nil
TabNR-rn	1	18/12/2022	5	GR/LA	19	82	8/8	RL	Nil	29	2340	2355	Nil		
TabNR-rn	2	20/12/22	2	GR	21.2	69	5/8	MSB	Nil	12	2109	2149	Nil	Nil	Nil
TabNR-rs	1	18/12/2022	4	LA	19	82	8/8	RL	Nil	29	2310	2340	**SqG SE 250n5e**		
TabNR-rs	2	20/12/22	1	GR	21.2	69	5/8	MSB	Nil	12	2025	2055	WTNJ, ONJ, TF	Nil	Nil
TabVM-ie	1	18/12/2022	6	GR	18.4	82	8/8	RL	Nil	29	*0013*	0043	FtG SG, FtG SE		
TabVM-ie	2	20/12/22	4	GR	18.2	74	0/8	RL	Nil	12	2240	2310	Nil	Nil	Nil
TabVM-iw	1	17/01/2023	1	DR	19.4	79	1/8	RL	Nil	Nil	2035	2100	Nil	Log over road	
TabVM-iw	2	20/12/22	2	LA	21.2	69	5/8	MSB	Nil	12	2112	2142	Nil	Nil	Nil
TabN-ie	1	18/12/2022	6	LA	18.4	82	8/8	RL	Nil	29	0009	0039	CRTP		
TabN-ie	2	20/12/22	3	LA	21.2	69	5/8	MSB	Nil	12	2238	2318	2 x ftg SM	Nil	Spotted gum?
TabN-iw	1	18/12/2022	3	LA	19	68	7/8	MSB	Nil	29	2207	2237	Nil		
TabN-iw	2	20/12/22	9	LA/GR	18.2	74	0/8	RL	Nil	12	0222	0235	Nil		
TabN-ce	1	18/12/2022	7	GR	18.4	82	8/8	RL	Nil	29	*0125*	0155	Nil		
TabN-ce	2	20/12/22	5	GR	18.2	74	0/8	RL	Nil	12	2317	2347	Nil	Nil	Nil

Transect	Survey	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TabN-cw	1	18/12/2022	2	GR	19	68	7/8	MSB	Nil	29	2115	2145	Nil		
TabN-cw	2	20/12/22	8	GR	18.2	74	0/8	RL	Nil	12	0141	0211	Nil	Nil	Nil
TabDD-rn	1	18/12/2022	3	GR	19	68	7/8	MSB	Nil	29	2205	2235	Possible HC YBG 10n50e, cbtp SE	**Not likely**	
TabDD-rn	2	20/12/22	8	LA	18.2	74	0/8	RL	Nil	12	0151	0219	**GG SE 260N40E, SqG 310N20E**	Nil	Nil
TabDD-rs	1	18/12/2022												Campers	
TabDD-rs	2	20/12/22												Same camper	
TabM-ce	1	18/12/2022	8	LA	18.4	82	8/8	RL	Nil	29	0131	0201	Nil		
TabM-ce	2	20/12/22	6	GR	18.2	74	0/8	RL	Nil	12	2355	0025	Nil	Nil	Nil
TabM-cw	1	18/12/2022	2	LA	19	68	7/8	MSB	Nil	29	2113	2143	FtG Se, Sug SE		
TabM-cw	2	20/12/22	7	LA	18.2	74	0/8	RL	Nil	12	0116	0146	Nil	Incidental SqG near gate on highway	Nil
TabM-ie	1	18/12/2022	7	LA	18.4	82	8/8	RL	Nil	29	0055	0125	Nil		
TabM-ie	2	20/12/22	7	GR	18.2	74	0/8	RL	Nil	12	0037	0107	FTG SE	Nil	Nil
TabM-iw	1	18/12/2022	1	LA	19	68	7/8	MSB	Nil	29	2030	2100	Nil		
TabM-iw	2	20/12/22	6	LA	18.2	74	0/8	RL	Nil	12	0036	0106	CbtP	Nil	Nil
TabS-ie	1	18/12/2022	1	GR/LA	18.4	82	8/8	RL	Nil	29	0211	0224	Nil		
TabS-ie	2	20/12/22	4	LA	21.2	69	5/8	MSB	Nil	12	2326	2356	**SqG SE 390N10W**	Nil	Nil
TabS-iw	1	18/12/2022	1	GR	19	68	7/8	MSB	Nil	29	2030	2100	Nil		
TabS-iw	2	20/12/22	5	LA	18.2	74	0/8	RL	Nil	12	0003	0033	FTG SE	Nil	Nil
TabS-ce	1	18/12/2022	8	DR	16	83	6/8	RL	Nil	Nil	0146	0216	Nil		
TabS-ce	2	20/12/2022	4	DR	17	69	2/8	RL	Nil	Nil	2240	2307	Nil		
TabS-cw	1	18/12/2022	7	DR	17	76	0/8	MLB	Nil	Nil	0106	0135	Nil		

Transect	Survey	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TabS-cw	2	20/12/2022	3	DR	17	69	6/8	RL	Nil	Nil	2150	2223	**Pet spp. (se);** FtG (sm); CBTP (se)		Wattle
MOR-ie	1	18/12/2022	1	DR	18	68	6/8	Nil	Nil	Nil	2034	2104	Nil		Mahogany
MOR-ie	2	13/01/2023	1	DR	19	74	2/8	RL	Nil	Nil	2030	2100	FtG (sm), CBTP (se)		
MOR-iw	1	18/12/2022	6	DR	17	76	0/8	MSB	Nil	Nil	0013	0040	Nil		
MOR-iw	2	20/12/2022	1	DR	18	64	4/8	MSB	Nil	Nil	2030	2100	Nil		
MOR-ce	1	18/12/2022	4	DR	18	68	8/8	MSB	Nil	Nil	2247	2317	**SqG, se, 300m, 50m east**		
MOR-ce	2	20/12/2022	6	DR	16	77	0/8	RL	Nil	Nil	2433	0107		ONJ	
MOR-cw	1	18/12/2022	5	DR	17	76	8/8	RL	Drizzle	Nil	2337	0005	Nil		Mahogany
MOR-cw	2	20/12/2022	2	DR	18	64	4/8	RL	Nil	Nil	2107	2135	Nil		Mahogany
MOR-rn	1	18/12/2022	2	DR	18	68	8/8	MSB	Nil	Nil	2120	2150	Nil	ONJ	
MOR-rn	2	13/01/2023	2	DR	19	74	2/8	RL	Nil	Nil	2115	2147	SuG (hc)		
MOR-rs	1	18/12/2022	3	DR	18	68	8/8	MLB	Nil	Nil	2205	2235	**SqG, se, 380m, east 30m**		
MOR-rs	2	20/12/2022	5	DR	17	69	0/8	RL	Nil	Nil	2337	2411	CBTP (se)		
MOR-rs															
TucN-ce	1	15/12/2022	5	DR	17	67	Nil	RL	Nil	Nil	1135	1210	FtG sm		
TucN-ce	2	19/12/2022	1	DR	17	63	Nil	MLB	Nil	Nil	2030	2100	Nil		
TucN-cw	1	15/12/2022	6	DR	17	67	Nil	RL	Nil	Nil	1215	1240	Nil		
TucN-cw	2	19/12/2022	2	DR	17	63	Nil	MLB	Nil	Nil	2107	2132	Nil		
TucM-ce	1	15/12/2022	4	DR	17	67	0	Nil	Nil	Nil	2245	2247	Nil		Tallowwood
TucM-ce	2	19/12/2022	3	DR	17	63	Nil	MSB	Nil	Nil	2142	2211	Nil		
TucM-cw	1	15/12/2022	3	DR	17	67	0	Nil	Nil	Nil	2200	2230	CBTP x 2 (se)		

