



# Widened Median Monitoring 2022

**Oxley Highway to Kempsey, Pacific Highway Upgrade**

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*Cover photograph: Widened median and aerial crossings photographed from Bill Hill Rd (left), Common Brushtail Possum recorded on remote camera East of widened median and Sugar Glider recorded on remote camera within the median.*

## Executive Summary

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### **Context**

This report documents findings from the 2022 monitoring period, the final of three monitoring periods for the widened median, as required for the Oxley Highway to Kempsey (OH2K) Pacific Highway Upgrade Project (the Project) and specified in the Oxley Highway to Kempsey (OH2K) Ecological Monitoring Program (EMP, TfNSW 2022). Transport for NSW (TfNSW) is required to manage and monitor the effectiveness of biodiversity mitigation measures implemented as part of the Project.

### **Aims**

The aim of the widened median monitoring program is to determine whether the widened median is being used by glider species, specifically the threatened Yellow-bellied Glider and Squirrel Glider. The aims of this report are to summarise the methods and results of the 2022 monitoring period and determine if performance measures are being met, as per the EMP.

### **Methods**

In response to recommendations within the 2020 Widened Median Monitoring Report and endorsement by Transport for NSW (TfNSW) and the NSW Environment Protection Authority (EPA), monitoring was undertaken in accordance with changes to the methods provided within the approved EMP. The changes resulted in the discontinuation of hair tube sampling and spotlighting surveys, replaced with baited arboreal motion-detecting camera monitoring.

A total of 18 arboreal motion-detecting cameras were deployed, including six within the median and another six within adjacent habitat on either side of the carriageway. Cameras were deployed on prominent trees and baited with a honey, oat and peanut butter mixture left in a bait canister on an opposing tree.

Nest boxes within the median and adjacent habitat each side of the carriageway were monitored as part of the Nest Box Monitoring Program for the Project and data was used to supplement the assessment of the widened median.

### **Key Results**

The key results can be summarised as follows:

- Yellow-bellied Gliders have not been recorded within the median.
- Squirrel Gliders have not been definitively recorded.
- Three glider species were detected during surveys including, the Sugar Glider, Feathertail Glider and Sugar/Squirrel Glider.
- All glider species were detected in adjacent habitat as well as within the Median.

### **Conclusions**

The performance indicator requiring evidence of use of median vegetation by the target glider species (Yellow-bellied Glider and Squirrel Glider) has not been met. Two potential Squirrel Gliders in 2022/2023 on arboreal cameras and one observation of an individual during spotlighting surveys in 2020 were recorded within the median. The Yellow-bellied Glider was not recorded within the median.

The performance indicator requiring evidence of use by dispersing individuals and different age cohorts cannot be assessed using the prescribed survey methods.

The performance indicator requiring use by glider species other than threatened species, e.g. Sugar Glider, has been met. The Sugar Glider has been recorded using the median during spotlighting surveys and arboreal camera monitoring.

### ***Management Implications***

Despite the change in methodology and use of arboreal baited cameras within the median use by target species could not be confirmed. However, further monitoring is not recommended for the following reasons:

- The target species were not recorded within the adjacent vegetation, east and west of the widened median, as such the absence of records from the median should not be considered as an indication of the performance of the mitigation.
- The widened median has been successfully used by other glider species (Feathertail Glider and Sugar Glider) a substantial number of times throughout the monitoring program, demonstrating the effectiveness of the mitigation measure to provide safe crossing opportunities.
- These glider species have been used as indicator species for the target glider species when considering the performance of other mitigation measures for the Project (rope bridges and glider poles).

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# 1. Introduction

## 1.1 Context

The Oxley Highway to Kempsey (OH2K) section of the Pacific Highway Upgrade Project (the Project) was approved in 2012 subject to various Ministers Conditions of Approval (MCoA) and a Statement of Commitments (SoC). A subsequent approval with additional conditions of consent (CoA) was granted in 2014 by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCCEE, previously the Department of Environment (DoE)) for Matters of National Environmental Significance (MNES) listed under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Ecological Monitoring Program (hereafter referred to as the EMP) (TfNSW 2022) combines these approval conditions and defines the mitigation and offsetting requirements for threatened species and ecological communities impacted by the Project.

