Biodiversity Assessment at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

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Prepared for **Davies Nominees Pty Ltd**
c/o Hogan Planning
PO Box 2257 Bowral NSW

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CONTENTS

Biodiversity Assessment at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

1. Introduction

On behalf of Davies Nominees Pty Ltd, Hogan Planning has requested the preparation of a Biodiversity Assessment for "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW to accompany a rezoning application in respect to the *Goulburn Mulwaree Draft Urban and Fringe Housing Strategy*. The above property is identified on Goulburn Mulwaree Council's Terrestrial Biodiversity Map. Woodlands Environmental Management has undertaken a field and database assessment to identify the biodiversity values of the land, and to determine if inclusion on the Terrestrial Biodiversity Map is appropriate, and whether biodiversity values may constrain any future rezoning or development.

A Conceptual Lot Plan is included as **Appendix 3**.

2. Summary of conclusions

This report concludes that:

- The pre-1750 vegetation and habitats within the c. 34ha property have been significantly structurally and floristically modified as a consequence of historic clearing, grazing, cropping and the introduction of exotic species.

- The property may be classified as 'highly disturbed areas with no or limited native vegetation' and is of low biodiversity value.

- Rezoning or future development of the property is unlikely to have a significant impact on biodiversity values within the locality.

Refer **7. Conclusions**

3. Supporting reports, documentation and data bases

The following reports, documentation and data bases were consulted:

3.1 BioNet Atlas of NSW Wildlife

Refer **Figure 1**: Bionet Atlas of NSW Wildlife map for Threatened Species within 10km of "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

Table 2: Threatened Species recorded in the BioNet Atlas of NSW Wildlife within 10km of "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW.

3.2 NSW Department of Planning, Industry and Environment species profile search / combined geographic and habitat search

Refer **Table 3**: Threatened Species associated with vegetation classes and habitats present at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW and recorded within Monaro sub-region.

Refer Table 4: Likelihood of occurrence of threatened species associated with both Southern Tableland Grassy Woodlands and Highly disturbed areas with no or limited native vegetation recorded within the Monaro subregion.

3.3 Native vegetation map report series No. 4

goulburn_NVMP_VISmap_2190. Tindall,D. et al. (2004). Native vegetation map report series No. 4. Araluen, Batemans Bay, Braidwood, Burragorang, Goulburn, Jervis Bay, Katoomba, Kiama, Moss Vale, Penrith, Port Hacking, Sydney, Taralga, Ulladulla & Wollongong 1:100000

Refer **Figure 2**: Vegetation mapping at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW.

4. Site survey and assessment

A site inspection and field work were undertaken at the property on 4th June 2021 by Greg Stone (BAppSc (Parks, Recreation & Heritage), GradCert (Environmental Management), GradCert (Science Communication), AdvDip (Land Management), AssDip (Land Management)) following previous vegetation and habitat surveys undertaken with Pandora Holliday (BSc (Hons)) on 13th February 2019.

Groundcover growth was favourable to surveying due to recent rains (February 2019) and light grazing by stock. Any plants not identified on site were collected for later positive identification.

In accordance with NSW Office of Environment & Heritage (now Department of Planning, Industry and Environment) survey requirements (i.e. minimum number of plots required per stratification unit), a total of four 400m^2 quadrats were surveyed at locations considered to representative of the vegetation within the property. Species, vegetative cover and bare ground (%) were recorded.

Walking transects and random meanders were conducted between quadrat locations to confirm the selected stratification units and to identify any significant or additional species not recorded within quadrats.

Refer **Table 1**: Survey sites and waypoints at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

Refer **Figure 3**: Survey sites and waypoints at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

At each quadrat, photographs were taken from the centre looking north, south, east and west. Two photographs of sample groundcover within each quadrat were also taken.

The location of remnant native trees was also recorded and photographed.

Refer **Appendix 1**: Photographs at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

Field survey data is presented as **Appendix 2**: Survey data for "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW.

5. Flora

The pre-1750 native vegetation at the property has been highly modified as a consequence of historic clearing, grazing, cropping and the introduction of exotic species.

Vegetation mapping does not identify any native vegetation community as occurring on the property.

Refer **Figure 2**: Vegetation mapping at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW.

The remnant overstorey is limited to two senescent Snow Gum *Eucalyptus pauciflora*, located on the upper slopes, west of the dwelling (Waypoints 122 and 121). No regeneration of the overstorey was occurring due to grazing.

Rows of senescent exotic Radiata Pine *Pinus radiata* are present along the access road and the boundary adjoining Braidwood Road.

No native mid-stratum is present. Small, isolated occurrences exotic African Boxthorn *Lycium ferocissimum* were observed.

The groundcover is dominated by African Lovegrass *Eragrostis curvula* and other exotic species. Only three native species of grasses were recorded by the survey.

The cover of native grasses recorded within the four quadrats ranged from 0% to <10%. The groundcover does not therefore meet the definition of 'native vegetation' i.e. >50% cover.

Refer **Appendix 2**: Survey data for "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW.

Refer **Appendix** 1: Photographs at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW.

The vegetation within the property may be classified as 'highly disturbed areas with no or limited native vegetation' (NSW Department of Planning, Industry and Environment).

No threatened ecological communities are present within the property.

BioNet Atlas of NSW Wildlife records the location of six species of flora within a 10km radius of the property (accessed 2nd June 2021).

Refer **Figure 1**: Bionet Atlas of NSW Wildlife map for Threatened Species within 10km of "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW.