Transect	Survey	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
TucM-cw	2	19/12/2022	4	DR	17	63	Nil	MSB	Nil	Nil	2230	2300	CBTP se		
Tuc-r-n	1	15/12/2022	2	DR	19	53	0	Nil	Nil	Nil	2115	2146	SuG (sm); MO sm, WtN hc, OnJ hc		Wattle
Tuc-r-n	2	19/12/2022	8	DR	17	67	Nil	RL	Nil	Nil	2402	2434	Nil		Wattle
Tuc-r-s	1	15/12/2022	1	DR	19	53	0	RL	Nil	Nil	2035	2136	CBTP x 1 (se); OnJ hc, WtN, hc, TF hc.		Iron bark
Tuc-r-s	2	19/12/2022	7	DR	17	67	0	RL	Nil	Nil	2323	2353	Nil		Iron bark
TucS-ce	1	15/12/2022	3	LA	18	58	0/0	Nil	Nil	53.9	2203	2233	Nil	Nil	Pink bloodwood
TucS-ce	2	19/12/22	8	FM	17.2	78	4/8	MSB	Nil	20	0107	0137	SE FtG		Pink bloodwood
TucS-cw	1	15/12/2022	3	FM	18	58	0/0	Nil	Nil	53.9	2203	2233	**SqG SE 100s0e, 2 x cbtp SE**	Nil	Nil
TucS-cw	2	19/12/22	8	LA	17.2	78	4/8	MSB	Nil	20	0107	0137	**Cbtp SE SE SqG 70s20e**		Nil
TucN-ie	1	15/12/2022	2	LA	18	58	0/0	Nil	Nil	53.9	2114	2144	2 x ftg SE, PO SE 100n10e	Nil	Nil
TucN-ie	2	19/12/22	7	LA	17.2	78	4/8	MSB	Nil	20	0029	0059	Barn owl		Nil
TucN-iw	1	15/12/2022	2	FM	18	58	0/0	Nil	Nil	53.9	2114	2144		Nil	Nil
TucN-iw	2	19/12/22	7	FM	17.2	78	4/8	MSB	Nil	20	0029	0059	Nil		Nil
TucS-ie	1	15/12/2022	1	FM	18	58	0/0	RL	Nil	53.9	2020	2050	GG SE 50s20w, GG SE 480s20	Nil	Nil
TucS-ie	2	19/12/22	5	LA	18	61	0/8	MSB	Nil	20	2319	2349	Nil		Nil
TucS-iw	1	15/12/2022	1	LA	18	58	0/0	RL	Nil	53.9	2020	2050	GG SE 20s5e	Emerging hollow	Nil
TucS-iw	2	19/12/22	5	FM	18	61	0/8	MSB	Nil	20	2319	2349	**SE SqG 500sw10**		Nil
GN-ce	1	15/12/2022	4	FM	18	58	7/8	Nil	Nil	53.9	2302	2332	Nil	GG incidental SE 100 south of transect	Spotted gum
GN-ce	2	19/12/22	6	FM	17.2	78	4/8	MSB	Nil	20	2351	0021	GHFF		Spotted gum
GN-cw	1	15/12/2022	4	LA	18	58	7/8	Nil	Nil	53.9	2302	2332	Nil	Nil	Spotted gum
GN-cw	2	19/12/22	6	LA	17.2	78	4/8	MSB	Nil	20	2351	0021	HC, SE GHFF. SE CbtP		Ironbark and spotted gum

Transect	Survey	Date	Order	Observer	Temp	Humidity	Cloud	Wind	Rain	Moon (%)	Start	Finish	Fauna	Comments	Flowering
GN-ie	1	15/12/2022	5	FM	18	58	7/8	Nil	Nil	53.9	2344	0014	Nil	Nil	Spotted gum
GN-ie	2	19/12/22	4	FM	18	61	0/8	MSB	Nil	20	2222	2252	HC, SE GHFF		Spotted gum
GN-iw	1	15/12/2022	5	LA	18	58	7/8	Nil	Nil	53.9	2344	0014	GHFF	Nil	Spotted gum
GN-iw	2	19/12/22	4	LA	18	61	0/8	MSB	Nil	20	2224	2254	HC GHFF		Ironbark and spotted gum
GS-ie	1	15/12/2022	7	FM	18	58	7/8	Nil	Nil	53.9	0111	0141	Cbtp SE	Nil	Ironbark and spotted gum
GS-ie	2	19/12/22	3	FM	18	61	0/8	MSB	Nil	20	2145	2215	Nil		Ironbark and spotted gum
GS-iw	1	15/12/2022	7	LA	18	58	7/8	Nil	Nil	53.9	0111	0141	Cbtp SE	Nil	Ironbark and spotted gum
GS-iw	2	19/12/22	3	LA	18	61	0/8	MSB	Nil	20	2145	2215	HC GHFF		Ironbark and spotted gum
GS-ce	1	15/12/2022	8	FM	18	58	7/8	Nil	Nil	53.9	0149	0219	Nil	Nil	Nil
GS-ce	2	19/12/22	1	FM	18	61	0/8	MLB	Nil	20	2025	2055	Nil		Nil
GS-cw	1	15/12/2022	8	FM	18	58	7/8	Nil	Nil	53.9	0149	0219	GHFF		Nil
GS-cw	2	19/12/22	1	LA	18	61	0/8	MLB	Nil	20	2025	2055	SE Cbtp	Nil	Ironbark and spotted gum
G-r-n	1	15/12/2022	6	FM	18	58	7/8	Nil	Nil	53.9	0029	0059	Nil	Nil	Nil
G-r-n	2	19/12/22	2	LA	18	61	0/8	MLB	Nil	20	2104	2134	SE SuG, HC GHFF	Nil	Ironbark and spotted gum
G-r-s	1	15/12/2022	6	LA	18	58	7/8	Nil	Nil	53.9	0033	0103	Nil	Nil	Nil
G-r-s	2	19/12/22	2	FM	18	61	0/8	MLB	Nil	20	2107	2136	SE SuG		Spotted gum

Appendix B –Aerial crossing structure fauna detections

Table B1: Results of 2022 rope bridge and glide pole fauna detections in sections 3-11. SqG = squirrel glider; SuG = sugar glider; FtG = Feathertail Glider; E = moved east; W = moved west; CC = complete crossing; IC = incomplete crossing; NC = non-crossing movement; NDM = non-directional movement; EXM = exploratory movement; D = definite; Pr = probable; Po = Possible.

