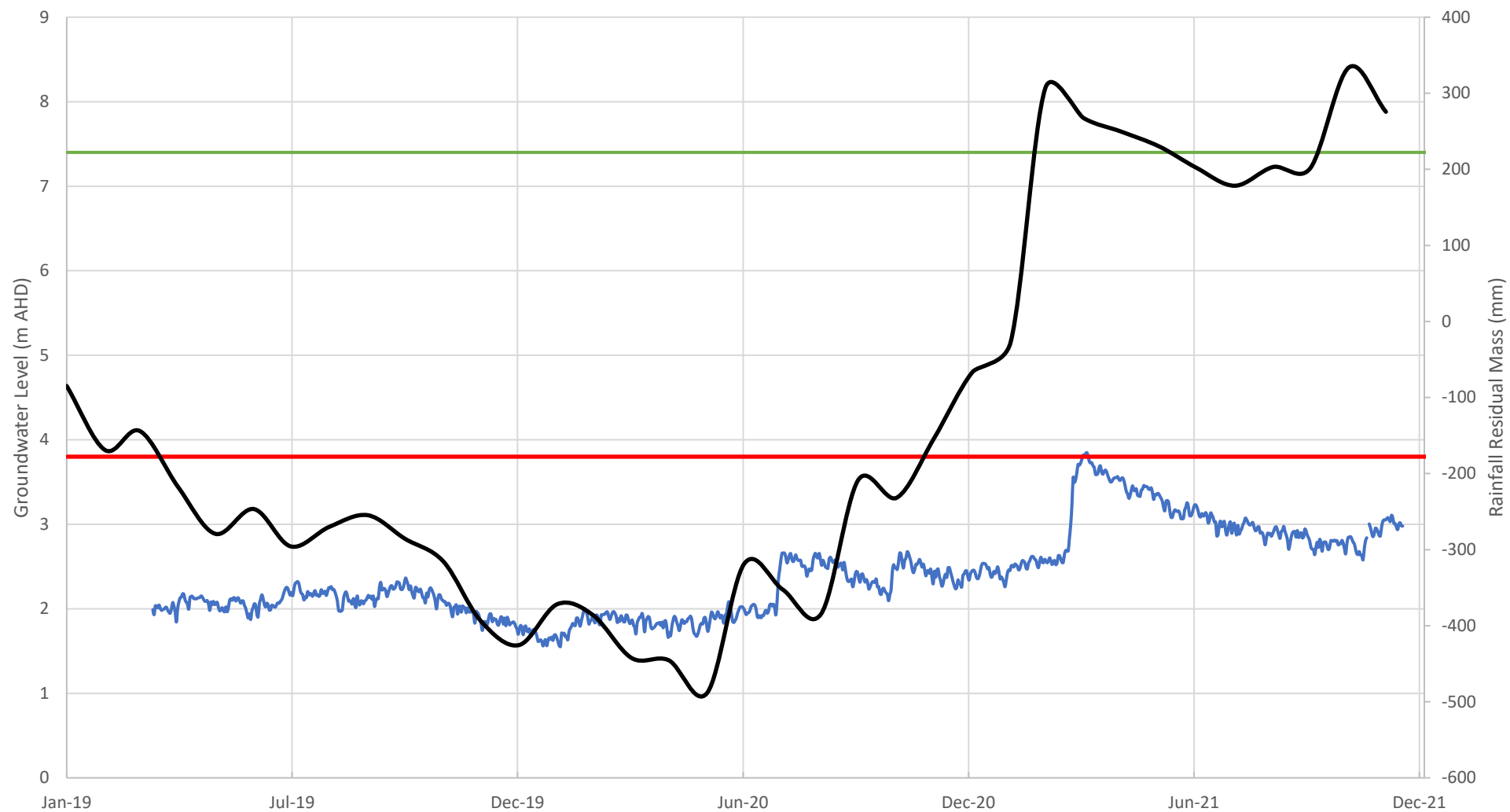


APPENDIX 6. GROUNDWATER LEVELS

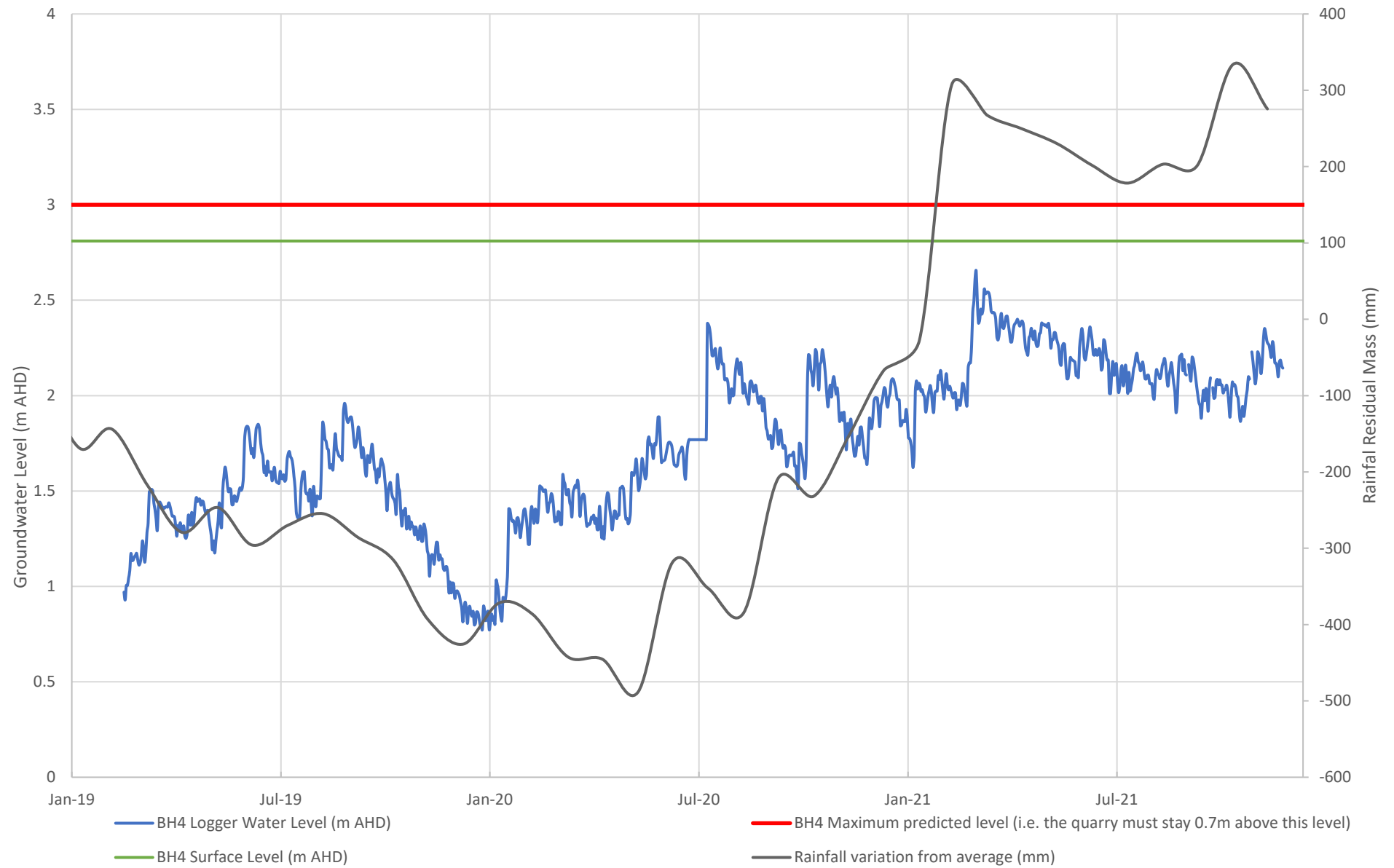