### 1.1.1 Monitoring framework

The design, methods and performance indicators that define the widened median monitoring program are specified in the EMP. Monitoring of the widened median was to commence during the first optimal season, that is, during breeding and dispersal periods (June – September) for target species, following the completion of the Project. As the final stage of the Project was opened in March 2018, monitoring commenced in June 2018, year 4 of the Project. Monitoring was scheduled to be undertaken for a minimum of three years: in years 4, 6 and 8 of the Project. Additional years may be required if the widened median is found to be ineffective and require modification.

To date, these monitoring events have been undertaken and reported as follows:

- Winter/spring 2018 (Year 4): Niche 2019a
- Winter/spring 2020 (Year 6): Niche 2021
- Winter/spring 2022 (Year 8): Current report

This report presents the results of the final of the three monitoring periods – year 8, winter/spring 2022.

### 1.1.2 Background data

The retention of trees within a median that separates the northbound and southbound carriageways has been employed as a means of mitigating the barrier effect of roads on gliders by providing safe crossing opportunities. The median is approximately 50 metres at its widest and is supplemented by three sets of glider poles and one canopy rope bridge (see Figure 1). Vegetation communities in the widened median and either side of the carriageway include Moist Gully Forest, Paperbark Swamp Forest, Swamp Mahogany/Forest Red Gum Swamp Forest, Moist Floodplain Forest and Dry Ridgetop Forest (TfNSW 2022). The target species and their breeding and dispersal periods are provided in Table 1.

**Table 1: Target species (from Table 18 of the EMP)**

Target species	Breeding season	Likely dispersal
Yellow-bellied Glider ( <i>Petaurus australis</i> )	Between July and September (variable depending on habitat characteristics)	Winter to spring (when young 12-24 months of age)
Squirrel Glider ( <i>Petaurus norfolcensis</i> )	Between April and November (peak during winter)	Autumn to spring

### 1.1.3 Purpose of this report

This report details the findings obtained from the third and final monitoring period for the widened median. The aims of this report are to summarise the methods and results of the 2022 monitoring and determine if performance measures are being met, as per the EMP.

## 1.2 Performance Measures

The EMP specifies the following performance measures for the widened median:

- *Evidence of use of median vegetation by the target glider species*
- *Evidence of use by dispersing individuals and different age cohorts*
- *Use by glider species other than threatened species e.g. sugar glider.*

Target glider species identified in the EMP include the Yellow-bellied Glider (*Petaurus australis*) and Squirrel Glider (*Petaurus norfolcensis*).

## 1.3 Monitoring Timing

Monitoring is to be undertaken over 16 weeks from June to September in years 4, 6 and 8 of the Project.

## 1.4 Reporting

As per the EMP, the annual reporting of monitoring results will include:

- Detailed description of monitoring methodology employed
- Results of the monitoring period
- Discussion of results, including how the results compare against performance measures, if any modifications to timing or frequency of monitoring periods or monitoring methodology are required and any other recommendations
- If contingency measures should be implemented.

This report prepared under the EMP will be submitted to NSW Department of Planning and Environment (DPE) and the NSW Environment Protection Authority (EPA).

## 1.5 Limitations

The transition from spotlighting and hair tube sampling utilised as monitoring methods in Year 4 and Year 6 to baited arboreal motion-detecting camera monitoring and ongoing nest box monitoring in Year 8 presents a limitation in the comparability of data throughout all monitoring periods. However, the use of motion-detecting cameras was adopted in order to provide additional fauna observations and increased chance of detection of the target species.

Where possible, individuals were identified to species, however accurate identification of Squirrel Gliders through camera trap imagery was not always possible due to distinguishing features being hidden from view.



## 2. Methods

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In response to recommendations within the 2020 Widened Median Monitoring Report (Niche 2020) and endorsement by Transport for NSW (TfNSW) and the NSW Environment Protection Authority (EPA), monitoring was undertaken in accordance with changes to the methods provided within the approved EMP. The changes resulted in the discontinuation of hair tube sampling and spotlighting surveys, replaced with baited arboreal motion-detecting camera monitoring.

### 2.1 Monitoring Sites

There have been no changes to the area of monitoring. Monitoring was undertaken in accordance the EMP, within the widened median and retained habitat either side of the highway corridor (Figure 1).

### 2.2 Survey Methods

Year 8 surveys were undertaken in accordance with the new methodology using the following techniques:

- Arboreal camera monitoring
- Nest box monitoring.