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	West	W01	Roadside	13/12/2022	0001	Feathertail glider	D	Away	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	20/12/2022	0438	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	29/12/2022	2218	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	3/01/2022	0228	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	13/01/2022	0155	Sugar glider	Pr	Towards	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	28/01/2022	2220	Feathertail glider	D	Away	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	29/01/2022	0255	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	30/01/2022	2335	Feathertail glider	D	EXM	NC	Incomplete	x 2
Glide pole	10	GP10	West	W01	Roadside	21/04/2022	2251	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	24/07/2022	2032	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	1/08/2022	0005	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	1/08/2022	2311	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	2/08/2022	0110	Feathertail glider	D	Towards	Launch off cam arm	Complete	
Glide pole	10	GP10	West	W01	Roadside	3/08/2022	0118	Feathertail glider	D	EXM	On predator shield	Complete	
Glide pole	10	GP10	West	W01	Roadside	26/08/2022	0326	Feathertail glider	Pr	EXM	NC	Incomplete	
Glide pole	10	GP10	West	W01	Roadside	26/08/2022	0157	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	25/01/2022	0158	Feathertail glider	D	NDM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	16/01/2022	0419	Squirrel glider	Pr	Towards	NC	Incomplete	3 sets of pics
Rope bridge	7	RB8	East	E10	Roadside	12/12/2022	0221	Short-eared brushtail possum	Pr	EXM	NC	Incomplete	
Glide pole	7	GP8	Median	M11	Median	27/01/2022	0311	Petaurus spp.	D	Towards	CC	Complete	2 sets of pics
Glide pole	7	GP8	Median	M11	Median	21/01/2022	0450	Petaurus spp.	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	20/01/2022	0338	Petaurus spp.	Pr	NDM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	19/01/2022	0431	Petaurus spp.	D	NDM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	18/01/2022	0418	Petaurus spp.	Pr	Towards	Launch off arm	Complete	
Glide pole	7	GP8	Median	M11	Median	15/01/2022	0241	Petaurus spp.	Pr	NDM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	14/01/2022	0235	Petaurus spp.	Pr	Towards	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	13/02/2022	0225	Petaurus spp.	D	Towards	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	4/02/2022	0113	Unid mammal	D	Towards	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	30/07/2022	2123	Petaurus spp.	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	30/07/2022	0104	Petaurus spp.	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	23/07/2022	2029	Sugar glider	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	7/07/2022	0358	Feathertail glider	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	29/06/2022	2342	Feathertail glider	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	2/06/2022	2031	Feathertail glider	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	6/04/2022	0052	Petaurus spp.	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	11/04/2022	0106	Unid mammal	D	EXM	NC	Complete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	7	GP8	Median	M11	Median	11/04/2022	0307	Squirrel glider	Pr	EXM	NC	Complete	3 sets of pics
Glide pole	7	GP8	Median	M11	Median	20/08/2022	0035	Feathertail glider	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	15/10/2022	2241	Feathertail glider	D	Towards	launch off arm	Complete	
Glide pole	7	GP8	Median	M11	Median	4/10/2022	2257	Feathertail glider	D	Away	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	19/09/2022	0223	Feathertail glider	D	NDM	NC	Complete	W9 - move upwards
Glide pole	7	GP8	Median	M11	Median	18/09/2022	0357	Feathertail glider	D	NDM	NC	Complete	W7 1 pic only
Glide pole	7	GP8	Median	M11	Median	5/11/2022	0210	Feathertail glider	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	26/11/2022	2341	Feathertail glider	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	26/12/2022	2343	Squirrel glider	Pr	EXM	NC	Complete	on pole for 51 mins, unsure if same individual, 13 image sequences
Glide pole	7	GP8	Median	M11	Median	19/12/2022	2253	Petaurus spp.	D	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	17/12/2022	0130	Squirrel Glider	Pr	EXM	NC	Complete	
Glide pole	7	GP8	Median	M11	Median	17/12/2022	0016	Squirrel Glider	D	EXM	NC	Complete	
Rope bridge	7	RB8	West	W12	Roadside	4/12/2022	0219	Sugar glider	D	Towards	CC	Complete	Wire rope
Rope bridge	7	RB8	West	W12	Roadside	11/12/2022	2229	Unid mammal	D	EXM	NC	Incomplete	
Rope bridge	7	RB8	West	W12	Roadside	15/12/2022	2256	Squirrel glider	Pr	EXM	NC	Incomplete	W13 1 pic only
Rope bridge	7	RB9	West	W13	Roadside	22/02/2022	2346	Unid mammal	Pr	EXM	NC	Incomplete	
Rope bridge	7	RB9	West	W13	Roadside	22/02/2022	2329	Petaurus spp.	Pr	EXM	NC	Incomplete	
Rope bridge	7	RB9	West	W13	Roadside	8/02/2022	2106	Unid mammal	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Rope bridge	7	RB9	West	W13	Roadside	26/08/2022	2115	Feathertail glider	D	Away - on wire rope	Moved away	Incomplete	
Rope bridge	7	RB9	West	W13	Roadside	21/08/2022	0242	Squirrel glider	D	EXM	NC	Incomplete	2 sets of pics
Rope bridge	7	RB9	West	W13	Roadside	20/08/2022	2216	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	20/08/2022	0231	Squirrel glider	D	Stationary	NC	Incomplete	
Rope bridge	7	RB9	West	W13	Roadside	25/08/2022	0000	Feathertail glider	D	Towards	CC	Complete	edge rope
Rope bridge	7	RB9	West	W13	Roadside	6/09/2022	0055	Squirrel glider	D	away	CC	Complete	central rope
Rope bridge	7	RB9	West	W13	Roadside	25/09/2022	1928	Feathertail glider	D	Towards	CC	Complete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	12/11/2022	0247	Feathertail glider	D	away	CC	Complete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	10/11/2022	0315	Petaurus spp.	Pr	Towards	NC	Incomplete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	29/10/2022	0116	Squirrel glider	D	Away	CC	Complete	central rope
Rope bridge	7	RB9	West	W13	Roadside	30/11/2022	2242	Feathertail glider	D	Away	CC	Complete	Wire rope
Rope bridge	7	RB9	West	W13	Roadside	25/11/2022	2342	Feathertail glider	Pr	Away	CC	Complete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	13/12/2022	2151	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	13/12/2022	2137	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	13/12/2022	2110	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	13/12/2022	2307	Feathertail glider	D	EXM	NC	Incomplete	rope ladder
Rope bridge	7	RB9	West	W13	Roadside	14/12/2022	2354	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	18/12/2022	2327	Feathertail glider	D	EXM	NC	Incomplete	Wire rope, rope ladder
Rope bridge	7	RB9	West	W13	Roadside	20/12/2022	0050	Feathertail glider	D	EXM	NC	Incomplete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	6/12/2022	0235	Feathertail glider	D	EXM	NC	Incomplete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	28/11/2022	2336	Feathertail glider	Pr	Towards	CC	Complete	wire rope

