

ECOLOGICAL ASSESSMENT IN RELATION TO PROPOSED DEVELOPMENT AT BOWRAL & DISTRICT HOSPITALS, BOWRAL STREET, BOWRAL

Prepared for:

T Kirris
TSA Management
C/- Andrew Scales
Naturally Trees
PO Box 5085
Elanora Heights NSW 2101

FEBRUARY 2018

ACS Environmental P/L

Flora and Fauna Surveys, Biodiversity Impact Assessment & Bushland Management Planning Services
Australian Business Number (ABN) 24 154 491 120
3/28 Tullimbar Rd, Cronulla NSW. 2230

Tel: 9527 5262, Mob: 0403 081902, Fax: 9527 7454

Email: acs@actinotus.com
Web: www@actinotus.com

Actinotus Environmental Consultants

Peter Stricker BSc. (Hons) (Syd) $^{\alpha}$

Member Ecological Consultants Association NSW Inc.

Consultants experience

The director of 'Actinotus Consultancy Services (ACS) – Environmental P/L' (formerly Actinotus Environmental Consultants) has collectively worked in the area of biodiversity impact assessment, bushland management planning and bushfire hazard assessment services for a period of greater than 20 years. He also has over 20 years of experience in scientific research (ecology) and teaching in biological science.

The principal of the former 'Actinotus Environmental Consultants' has completed the NSW Consulting Planners Bushfire Training Course organised by the Planning Institute of Australia NSW Division for planning consultants and allied professionals relating to the implementation of 'Planning for Bushfire Protection', in June 2003.

CON	ONTENTS pag				
ABBR	EVIATIONS	v			
1	INTRODUCTION	1			
1.: 1.:	,	1 1			
2	EXISTING VEGETATION	2			
3	ASSESSMENT OF STATUS OF INDIVIDUAL TREES AND ECOLOGICAL COMMIN ON SITE AND IN VICINITY	ITY 5			
3.3 3.3	2 Threatened species of fauna	5 7 8			
4	REFERENCES & LITERATURE REVIEWED	10			
FIGU	RES				
1	Indicates the area of study at the Bowral & District Hospital, Bowral (yellow o including individual of Camden Woollybutt (circled in light blue)	outline) 2			
2	Depiction plan of south-western quadrant of the hospital grounds (not to be developed) (from Scales 2017)	3			
3	Remnant individual opposite Warenda Street junction appears to be Forest R Gum (Google Street View)	ed 4			
4	Remnant individual occurring about 40m to north of Tree No. 1 appears to be remnant individual of Camden Woollybutt	e 4			
5	Relative location of records for threatened flora within the Bowral locality (Atlas of NSW Wildlife 2018)	5			
6	Individual that appears to be Camden Woollybutt occurring along the Sheffie Street frontage about 40m north of the Warenda Street junction, the tree occurring within a section of the hospital grounds where no development will occur (Scales 2017) (photo courtesy of Stephen Clarke - NSW Health)				

FIGURES page No.

- Relative location of records for the most commonly recorded threatened species of fauna within the Bowral locality (Atlas of NSW Wildlife 2018)
- Biodiversity Values Map of Bowral locality indicating no areas of high biodiversity value (shaded in orange) occurring at or in the vicinity of the subject site at Bowral and District Hospitals

TABLES

- 1 Records for 4 species of threatened flora that occur within a 5km radius of the subject site at Bowral and District Hospitals 5
- Records for 19 species of threatened fauna and one population that occur within a 5km radius of the subject site at Bowral and District Hospitals 7

ABBREVIATIONS

BCA - Biodiversity Conservation Act (2016)

BDAR - Biodiversity Development Assessment Report

BV Map - Biodiversity Values Map

CEEC - Critically Endangered Ecological Community

DEC - Department of Environment and Conservation (now OEH)

DoEE - Commonwealth Department of Environment and Energy

EEC - Endangered Ecological Community

EPA Act – Environment Protection Act

EPBC Act – Environment Protection and Biodiversity Conservation Act

NPWS - State National Parks and Wildlife Service

OEH - Office of the Environment and Heritage

RoTAP – Rare and Threatened Australian Plants

SSD DA - State Significant Development - Development Application

TSC Act – Threatened Species Conservation Act

INTRODUCTION

1.1 Proposed development

'ACS (Actinotus Consultancy Services) – Environmental' was commissioned by Naturally Trees on behalf of Taya Kirris, TSA Management, to undertake an ecological assessment of vegetation in relation to potential development within the grounds of the Bowral & District Hospital, Bowral Street, Bowral.