Year 4-6 surveys were undertaken in accordance with the original EMP using the following techniques:

- Hair tube sampling
- Spotlighting transects
- Nest box monitoring.

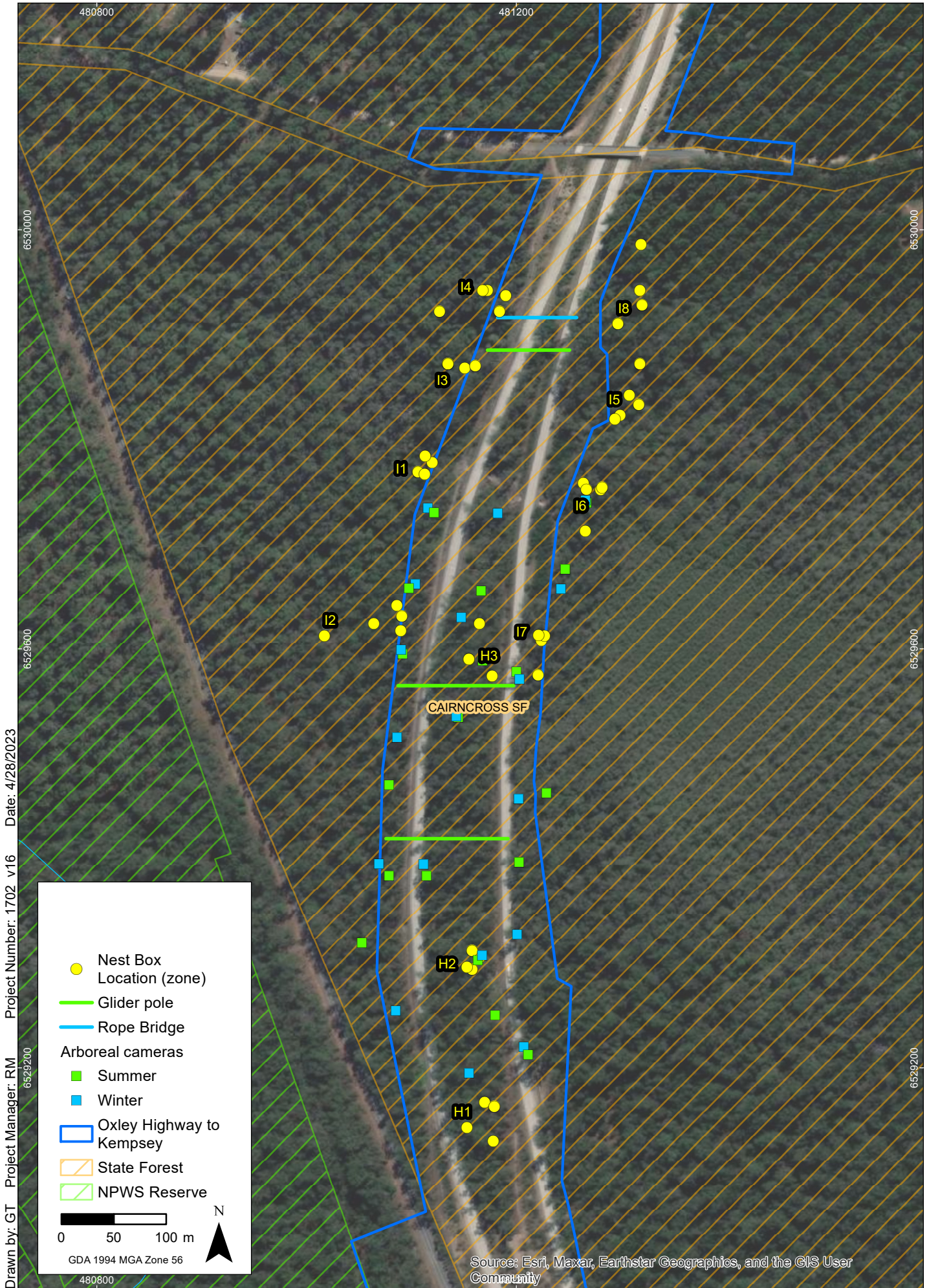
#### 2.2.1 Arboreal camera monitoring

Commencing in Year 8, a total of 18 arboreal motion-detecting cameras were deployed, including six within the median and another six within adjacent habitat on either side of the carriageway. Cameras were deployed on prominent trees and baited with a honey, oat and peanut butter mixture left in a bait canister on an opposing tree. An arborist was employed to mount each camera between four and six metres above-ground. Arboreal camera monitoring was carried out over two, two-month sample periods, with bait changed after four weeks. Monitoring occurred during winter 2022 and in late spring/early summer 2022/2023.