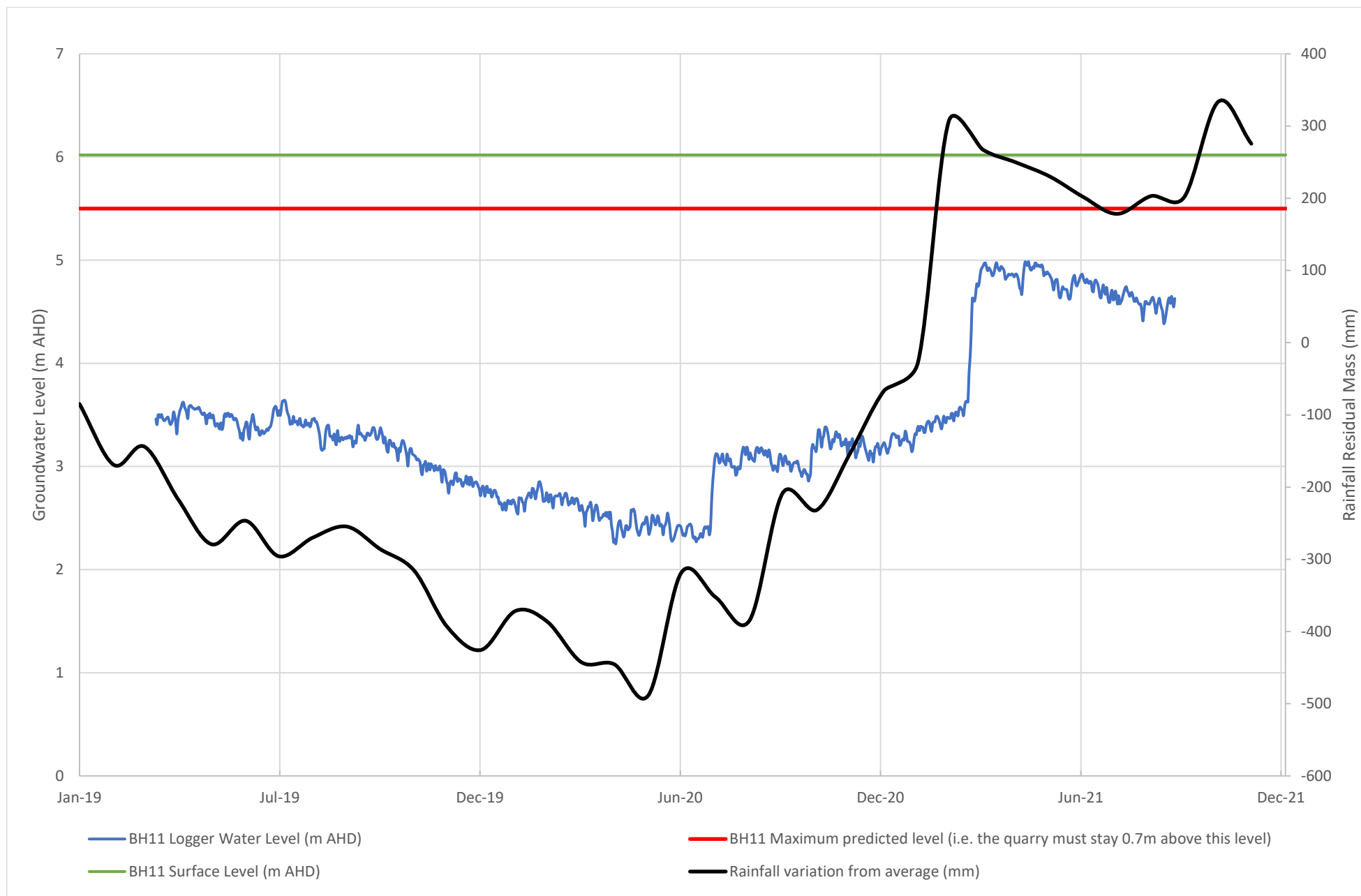
— BH2 Logger Water Level (m AHD)

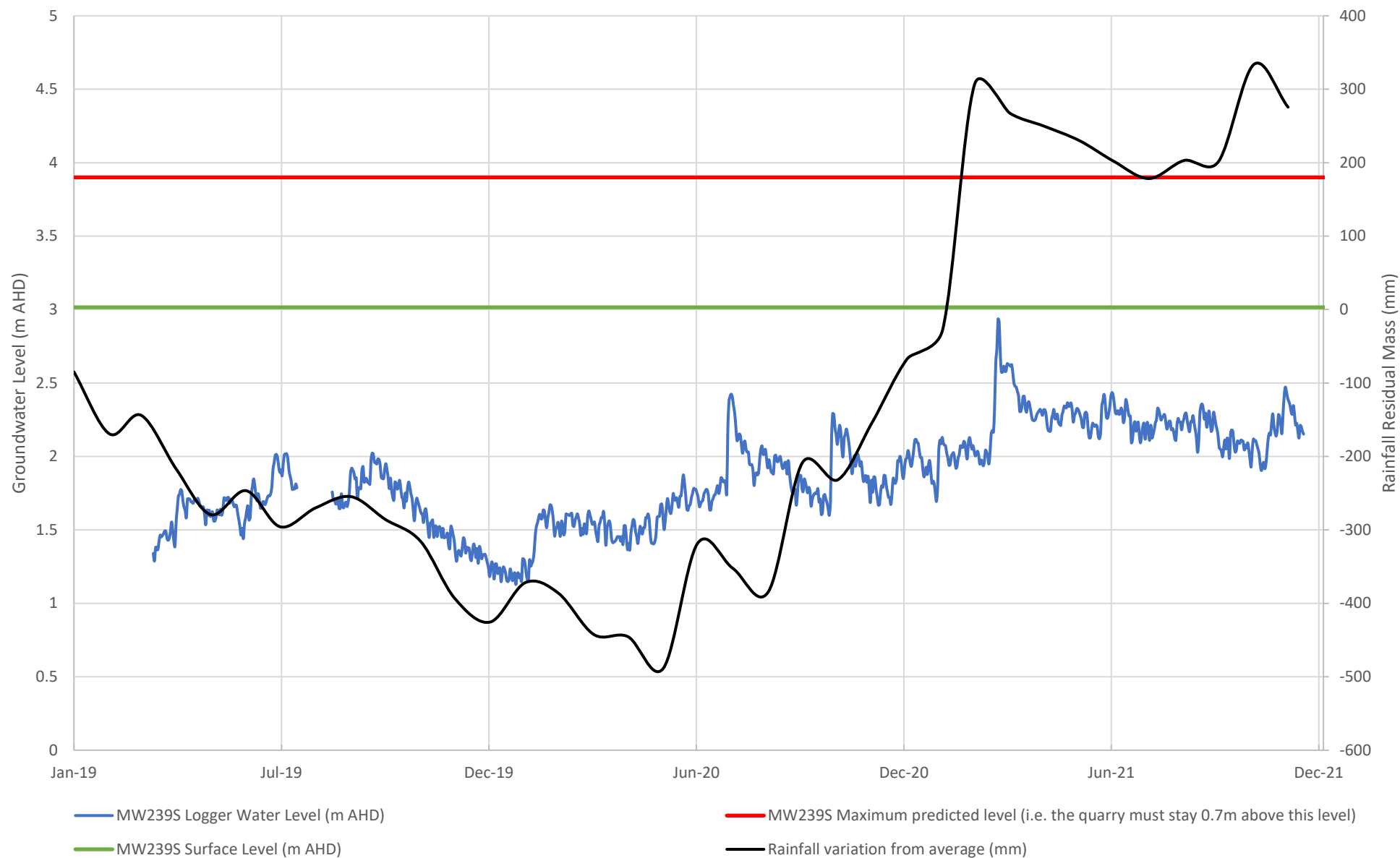
— BH2 Surface Level (m AHD)