Table 2: Threatened Species recorded in the BioNet Atlas of NSW Wildlife within 10km of "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW.

No threatened species of flora were located by the survey. Although the survey was not comprehensive, it is considered that any threatened species associated with the 'highly disturbed areas with no or limited native vegetation' habitat in the Monaro subregion is unlikely to be present due to the extent of historic clearing, grazing, cropping and the dominance of exotic species.

Refer **Table 3**: Threatened Species associated with vegetation classes and habitats present at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW and recorded within Monaro sub-region.

Refer Table 4: Likelihood of occurrence of threatened species associated with both Southern Tableland Grassy Woodlands and Highly disturbed areas with no or limited native vegetation recorded within the Monaro subregion.

6. Fauna and habitats

BioNet Atlas of NSW Wildlife records the location of twenty-four threatened species of fauna within a 10km radius of the property (accessed 2nd June 2021).

Refer **Figure 1**: Bionet Atlas of NSW Wildlife map for Threatened Species within 10km of "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

The pre-1750 fauna habitats at the property have been degraded and highly modified as a consequence of historic clearing, grazing, cropping and the introduction of exotic species.

The remnant overstorey is limited to two senescent, hollow-bearing remnant Snow Gum *Eucalyptus pauciflora*.

One Snow Gum (Waypoint 121) supports one 2-5cm diameter hollow, three 5-10cm hollows and two 15-20cm hollows. The second Snow Gum (Waypoint 122) supports two >20cm hollows. These hollows provide potential roosting, nesting or breeding habitat for a range of birds and bats, including threatened species. However, it is considered that the value of these hollows is reduced by the lack of associated native mid-stratum and groundcover and the absence of connectivity to other larger areas of habitat.

The habitat value of the property to threatened species of fauna is likely to be limited to bird species able to forage within open grassy areas including modified, agricultural land. Species likely to occur within the Monaro subregion have been identified to be Spotted Harrier *Circus assimilis*, Little Eagle *Hieraaetus morphnoides* and Diamond Firetail *Stagonopleura guttata.*

Refer **Table 3**: Threatened Species associated with vegetation classes and habitats present at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW and recorded within Monaro sub-region.

Refer Table 4: Likelihood of occurrence of threatened species associated with both Southern Tableland Grassy Woodlands and Highly disturbed areas with no or limited native vegetation recorded within the Monaro subregion.

The habitat value of the two dams within the property is limited due to stock access and lack of fringing vegetation.

7. Conclusions

This report concludes that:

- The pre-1750 vegetation and habitats c. 34ha property have been significantly structurally and floristically modified as a consequence of historic clearing, grazing, cropping and the introduction of exotic weeds.

- The property may be classified as 'highly disturbed areas with no or limited native vegetation' and is of low biodiversity value.

- Rezoning or future development of the property is unlikely to have a significant impact on biodiversity values within the locality.

Flora

- Remnant overstorey on the property is limited to two senescent Snow Gum *Eucalyptus pauciflora*.

- No native mid-stratum is present.

- The groundcover is dominated by African Lovegrass *Eragrostis curvula* and other exotic species and does not meet the definition of 'native vegetation' i.e. >50% cover.

- No threatened ecological communities are present.

- No threatened species of flora was located by the survey, and it is considered unlikely that any would be present due to the degradation of the vegetation.

Fauna

- The property lacks significant nesting, breeding and foraging habitats as a consequence of historic clearing, grazing, cropping and the introduction of exotic species.

- The two hollow-bearing trees provide potential roosting, nesting or breeding habitat for a range of birds and bats, including threatened species. It is considered that the value of these hollows is reduced by the lack of associated native mid-stratum and groundcover and the absence of connectivity to other larger areas of habitat.

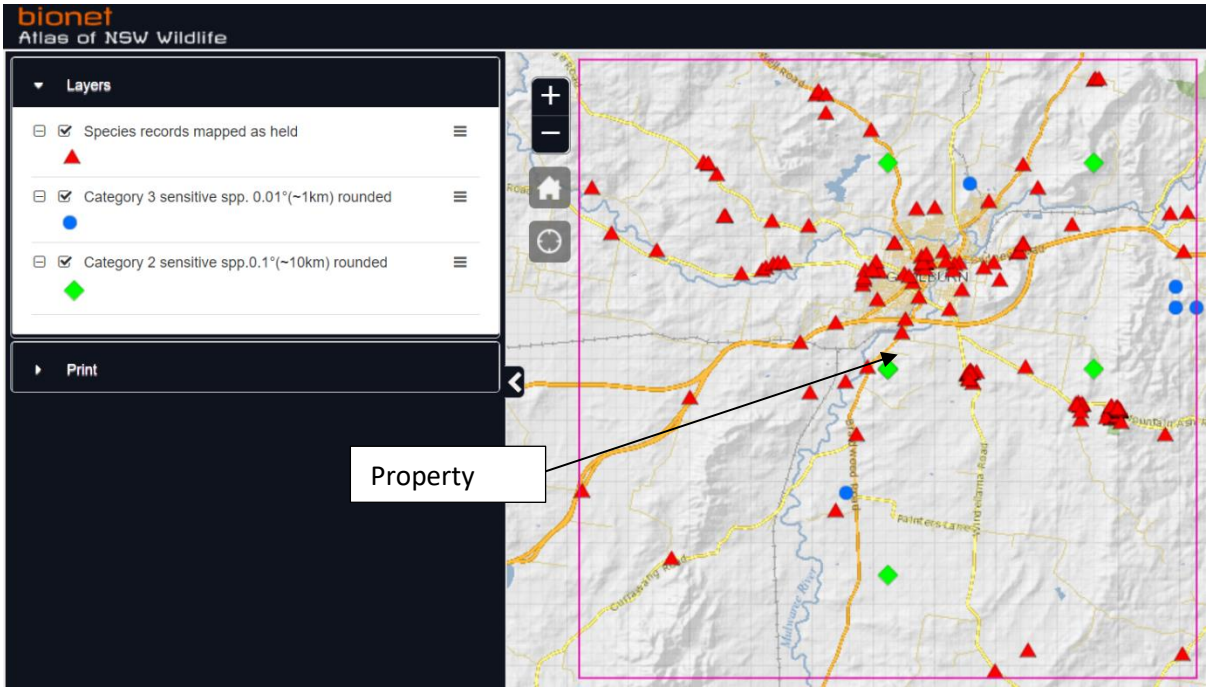
- Three threatened species of fauna (Spotted Harrier *Circus assimilis,* Little Eagle *Hieraaetus morphnoides* and Diamond Firetail *Stagonopleura guttata*) could potentially utilise the habitat within the property for foraging.