#### 2.2.2 Nest box monitoring

Nest boxes within the median and adjacent habitat each side of the carriageway were monitored as part of the Nest Box Monitoring Program for the Project. There are 11 nest boxes located within the median and a further 18 boxes on the eastern side and 18 boxes on the western side of the carriageway immediately adjacent to the median.

Each nest box was visually inspected using a wireless camera attached to the end of an extendable pole, or by a tree climber when inspection from the ground was not possible. Details recorded for each box included: occupation by fauna, species if present, signs of use by fauna, box condition, maintenance required, changes to surrounding landscape and daily weather conditions.



Widened median monitoring 2022/2023

Pacific Highway Upgrade - Oxley Highway to Kempsey

FIGURE 1

### 3. Results

Figure 2 shows the location of cameras where gliding species were detected along with the relevant nest box monitoring results for the 2022 monitoring period.

#### 3.1 Arboreal camera monitoring

A total of 18 cameras were deployed, including six within the widened median, and six on either side of the of the carriageway. Results of the arboreal camera monitoring are provided in Table 2.

The 2022/2023 monitoring periods were as follows:

- Winter 2022: 20 June 2022 – 13 September 2022
- Late spring/early summer: 9 November – 9 March 2023.

A total of 653 and 237 records of fauna were captured during winter and summer, respectively. Of the 653 and 237 records from winter and summer, 312 were recorded within the median. Sugar Gliders were the most commonly recorded fauna recorded during monitoring, followed by *Antechinus* sp. and Black Rat (*Rattus rattus*). Gliders, including the Sugar Glider and Feathertail Glider, were recorded within the median as well as in adjacent habitat to the east and west of the widened median.

Monitoring did not reveal use by the target species; the Yellow-bellied Glider was not recorded, and three potential records of the Squirrel Glider occurred within the median.

**Table 2: Arboreal camera monitoring results.**

Species	West		Median		East	
	Winter	Summer	Winter	Summer	Winter	Summer
Sugar Glider ( <i>Petaurus breviceps</i> )	Y (125)	Y (43)	Y (205)	Y (40)	Y (93)	Y (17)
Sugar/Squirrel glider ( <i>Petaurus breviceps</i> / <i>Petaurus norfolcensis</i> )			Y (2)	Y (1)		
Feathertail Glider ( <i>Acrobates pygmaeus</i> )		Y (3)	Y (2)		Y (1)	
<i>Antechinus</i> sp.	Y (17)	Y (23)	Y (42)	Y (1)	Y (109)	Y (17)
Black Rat ( <i>Rattus rattus</i> )	Y (8)	Y (39)	Y (6)			Y (38)
Common Brushtail Possum ( <i>Trichosurus vulpecula</i> )					Y (11)	Y (6)
Rodent/Marsupial	Y (2)	Y (5)		Y (1)	Y (2)	Y (1)
Bird		Y (2)				
Unknown Glider			Y (3)		Y (2)	
Unidentified (partial)	Y (5)		Y (9)		Y (10)	

Y = recorded, (#) = number of records.

#### 3.2 Nest Box Monitoring

Eighteen nest boxes were installed on either side of the carriageway and 12 nest boxes within the widened median as part of the *Nest Box Plan of Management* (NBPoM, Lewis 2013). The results of inspections to

date are provided in Annex 2 and have been extracted from the 2022 Nest Box Monitoring report (Niche 2023). Table 3 summarises the species recorded using these nest boxes during the 2022 survey period as well as all inspections to date.

### 3.2.1 Occupation

The Sugar Glider was recorded occupying nest boxes on two occasions within the median during 2022 nest box monitoring. Sugar Gliders were recorded in two different small glider nest boxes (H2\_390 and H3\_395) during the winter monitoring period. Other species previously identified using nest boxes within the median include *Antechinus* sp. on one occasion and a Lace Monitor on one occasion. Comparably, there was one records of occupation by Sugar Gliders to the east and one record to the west during 2022 nest box monitoring.