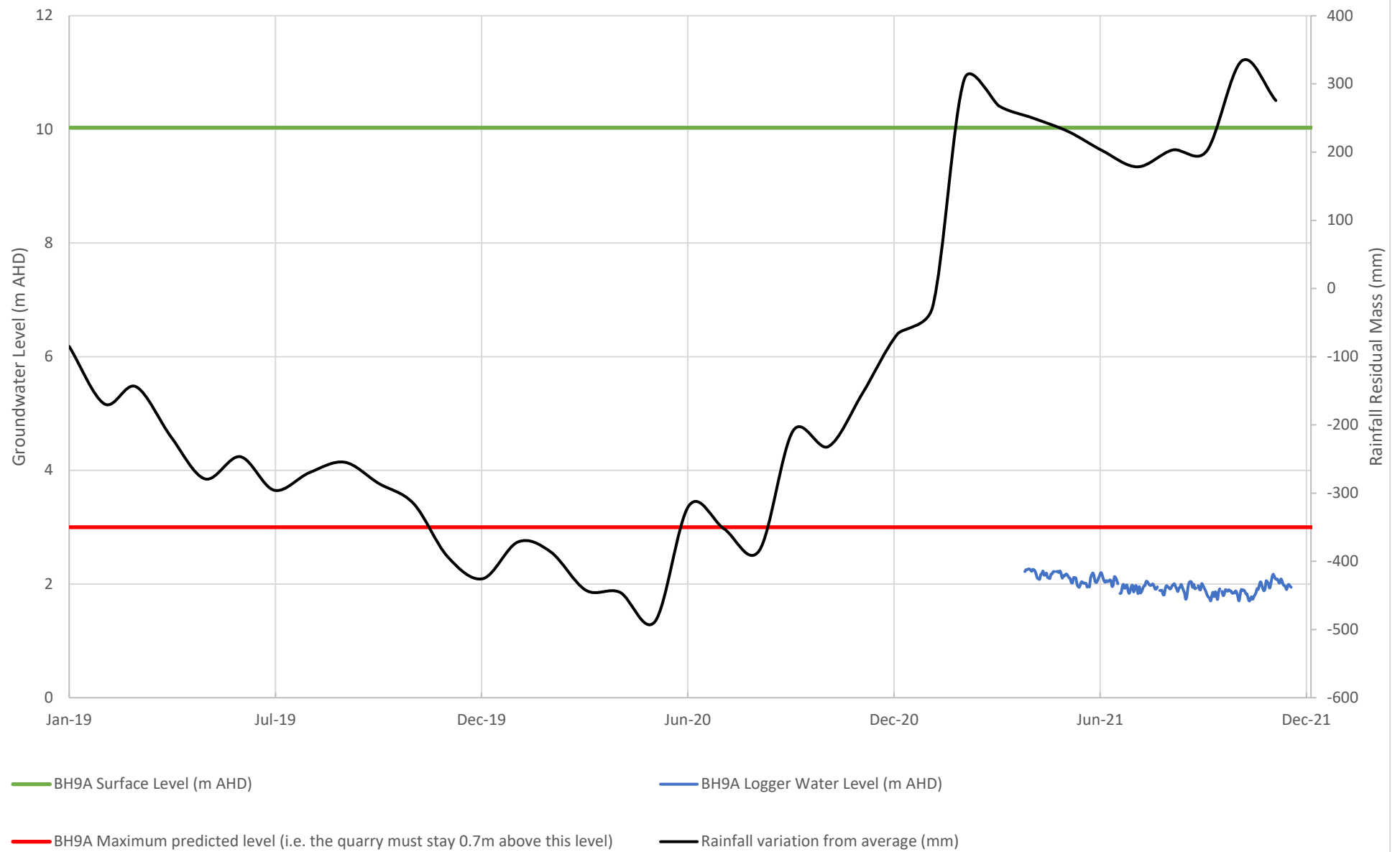
— BH2 Maximum predicted level (i.e. the quarry must stay 0.7m above this level)

— Rainfall variation from average (mm)









APPENDIX 7. AMPHIBIAN SURVEY

Newcastle Sand – Annual Amphibian Monitoring

282 Cabbage Tree Rd Williamstown NSW

20213922 - NCA22L136880

29 March 2022



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Kleinfelder Australia Pty Ltd

ABN: 23 146 082 500

Suite 3, 240-244 Pacific Highway, Charlestown, NSW 2290

Phone: +61 2 4949 5200

www.kleinfelder.com.au

29 March 2022

20213922 - NCA22L136880

Newcastle Sand
Quarry Manager

Subject: Newcastle Sand – Annual Amphibian Monitoring
Annual Amphibian Monitoring

1 INTRODUCTION

1.1 SCOPE

Targeted fauna monitoring for the Mahony's Toadlet (*Uperoleia mahonyi*) and Wallum Froglet (*Crinia tinnula*) was undertaken by Kleinfelder ecologists as part of the requirements outlined in Section 6.4C of Table 7 in the Biodiversity and Rehabilitation Management Plan Cabbage Tree Road Sand Quarry (Kleinfelder, 2020). Two discreet monitoring events were conducted between Spring 2021 and Autumn 2022. During the 2021 annual monitoring, surveys were restricted to the single breeding season, rather than separated across two breeding seasons due to extreme weather events limiting access during planned survey events at the beginning of 2021. To increase the detectability of target species, surveys were undertaken after moderate rainfall was received. As such, monitoring was conducted by two ecologists over nights on the 8 November 2021 and 2 February 2022 for a total of 4.5 person hours each survey. Surveys were undertaken at night, after moderate rainfall was received (Table 1 and 2).