- The habitat value of the two dams within the property is limited due to stock access and lack of fringing vegetation.

Table 1: Survey sites and waypoints at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

Waypoints	Vegetation type	Grid reference		Description and notes	Photographs
119	Highly modified grassland	-34.791633	149.705473	Looking north, south, east and west from centre of Quadrat 1	1-4
	Highly modified grassland			Typical groundcover within Quadrat 1	5-6
120	Highly modified grassland	-34.791179	149.701884	Looking north, south, east and west from centre of Quadrat 2	7-10
	Highly modified grassland			Typical groundcover within Quadrat 2	11-12
121	Remnant overstorey	-34.789316	149.703194	Snow Gum *Eucalyptus pauciflora*	13
122	Remnant overstorey	-34.789008	149.703217	Snow Gum *Eucalyptus pauciflora*	14
123	Highly modified grassland	-34.788551	149.703766	Looking north, south, east and west from centre of Quadrat 3	15-18
	Highly modified grassland			Typical groundcover within Quadrat 3	19-20
124	Highly modified grassland	-34.787709	149.705820	Looking north, south, east and west from centre of Quadrat 4	21-24
	Highly modified grassland			Typical groundcover within Quadrat 4	25-26
				Dam	27
				Dam	28

Figure 1: Bionet Atlas of NSW Wildlife map for Threatened Species within 10km of "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