### 3.2.2 Signs of use

During the 2022 nest box monitoring, 50% of nest boxes within the median showed signs of use, while 22% and 38% of nest boxes to the east and west respectively showed signs of use.

Considering all nest box monitoring events, 42% of the boxes (five boxes) within the median have been found to be occupied on at least one occasion and 83% of the boxes (ten boxes) within the median have been found to be occupied or have shown signs of use on at least one occasion. The rate of occupancy/use of boxes within the median is similar to the rate of occupancy/use of nest boxes in adjacent forested habitat.

The Yellow-bellied Glider has been recorded previously on six occasions using nest boxes along the alignment (Niche 2020) in locations 10-15 kilometres north of the widened median. Similarly, the Squirrel Glider has been previously recorded on three occasions in nest boxes from 1.5 to 10 kilometres from the median (Niche 2018). These species have not been recorded occupying nest boxes within the median.

**Table 3: Nest box occupancy and species recorded in nest boxes within the median and adjacent to the highway**

Species	Summer/winter 2021/2022			All inspections		
	East	Median	West	East	Median	West
Number of boxes occupied at least once (%)	1 (6%)	2 (17%)	2 (11%)	5 (28%)	5 (42%)	5 (28%)
Number of boxes occupied or showing signs of use at least once (%)	4 (22%)	6 (50%)	7 (38%)	17 (94%)	10 (83%)	16 (88%)
Sugar Glider	✓ (1)	✓ (2)	✓ (1)	✓ (1)	✓ (5)	✓ (6)
Common Brushtail Possums ( <i>Trichosurus vulpecula</i> )	✓ (1)		✓ (1)	✓ (6)		
<i>Antechinus</i> sp.					✓ (1)	
Lace monitor ( <i>Varanus varius</i> )				✓ (2)	✓ (1)	✓ (1)

(#) number of occasions found occupying nest boxes

### 3.3 Summary of Results

The results of the three monitoring periods to date (2018, 2020 and 2022) have been combined to show the cumulative use of the median by target fauna. Table 4 provides a cumulative summary of fauna recorded within the median and adjacent habitat east and west of the carriageway. Methods of detection have included arboreal camera monitoring, spotlighting, hair tubes and nest box monitoring.