Figure 1 is an aerial image of the area of study at the Bowral & District Hospital

1.2 Study methodology

A desktop survey was undertaken to assess the presence or otherwise of any threatened species of flora, fauna or endangered ecological communities or populations that may be impacted by the proposed development



Figure 1 - Indicates the area of study at the Bowral & District Hospital, Bowral (yellow outline) including individual of Camden Woollybutt (circled in light blue)

2 EXISTING VEGETATION

Scales (2017) documents a total of 148 trees, including small trees, in an arboricultural assessment of the tree population contained within the grounds of the Bowral and District Hospital at Bowral Street, Bowral. All but three of the tree population are landscaped exotic ornamental trees that have been planted some time ago to enhance the amenity of the landscape at the subject site. Three small non-locally indigenous species include an individual of Hair-pin Banksia to 3m, an individual of Coast Banksia to 9m and an individual of Paperbark to 4m tall (Scales 2107). None of the tree population documented in the report by Scales (2017) occurs naturally at the site.

However, two individuals of trees occurring within the hospital grounds along the Sheffield Street frontage on the western side of the subject land that have not been documented in Scales (2017), may be remnant trees. Figure 2 indicates the location of these trees within the section of the site where there will be no development, and as such, these trees will not be impacted and have not been documented. Figure 3 indicates the individual located at the junction of Warenda and Sheffield Streets, Bowral (Tree No. 1) and Figure 4 indicates the individual located about 40m to the north of Tree No. 1 along Sheffield Street (Tree No, 2). Tree No. 1 appears to be an individual of Forest Red Gum and Tree No. 2 appears to be an individual of Camden Woollybutt. Neither of these individuals will be impacted by the proposed redevelopment at the subject site (Scales 2017).

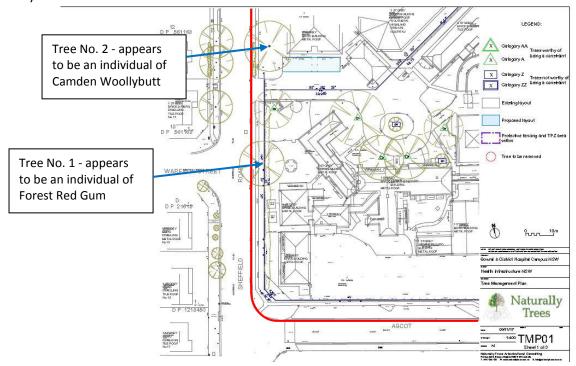


Figure 2 - Depiction plan of south-western quadrant of the hospital grounds (not to be developed) (from Scales 2017)



Figure 3 - Remnant individual opposite Warenda Street junction appears to be Forest Red Gum (Google Street View)



Figure 4 - Remnant individual occurring about 40m to north of Tree No. 1 appears to be remnant individual of Camden Woollybutt

3 ASSESSMENT OF STATUS OF INDIVIDUAL TREES AND ECOLOGICAL COMMUNITY ON SITE AND IN VICINITY

3.1 Threatened species of flora

As the entire site has been landscaped, there is no natural ecological community occurring at the subject site (Scales 2017).

Records for threatened species of flora occurring within a 5km radius of the subject site are tabulated in Table 1 (from OEH Bionet Atlas of NSW Wildlife 2018).

Family	Common name	Scientific name			No. of records
Myrtaceae	Black Gum	Eucalyptus aggregata	V,P	V	1
	Eucalyptus aggregata H.Deane & Maiden population in the Wingecarribee local government area	Eucalyptus aggregata	E2,V,P	V	1
	Paddys River Box, Camden Woollybutt	Eucalyptus macarthurii	E1,P	Е	370
Proteaceae	Mittagong Geebung	Persoonia glaucescens	E1,P	V	76

Table 1 - Records for 4 species of threatened flora that occur within a 5km radius of the subject site at Bowral and District Hospitals

Figure 5 indicates the relative location of the records for the 4 threatened species of flora that occur within a 5km radius of the subject site.