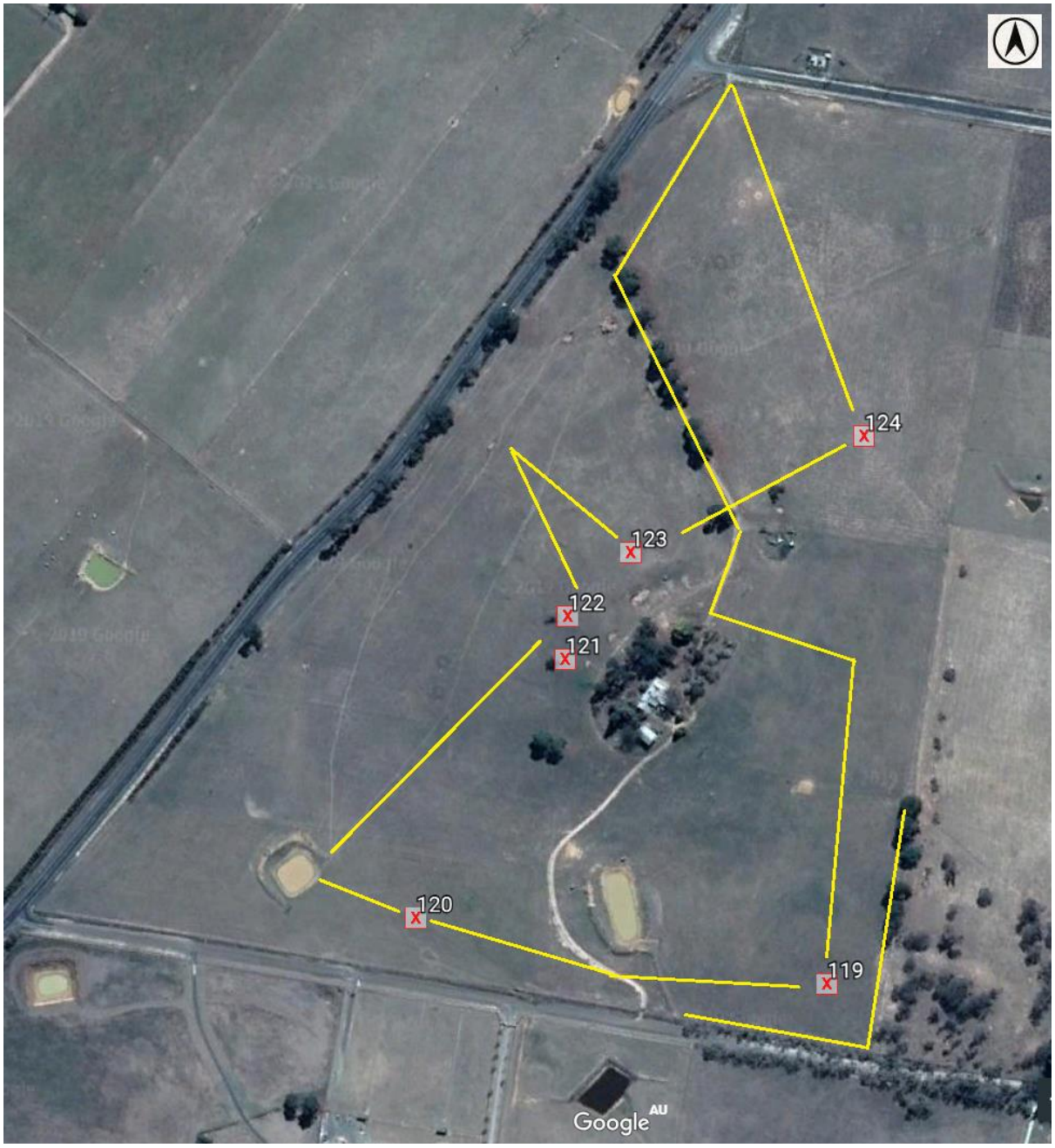


Source: NSW Government

Figure 2: **Vegetation mapping at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW**

Source: goulburn_NVMP_VISmap_2190

Figure 3: Survey sites and waypoints at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW



Source: Google maps

Red squares: Waypoints and location of 400m^2 quadrats or trees Yellow lines: Walking transects and random meanders

Table 2: Threatened Species recorded in the BioNet Atlas of NSW Wildlife within 10km of "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria : Public Report of all Valid Records of Threatened (listed on BC Act 2016) or Commonwealth listed Entities in selected area [North: -34.65 West: 149.55 East: 149.85 South: -34.95] returned a total of 194 records of 30 species.

Kingdom	Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records
Animalia	Amphibia	Hylidae	*Litoria aurea*	Green and Golden Bell Frog	E1,P	V	1
Animalia	Reptilia	Pygopodidae	*Delma impar*	Striped Legless Lizard	V,P	V	1
Animalia	Aves	Ciconiidae	*Ephippiorhynchus asiaticus*	Black-necked Stork	E1,P		1
Animalia	Aves	Accipitridae	*Circus assimilis*	Spotted Harrier	V,P		1
Animalia	Aves	Accipitridae	*Haliaeetus leucogaster*	White-bellied Sea-Eagle	V,P		1
Animalia	Aves	Accipitridae	*Hieraaetus morphnoides*	Little Eagle	V,P		10
Animalia	Aves	Accipitridae	*^^Lophoictinia isura*	Square-tailed Kite	V,P,3		1
Animalia	Aves	Falconidae	*Falco subniger*	Black Falcon	V,P		1
Animalia	Aves	Cacatuidae	*^^Callocephalon fimbriatum*	Gang-gang Cockatoo	V,P,3		6
Animalia	Aves	Cacatuidae	*^Calyptorhynchus lathami*	Glossy Black-Cockatoo	V,P,2		3
Animalia	Aves	Acanthizidae	*Chthonicola sagittata*	Speckled Warbler	V,P		2
Animalia	Aves	Meliphagidae	*Anthochaera phrygia*	Regent Honeyeater	E4A,P	CE	1
Animalia	Aves	Neosittidae	*Daphoenositta chrysoptera*	Varied Sittella	V,P		5
Animalia	Aves	Artamidae	*Artamus cyanopterus cyanopterus*	Dusky Woodswallow	V,P		4
Animalia	Aves	Petroicidae	*Petroica boodang*	Scarlet Robin	V,P		2
Animalia	Aves	Estrildidae	*Stagonopleura guttata*	Diamond Firetail	V,P		2
Animalia	Mammalia	Dasyuridae	*Dasyurus maculatus*	Spotted-tailed Quoll	V,P	E	1
Animalia	Mammalia	Phascolarctidae	*Phascolarctos cinereus*	Koala	V,P	V	1

Animalia	Mammalia	Pteropodidae	*Pteropus poliocephalus*	Grey-headed Flying-fox	V,P	V	22
Animalia	Mammalia	Emballonuridae	*Saccolaimus flaviventris*	Yellow-bellied Sheathtail-bat	V,P		1
Animalia	Mammalia	Molossidae	*Micronomus norfolkensis*	Eastern Coastal Free-tailed Bat	V,P		1
Animalia	Mammalia	Vespertilionidae	*Falsistrellus tasmaniensis*	Eastern False Pipistrelle	V,P		2
Animalia	Mammalia	Miniopteridae	*Miniopterus australis*	Little Bent-winged Bat	V,P		1
Animalia	Mammalia	Miniopteridae	*Miniopterus orianae oceanensis*	Large Bent-winged Bat	V,P		6
Plantae	Flora	Asteraceae	*Leucochrysum albicans var. tricolor*	Hoary Sunray		E	54
Plantae	Flora	Asteraceae	*Rutidosis leptorrhynchoides*	Button Wrinklewort	E1	E	20
Plantae	Flora	Fabaceae	*Bossiaea oligosperma*	Few-seeded Bossiaea	V	V	1
Plantae	Flora	Myrtaceae	*Eucalyptus aggregata*	Black Gum	V	V	3
Plantae	Flora	Orchidaceae	*^Diuris aequalis*	Buttercup Doubletail	E1,P,2	V	3
Plantae	Flora	Rhamnaceae	*Pomaderris delicata*	Delicate Pomaderris	E4A	CE	36