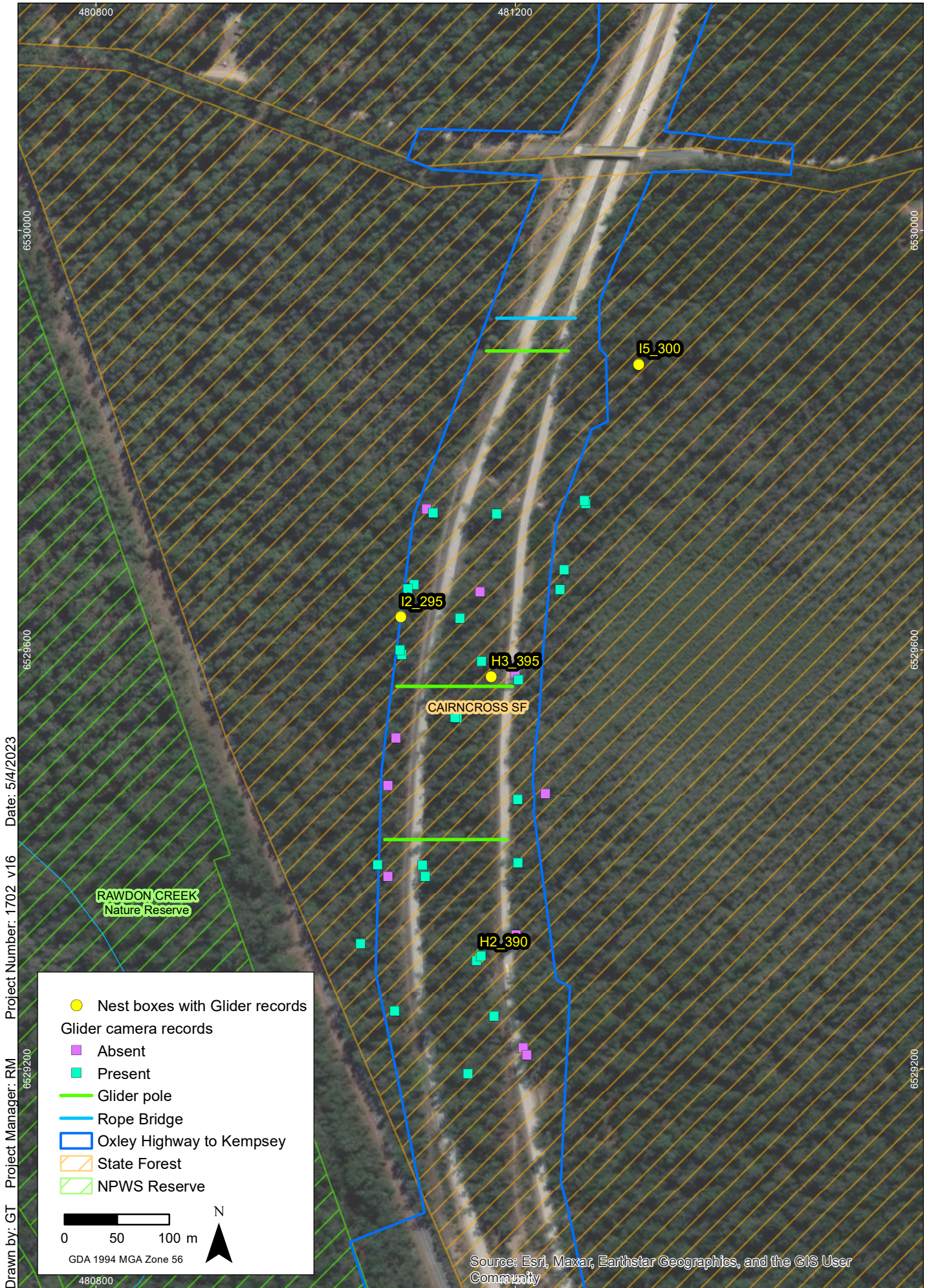
A total of 14 species were detected during surveys, including two (possibly three) glider species (Sugar Glider, Feathertail Glider and Sugar/Squirrel Glider). All glider species were detected in adjacent habitat as well as within the median.

The Yellow-bellied Glider was not recorded whilst five potential records of the Squirrel Glider occurred within the median throughout the monitoring program.

**Table 4: Cumulative use of median, eastern and western roadside habitat**

Species	Transect		
	East	Median	West
Feathertail Glider	✓ (2s, 1c)	✓ (2s, 2c)	✓ (3c)
Sugar/Squirrel Glider *	✓ (6s)	✓ (2s, 3c)	✓ (1s)
Sugar Glider	✓ (3s, 110c)	✓ (7s, 3n, 245c)	✓ (1s, 5n, 168c)
Common Brushtail Possum	✓ (4s)		✓ (2s)
Brushtail Possum ( <i>Trichosurus</i> spp.)	✓ (5n, 2h)		✓ (1h)
Cat ( <i>Felis catus</i> )	✓ (1s, 17c)		
Bat (Microbat and Flying Fox)	✓ (1s)	✓ (1s)	
Bird		✓ (1s)	✓ (2c)
<i>Rattus</i> sp.	✓ (6h)	✓ (14h)	✓ (1s, 3h)
Black Rat	✓ (11h, 38c)	✓ (35h, 6c)	✓ (2h, 47c)
Bush Rat ( <i>Rattus fuscipes</i> )	✓ (1h)		
Rodent	✓ (1h, 3c)	✓ (6c)	✓ (3h, 7c)
<i>Antechinus</i> sp.	✓ (116c)	✓ (1n, 43c)	✓ (40c)
Lace Monitor ( <i>Varanus varius</i> )	✓ (2n)	✓ (1n)	✓ (1n)

#- number of records, \* - denotes possible Squirrel Glider record, s-spotlighting, n-nest boxes, h-hair tubes, c-remote camera.



Widened median monitoring results

Pacific Highway Upgrade - Oxley Highway to Kempsey

**FIGURE 2**

## 4. Discussion

### 4.1 Performance Measures

A summary of the monitoring results to date in relation to the performance measures is provided in Table 5.