Table 1 Weather conditions during annual monitoring surveys

Date	Max Temp (°C)	Humidity (%)	Barometric pressure (hPa)	Wind (spd/direction)	Rain past 24 hours (mm)	Rain past 5 days (mm)
5/11/2021	24.0	65	1017	31/ENE	4.0	4.2
6/11/2021	27.4	51	1010	19/E	0	4.0
7/11/2021	26.2	61	1007	13/SSE	0	4.0
8/11/2021	23.6	66	1006	20/SSE	21.0	25.0
1/02/2022	35.1	44	999	9/SSE	0	0
02/02/2022	24.2	100	1004	28/SSW	7.6	7.6
03/02/2022	23.7	68	1006	41/SSW	13.0	20.6
04/02/2022	24.8	86	1014	31/SSE	32.8	53.4
16/02/2022	27.7	53	1016	24/E	0	40.4
17/02/2022	34.6	35	1007	17/NNW	0	0
18/02/2022	29.5	61	1009	15/SE	8.6	8.6
1/02/2022	35.1	44	999	9/SSE	0	0

Source: Bureau of Meteorology – Williamtown RAAF (061078).

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Newcastle
Sand –



2 RESULTS

Survey effort was focused around ephemeral and semi-permanent water bodies using both spotlighting and quiet listening techniques (**Figure 1**). Each site was surveyed for 20 minutes on two separate occasions (see results for Mahony's Toadlet and Wallum Froglet in **Table 3**). Seven amphibian species were detected across both surveys (four species in November 2021 and seven species in February 2022) (**Table 4**). The Wallum froglet was detected at one location in February 2022 (Location 6). Mahony's Toadlet was not detected at any of the seven survey locations during the 2021/22 seasonal surveys.

3 DISCUSSION

Mahony's Toadlet was previously found at six of the seven survey locations established during initial 2018 targeted amphibian surveys. While several amphibian surveys had been conducted at the site in the past, Mahony's Toadlet has been detected at multiple survey locations on two occasions during optimal weather conditions. The species breeding behaviour is considered to be reasonably unpredictable with evidence suggesting that increased rainfall does not always trigger the initiation of calling. Despite seemingly suitable weather conditions for breeding during both surveys (November 2021 and February 2022), Mahony's Toadlet was not heard calling within the site. Surveys at other sites within Port Stephens showed similar results, with the absence of calling Mahony's Toadlet at highly reliable sites (reference sites). Given the lack of information about the exact breeding season and the triggers of breeding behaviour, it is possible that the species bred at other times of the year. Given that the Mahony's Toadlet was not detected at any of the survey locations within the site that the species was previously known from suggests that quarrying operations are unlikely to be the casual factor. While quarrying has commenced within site (in proximity to survey locations where Mahony's Toadlet has previously been detected), there are some survey locations that are a considerable distance from active quarrying areas. Given that Mahony's Toadlet was not redetected at these sites (which are some distance from any potential indirect impacts), this suggests that the absence of the species during surveys likely to be linked to environmental conditions.

Despite the species absence during the annual amphibian monitoring, Mahony's Toadlet has been recently detected within the site during unrelated surveys. Pit-fall trapping surveys on the 16 and 18 February 2022 detected several individuals of Mahony's Toadlet.

Future monitoring should consider any available literature that is likely to be published over the coming years relating to the breeding ecology of the Mahony's Toadlet.

**Table 2: Mahony's Toadlet and Wallum Froglet presence during targeted nocturnal monitoring**

Survey Location	Original Survey 2018	November 2021	Comments November 2021	February 2022	Comments February 2022
1	+	-	20cm pooling water	-	20cm pooling water
2	-	-	20cm pooling water	-	No pooling water
3	+	-	10cm pooling water	-	No pooling water
4	+	-	15cm pooling water	-	No pooling water
5	+	-	Permanent water >50cm	-	Permanent water >50cm
6	+	-	5-10cm pooling water	#	No pooling water
7	+	-	10cm pooling water	-	5cm pooling water

(Mahony's Toadlet +)(Wallum Froglet #)

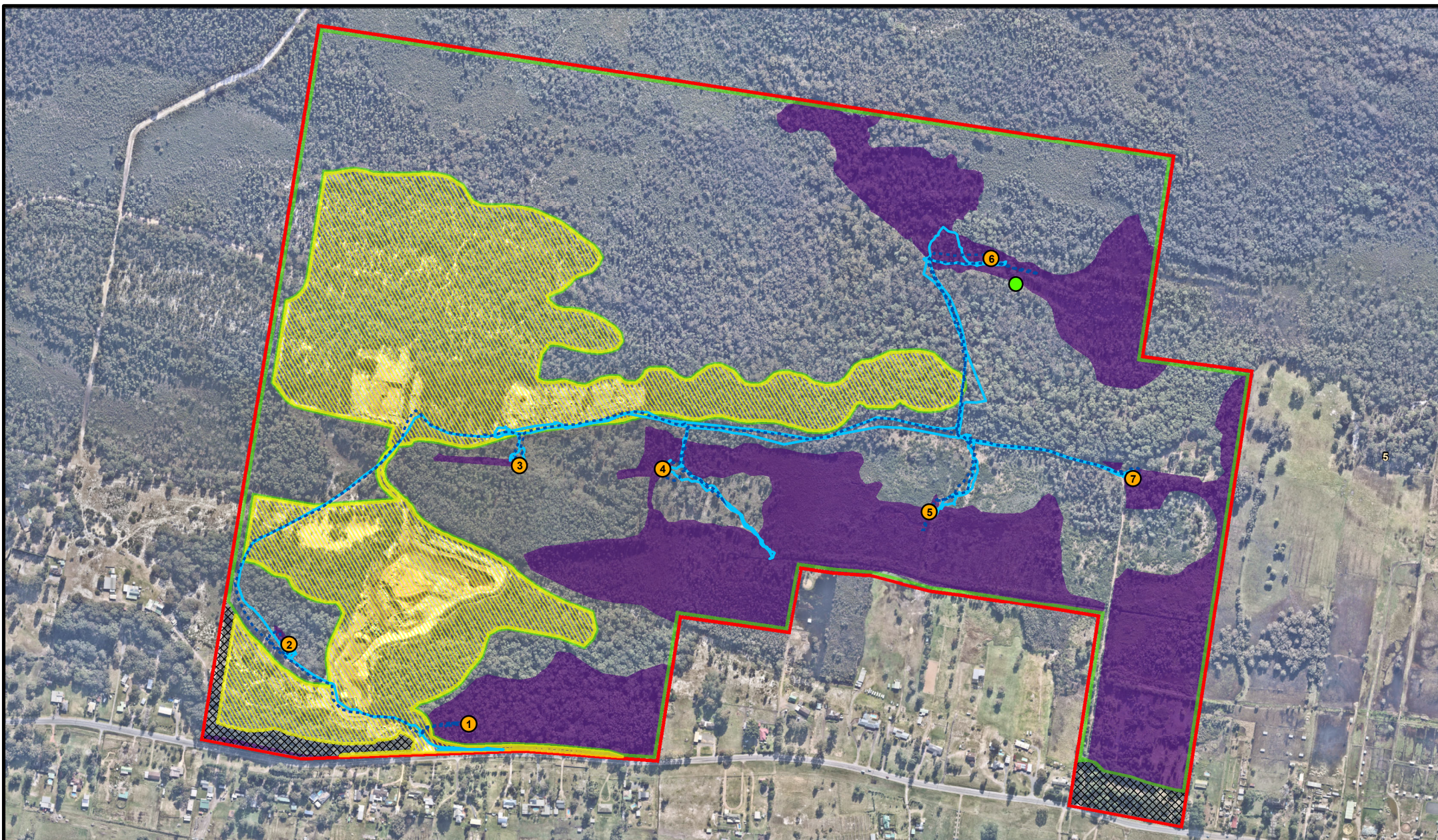
Table 3 Full Species Lists for both November 2021 and February 2022.