Commonwealth status

V – Vulnerable E – Endangered CE Critically Endangered EEC – Endangered Ecological Community EP – Endangered Population
K – Known to occur P – Predicted to occur

NSW Status

1 - Sensitivity Class 1 (Sensitive Species Data Policy)
2 - Sensitivity Class 2 (Sensitive Species Data Policy)
3 - Sensitivity Class 3 (Sensitive Species Data Policy)
E1 - Endangered (Biodiversity Conservation Act 2016)
E2 - Endangered Population (Biodiversity Conservation Act 2016)
E3 - Endangered Ecological Community (Biodiversity Conservation Act 2016)
E4A - Critically Endangered (Biodiversity Conservation Act 2016)
E4B - Critically Endangered Ecological Community (Biodiversity Conservation Act 2016)
P - Protected (National Parks & Wildlife Act 1974)
V - Vulnerable (Biodiversity Conservation Act 2016)
V2 - Vulnerable Ecological Community (Biodiversity Conservation Act 2016)

Table 3: Threatened Species associated with vegetation classes and habitats present at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW and recorded within Monaro sub-region

Scientific Name	Common Name	NSW status	Comm. status	Status / Records	Present	Suitable vegetation class (1)	Suitable vegetation class (2)	Bionet 10km radius	Suitable habitat
Anthochaera phrygia	Regent Honeyeater	CE	CE	K		Y			
Aprasia parapulchella	Pink-tailed Legless Lizard	V	V	K		Y			
Artamus cyanopterus cyanopterus	Dusky Woodswallow	V		K		Y	Y	Y	
Caladenia tessellata	Thick Lip Spider Orchid	E	V	P		Y			
Callocephalon fimbriatum	Gang-gang Cockatoo	V		K		Y	Y		
Calyptorhynchus lathami	Glossy Black-Cockatoo	V		K		Y			
Cercartetus nanus	Eastern Pygmy-possum	V		K		Y			
Chthonicola sagittata	Speckled Warbler	V		K		Y			
Circus assimilis	Spotted Harrier	V		K		Y	Y		F
Climacteris picumnus victoriae	Brown Treecreeper (eastern subspecies)	V		K		Y			
Daphoenositta chrysoptera	Varied Sittella	V		K		Y			
Dasyurus maculatus	Spotted-tailed Quoll	V	E	K		Y			
Delma impar	Striped Legless Lizard	V	V	K		Y		Y	
Diuris aequalis	Buttercup Doubletail	E	V	K		Y		Y	
Eucalyptus aggregata	Black Gum	V	V	K	N	Y	Y		
Eucalyptus pulverulenta	Silver-leafed Gum	V	V	K		Y			
Falsistrellus tasmaniensis	Eastern False Pipistrelle	V		K		Y			
Glossopsitta pusilla	Little Lorikeet	V		K		Y			
Heleioporus australiacus	Giant Burrowing Frog	V	V	K		Y			

Hieraaetus morphnoides	Little Eagle	V		K		Y	Y	Y	F
Lathamus discolor	Swift Parrot	E	CE	K		Y	Y		
Lepidium hyssopifolium	Aromatic Peppercress	E	E	K	N	Y	Y		
Leucochrysum albicans var. tricolor	Hoary Sunray	NL	E	K	N	Y	Y	Y	
Litoria aurea	Green and Golden Bell Frog	E	V	K		Y			
Litoria raniformis	Southern Bell Frog	E	V	K		Y			
Lophoictinia isura	Square-tailed Kite	V		K		Y			
Melanodryas cucullata cucullata	Hooded Robin (south-eastern form)	V		K		Y			
Miniopterus schreibersii oceanensis	Eastern Bentwing-bat	V		K		Y	Y		
Myotis macropus	Southern Myotis	V		K		Y	Y		
Natural Temperate Grassland of the South Eastern Highlands	Natural Temperate Grassland of the South Eastern Highlands	NL	CE	K		Y			
Neophema pulchella	Turquoise Parrot	V		K		Y			
Ninox connivens	Barking Owl	V		K		Y			
Ninox strenua	Powerful Owl	V		K		Y			
Petaurus australis	Yellow-bellied Glider	V		K		Y			
Petaurus norfolcensis	Squirrel Glider	V		K		Y			
Petroica boodang	Scarlet Robin	V		K		Y			
Petroica phoenicea	Flame Robin	V		K		Y			
Phascogale tapoatafa	Brush-tailed Phascogale	V		P		Y			
Phascolarctos cinereus	Koala	V	V	K		Y			
Polytelis swainsonii	Superb Parrot	V	V	K		Y	Y		
Prasophyllum petilum	Tarengo Leek Orchid	E	E	K		Y			
Pteropus poliocephalus	Grey-headed Flying-fox	V	V	K		Y	Y	Y	
Rutidosis leptorrhynchoides	Button Wrinklewort	E	E	K		Y		Y	
Stagonopleura guttata	Diamond Firetail	V		K		Y	Y	Y	F
Suta flagellum	Little Whip Snake	V		K		Y			
Swainsona recta	Small Purple-pea	E	E	K		Y			
Swainsona sericea	Silky Swainson-pea	V		K		Y			