**Table 5: Summary of performance measures**

Performance measure	Discussion
Evidence of use of median vegetation by the target glider species (Yellow-bellied Glider and Squirrel Glider).	<b>This performance measure has not been met.</b> Five possible Squirrel Glider observations have been made over the course of the three monitoring periods undertaken to date, during spotlighting surveys and arboreal camera monitoring within the median. The Yellow-bellied Glider has not been recorded within the median.
Evidence of use by dispersing individuals and different age cohorts.	<b>This performance measure cannot be assessed.</b> Surveys completed do not permit the determination of dispersal (they provide information on presence/absence and behaviour only in this instance) and offer limited opportunity to determine age of individuals.
Use by glider species other than threatened species e.g. Sugar Glider	<b>This performance measure has been met.</b> The Sugar Glider and Feathertail Glider have been recorded using the median during spotlighting surveys and arboreal camera monitoring.

## 5. Recommendations

### 5.1 Contingency Measures

The EMP lists potential problems and contingency measures for various components of the monitoring program. Those that are considered relevant to the widened median monitoring are listed and discussed in Table 6.

**Table 6: Contingency measures**

Potential problem	Contingency measure	Discussion of proposed measure
No evidence of use of the median vegetation by the target glider species.	Investigate alternative crossing structures (e.g. glider poles and/or rope bridges) in consultation with EPA.	<p>Yellow-bellied Gliders have not been recorded within the median. Squirrel Gliders have not been definitively recorded. Sugar Gliders were recorded actively foraging within the median vegetation. This species is listed in the EMP as an indicator species for the target species, to be used to assess the success of road crossing structures (glider poles and rope bridges). However, the use of indicator species to assess the success of the widened median as a mitigation measure is not provided for within the EMP.</p> <p>It is however considered that the median is providing roosting and foraging habitat for small gliders and that, if present, would provide habitat and connectivity for Squirrel Gliders.</p> <p>Yellow-bellied Gliders were identified during baseline surveys undertaken in 2013 within Cairncross State Forest, directly to the south west of the median (one individual during two out of three surveys, one month apart (Lewis 2014)), however current surveys of the same area have not recorded this species. Yellow-bellied Glider records from nest box monitoring and other incidental records (Niche 2019b) occur from approximately 10 kilometres north of the median. There have been no records of this species in closer proximity to the median during any operational monitoring. Given the absence of records in adjacent habitat, the absence of records from the median should not be considered as an indication of the performance of the mitigation measure.</p> <p>The widened median is already supplemented by three sets of glider poles and one rope bridge. However, as the aerial crossings are not being monitored it is not possible to confirm traverses, however the presence of gliders within the median and occupation of the installed nest boxes would indicate traverses of the highway on at least a number of occasions, via the glider crossings or <i>in situ</i> trees. Yellow-bellied Gliders were not detected within the median or in adjacent habitat during the monitoring program. Foraging and roosting habitat is present within the median, however it is not abundant. It is possible that the median may provide transitory habitat only for this species, in which case the likelihood of detection of this species may be expected to be lower than small gliders, which have demonstrated use of the habitat within the widened median for roosting and foraging.</p> <p><b>Given that the widened median is already supplemented by crossing structures and small gliders are demonstrating use of the widened median, this contingency measure is not considered relevant.</b></p>
Evidence of use by dispersing individuals and different age cohorts.	Not applicable	Surveys completed do not permit the determination of dispersal (they provide information on presence/absence and behaviour only in this instance) and offer limited opportunity to determine age of individuals. Given the purpose of the monitoring program is to determine use of the mitigation measure by glider species, the nature of the movement and age of individuals is of no consequence and is beyond the scope of the monitoring program.



## 5.2 Recommendations

Despite the change in methodology and use of arboreal baited cameras within the median use by target species could not be confirmed. However, further monitoring is not recommended for the following reasons:

- The target species were not recorded within the adjacent vegetation, east and west of the widened median, as such the absence of records from the median should not be considered as an indication of the performance of the mitigation.
- The widened median has been successfully used by other glider species (Feathertail Glider and Sugar Glider) a substantial number of times throughout the monitoring program, demonstrating the effectiveness of the mitigation measure to provide safe crossing opportunities.
- These glider species have been used as indicator species for the target glider species when considering the performance of other mitigation measures for the Project (rope bridges and glider poles).