November 2021		February 2022	
Species	Common Name	Species	Common Name
<i>Limnodynastes peronii</i>	Striped Marsh Frog	<i>Crinia tinnula</i>	Wallum Froglet
<i>Crinia signifera</i>	Common Eastern Froglet	<i>Limnodynastes peronii</i>	Striped Marsh Frog
<i>Litoria fallax</i>	Eastern Dwarf Tree Frog	<i>Crinia signifera</i>	Common Eastern Froglet
<i>Litoria tyleri</i>	Tyler's Tree Frog	<i>Litoria fallax</i>	Eastern Dwarf Tree Frog
<i>Platyplectrum ornatum</i>	Ornate Burrowing Frog	<i>Litoria tyleri</i>	Tyler's Tree Frog
		<i>Platyplectrum ornatum</i>	Ornate Burrowing Frog
		<i>Limnodynastes dumerilli</i>	Eastern Banjo Frog

Sincerely,

Mark Dean

Ecologist (Zoologist)
Suite 3, 240-244 Pacific Highway
Charlestown, NSW 2290
m|: 04 2531 8679
o|: +61 2 4949 5200
Kleinfelder Australia Pty Ltd



Legend

- Subject Land
- Development Site
- Onsite Offset Area
- Offset Exclusion Areas
- Mahony's Toadlet (*Uperoleia mahonyi*) Core Habitat

- Mahony's Toadlet (*Uperoleia mahonyi*) not detected
- Wallum Froglet (*Crinia tinnula*) detected

Survey Tracks

- 8 November 2021
- - - 2 February 2022



PROJECT REFERENCE: 20213922

DATE DRAWN: 2022/02/22 22:00 Version 1

DRAWN BY: GJoyce

DATA SOURCE:
Nearmap - 2021

Frog Monitoring 2021

2021 Frog Monitoring
Cabbage Tree Road Sand Quarry
Cabbage Tree Road, Williamtown, NSW

FIGURE:

1





APPENDIX 8. FAUNA MONITORING

Thursday, 31 March 2022

Quarry Manager
Newcastle Sand Pty Ltd
398 Cabbage Tree Road
Williamstown NSW 2318

Attention: Sean Pennell
Sent by email to: Sean@newcastlesand.com.au

SUBJECT: Camera Monitoring 2021

Dear Sean,

Between May and October 2021, an Ecologist from Wedgetail Project Consulting, Kane Blundell, carried out camera monitoring to observe and record sightings of fauna, both native and exotic. On each of these occasions, infra-red, motion detecting cameras were set up in both random and targeted locations across the site, for a minimum period of 2 weeks at a time (see Table 1). The locations that cameras were set up can be seen in Figure 1. The sightings for each location are listed along with the date and picture reference in tables 2-12.

Table 1 Amount of time that cameras were set up at each location

LOCATION	START DATE	FINISH DATE	DURATION (DAYS)
1	14/05/21	15/06/21	32
2	14/05/21	15/06/21	32
3	14/05/21	15/06/21	32
*4	13/07/20	15/06/21	337
5	16/07/21	CAMERA STOLEN	
6	16/07/21	02/08/21	17
7	16/07/21	02/08/21	17
8	16/07/21	02/08/21	17
9	7/10/21	22/10/21	15
10	7/10/21	22/10/21	15
11	7/10/21	22/10/21	15

*Camera at Location 4 was set up by the client 12 months prior to campaign and became inaccessible due to flooding. It was collected by Wedgetail staff during the first round of camera monitoring.

Table 2 Camera monitoring in Location #1 - Northern Boundary of Area 7

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
1-2	14 May 2021	<i>Macropus giganteus</i>	Eastern Grey Kangaroo
3-6	14 May 2021	<i>Macropus rufogriseus</i>	Red necked Wallaby
7-10	17 May 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum
11-12	18 May 2021	<i>Macropus giganteus</i>	Eastern Grey Kangaroo
14-17	18 May 2021	<i>Vulpes vulpes</i>	Fox
20-30	18 May 2021	<i>Macropus giganteus</i>	Eastern Grey Kangaroo
37-38	20 May 2021	<i>Varanus varius</i>	Lace Monitor
42	23 May 2021	<i>Macropus rufogriseus</i>	Red necked Wallaby
45	23 May 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum
57	28 May 2021	<i>Vulpes vulpes</i>	Fox
59-60	28 May 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum
62-64	29 May 2021	<i>Macropus rufogriseus</i>	Red necked Wallaby
66-67	29 May 2021	<i>Vulpes vulpes</i>	Fox
68	30 May 2021	<i>Vulpes vulpes</i>	Fox
72-73	9 June 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum
76-77	9 June 2021	<i>Vulpes vulpes</i>	Fox
78	10 June 2021	<i>Vulpes vulpes</i>	Fox
80-83	12 June 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum
94-95	13 June 2021	<i>Canis familiaris</i>	Dog

Table 3 Camera monitoring in Location #2 - Southern Boundary of Area 7

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
23-32	20 May 2021	-	Vehicle
34	25 May 2021	<i>Vulpes vulpes</i>	Fox
43-44	27 May 2021	<i>Eopsaltria australis</i>	Yellow Robin
47-48	27 May 2021	<i>Vulpes vulpes</i>	Fox
140-142	31 May 2021	<i>Macropus rufogriseus</i>	Red necked Wallaby
145	1 June 2021	<i>Vulpes vulpes</i>	Fox
147-148	3 June 2021	<i>Macropus rufogriseus</i>	Red necked Wallaby
291	12 June 2021	<i>Macropus rufogriseus</i>	Red necked Wallaby

Table 4 Camera monitoring in Location #3 - Northern boundary of Areas 1A & 2

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
16	6 June 2021	-	Horse riders
31-33	13 June 2021	-	Motorbikes
36-37	14 June 2021	-	Motorbikes

Table 5 Camera monitoring in Location #4 - Koala fence east of entry

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
1-999	July 2020 – June 2021		Passing traffic only No fauna sightings

Table 6 Camera monitoring in Location #5 Area 9 - Access Track - middle

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
CAMERA MISSING/STOLEN BEFORE BEING COLLECTED			

Table 7 Camera monitoring in Location #6 Area 9 - Access Track - top

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
3	16-July-2021	-	Elliot in Silver Hilux
5-6	16-July-2021	-	Silver Hilux leaving
583-584	27-June-2021	<i>Trichosurus vulpecula</i>	Brushtail Possum
605	29-July-2021	-	Red Triton approaching
607-608	29-July-2021	-	Red Triton leaving
611	31-July-2021	<i>Vulpes vulpes</i>	Fox
612	01-August-2021	<i>Oryctolagus cuniculus</i>	Rabbit