Synemon plana	Golden Sun Moth	E	CE	K		Y			
Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions	Tableland Basalt Forest in the Sydney Basin and South Eastern Highlands Bioregions	EEC		K		Y			
Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland in the South Eastern Highlands, Sydney Basin, South East Corner and NSW South Western Slopes Bioregions	Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland in the South Eastern Highlands, Sydney Basin, South East Corner and NSW South Western Slopes Bioregions	EEC		K		Y			
Thesium australe	Austral Toadflax	V	V	K		Y			
Varanus rosenbergi	Rosenberg's Goanna	V		K		Y			
White Box Yellow Box Blakely's Red Gum Woodland	White Box Yellow Box Blakely's Red Gum Woodland	EEC	CE	K		Y			

V – Vulnerable E – Endangered CE Critically Endangered EEC – Endangered Ecological Community EP – Endangered Population
K – Known to occur P – Predicted to occur N – Nesting or breeding habitat F – Foraging habitat

Vegetation class 1: Southern Tablelands Grassy Woodland
Vegetation Class 2: highly disturbed areas with no or limited native vegetation

Table 4: Likelihood of occurrence of threatened species associated with both Southern Tableland Grassy Woodlands and Highly disturbed areas with no or limited native vegetation recorded within the Monaro subregion

This table is comprised of threatened species:
1) recorded within a 10 km radius of the subject site (sourced from BioNet Atlas of NSW Wildlife) and,
2) associated with vegetation classes and habitats present at the subject site (sourced from NSW Department of Planning, Industry and Environment (DPIE) Threatened species profile search / combined geographic and habitat search) and
3) recorded within Monaro sub-region (sourced from DPIE Threatened species profile search / combined geographic and habitat search).

Likelihood of occurrence in study area
Unlikely: Species, population or ecological community is not likely to occur. Lack of previous recent (<25 years) records and suitable potential habitat limited or not available in the study area.

Likely: Species, population or ecological community could occur, and study area is likely to provide suitable habitat.

Previous records in the locality and/or suitable potential habitat in the study area. Present: species, population or ecological community was recorded during the field investigations.

Species / Communities		Status		Likelihood of occurrence in the study area
		NSW	Nation.	
Ecological Communities				
Not applicable	Not applicable			Not applicable
Flora				
Eucalyptus aggregata	Black Gum	V	V	**Unlikely**: The species was not recorded by the survey within the property.
Lepidium hyssopifolium	Aromatic Peppercress	E	E	**Unlikely:** The species was not recorded by the survey within the property.
Leucochrysum albicans var. tricolor	Hoary Sunray		E	**Unlikely:** The species was not recorded by the survey within the property.

Fauna				
Artamus cyanopterus cyanopterus	Dusky Woodswallow	V		**Unikely**: Characteristic habitat (i.e. dry, open eucalypt forests and woodlands, including mallee associations, with an open or sparse understorey of eucalypt saplings, acacias and other shrubs, and ground-cover of grasses or sedges and fallen woody debris) is not present within the property and could potentially be utilized by the species.
Callocephalon fimbriatum	Gang-gang Cockatoo	V		**Unlikely**: Characteristic general habitat (i.e. tall mountain forests and woodlands, heavily timbered and mature wet sclerophyll forests and drier more open eucalypt forests and woodlands) is not present within the property. Characteristic breeding habitat (i.e. favours old growth attributes for nesting and roosting) is very limited within the property i.e. two trees.
Circus assimilis	Spotted Harrier	V		**Likely:** Characteristic foraging habitat (i.e. native grassland, but also occurs in agricultural land, foraging over open habitats) is present within the property.
Hieraaetus morphnoides	Little Eagle	V		**Likely**: Characteristic foraging habitat (i.e. open eucalypt forest, woodland or open woodland) is present within the property.
Lathamus discolor	Swift Parrot	E	CE	**Unlikely**: Characteristic foraging habitat (i.e. profusely flowering eucalypts or where there are abundant lerp infestations) is not present within the property.
Miniopterus schreibersii oceanensis	Eastern Bentwing-bat	V		**Unlikely**: Characteristic foraging and / or breeding habitat (i.e. caves are the primary roosting habitat, and foraging above tree tops) is not present within the property and is unlikely to be utilized by the species.
Myotis macropus	Southern Myotis	V		**Unlikely**: Characteristic foraging and / or breeding habitat (i.e. roosts close to water in caves, mine shafts, hollow-bearing trees, and forages over streams and pools) is not present within the property.
Polytelis swainsonii	Superb Parrot	V	V	**Unlikely**: Characteristic general habitat (i.e. Box-Gum, Box-Cypress-pine and Boree Woodlands and River Red Gum Forest) is not present within the property. Characteristic breeding habitat (i.e. hollows of

				large trees - dead or alive) is very limited within the property i.e. two trees.
Pteropus poliocephalus	Grey-headed Flying-fox	V	V	**Unlikely**: Characteristic foraging and / or breeding habitat (i.e. roosting camps are generally located within 20km of a regular food source and are commonly found in gullies, close to water, in vegetation with a dense canopy) is not present within the property and is unlikely to be utilized by the species.
Stagonopleura guttata	Diamond Firetail	V		**Likely**: Characteristic foraging and / or breeding habitat (i.e. grassy eucalypt woodlands, in open forest, mallee, Natural Temperate Grassland, in secondary grassland derived from other communities and often found in riparian areas, and sometimes in lightly wooded farmland) is present within the property.

Appendix 1: Photographs at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

Photo 1: WP119. Looking north from centre of Quadrat 1.

Photo 2: WP119. Looking south from centre of Quadrat 1.

Photo 3: WP119. Looking east from centre of Quadrat 1.

Photo 4: WP119. Looking west from centre of Quadrat 1.

