

Within the vicinity of the proposed development, it is considered that this species is adequately represented in conservation reserves of the Nattai Wilderness and areas of crown reserve of the Bargo and Nepean Rivers Catchment.

G) Whether the development or activity proposed is of a class of development or activity that is recognised as a threatening process.

Threatening processes for this species as listed in the U.B.B.S. include habitat loss, fragmentation and degradation, as well as introduced animals. It is regarded that the above processes are not a threat in this case as, the site is very small and no food trees will be removed

H) Whether any threatened species, population or ecological community is at the limit of its known distribution.

The species are not at the limit of their range, they have been noted further south, east, west and north.

8.0 Discussion and Conclusions

* It is recommended that no mature trees be removed, as such trees provide habitat for a range of faunal species, eg. birds and mammals. Such trees are a limited resource, as logging in past years, has seen the removal of a significant number, particularly Ironbarks. It requires approximately 150 years for trees to reach a stage of development where they provide habitat holes of sufficient size to be significant.

*No scientific studies have been undertaken to gauge the movement of Koalas through the area. Incidental observations however, do provide evidence that Koalas utilize the remnant vegetation to pass from east to west and vice versa. It is therefore important to retain what natural vegetation remains in the area.

*It is recommended that remnant vegetation be retained on the study site to preserve the genetic pool of the CPW and to maintain the area as a wildlife corridor

There is a high demand for building blocks within the Bargo area and in areas where zoning permits, land has been subdivided into smaller and smaller lots. As a consequence of this it is often not possible to retain any trees on site as a result of safety issues.

This proposed development would see an increase in the number of residential lots available and at the same time utilize land that was already substantially cleared. The proposed size of the lots would be sufficient to retain existing vegetation.

*It is recommended that consideration be given to future garden plantings, so as to minimize the risk of "feral" plants invading the bushland to the east. Native species should be preferred to create habitat.

* It is recommended that new residents be made aware that Koalas may infrequently travel through the area. In Chandos St, Yanderra, a young male Koala was mauled by a residents dog resulting in its death. Dogs need to be restrained during the night when Koalas and other animals are active.

In conclusion, the Assessments of Significance found that the proposed development would not have a significant effect on the endangered ecological community of the CPW or the threatened species *Phascolarctos cinereus*. It can be stated that, as the development is of a limited nature and as no other threatened species were noted, there will be minimal impact on the environment.

Appendix 1 Threatened Species

Table 1 Threatened Fauna Species of the Bargo River Catchment

ENDANGERED SPECIES	REQUIREMENTS	SITE SUITABILITY
BATS		
Mormopterus norfolkensis [Eastern Little Mastif Bat]	<i>Inhabits temperate to subtropical, wet& dry sclerophyll forest & woodland</i>	<i>Unlikely as limited habitat is present on the study site.</i>
Miniopterus schreibersii [Common Bent Wing Bat]	<i>Habitat in caves, mines, stormwater drains, trees Has specific nursery sites characterized by conditions of high temperature and humidity</i>	<i>Unlikely to be present as limited habitat available</i>
Pipistrellus tasmaniensis [Great Pipistrelle]	<i>Inhabits tall, moist forest. Also found in caves and abandoned buildings</i>	<i>Unlikely as it prefers wetter habitat & tall Tree > 20m</i>
Scoteanax rueppelli [Greater Broad-Nosed Bat]	<i>Inhabits cool, mature temperate to tropical forest & rainforest. Roosts by day in tree hollows and dense vegetation</i>	<i>Unlikely to be present as habitat not present</i>
AMPHIBIANS		
Heleioporus australiacus [Giant Burrowing Frog]	<i>Strongly associated with sandstone ridge-tops, usually along sandy creekbanks</i>	<i>Unlikely as habitat not present</i>
Pseudophryne australis [Red-crowned Toadlet]	<i>Restricted to sandstone areas, generally under rocks. Known to occur north of Balmoral</i>	<i>Habitat is not present</i>

REPTILES		
Hoplocophalus bungaroides [Broad-headed Snake]	Largely confined to Hawkesbury Sandstone formations. It is restricted to rock-on-rock where thin sheets of exfoliated rock occur, spends winter under rocks on rock shelves or in crevices. Moves into trees in summer.	Habitat under exfoliated rock is not present. These species require larger home ranges. Unlikely visitor
Varanus rosenbergi [Heath Monitor]	Prefers heathland	Habitat not present on the site, unlikely to be present
BIRDS		
Ninox strenua [Powerful Owl]	Roosts in dense foliage, often along streams, between ridges covered with Eucalypt forest	Unlikely visitor as these species require large home ranges 500 plus Ha.
Tyto tenebricosa [Sooty Owl]	Prefers dense Sclerophyll forest with emergent trees	Unlikely visitor as large home ranges required, 500 plus ha.
Calyptorhynchus lathami [Glossy Black Cockatoo]	Frequents heavily timbered forests with stands of casuarina	Habitat not present on the site, unlikely visitor