Table 8 Camera monitoring in Location #7 - Area 9 Koala fence

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
4	12 July 2021	<i>Rattus sp.</i>	Rat
7-9	13 July 2021	<i>Rattus sp.</i>	Rat
11	13 July 2021	<i>Rattus sp.</i>	Rat
19-20	14 July 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum
21	15 July 2021	<i>Rattus sp.</i>	Rat
26	17 July 2021	<i>Vulpes vulpes</i>	Fox
31-32	21 July 2021	<i>Pseudocheirus peregrinus</i>	Ringtail Possum
33-34	24 July 2021	<i>Pseudocheirus peregrinus</i>	Ringtail Possum
37-38	27 July 2021	<i>Perameles nasuta</i>	Long nosed Bandicoot
40-42	29 July 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum

Table 9 Camera monitoring in Location #8 - Area 9 Bush track

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
5-8	13 July 2021	<i>Oryctolagus cuniculus</i>	Rabbit
17-18	14 July 2021	<i>Oryctolagus cuniculus</i>	Rabbit
21-24	14 July 2021	<i>Oryctolagus cuniculus</i>	Rabbit

Table 10 Camera monitoring in Location #9 - Area 3A Boundary track

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
112-114	14 October 2021	<i>Macropus rufogriseus</i>	Red necked Wallaby

Table 11 Camera monitoring in Location #10 - Between Area 3B and 4A on boundary track

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
Media Folder 1			
2-4	9 October 2021	<i>Perameles nasuta</i>	Long nosed Bandicoot
44-49	10 October 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum carrying baby on back
179-181	13 October 2021	<i>Macropus rufogriseus</i>	Red necked Wallaby
401-403	15 October 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum
Media Folder 2			
398-403	17 October 2021	<i>Tachyglossus aculeatus</i>	Echidna
443-445	18 October 2021	<i>Trichosurus vulpecula</i>	Brushtail Possum carrying baby on back
557-559	20 October 2021	<i>Vulpes vulpes</i>	Fox

Table 12 Camera monitoring in Location #11 – Border of Area 4B and 5A

PIC	DATE	SCIENTIFIC NAME	COMMON NAME
1-999	7-22 October 2021	No fauna sightings recorded	

For any further questions, feel free to contact me.

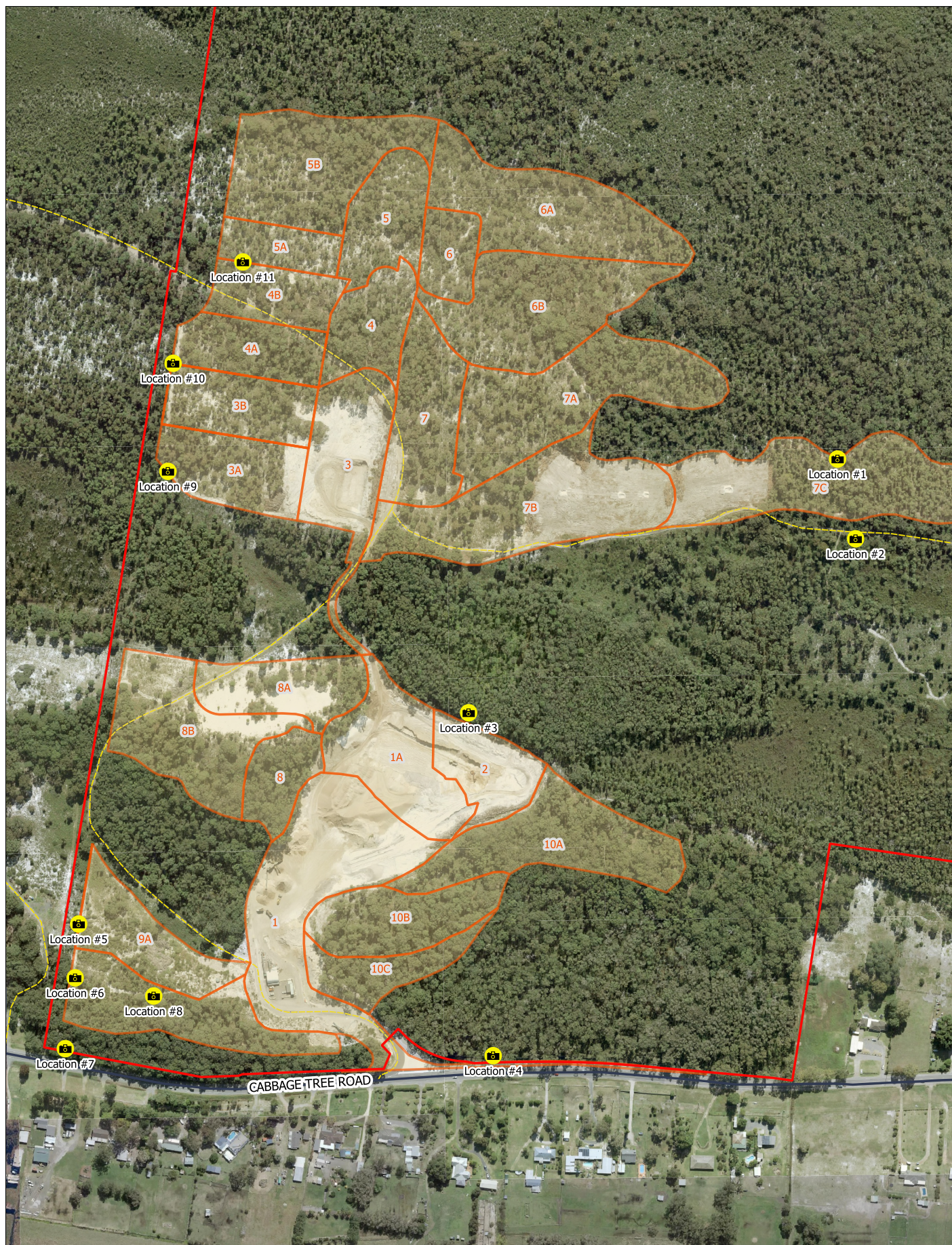
Yours Sincerely

Kane Blundell

Ecologist

M: 0419 999 256

kblundell@wedgetail.com.au



Created by: K.Blundell
Date: 31/03/2021
Version: A

Operational Stages
 Camera Locations
 Site Boundary
 — Main Road
 Vehicle Tracks

50 100 150 200 250 m

Camera Locations

Newcastle Sand
Cabbage Tree Rd, Williamtown

Figure:

1



Friday, 11 June 2021

Quarry Manager
Newcastle Sand Pty Ltd
398 Cabbage Tree Road
Williamstown NSW 2318

Attention: Shane Burton.
Sent by email to: shane@newcastlesand.com.au

SUBJECT: NESTBOX MONITORING – APRIL 2021

Dear Shane,

On April 20, 21 and 23 2021, an Ecologist from Wedgetail Project Consulting, Kane Blundell, inspected nest boxes previously installed by Kleinfelder. A total of 94 nest boxes were inspected within the Onsite Biodiversity Offset Areas, checking for structural integrity and for signs of use. At the time of inspection, the trees were also tagged with ID numbers to assign one single identification number applicable to all installations of nest boxes, collectively. For each nest box, previously collected data was confirmed or amended where necessary, and photos were taken inside the boxes using a GoPro© mounted on a 4mtr extension pole (see **Table 1**).