Photo 5: WP119. Typical groundcover within Quadrat 1.

Photo 6: WP119. Typical groundcover within Quadrat 1.

Photo 7: WP120. Looking north from centre of Quadrat 2.

Photo 8: WP120. Looking south from centre of Quadrat 2.

Photo 9: WP120. Looking east from centre of Quadrat 2.

Photo 10: WP120. Looking west from centre of Quadrat 2.

Photo 11: WP120. Typical groundcover within Quadrat 2.

Photo 12: WP120. Typical groundcover within Quadrat 2.

Photo 13: WP121. Snow Gum *Eucalyptus pauciflora.*

Photo 14: WP122. Snow Gum *Eucalyptus pauciflora.*

Photo 15: WP123. Looking north from centre of Quadrat 3.

Photo 16: WP123. Looking south from centre of Quadrat 3.

Photo 17: WP123. Looking east from centre of Quadrat 3.

Photo 18: WP123. Looking west from centre of Quadrat 3.

Photo 19: WP123. Typical groundcover within Quadrat 3.

Photo 20: WP123. Typical groundcover within Quadrat 3.

Photo 21: WP124. Looking north from centre of Quadrat 4.

Photo 22: WP124. Looking south from centre of Quadrat 4.

Photo 23: WP124. Looking east from centre of Quadrat 4.

Photo 24: WP124. Looking west from centre of Quadrat 4.

Photo 25: WP124. Typical groundcover within Quadrat 4.

Photo 26: WP124. Typical groundcover within Quadrat 4.

Photo 27: Dam 1. Looking south.

Photo 28: Dam 2. Looking south-east.

Appendix 2: Survey data for "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

Client: Davies Nominees Pty Ltd c/o Hogan Planning	**Project: Rezoning Application**	**Date: 13/2/19**	**Site name: "Allfarthing" 2 Brisbane Grove Rd Goulburn**
Plot ID:		Recorder: Pandora Holliday	Location: 2 Brisbane Grove Rd Goulburn
Datum:	Easting:	Northing:	Soil type: Fine sandy loam
Landform: Upper slope	Rock %: 1, no outcrops. Fine sedimentary plus precipitated quartz	Average vegetation height: 30cm	Biomass removal: current cattle grazing

Quadrat	**Sp. #**	**Native Species**	**%**	**Sp. #**	**Exotic Species**	**%**
1	1	*Cynodon dactylon*	<10	1	*Eragrostis curvula*	70
	2	*Bothriochloa macra*	1	2	*Eleusine tristachya*	15
	3	*Austrostipa bigeniculata*	1	3	*Hypochaeris radica*	<5
		-		4	*Digitaria sanguinalis*	5
		-		5	*Conyza bonariensis*	1
		-		6	*Onopordum acanthium*	1
		-		7	*Acetosella vulgaris*	<5
		-		8	*Polygonum sp.*	1
		-		9	*Paspalum dilatum*	1
		-		10	*Panicum effusum*	1
		-		11	*Chloris truncate*	1
		-		12	*Chondrilla juncea*	1
		-		13	*Nassella trichotoma*	1
				14	*Setaria parviflora*	1
				15	Prunus sp.	<1

Quadrat	Sp. #	Native Species	%	Sp. #	Exotic Species	%
2	1	*Cynodon dactylon*	<10	1	*Eragrostis curvula*	25
		-		2	*Digitaria sanguinalis*	15
		-		3	*Lepidum africanum*	2
		-		4	*Hypocharis radica*	5
		-		5	*Onopordum acathium*	1
		-		6	*Eleusine tristachya*	<10
		-		7	*Oxalis thompsoniae*	5
		-		8	*Conyza bonariensis*	1
		-		9	*Echium vulgare*	1
		-		10	*Nassella trichotoma*	<1
		-		11	*Pnicum effusum*	<1
		-		12	*Bromus cathiarticus*	<1
		-		13	*Polygonum sp.*	<1
		-		14	*Setaria parviflora*	<1
		-		15	*Solanum sp.*	<1
		-		16	*Paspalum dilatum*	<1
		-		17	*Phalaris aquatica*	<1

Site situated low in the landscape near small dam. No trees or shrubs present in the area.
Landscape position: flat/drainage area
Soil: silty clay, 0% exposed rock
Bare ground: 15%
Biomass removal: cattle grazing
Average biomass height: 15cm

Quadrat	Sp. #	Native Species	%	Sp. #	Exotic Species	%
3	1	*Cynodon dactylon*	<10	1	*Eragrostis curvula*	72
		-		2	*Hypocharis radica*	<1
		-		3	*Eleusine tristachya*	1
		-		4	*Dysphania pumilio*	<1
Location, site 3: situated midslope below house. No trees or shrubs present in the area. Landscape position: midslope Soil: fine sandy clay, very gravelly Rock: <5%, no outcrops Bare ground: 25% Biomass removal: cattle grazing Average biomass height: 25cm						
Quadrat	**Sp. #**	**Native Species**	**%**	**Sp. #**	**Exotic Species**	**%**
4		-		1	*Eragrostis curvula*	15
		-		2	*Digitaria sanguinalis*	30
		-		3	*Panicum gilvum*	15
		-		4	*Hypocharis radica*	<1
		-		5	*Setaria parviflora*	2
		-		6	*Eleusine tristachya*	<5
		-		7	*Paspalum dilatum*	<5
		-		8	*Onopordum acathium*	1
		-		9	*Phalaris aquatica*	1
		-		10	*Sonchus asper*	<1
		-		11	*Dysphania pumilio*	<1
		-				
Location, site 4: situated on lower slope, northern area of property. No trees or shrubs present in the area. Landscape position: lower slope						

Soil: fine sandy clay
Rock: <5%, no outcrops
Bare ground: 20%
Biomass removal: cattle grazing
Average biomass height: 15cm

Disturbance history: some form of cultivation (likely >5-10 years prior). Widely spaced row hummocks present.