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Rope bridge	7	RB9	West	W13	Roadside	24/12/2022	2345	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB9	West	W13	Roadside	23/12/2022	2030	Feathertail glider	D	EXM	NC	Incomplete	Wire rope
Rope bridge	7	RB9	West	W13	Roadside	18/12/2022	2327	Feathertail glider	D	Away	CC	Complete	Wire rope
Rope bridge	7	RB9	West	W13	Roadside	14/12/2022	2354	Feathertail glider	D	Away	CC	Complete	Wire rope
Rope bridge	7	RB9	West	W13	Roadside	22/01/2022	0010	Feathertail glider	D	Away	CC	Complete	wire rope
Glide pole	6	GP7	East	E15	Roadside	26/01/2022	2251	Squirrel glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	26/01/2022	2250	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	24/01/2022	0154	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	6/03/2022	0059	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	6/03/2022	0011	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	4/03/2022	2240	Sugar glider	Pr	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	3/03/2022	0008	Feathertail glider	D	Away	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	14/02/2022	0335	Sugar glider	Pr	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	13/02/2022	0217	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	13/02/2022	0216	Sugar glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	13/02/2022	0121	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	10/02/2022	0121	Sugar glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	8/02/2022	2325	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	7/02/2022	0200	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	7/02/2022	0151	Feathertail glider	D	Towards	Launch off cam arm	Complete	
Glide pole	6	GP7	East	E15	Roadside	6/02/2022	0404	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	6/02/2022	0325	Feathertail glider	D	Towards	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	6	GP7	East	E15	Roadside	6/02/2022	0243	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	6/02/2022	0241	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	6/02/2022	0101	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	5/02/2022	0112	Petaurus spp.	D	Towards	NC	Incomplete	2 sets of pics
Glide pole	6	GP7	East	E15	Roadside	4/02/2022	0251	Squirrel glider	Pr	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	1/02/2022	0446	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	2/08/2022	2045	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	31/07/2022	0118	Feathertail glider	D	To side	Launch off cam arm	Complete	
Glide pole	6	GP7	East	E15	Roadside	28/07/2022	2054	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	29/06/2022	2354	Squirrel glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	29/06/2022	2353	Squirrel glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	17/06/2022	2159	Sugar glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	10/06/2022	2035	Petaurus spp.	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	31/05/2022	2201	Feathertail glider	D	To side	Launch off cam arm	Complete	
Glide pole	6	GP7	East	E15	Roadside	2/04/2022	0213	Squirrel glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	25/04/2022	0208	Petaurus spp.	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	25/04/2022	0247	Feathertail glider	D	Towards	Launch off cam arm	Complete	
Glide pole	6	GP7	East	E15	Roadside	27/04/2022	0147	Petaurus spp.	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	1/05/2022	2107	Sugar glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	8/05/2022	2342	Sugar glider	Pr	EXM	NC	Incomplete	
Glide pole	6	GP7	East	E15	Roadside	9/05/2022	0246	Squirrel glider	Pr	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	6	GP7	East	E15	Roadside	13/05/2022	0026	Squirrel glider	Pr	Stationary	Launch off arm	Complete	
Glide pole	6	GP7	West	W16	Roadside	15/01/2022	2247	Sugar glider	Pr	Towards	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	11/01/2022	2257	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	9/01/2022	2322	Petaurus spp.	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	3/01/2022	2231	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	4/03/2022	2256	Feathertail glider	D	Towards	Launch off camera arm	Complete	
Glide pole	6	GP7	West	W16	Roadside	4/03/2022	0249	Squirrel glider	D	Towards	NC	Incomplete	3 sets of pics
Glide pole	6	GP7	West	W16	Roadside	3/03/2022	2338	Feathertail glider	D	Away	NDM	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	2/03/2022	2312	Feathertail glider	D	Away	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	2/03/2022	2132	Feathertail glider	Pr	NDM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	23/02/2022	0150	Squirrel glider	Pr	to side	Launch off arm	Complete	
Glide pole	6	GP7	West	W16	Roadside	23/02/2022	0123	Petaurus spp.	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	20/02/2022	0405	Squirrel glider	Pr	Towards	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	8/02/2022	2208	Sugar glider	Pr	Towards	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	7/02/2022	0053	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	6/02/2022	0053	Squirrel glider	Pr	Towards	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	30/01/2022	2228	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	23/07/2022	2306	Sugar glider	Pr	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	3/07/2022	0156	Petaurus spp.	Pr	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	25/06/2022	0131	Unid mammal	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	19/06/2022	0318	Petaurus spp.	D	Towards	NC	Incomplete	2 sets of pics