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## Annex 1 – Nest box results

**Table 7: Nest box monitoring results (extracted from Niche 2023)**

Zone	Location	Box #	Box type	Height (m)	Tree species	Summer 2022 species	Summer 2022 signs of use	Winter 2022 species	Winter 2022 signs of use
H1	Median	385	LG	10	Blackbutt		Nil		
H1	Median	386	SG	7	Blackbutt		Nil		
H1	Median	387	Parr	8	Blackbutt		Nil		
H1	Median	388	Poss.	8	Blackbutt		Old leaves		Latrine
H2	Median	389	MB	7	Tallowood		Nil		Nil
H2	Median	390	SG	6	Tallowood		Old leaves	Sugar Gliders	Occupied
H2	Median	391	LG	10	Blackbutt		Old leaves		Euc leaf
H2	Median	392	SG	6	Blackbutt		Old leaves		Fresh euc nest
H3	Median	393	Cock	12	Blackbutt		Nil		Nil
H3	Median	394	Poss.	6	Blackbutt		Nil		Nil
H3	Median	395	SG	6	Turpentine		Nil	Sugar Gliders	Occupied
H3	Median	396	LG	10	Blackbutt		Old leaves		Old leaves
I1	West	290	Scan	6	Swamp Mahogany	Ants	Nil	Ants	Nil
I1	West	292	SG	8	Pink Bloodwood	Insect	Nil	Termites	Old leaf
I1	West	293	SG	8	Swamp Mahogany	Ants	Old leaves		Conical Euc Nest
I1	West	294	Poss.	7	Swamp Mahogany		Nil		Nil
I2	West	288	LG	10	White Stringybark		Nil		Nil
I2	West	289	Parr	8	Blackbutt		Nil		Nil
I2	West	291	MB	7	White Stringybark		Nil		Nil
I2	West	295	SG	8	Blackbutt	Sugar Glider x4	Occupied		Fresh euc nest
I2	West	296	Scan	6	White Stringybark		Euc leaf	Insects	Nil
I3	West	283	SO	10	Tallowood		Nil		Nil
I3	West	284	Poss.	7	Tallowood		Old leaves		Nil
I3	West	285	LG	10	Blackbutt		Old leaves		Bark and leaf
I3	West	286	SG	8	White Stringybark		Nil		Nil
I3	West	287	Scan	8	Mahogany		Euc leaf		Nil
I4	West	279	LG	10	Mahogany		Nil	Common Brushtail Possum	Occupied
I4	West	280	MB	8	Blackbutt		Nil		Fresh euc
I4	West	281	Parr	8	Mahogany		Nil		Nil
I4	West	282	Poss.	8	Turpentine		Nil		Nil
I5	East	297	SG	6	White Mahogany		Nil		Nil
I5	East	298	Poss.	8	Tallowood		Nil		Nil
I5	East	299	Add. Poss.	8	Tallowood		Nil		Old leaves
I5	East	300	SO	10	Mahogany	Common Brushtail Possum	Nil	Sugar Glider	Occupied
I5	East	301	LG	10	Tallowood		Nil		Nil

Zone	Location	Box #	Box type	Height (m)	Tree species	Summer 2022 species	Summer 2022 signs of use	Winter 2022 species	Winter 2022 signs of use
I6	East	307	Poss.	6	Mahogany		Nil		Old leaf
I6	East	308	SG	7	Bloodwood		old leaves, latrine		Euc leaf
I6	East	309	Parr	9	Mahogany		Nil		Nil
I6	East	310	Scan	5	Mahogany		Nil		Nil
I6	East	311	LG	9	Mahogany		Nil		Nil
I7	East	312	Parr	7	Mahogany		Nil		Nil
I7	East	313	LG	9	Mahogany		Euc leaf		Old leaf
I7	East	314	LG	10	Swamp Mahogany		Nil	Termites	Nil
I7	East	315	MB	6	White Stringybark		Nil		Nil
I8	East	316	LG	10	White Stringybark		Old leaves		Old leaf
I8	East	317	Poss.	7	Turpentine		Nil		Nil
I8	East	318	Parr	8	Blackbutt		Nil		Nil
I8	East	319	Cockatoo	10	Blackbutt		Nil		Unk

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## **Niche Environment and Heritage**

A specialist environmental and heritage consultancy.

### **Head Office**

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All mail correspondence should be through our Head Office