Appendix 3: Conceptual Lot Plan for "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW

Source: Sowdes

Appendix 4: Certification

Woodlands
Environmental Management
PO Box 9 Braidwood NSW 2622
ABN 93 036 995 658
Mob: 0422279946
Email: woodlandsenviro@gmail.com

ABN 93036995658

Report title:	Biodiversity Assessment at "Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW
Report prepared by:	Greg Stone, Woodlands Environmental Management
Qualifications:	BAppSc (Parks, Recreation & Heritage), GradCert (Env Management), GradCert (Science Communication), AdvDip (Land Management), AssDip (Land Management)
Address:	Woodlands Environmental Management PO Box 9 Braidwood NSW 2622
Applicant Name:	Davies Nominees Pty Ltd
Applicant Address:	c/o Hogan Planning, PO Box 2257 Bowral NSW
Land to be assessed:	"Allfarthing" 2 Brisbane Grove Road, Brisbane Grove NSW
Scope:	Assessment of existing biodiversity values.
Certification:	I certify that I have prepared the contents of this report and to the best of my knowledge: • It reports on the potential impacts of the proposal as generally outlined in the concept application; • It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.
Disclaimer:	This report has been prepared to provide advice to the client on matters pertaining to the particular and specific development proposal as advised by the client and / or their authorised representatives. This report can be used by the client only for its intended purpose and for that purpose only. Should any other use of the advice be made by any person including the client then Woodlands Environmental Management advises that the advice should not be relied upon. The report and its attachments should be read as a

whole and no individual part of the report or its attachments should be interpreted without reference to the entire report.

The mapping is indicative of available space and location of features which may prove critical in assessing the viability of the proposed works. Mapping has been produced on a map base with an inherent level of inaccuracy, the location of all mapped features are to be confirmed by a registered surveyor.

Signature:

Name: Gregory John Stone
Date: 4th June 2021

Appendix 5: Curriculum Vitae, licensing and insurance

Curriculum Vitae

Name
Gregory John Stone

Contact details
Address: PO Box 9
Braidwood NSW 2622

Email: woodlandsenviro@gmail.com

Mobile: 0422279946

Qualifications and education
Bachelor of Applied Science (Parks, Recreation and Heritage)
Charles Sturt University

Graduate Certificate in Science Communication
Australian National University

Graduate Certificate of Environmental Management
Charles Sturt University

Advanced Diploma in Land Management
University of Sydney

Associate Diploma in Land Management
University of New England

Name of the organization: **Woodlands Environmental Management**
Designation: Principal environmental consultant (self-employed)
Period: 1990 to present
Duties:

- Preparation of environmental assessments undertaken for development applications, rehabilitation projects and conservation agreements

- Preparation of environmental assessments undertaken in accordance with *Native Vegetation Act 2003, Threatened Species Conservation Act 1995, Biodiversity Conservation Act 2016,* the *Environmental Planning and Assessment Act 1979* and the *Commonwealth Environment Protection and Biodiversity Act 1999*

- Preparation of Assessments of Significance (7-part tests) and Tests of Significance (5-part tests) for Threatened Species and Threatened Ecological Communities.

- Preparation of Habitat Management Plans for the purpose of protecting Threatened Species of flora, fauna and Threatened Ecological Communities and their habitats.

- Vegetation surveying and mapping undertaken within conservation areas and bushland reserves on the Southern Tablelands.

- Survey and mapping of threatened species for NSW DPIE Saving our Species program

- Preparation and monitoring of Vegetation Management Plans.

- Preparation of management plans for natural areas incorporating fire, weed and water management and rehabilitation work.

- Delivery of lectures, training, workshops and field days conducted for NSW National Parks and Wildlife Service, Hawkesbury - Nepean Catchment Management Authority, Wingecarribee Shire Council, Department of Agriculture, Landcare NSW, Bushcare, TAFE NSW, Department Infrastructure, Planning and Natural Resources and community groups

Contracts with NSW Government

Name of the organization: **NSW Department of Planning, Industry and Environment / Biodiversity Conservation Trust**
Designation: Conservation Partners Program contractor
Period: 2008 to present
Duties: Preparing Conservation Agreements with private landholders on properties of high conservation value across south-east NSW.

Name of the organization: **Hawkesbury-Nepean Catchment Management Authority**
Designation: Catchment Officer (part-time)
Period: August 2007 to August 2012
Duties: Administering the *Native Vegetation Act 2003,* undertaking assessments for Property Vegetation Plans.
Co-ordination of Southern Highlands and Tablelands Biolinks project including incentive, community education and conservation programs.

Insurances

Public and Products Liability Insurance
Limit of Liability: $10,000,000

Professional Indemnity
Limit of Liability: $10,000,000

Licence
Greg Stone of Woodlands Environmental Management currently holds a **SCIENTIFIC LICENCE** issued under the *National Parks & Wildlife Act 1974*

Licence number is: **SL101033**

Class Name: **Biodiversity assessment/Species Impact Statement**
Ecological survey/consultancy