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	6	GP7	West	W16	Roadside	8/06/2022	0224	Petaurus spp.	D	Towards	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	1/06/2022	0140	Squirrel glider	D	Towards	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	24/05/2022	2222	Unid mammal	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	20/03/2022	0423	Squirrel glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	1/04/2022	0226	Squirrel glider	Pr	Towards	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	25/04/2022	2004	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	2/05/2022	0252	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	2/05/2022	0326	Squirrel glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	5/05/2022	0109	Petaurus spp.	D	EXM	NC	Incomplete	3 sets of pics
Glide pole	6	GP7	West	W16	Roadside	23/10/2022	0448	Petaurus spp.	Pr	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	19/11/2022	0103	Feathertail glider	D	Towards	Launch off arm	Complete	
Glide pole	6	GP7	West	W16	Roadside	10/12/2022	0120	Feathertail glider	Po	towards	CC	Complete	launch off cam
Glide pole	6	GP7	West	W16	Roadside	19/11/2022	0102	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	28/12/2022	0202	Sugar glider	Pr	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	26/12/2022	0150	Petaurus spp.	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	9/01/2022	2322	Petaurus spp.	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	11/01/2022	2257	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	3/03/2022	2227	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	6	GP7	West	W16	Roadside	20/03/2022	0423	Squirrel glider	Pr	EXM	NC	Incomplete	
Rope bridge	4	RB7	East	E17	Roadside	8/02/2022	2353	Petaurus spp.	D	EXM	NC	Incomplete	
Rope bridge	4	RB7	East	E17	Roadside	12/05/2022	0253	Unid mammal	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Rope bridge	4	RB7	East	E17	Roadside	23/04/2022	2106	Unid mammal	D	EXM	NC	Incomplete	
Rope bridge	4	RB7	East	E17	Roadside	23/04/2022	2109	Unid mammal	D	EXM	NC	Incomplete	
Rope bridge	4	RB7	East	E17	Roadside	27/04/2022	2143	Unid mammal	D	EXM	NC	Incomplete	
Rope bridge	4	RB7	East	E17	Roadside	29/04/2022	2206	Unid mammal	D	EXM	NC	Incomplete	
Rope bridge	4	RB7	East	E17	Roadside	2/08/2022	0123	Unid mammal	Pr	EXM	NC	Incomplete	
Rope bridge	4	RB7	East	E17	Roadside	20/09/2022	0105	Petaurus spp.	Pr	EXM	NC	Incomplete	
Rope bridge	4	RB7	East	E17	Roadside	6/12/2022	0030	Ringtail possum	D	EXM	NC	Incomplete	
Glide pole	3	GP4	East	E19	Roadside	16/08/2022	0251	Petaurus spp.	D	EXM	NC	Incomplete	
Glide pole	3	GP4	East	E19	Roadside	26/10/2022	2112	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	3	GP4	East	E19	Roadside	5/11/2022	0254	Squirrel glider	D	EXM	NC	Incomplete	4 images (249-254)
Glide pole	3	GP4	East	E19	Roadside	5/12/2022	0157	Squirrel glider	D	Towards	NC	Incomplete	
Glide pole	3	GP4	East	E19	Roadside	26/11/2022	2302	Squirrel glider	Pr	NDM	NC	Incomplete	
Glide pole	3	GP4	East	E19	Roadside	23/11/2022	0256	Squirrel glider	Pr	EXM	NC	Incomplete	
Glide pole	3	GP4	East	E19	Roadside	19/11/2022	0051	Squirrel glider	D	Towards	Launch off arm	Complete	remained on bridge for 4 mins
Glide pole	3	GP4	East	E19	Roadside	27/12/2022	0010	Squirrel glider	D	EXM	NC	Incomplete	
Glide pole	3	GP4	East	E19	Roadside	23/12/2022	0302	Squirrel glider	Pr	EXM	NC	Incomplete	
Glide pole	3	GP4	East	E19	Roadside	16/12/2022	2339	Squirrel glider	Pr	EXM	NC	Incomplete	
Glide pole	3	GP4	West	W20	Roadside	1/04/2022	0441	Squirrel glider	D	EXM	NC	Incomplete	
Glide pole	3	GP4	West	W20	Roadside	29/01/2022	0235	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	3	GP4	West	W20	Roadside	1/04/2022	0441	Squirrel Glider	Pr	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	3	GP4	West	W20	Roadside	1/04/2022	0442	Squirrel glider	Pr	EXM	NC	Incomplete	
Glide pole	3	GP4	West	W20	Roadside	30/10/2022	0138	Squirrel glider	Pr	EXM	NC	Incomplete	stayed on for 2 min
Glide pole	3	GP4	West	W20	Roadside	18/02/2022	0225	Squirrel glider	D	EXM	NC	Incomplete	
Rope bridge	3	RB5	West	W22	Roadside	28/01/2022	2104	Brush-tailed phascogale	D	Away	CC	Complete	
Rope bridge	3	RB5	West	W22	Roadside	15/10/2022	2158	Feathertail glider	Pr	Towards	CC	Complete	central rope
Rope bridge	3	RB5	West	W22	Roadside	6/11/2022	2236	Petaurus spp.	Pr	Away	NC	Incomplete	wire rope, 1 pic only
Rope bridge	3	RB5	West	W22	Roadside	2/11/2022	2211	Petaurus spp.	Pr	Away	NC	Incomplete	wire rope
Rope bridge	3	RB5	West	W22	Roadside	15/12/2022	0334	Unid mammal	Pr	Towards	CC	Complete	wire rope
Rope bridge	3	RB5	West	W22	Roadside	20/12/2022	0153	Feathertail glider	Pr	Towards	CC	Complete	wire rope
Rope bridge	3	RB5	East	E23	Roadside	22/01/2022	2323	Unid mammal	D	EXM	NC	Incomplete	
Rope bridge	3	RB5	East	E23	Roadside	14/11/2022	0234	Petaurus spp.	D	Towards	CC	Complete	side rope
Rope bridge	3	RB6	East	E24	Roadside	23/11/2022	2124	Feathertail glider	D	Towards	CC	Complete	wire rope
Rope bridge	3	RB6	East	E24	Roadside	19/11/2022	0052	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	3	RB6	East	E24	Roadside	22/12/2022	0217	Feathertail glider	D	Away	CC	Complete	wire rope
Glide pole	3	GP6	Median	M26	Median	7/01/2022	2215	Feathertail glider	Pr	EXM	CC	Complete	
Glide pole	3	GP6	Median	M26	Median	2/01/2022	2210	Squirrel glider	D	EXM	CC	Complete	
Glide pole	3	GP6	Median	M26	Median	30/10/2022	0017	Squirrel glider	Pr	Stationary	NC	Complete	
Glide pole	3	GP6	Median	M26	Median	14/11/2022	2326	Feathertail glider	D	Towards	NC	Complete	
Rope bridge	10	RB12	West	W5	Roadside	24/05/2022	0001	Unid mammal	Pr	Towards	CC	Complete	
Rope bridge	10	RB12	West	W5	Roadside	3/12/2022	2351	Unid mammal	D	Towards	NC	Incomplete	Inside box