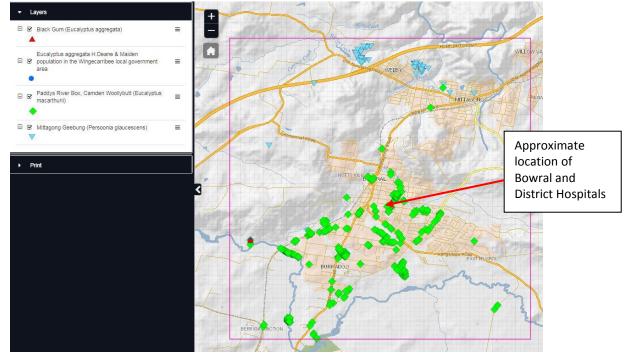


Figure 5 - Relative location of records for threatened flora within the Bowral locality (Atlas of NSW Wildlife 2018)

Figure 5 indicates that the individual that appears to be Camden Woollybutt (*Eucalyptus macarthurii*) and depicted in Figure 4, is likely the individual numbered as Tree No. 2 in Figure 2.

Figure 6 is a photo taken from within the grounds of the hospital and confirms the apparent presence of Camden Woollybutt at the location some 40m to the north of the junction of Warenda and Sheffield Streets.



Figure 6 - Individual that appears to be Camden Woollybutt occurring along the Sheffield Street frontage about 40m north of the Warenda Street junction, the tree occurring within a section of the hospital grounds where no development will occur (Scales 2017) (photo courtesy of Stephen Clarke - NSW Health)

Assessment - A remnant individual of an endangered eucalypt, Camden Woollybutt, appears to be located within the hospital ground complex, along the south-western frontage with Sheffield Street, Bowral (Figures 2, 4, 5 & 6).

This individual is located well outside the proposed development footprint and will not be impacted by the proposed development (Scales 2017). Other remnant individuals likely occur in surrounding parks and gardens (Figure 6).

3.2 Threatened species of fauna

Records for threatened species of fauna occurring within a 5km radius of the subject site are tabulated in Table 2 (from OEH Bionet Atlas of NSW Wildlife 2018).

Family	Common name	Scientific name	NSW status	Comm. status	No. of records
Aves Anatidae	Blue-billed Duck	Oxyura australis	V,P		1
Apodidae	White-throated Needletail	Hirundapus caudacutus	Р	C,J,K	1
Accipitridae	White-bellied Sea-Eagle	Haliaeetus leucogaster	V,P	С	1
Scolopacidae	Latham's Snipe	Gallinago hardwickii	Р	C,J,K	3
Cacatuidae	Gang-gang Cockatoo	Callocephalon fimbriatum	V,P,3		19
	Glossy Black-Cockatoo	Calyptorhynchus lathami	V,P,2		5
Strigidae	Powerful Owl	Ninox strenua	V,P,3		5
Tytonidae	Masked Owl	Tyto novaehollandiae	V,P,3		1
Neosittidae	Varied Sittella	Daphoenositta chrysoptera	V,P		4
Artamidae	Dusky Woodswallow	Artamus cyanopterus cyanopterus	V,P		1
Petroicidae	Scarlet Robin	Petroica boodang	V,P		2
	Flame Robin	Petroica phoenicea	V,P		1
Mammalia Dasyuridae	Spotted-tailed Quoll	Dasyurus maculatus	V,P	E	1
Phascolarctidae	Koala	Phascolarctos cinereus	V,P	V	29
Petauridae	Squirrel Glider	Petaurus norfolcensis	V,P		1
Pseudocheiridae	Greater Glider	Petauroides volans	Р	V	8
	Greater Glider Petauroides volans (Kerr, 1792) population in the Mount Gibraltar Reserve area	Petauroides volans	E2,P	V	3
Vespertilionidae	Eastern False Pipistrelle	Falsistrellus tasmaniensis	V,P		2
	Eastern Bentwing-bat	Miniopterus schreibersii oceanensis	V,P		2
	Greater Broad-nosed Bat	Scoteanax rueppellii	V,P		1

Table 2 - Records for 19 species of threatened fauna and one population that occur within a 5km radius of the subject site at Bowral and District Hospitals

Figure 7 indicates the relative location of the records for the 5 most commonly occurring threatened fauna species that occur within a 5km radius of the subject site.