Table 1 Nestboxes with confirmed specifications, signs of use and current condition.

TreeTag ID	Box type	Tree Species	DBH (cm)	Height (m)	Aspect	Signs of Use	Condition
1	Micro Bat	A. costata	64	5.5	SE	No	Fair
2	-	E. robusta	64	-	-	Inaccessible	-
3	-	E. robusta	51	-	-	Inaccessible	-
4	-	E. robusta	20.5	-	-	Inaccessible	-
5	-	A. costata	39	-	-	Inaccessible	-
6	-	E. robusta	41.5	-	-	Inaccessible	-
7	-	E. robusta	34.5	-	-	Inaccessible	-
8	-	A. costata	22	-	-	Inaccessible	-
9	-	E. robusta	50.5	-	-	Inaccessible	-
10	Glider	E. robusta	51	3.6	SW	No	Fair
11	Glider	E. robusta	57	5.2	SW	Squirrel glider pair	Fair
12	Micro Bat	A. costata	32.5	4.4	SE	Drey	Fair
13	Micro Bat	A. costata	23	3.3	W	Full to top with leaves	Fair
14	Micro Bat	C. gummifera	38.5	4.1	N	No	Fair
15	Glider	A. costata	23	4	SW	Fur visible within drey	Fair
16	Possum	E. robusta	44.5	4.3	SW	Brushtail Possum	Fair
17	Glider	C. gummifera	53	5.1	S	Wasp Nest	Fair

TreeTag ID	Box type	Tree Species	DBH (cm)	Height (m)	Aspect	Signs of Use	Condition
18	Micro Bat	C. gummifera	35	4.5	W	Insect nest blocking entrance	Fair
19	Glider	C. gummifera	64	3.3	S	A few fresh leaves	Fair
20	Glider	C. gummifera	41	4.6	SW	Wasp Nest	Fair
21	Micro Bat	C. gummifera	40	4.8	NW	No	Fair
22	Micro Bat	A. costata	32	5	W	No	Fair
23	Micro Bat	A. costata	32	0	-	Box still on ground	Fair
24	Micro Bat	A. costata	35	3.2	SW	No	Fair
25	Micro Bat	A. costata	51	4.2	S	No	Fair
26	Glider	C. gummifera	32	5.1	S	Fresh leaves in drey	Fair
27	Glider	C. gummifera	51	4.5	SE	No	Fair
28	Micro Bat	A. costata	32	4.5		No	Fair
29	Micro Bat	A. costata	38	4.5	SW	No	Fair
30	Micro Bat	A. costata	29	3	SW	Drey with fur visible	Fair
31	Glider	A. costata	46	4	SW	Squirrel glider pair	Fair
32	Glider	A. costata	29	5.2	W	Fresh leaves	Fair
33	Glider	A. costata	45	5.2	W	Possible reptile?	Fair
34	Glider	A. costata	43	5.2	W	Glider(s) in drey	Fair
35	Possum	E. pilularis	46	4.5	SW	Brush-tail Possum	Fair
36	Glider	A. costata	30	5.1	S	Fresh leaves	Fair
37	Glider	E. pilularis	48	4.5	SW	No	Fair
38	Micro Bat	E. signata	32	5	SW	Possible drey	Fair
39	Glider	A. costata	29	4.9	SW	Fresh leaves	Fair
40	Micro Bat	C. gummifera	21	4.2	SE	No	Fair
41	Glider	E. pilularis	48	4.7	W	Old bee hive	Good
42	Glider	A. costata	30	4.8	W	Fresh leaves	Fair
43	Micro Bat	Bloodwood	80	5.1	S	No	Fair
44	Micro Bat	A. costata	30	4.6	SW	No	Fair
45	Glider	A. costata	60	3.8	W	No	Fair
46	Glider	C. gummifera	64	4.5	SE	Pair of sugar gliders	Fair
47	Glider	C. gummifera	32	3.9	S	Squirrel glider (pair?)	Fair
48	Micro Bat	E. pilularis	22	3.6	SE	No	Fair
49	Micro Bat	E. pilularis	25	4.2	NE	No	Fair
50	Micro Bat	E. signata	57	3.3	SE	No	Fair
51	Glider	C. gummifera	35	4.4	SW	Fresh leaves	Fair
52	Glider	C. gummifera	29	5	N	Glider	Fair
53	Glider	C. gummifera	35	4.8	SW	No	Fair
54	Micro Bat	C. gummifera	29	3.4	NE	No	Fair
55	Micro Bat	A. costata	32	4.4	SW	No	Fair
56	Micro Bat	C. gummifera	32	4	E	No	Fair
57	Glider	C. gummifera	29	4.7	SE	Glider in drey	Fair
58	Micro Bat	C. gummifera	19	4.2	SW	No	Fair
59	Micro Bat	C. gummifera	19	3.8	SW	No	Fair
60	Glider	C. gummifera	38	4.6	SW	Bee hive	Fair
61	Micro Bat	C. gummifera	29	3.6	SE	No	Fair
62	Glider	C. gummifera	41	3.3	S	No	Fair
63	Glider	C. gummifera	48	3.6	SE	Active Bee Hive	Fair

TreeTag ID	Box type	Tree Species	DBH (cm)	Height (m)	Aspect	Signs of Use	Condition
64	Micro Bat	C. gummifera	41	4.5	SE	No	Fair
65	Glider	C. gummifera	48	4.9	S	Squirrel glider pair with offspring	Fair
66	Glider	C. gummifera	51	4.5	SE	Fresh leaves	Fair
67	Micro Bat	C. gummifera	35	4.2	SW	No	Fair
68	Micro Bat	C. gummifera	51	4	W	No - Lid fallen off	REPAIR
69	Micro Bat	E. pilularis	35	5	SE	Fresh leaves	Fair
70	Micro Bat	A. costata	38	4.6	SW	Fresh leaves	Good
71	-	A. costata	35	0	-	BOX MISSING	Replace
72	Glider	E. robusta	30	5	SE	Glider in drey	Fair
73	Glider	A. costata	48	3.2	SW	No	Fair
74	Glider	E. robusta	36	4.2	NE	No	Fair
75	Glider	E. robusta	25	4.4	SW	Drey	Fair
76	Possum	E. robusta	50.5	5.3	E	No	Fair
77	Glider	E. robusta	30	4.3	S	No	Fair
78	Glider	E. robusta	34	3.8	NE	Glider in drey	Fair
79	Glider	A. costata	52	2.9	SW	No	Good
80	Glider	A. costata	62	3.3	SW	No	Good
81	Glider	A. costata	37	3.3	SW	No	Good
82	Micro Bat	A. costata	29	3.4	West	No	Good
83	Micro Bat	A. costata	38	3.2	West	No	Good
84	Micro Bat	A. costata	41	3.3	West	No	Good
85	Micro Bat	A. costata	38.5	4.5	NW	No	Fair
86	Glider	A. costata	30	2.9	SW	No	Good
87	Possum	A. costata	29	3.1	SW	No	Good
88	Glider	A. costata	51	3.7	SW	No	Good
89	Glider	E. robusta	30.5	3.9	N	Glider in drey	Fair
90	Glider	E. robusta	64.5	4.5	NW	No	Fair
91	Glider	E. robusta	37	3.4	S	No	Fair
92	Micro Bat	E. robusta	33.5	3.9	W	No	Fair
93	Glider	A. costata	29.5	4.1	NW	Drey	Fair
94	Glider	E. robusta	37	4	S	No	Fair

Of the 94 nest boxes, 8 boxes were inaccessible due to flooding in the surrounding area, 1 box hadn't been installed and was found to be sitting at the base of the tree, 1 box was damaged and in need of repair and 1 box was completely missing from the designated tree and could not be found in the surrounding area.