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Rope bridge	10	RB12	East	E3	Roadside	28/12/2022	0236	Unid mammal	Pr	NDM	NC	Incomplete	
Rope bridge	7	RB10	East	E7	Roadside	26/11/2022	2353	Feathertail glider	D	Away	CC	Complete	central rope
Rope bridge	7	RB10	East	E7	Roadside	26/11/2022	2331	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB10	East	E7	Roadside	26/11/2022	2256	Feathertail glider	D	EXM	CC	Complete	wire rope
Rope bridge	7	RB10	East	E7	Roadside	26/11/2022	2244	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB10	East	E7	Roadside	12/12/2022	2249	Feathertail glider	D	EXM	NC	Incomplete	wire rope
Rope bridge	7	RB10	East	E7	Roadside	29/12/2022	0139	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB10	East	E7	Roadside	27/12/2022	0257	Petaurus spp.	Pr	Towards	EXM	Incomplete	centre rope
Rope bridge	7	RB10	East	E7	Roadside	27/12/2022	0119	Feathertail glider	D	Away	CC	Complete	Wire rope
Rope bridge	7	RB10	East	E7	Roadside	25/12/2022	0208	Feathertail glider	D	Away	CC	Complete	central rope
Rope bridge	7	RB10	East	E7	Roadside	25/12/2022	0033	Feathertail glider	D	EXM	NC	Incomplete	wire rope & central rope
Rope bridge	7	RB10	East	E7	Roadside	24/12/2022	0006	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB10	East	E7	Roadside	22/12/2022	0245	Petaurus spp.	D	Towards	CC	Complete	central rope
Rope bridge	7	RB10	East	E7	Roadside	3/12/2022	0218	Feathertail glider	D	Away	CC	Complete	Central rope
Rope bridge	7	RB10	East	E7	Roadside	21/12/2022	2139	Feathertail glider	Pr	Towards	CC	Complete	central rope
Rope bridge	7	RB10	East	E7	Roadside	20/12/2022	2346	Feathertail glider	D	Away	CC	Complete	wire rope
Rope bridge	7	RB10	East	E7	Roadside	22/01/2022	0138	Feathertail glider	D	Away	CC	Complete	wire rope
Glide pole	10	GP10	East	W2/E701	Roadside	27/01/2022	2435	Feathertail glider	D	Towards	Launch off cam	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/01/2022	0441	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/01/2022	0207	Feathertail glider	D	Towards	Prob launch off cam	Complete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	5/02/2022	0457	Petaurus spp.	Pr	Towards	Launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	1/02/2022	0218	Feathertail glider	D	Towards	Launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/01/2022	0253	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/02/2022	2217	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	6/03/2022	0146	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	9/03/2022	0156	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/04/2022	2210	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	26/04/2022	0042	feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/04/2022	2222	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	9/05/2022	0244	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/05/2022	0117	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/05/2022	2050	Feathertail glider	D	Towards	Launch off cam	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	5/06/2022	2344	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/06/2022	2226	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/06/2022	2137	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/07/2022	0107	Feathertail glider	D	Towards	Launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/07/2022	0355	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	9/07/2022	0315	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	0252	Feathertail glider	D	Towards	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	0423	Feathertail glider	D	Towards	Launch off cam arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	2001	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	2047	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/07/2022	0115	Feathertail glider	D	Towards	Launch off cam arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/07/2022	0400	Feathertail glider	D	Away	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	30/07/2022	0132	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	30/07/2022	0205	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	30/07/2022	0409	Feathertail glider	D	Towards	Launch off cam	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	30/07/2022	2241	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	31/07/2022	0210	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	31/07/2022	0338	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	1/08/2022	0200	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	1/08/2022	0323	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	22/07/2022	2257	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	23/07/2022	0025	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	23/07/2022	0047	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	24/07/2022	0352	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	24/07/2022	2329	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	24/07/2022	2352	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	24/07/2022	0026	Unid mammal	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	2236	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	2259	Feathertail glider	D	towards forest	launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	2314	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	0028	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	0041	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/07/2022	0137	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	26/07/2022	0218	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	26/07/2022	0411	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	26/07/2022	0006	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/07/2022	0224	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/07/2022	0239	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/07/2022	0021	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/07/2022	0229	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/07/2022	0325	Feathertail glider	D	towards forest	launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/07/2022	2227	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/07/2022	0010	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/07/2022	0030	Feathertail glider	D	towards forest	Launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/07/2022	0041	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/07/2022	0127	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/07/2022	0023	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/07/2022	0313	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/07/2022	0339	Feathertail glider	D	Away	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/07/2022	0013	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/07/2022	0047	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	29/07/2022	0110	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/07/2022	0131	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/07/2022	0158	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	30/07/2022	0317	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	30/07/2022	0339	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	30/07/2022	2336	Feathertail glider	D	Towards	Launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	31/07/2022	0259	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	31/07/2022	0313	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	31/07/2022	2238	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	1/08/2022	0306	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	1/08/2022	0144	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	3/08/2022	0332	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	3/08/2022	0349	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	4/08/2022	0306	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	5/08/2022	0324	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	5/08/2022	0358	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	5/08/2022	0032	Feathertail glider	D	Away	Launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	6/08/2022	0258	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/08/2022	2234	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/08/2022	2256	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/08/2022	0329	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	8/08/2022	2234	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/08/2022	0058	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	9/08/2022	2210	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/08/2022	2213	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/08/2022	0013	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/08/2022	0034	Feathertail glider	D	Towards	Launch off cam	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/08/2022	0105	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/08/2022	0307	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/08/2022	2250	Feathertail glider	D	Away	CC	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/08/2022	2317	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/08/2022	2339	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/08/2022	2359	Feathertail glider	D	EXM	NC	Incomplete	on pole for 30 mins
Glide pole	10	GP10	East	W2/E701	Roadside	11/08/2022	0315	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	12/08/2022	2356	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	12/08/2022	0045	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	12/08/2022	0101	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	13/08/2022	0301	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	13/08/2022	2244	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	13/08/2022	0056	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/08/2022	0326	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/08/2022	2228	Feathertail glider	D	Towards	Glide off arm	Complete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	14/08/2022	2303	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/08/2022	2346	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/08/2022	0005	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/08/2022	0037	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/08/2022	0118	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	15/08/2022	0225	Feathertail glider	D	Towards	Launch off cam arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	15/08/2022	0243	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	15/08/2022	0308	Feathertail glider	D	Towards	Launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	15/08/2022	2227	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	15/08/2022	0028	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	15/08/2022	0144	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	15/08/2022	0204	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	16/08/2022	0314	Feathertail glider	D	Away	launch off arm	Complete	2 individuals
Glide pole	10	GP10	East	W2/E701	Roadside	16/08/2022	2307	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	16/08/2022	2331	Feathertail glider	D	Towards	launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	16/08/2022	0004	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	17/08/2022	0324	Feathertail glider	D	Away	launch off arm	Complete	2 individuals
Glide pole	10	GP10	East	W2/E701	Roadside	19/08/2022	2248	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	19/08/2022	2325	Feathertail glider	D	Towards	Launch off cam arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	19/08/2022	0000	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	19/08/2022	0029	Feathertail glider	D	Towards	Launch off cam arm	Complete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	19/08/2022	0116	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	20/08/2022	0232	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	20/08/2022	0307	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/08/2022	2229	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/08/2022	2300	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/08/2022	2349	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/08/2022	0009	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/08/2022	0047	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/08/2022	0106	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/08/2022	0145	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/08/2022	0246	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	22/08/2022	0322	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	24/08/2022	0135	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/08/2022	2259	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/08/2022	0058	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/08/2022	0116	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/08/2022	0153	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/08/2022	2224	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/08/2022	0022	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/08/2022	0051	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/08/2022	0135	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	27/08/2022	0156	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/08/2022	0215	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/08/2022	0302	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/08/2022	0114	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/08/2022	0153	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	31/08/2022	0056	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	1/09/2022	0252	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	2/09/2022	0306	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	3/09/2022	0223	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	4/09/2022	2332	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	6/09/2022	2219	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	6/09/2022	2318	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/09/2022	0146	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/09/2022	0156	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	9/09/2022	2237	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	9/09/2022	0031	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	9/09/2022	0115	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/09/2022	2222	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/09/2022	2341	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/09/2022	0017	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/09/2022	0140	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	11/09/2022	0217	Feathertail glider	D	Towards	Launch off cam arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/09/2022	0054	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	18/09/2022	2229	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	18/09/2022	0101	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	20/09/2022	2311	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/09/2022	2254	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/09/2022	0002	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/09/2022	0047	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	22/09/2022	2259	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	24/09/2022	2217	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	26/09/2022	2254	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	26/09/2022	2332	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	26/09/2022	0133	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/09/2022	2226	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/09/2022	2313	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/09/2022	2345	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/09/2022	0053	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	30/09/2022	0241	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	1/10/2022	2244	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	3/10/2022	0028	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	3/10/2022	0047	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	4/10/2022	0050	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	6/10/2022	0224	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	6/10/2022	2223	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/10/2022	0214	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/10/2022	2239	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/10/2022	0014	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/10/2022	2229	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/10/2022	0035	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/10/2022	2237	Feathertail glider	D	Towards	Launch from pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/10/2022	2356	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/10/2022	0109	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/10/2022	0049	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	12/10/2022	2258	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	13/10/2022	2249	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	17/10/2022	2239	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	17/10/2022	0104	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	20/10/2022	0225	Feathertail glider	D	Away	Launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/10/2022	0218	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/10/2022	0037	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	21/10/2022	0049	Feathertail glider	Pr	Across (right)	Launch off arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	23/10/2022	0011	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	24/10/2022	0205	Sugar glider	Pr	Towards	Launch off cam arm	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/10/2022	2222	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/10/2022	0031	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/10/2022	0129	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/10/2022	0148	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/10/2022	2328	Sugar glider	Pr	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/10/2022	2356	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	28/10/2022	0120	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	31/10/2022	2315	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	31/10/2022	0157	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	1/11/2022	2348	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	1/11/2022	0031	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	2/11/2022	2350	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	3/11/2022	0020	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	5/11/2022	2242	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/11/2022	2213	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/11/2022	2358	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/11/2022	0046	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/11/2022	2336	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/11/2022	0004	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/11/2022	2224	Feathertail glider	D	Towards	Glide off pole	Complete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	10/11/2022	2251	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/11/2022	2256	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/11/2022	2330	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	11/11/2022	0135	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	13/11/2022	2355	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/11/2022	2215	Feathertail glider	D	towards	Launch from pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/11/2022	2305	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	14/11/2022	0146	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	15/11/2022	2248	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	19/11/2022	2235	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	19/11/2022	2322	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	19/11/2022	2356	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	26/11/2022	0050	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	27/11/2022	2355	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	29/11/2022	0144	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	2/12/2022	2231	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	5/12/2022	2239	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/12/2022	2223	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	7/12/2022	0006	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	8/12/2022	0132	Feathertail glider	D	Towards	Launch off pole	Complete	
Glide pole	10	GP10	East	W2/E701	Roadside	10/12/2022	2253	Feathertail glider	D	EXM	NC	Incomplete	