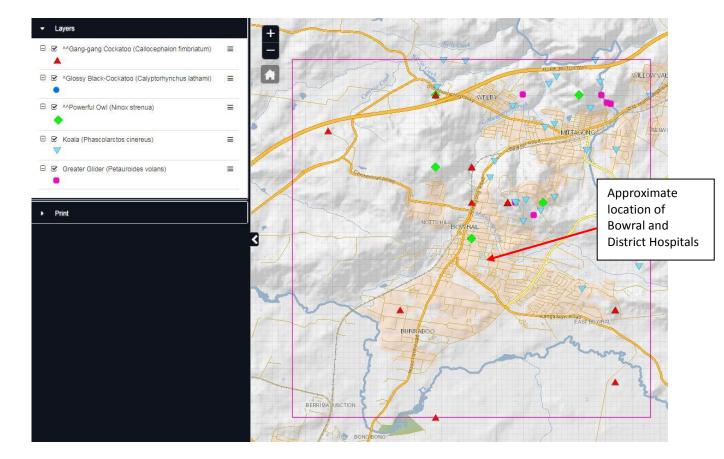


Figure 7 - Relative location of records for the most commonly recorded threatened species of fauna within the Bowral locality (Atlas of NSW Wildlife 2018)

Assessment - No threatened fauna are likely to be impacted by the proposed development. Occurrences of the wide-ranging foraging Powerful Owl occur across the locality but prefer tall moist forests and do not depend on areas of landscaped exotic vegetation in relation to preferred prey such as Ringtail Possums.

3.3 Conclusions and recommendations

There would appear to be no ecological requirement to undertake a Biodiversity Development Assessment for this proposal.

Firstly, The *Biodiversity Conservation (Savings and Transitional) Amendment Regulation 2017* ('Amending Regulation') released on 24 November 2017, extends the application of the former planning provisions of the EPA Act to the biodiversity assessment of Part 4 development applications to **25 February 2018.**

Part 4 development applications lodged before this date will not be assessed under the *Biodiversity Conservation Act 2016* ('BC Act').

Secondly, though there may be an occurrence of an individual of the Endangered Species 'Camden Woollybutt' within the hospital ground complex (Figure 5), the individual is located outside the proposed development footprint and will not be impacted (Scales 2017). As such, it is considered that there is no need for a 5-part assessment of significance in relation to potential impacts as required by the Biodiversity Conservation Act (2016), as there will not be any.

The Biodiversity Values Map (BV Map) identifies land with high biodiversity value, as defined by the *Biodiversity Conservation Regulation 2017*. Figure 8 indicates the section of the BV Map in the Bowral locality showing that there are no areas of high biodiversity value at or in the vicinity of the Bowral and District Hospitals precinct.

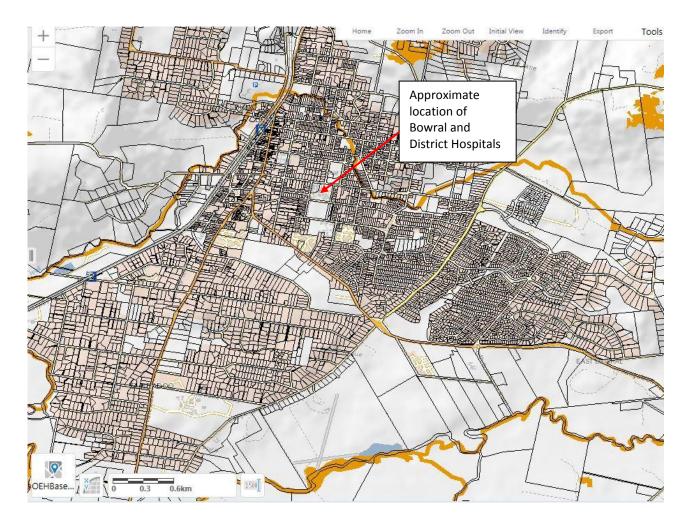


Figure 8 - Biodiversity Values Map of Bowral locality indicating no areas of high biodiversity value (shaded in orange) occurring at or in the vicinity of the subject site at Bowral and District Hospitals

It is considered that the proposed enabling works at the site will have no impact on any species or ecological community in relation to the requirements of Section 5A (s.5A) of the *Environmental Planning & Assessment Act 1979*.

As such, it is recommended that a Biodiversity Conservation Act waiver is granted in relation to the request to the Department of Planning for a State Significant Development Application (SSD DA).

4 REFERENCES & LITERATURE REVIEWED

- Fairley, A. (2004) 'Seldom Seen Rare Plants of Greater Sydney'. Pub. L. Egerton Toppan Printing Co. U.K.
- OEH Atlas of NSW Wildlife (2018). NPWS Geographic Information Systems Division, Hurstville NSW, 2220.
- Pizzey, G. and Knight, F. (2003). *The Field Guide to the Birds of Australia*. Angus and Robinson Publs.
- Scales, A (2017) Arboricultural assessment and Method Statement for Bowral & District Hospital, Bowral (prepared for Health Infrastructure NSW)