The remaining 83 nest boxes were found to be structurally sound, and associated data was collected including habitation. Of those nest boxes, 2 contained Common brushtail possums (*Trichosurus vulpecula* - see **Plate 1** & **Plate 2**), 4 contained pairs of Squirrel gliders (*Petaurus norfolcensis*) including one with offspring (see **Plate 3** & **Plate 4**) and 1 contained a pair of Sugar gliders (*Petaurus breviceps* - see **Plate 5**). 7 other nest boxes contained gliders nestled within dreys whose species could not be confirmed (see **Plate 6**), and 14 boxes contained nesting materials. The location of associated boxes can be seen in **Figure 1**.



Plate 1: Brushtail possum (*Trichosurus vulpecula*) fleeing nest box



Plate 2: Brushtail possum (*Trichosurus vulpecula*) in nest box



Plate 3: Pair of Squirrel gliders (*Petaurus norfolcensis*) with offspring



Plate 4: Pair of Squirrel gliders (*Petaurus norfolcensis*) in drey

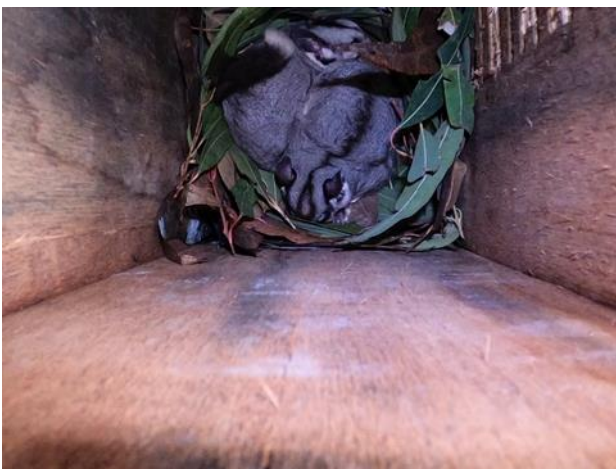


Plate 5: Pair of Sugar gliders (*Petaurus breviceps*) in drey



Plate 6: Unconfirmed Glider species (*Petaurus sp.*) in drey

For any further questions, feel free to contact me.

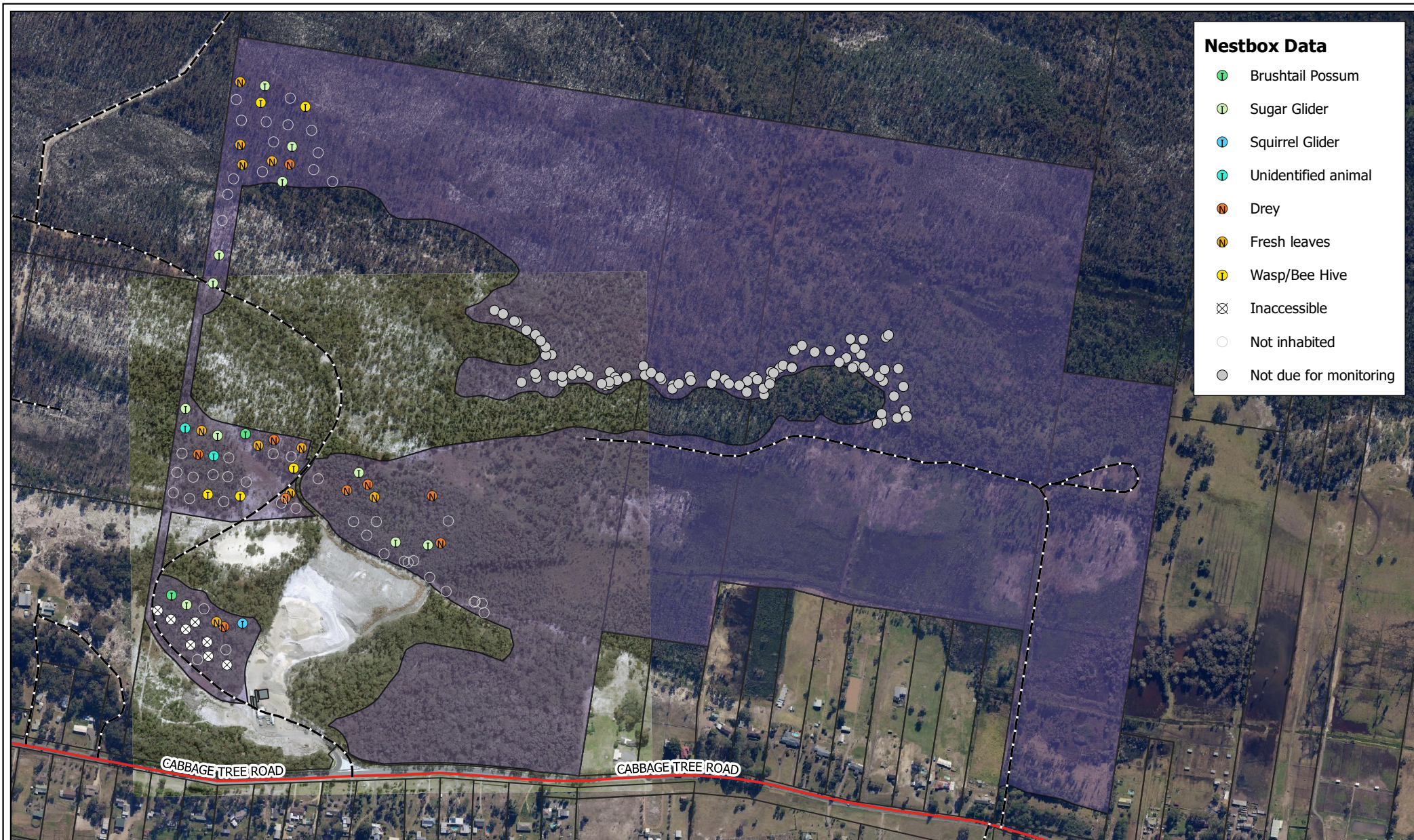
Yours Sincerely

Kane Blundell

Ecologist

M: 0419 999 256

kblundell@wedgetail.com.au



- Nestbox Data**
- ① Brushtail Possum
 - ① Sugar Glider
 - ① Squirrel Glider
 - ① Unidentified animal
 - ① Drey
 - ① Fresh leaves
 - ① Wasp/Bee Hive
 - ⊗ Inaccessible
 - Not inhabited
 - Not due for monitoring

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 Date: 10/05/2021



- Proposed Stewardship Site
- Site Office
- Arterial Road
- Lot Boundaries
- Track-Vehicular



0 100 200 300 400 500 m

Newcastle Sand

Figure:

1

Nestbox Monitoring April 2021