Structure type	Section	Structure ID	Side	Camera	Location	Date	Time	Species	Accuracy	Movement Direction	Crossing Type	Edited crossing type	Comments
Glide pole	10	GP10	East	W2/E701	Roadside	11/12/2022	0128	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	13/12/2022	0201	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	19/12/2022	2214	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	19/12/2022	0150	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	22/12/2022	2342	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	23/12/2022	2356	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	24/12/2022	2322	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	10	GP10	East	W2/E701	Roadside	25/12/2022	0037	Feathertail glider	D	EXM	NC	Incomplete	
Glide pole	3	GP5	West	S000	Roadside	18/11/2022	0048	Petaurus spp.	Pr	EXM	NC	Incomplete	
Glide pole	3	GP5	East	W31	Roadside	13/11/2022	2302	Squirrel glider	D	EXM	NC	Incomplete	

Appendix C –Effort and maintenance inspections on aerial crossing structures

Table C1: Effort and maintenance inspections on aerial crossing structures at sections 3-11 W2B during year two operational monitoring.

Site	Camera #	Maintenance check		
		Notes - 1-4 August 2022	12&13 October 2022	13-16 February 2023
GP10	East 701 (prev W02)	1/8/22; batteries still active; batteries & SD replaced		1899 pics; 100% battery, faulty SIM; EST 1800-0500
	West 1	1/8/22; SIM card not installed; batteries still active; batteries, SD & solar panel replaced. 2500 images		100% battery; off, D, off; EST 1800-0500
RB12	East 6	1/8/22; battery 100%; 6 pics - no fauna; SD & batteries left in cam.		60% battery, 9 pics; off, D, off; EST 1800-0500, increased sensitivity
	West 5	1/8/22; battery 80%; active, 7 pics; batteries & SD swapped.		100% battery, 3 pics, SD cycle was on; EST 1800-0500; off, D, off; increased sensitivity
RB11	East 3	1/8/22; battery 20%; 7 pics; batteries replaced; installed on sandwich board		Cam malfunction - keeps turning off; 100% battery; installed new cam; EST 1800-0500; on, D, off
	West 4; 27	1/8/22; old cam found at base of pole; new cam installed; w27		Battery flat, 4399 pics; added extra coreflute to reduce false triggers; EST 1800-0500; on, D, on, changed number of pics to 3
RB10	East 7	2/8/22; cam flooded; New cam installed; new SD; same sim		100% battery, 471 pics, EST 1800-0500; on, D, on; added coreflute
	West 8	2/8/2022; active; 14 pics; no fauna; 100% battery; replaced strap		17 pics; 100% battery, off, D, off, EST 1800-0500; increased sensitivity; held on with strap; gliders may be able to glide from forest edge to median bypassing the pole.
RB9	East 9	2/8/22; batteries 100%; 17 pics no fauna; cam moved lower on pole	Checked settings; moved 50mm higher & 50mm to the side	26pics, 80% battery, off, D, off; EST 1800-0500, increased sensitivity, setup is ok
	West 13	2/8/22; cam flooded, & not operational; replaced camera, SD, batteries, installed on bracket with new solar panel & large aerial	No changes made	100% battery, 309 pics, EST, 1800-0500; on, D, on.
RB8	East 10			100% battery, 9 pics; moved 30mm lower; off, D, off; EST 1800-0500
	West 12	Fallen over & unplugged from solar panel; 92 pics; replaced SD, batteries, solar panel & placed camera on bracket	Moved camera 75mm higher	100% battery, 13999 pics, EST, off, D, off; moved cam 50mm higher & fixed orientation
GP9	median 14	2/8/22; sensor damaged by bird, batteries flat; no spare cam.	Installed cameras on edge poles with solar panels on 12/10/22; W30 east & W25 west	1899 pics, cam dead - crow damage, solar panel unplugged, changed camera; EST 1800-0500; off, D, off. East cam flat, sensor damaged, replaced with non-wireless enduro, EST, 1800-0500
GP8	median 11	2/8/22; 425pocs, 100% battery; swapped SD & realigned camera slightly to the left		Not inspected

GP7	East 15	3/8/22; cam active, 80% battery; 2500 images; SD swapped; bottom eyebolt on lead line has snapped - concern about top eye bolt.		Need to replace/repair installed line & bolts; card error, EST, 1800-0500, on,D,on; 70% battery, no pics
	West 16	3/8/22; cam active, battery 100%; 9500 images; SD swapped.		106 pics; 100% battery, EST, 1800-0500, off, D, off; upper flip line bolt rusty
RB7	East 17	3/8/22; 5800 images, camera fallen onto rope bridge; 100% battery; SD, batteries & solar panel replaced	Changed active period (2000hrs to 0500hrs) & checked all settings. Sensitivity on low. . Left in original position. Safety issue with solar panel brackets at eye height	100% battery, 6 pics, mms off, smtp D, ftp off; 1800-0500 EST,
	West 18	3/8/22; 2500 images, batteries 30%; SD, batteries, solar panel replaced; camera moved lower on bridge	Changed active period to 2000hrs to 0500hrs; checked settings. Changed sensitivity to middle; installed coreflute	Card error, 100% battery, EST 1800-005, mms off, smtp D, ftp off
RB6	East 24	3/8/22; batteries 80%; 7 pics; replaced batteries & installed new aerial; only 1 metal zip tie remaining on each linking ropes	Installed extra core flute to widen coverage; moved camera 50mm lower	Battery 100%; 4933 pics; false triggers;; no signal; moved camera down 50mm & removed angle.
	West 25	3/8/22; batteries flat; 1900 pics; replaced batteries, SD, solar panel & new aerial	Moved camera 75mm higher	100% battery; 99 pics; moved cam 10mm higher; mms off; smpt default, ftp off; EST, 1800-0500
GP6	Median 26	3/8/22; batteries 100%, 2900 pics; replaced batteries & SD & reoriented camera.		Not inspected
RB5	East 23	Fallen off- sitting on bridge; 4/8/22, camera inundated; replaced camera, SD, solar panel.		100% battery; 12 pics; EST, 1800-0500; mms off, smpt D, ftp off
	West 22	4/8/22; camera malfunction (white screen); replaced camera, SD & solar panel		100% battery; 24 pic; EST, 1800-0600; on,D, on
GP4	East 19	4/8/22; w19 - cam flooded & inoperational; replaced cam, SD & aerial; w20 - active100%, 545 images; changed SD	Changed number of images remotely - change failed	100% battery; 354 pics; time EST
	West 20			Camera unplugged, 486 pics, cam active - died on inspection; swapped batteries; set time EST
GP5	Median 21		Installed cam 31 on east side; poor reception 2 bars 3G. Non wireless cam on west side. Both cams face highway.	Not inspected
	West non wireless			S000; non wireless; 100% battery; 21 pics; battery & SD swapped;
	East C31			W31; 80% battery; 3pics; setup looks ok; sensitivity high; 1800-0500 EST