MAMMALS	REQUIREMENTS	SITE SUITABILITY
<i>Dasyurus maculatus</i> [Spotted Tailed Quoll]	<i>Has versatile habitat requirements. Inhabits tropical to temperate regions. Open forest, Savannah & scrubland. Prefers rocky country. Requires large un-fragmented ranges with little competition from foxes.</i>	<i>Unlikely as large home range required and habitat not present on the site</i>
<i>Petauroides volans</i> [Greater Glider]	<i>Habitat is wet to dry Sclerophyll forest & woodland. Prefers undisturbed, mature forests, with nesting hollows. Food preference is young leaves from particular Eucalypt which are high in nitrogen content.</i>	<i>Unlikely visitor as large home range required and limited degraded vegetation present</i>
<i>Petrogale pencillata</i> [Brush Tailed Rock Wallaby]	<i>Inhabits rock areas in Sclerophyll forest. Found near grassy areas. Prefers areas with abundant ledges and caves.</i>	<i>Unlikely visitor as habitat not present</i>
<i>Phascolarctus cinereus</i> [Koala]	<i>% of fodder trees establishes potential koala habitat</i>	<i>Likely infrequent visitor as preferred habitat present but limited</i>
<i>Potorus tridactylus</i> [Long Nosed Potoroo]	<i>Inhabits areas with rainfall over 750mm. Inhabits coastal heath & wet & dry Sclerophyll forest</i>	<i>Unlikely visitor not sited for some time in the area</i>

Appendix 1 Threatened Species of the Wollondilly Area

Acacia bynoeana
Acacia clunies rossiae
Acacia floctoniae
Bossiaea oligosperma
Cynanchum elegans
Eucalyptus benthami
Grevillea obtusiflora
Grevillea parviflora ssp. *parviflora*
Grevillea longifolia
Epacris purpurescens var. *purpurescens*
Hakea sp. Kowmung River
Haloragis exalata ssp. *Velutina* Orch
Kunzia cambagei
Lastrepsis hispida
Leucopogon exolasius
Persicaria elatior
Persoonia acerosa
Persoonia bargoensis
Persoonia glaucescens
Persoonia hirsuta
Persoonia nutens
Phylota humifusa
Pomaderris brunnea
Pomaderris catoneaster
Pomaderris sericea
Pterostylis spE
Rulingia prostrata
Ziera murphyi

Endangered Ecological Communities

Cumberland Plain Woodland
Shale Sandstone Transition Forest

Characteristic Species of the Cumberland Plain Woodland

<i>Acacia decurrens</i>	<i>Acacia falcata</i>
<i>Acacia implexa</i>	<i>Acacia parramattensis</i>
<i>Aristida vagans</i>	<i>Aristida vagans</i>
<i>Arthropodium milleflorum</i>	<i>Asperula conferta</i>
<i>Brunoniella australis</i>	<i>Bursaria spinosa</i>
<i>Cheilanthes sieberi</i>	<i>Chloris truncata</i>
<i>Chloris ventricosa</i>	<i>Commelina cyanea</i>
<i>Cyperus gracilis</i>	<i>Daviesia ulicifolia</i>
<i>Dianella longifolia</i>	<i>Dianella revoluta</i>
<i>Dichelachne micrantha</i>	<i>Dichondra repens</i>
<i>Dillwynia sieberi</i>	<i>Echinopogon caespitosus</i>
<i>Echinopogon ovatus</i>	<i>Entolasia marginata</i>
<i>Eragrostis leptostachya</i>	<i>Eremophila debilis</i>
<i>Eucalyptus crebra</i>	<i>Eucalyptus eugenioides</i>
<i>Eucalyptus fibrosa</i>	<i>Eucalyptus maculata</i>
<i>Eucalyptus moluccana</i>	<i>Eucalyptus tereticornis</i>
<i>Exocarpus cupressiformis</i>	<i>Glycine clandestina</i>
<i>Glycine tabacina</i>	<i>Goodenia hederacea</i>
<i>Hardenbergia violacea</i>	<i>Hibbertia diffusa</i>
<i>Hypericum gramineum</i>	<i>Hypoxis hygrometrica</i>
<i>Indigofera australis</i>	<i>Lepidosperma laterale</i>
<i>Lissanthe strigosa</i>	<i>Lomandra filiformis</i>
<i>Lomandra multiflora</i>	<i>Melaleuca decora</i>
<i>Microlaena stipoides</i>	<i>Oplismenus aemulus</i>
<i>Oxalis exilis</i>	<i>Panicum simile</i>
<i>Phyllanthus filicaulis</i>	<i>Pratia purpurascens</i>
<i>Solanum pungetium</i>	<i>Themeda australis</i>
<i>Tricoyne elatior</i>	<i>Venonia cinerea</i>
<i>Wahlenbergia gracilis</i>	

Appendix 2 continued...

Melaleuca linearifolia
Melaleuca stypheloides
Melaleuca thymifolia
Microlena stipoides
Modiola caroliniana *
Myrsiphyllum asparagoides *
Ozthamnus diosmifolia
Panicum semile
Paspalum dilatatum *
Patersonia glabrata
*Pennisetum clandestinum**
Persicaria sp.
Persoonia linearis
Phalaris minor *
Pimelea linifolia
Pimelia linifolia
Pittosporum undulatum
*Plantago lanceolata**
Plectronthus parviflorus
Poa labillarderi
Pomax umbellata
Pratia pedunculata
Pratia purpurescens
Pteridium esculentum
Pultenea villosa
*Phytolaca octandra**
Rubus fruticosa *
Rumex sp.
Senecio madagascariensis *
Setaria sp
Sida rhombifolia
Solanum companulatum
Solanum nigrum *
Stipa sp.
Themeda australis
Tricoryne simplex
Trifolium repens *

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