Appendix D – Vegetated median fauna detections

Table C1: Results of 2022 tabbimoble vegetated median monitoring - fauna detections in sections 3-11. SqG = squirrel glider; SuG = sugar glider; FtG = Feathertail Glider

VM site	Cam ID	Date	Time	Species	Visitation count	Image No's	Comments
Tabbimoble	Tab VM1	4/01/2022	21:51	Squirrel glider	1	7	

VM site	Cam ID	Date	Time	Species	Visitation count	Image No's	Comments
Tabbimoble	Tab VM1	12/01/2022	2:51	Acrobates spp.	1	8	
Tabbimoble	Tab VM1	24/05/2022	NR	Acrobates spp.	11		cam flooded shorter date range
Tabbimoble	Tab VM1	24/05/2022	NR	Sugar glider	4		
Tabbimoble	Tab VM1	24/05/2022	NR	Squirrel glider	6		
Tabbimoble	Tab VM1	24/05/2022	NR	Small petaurid	4		
Tabbimoble	Tab VM1	1/09/2022	23:13	Acrobates spp.	1	2	
Tabbimoble	Tab VM1	29/09/2022	23:07	Acrobates spp.	1	1	
Tabbimoble	Tab VM1	30/09/2022	00:44	Squirrel glider	1	4-6	
Tabbimoble	Tab VM1	3/10/2022	01:08	Small petaurid	1	14	
Tabbimoble	Tab VM1	31/12/2022	Nil	Nil	Nil	Nil	Numerous false trigger of insects
Tabbimoble	Tab VM2	2022	NR	Nil	Nil	Nil	All images of moving leaves and branches in background (14/04/2022 download)
Tabbimoble	Tab VM2	28/09/2022	21:37	Squirrel glider	1	2-	
Tabbimoble	Tab VM2	10/12/2022	349	Acrobates spp.	1	6	
Tabbimoble	Tab VM2	19/12/2022	317	Squirrel glider	1	11	
Tabbimoble	Tab VM2	21/12/2022	411	Acrobates spp.	1	12	
Tabbimoble	Tab VM2	24/12/2022	113	Small petaurid	1	15	
Tabbimoble	Tab VM2	24/12/2022	411	Acrobates spp.	1	18	
Tabbimoble	Tab VM2	24/12/2022	2213	Acrobates spp.	1	19	
Tabbimoble	Tab VM2	27/12/2022	0046	Squirrel glider	1	25	
Tabbimoble	Tab VM2	29/12/2022	0204	Squirrel glider	1	27	Reviewed up to image number 29 - remaining vids on hard drive
Tabbimoble	Tab VM2	NR	NR	Acrobates spp.	19		Several false triggers. Lots of petaurid individuals hovering.
Tabbimoble	Tab VM2	NR	NR	Sugar glider	9		
Tabbimoble	Tab VM2	NR	NR	Squirrel glider	13		
Tabbimoble	Tab VM2	NR	NR	Small petaurid	7		
Tabbimoble	Tab VM3	13/10/2022	22:43	Small petaurid	1	2	
Tabbimoble	Tab VM3	14/10/2022	23:50	Squirrel glider	1	17	
Tabbimoble	Tab VM3	15/10/2022	22:33	Acrobates spp.	1	2	
Tabbimoble	Tab VM3	15/10/2022	00:17	Squirrel glider	1	19	Male - scent gland
Tabbimoble	Tab VM3	18/10/2022	22:02	Acrobates spp.	1	4	

VM site	Cam ID	Date	Time	Species	Visitation count	Image No's	Comments
Tabbimoble	Tab VM3	20/10/2022	23:59	Squirrel glider	1	23	
Tabbimoble	Tab VM3	21/10/2022	03:27	Antechinus spp.	1	26	
Tabbimoble	Tab VM3	21/10/2022	21:43	Small petaurid	1	29	
Tabbimoble	Tab VM3	26/10/2022	22:46	Squirrel glider	1	30	
Tabbimoble	Tab VM3	27/10/2022	22:45	Acrobates spp.	1	31	
Tabbimoble	Tab VM3	30/10/2022	00:11	Acrobates spp.	1	17	
Tabbimoble	Tab VM3	30/10/2022	02:10	Squirrel glider	1	7	
Tabbimoble	Tab VM3	31/10/2022	00:38	Squirrel glider	1	23	
Tabbimoble	Tab VM3	31/10/2022	03:18	Acrobates spp.	1	24-27	
Tabbimoble	Tab VM3	31/10/2022	23:26	Squirrel glider	1	30-31	
Tabbimoble	Tab VM3	2/11/2022	03:01	Acrobates spp.	1	33	
Tabbimoble	Tab VM3	4/11/2022	03:22	Acrobates spp.	1	33	
Tabbimoble	Tab VM3	4/11/2022	02:55	Small petaurid	1	39	
Tabbimoble	Tab VM3	6/11/2022	04:34	Small petaurid	1	54	
Tabbimoble	Tab VM3	10/11/2022	21:06	Acrobates spp.	1	44	
Tabbimoble	Tab VM3	12/11/2022	20:53	Small petaurid	1	48	
Tabbimoble	Tab VM3	14/11/2022	20:44	Small petaurid	1	51	
Tabbimoble	Tab VM3	17/11/2022	22:23	Acrobates spp.	1	58	
Tabbimoble	Tab VM3	21/11/2022	23:07	Acrobates spp.	1	62	
Tabbimoble	Tab VM3	30/11/2022	22 23	Acrobates spp.	1	2	
Tabbimoble	Tab VM3	17/12/2022	00 53	Sugar glider	1	14	
Tabbimoble	Tab VM3	18/12/2022	22 48	Acrobates spp.	1	15	
Tabbimoble	Tab VM3	24/12/2022	22 44	Acrobates spp.	1	19	Reviewed up to image number 32 - remaining vids on hard drive
Tabbimoble	Tab VM4	9/12/2022	00 09	Acrobates spp.	1	3	Reviewed up to image number 8 - remaining vids on hard drive